

STRATEGIC COMPETITION IN THE ARCTIC

HEARING
BEFORE THE
SUBCOMMITTEE ON
TRANSPORTATION AND MARITIME
SECURITY
OF THE
COMMITTEE ON HOMELAND SECURITY
HOUSE OF REPRESENTATIVES
ONE HUNDRED EIGHTEENTH CONGRESS
FIRST SESSION
JULY 18, 2023
Serial No. 118-23

Printed for the use of the Committee on Homeland Security



Available via the World Wide Web: <http://www.govinfo.gov>

U.S. GOVERNMENT PUBLISHING OFFICE

54-320 PDF

WASHINGTON : 2023

COMMITTEE ON HOMELAND SECURITY

MARK E. GREEN, MD, Tennessee, *Chairman*

MICHAEL T. MCCAUL, Texas	BENNIE G. THOMPSON, Mississippi, <i>Ranking Member</i>
CLAY HIGGINS, Louisiana	SHEILA JACKSON LEE, Texas
MICHAEL GUEST, Mississippi	DONALD M. PAYNE, JR., New Jersey
DAN BISHOP, North Carolina	ERIC SWALWELL, California
CARLOS A. GIMENEZ, Florida	J. LUIS CORREA, California
AUGUST PFLUGER, Texas	TROY A. CARTER, Louisiana
ANDREW R. GARBARINO, New York	SHRI THANEDAR, Michigan
MARJORIE TAYLOR GREENE, Georgia	SETH MAGAZINER, Rhode Island
TONY GONZALES, Texas	GLENN IVEY, Maryland
NICK LALOTA, New York	DANIEL S. GOLDMAN, New York
MIKE EZELL, Mississippi	ROBERT GARCIA, California
ANTHONY D'ESPOSITO, New York	DELIA C. RAMIREZ, Illinois
LAUREL M. LEE, Florida	ROBERT MENENDEZ, New Jersey
MORGAN LUTTRELL, Texas	YVETTE D. CLARKE, New York
DALE W. STRONG, Alabama	DINA TITUS, Nevada
JOSH BRECHEEN, Oklahoma	
ELIJAH CRANE, Arizona	

STEPHEN SIAO, *Staff Director*

HOPE GOINS, *Minority Staff Director*

NATALIE NIXON, *Chief Clerk*

SUBCOMMITTEE ON TRANSPORTATION AND MARITIME SECURITY

CARLOS A. GIMENEZ, Florida, *Chairman*

CLAY HIGGINS, Louisiana	SHRI THANEDAR, Michigan, <i>Ranking Member</i>
NICK LALOTA, New York	DONALD M. PAYNE, JR., New Jersey
LAUREL M. LEE, Florida	ROBERT GARCIA, California
MARK E. GREEN, MD, Tennessee (<i>ex officio</i>)	BENNIE G. THOMPSON, Mississippi (<i>ex officio</i>)

VACANCY, *Subcommittee Staff Director*

ALEX MARSTON, *Minority Subcommittee Staff Director*

CONTENTS

	Page
STATEMENTS	
The Honorable Carlos A. Gimenez, a Representative in Congress From the State of Florida, and Chairman, Subcommittee on Transportation and Maritime Security:	
Oral Statement	1
Prepared Statement	2
The Honorable Shri Thanedar, a Representative in Congress From the State of Michigan, and Ranking Member, Subcommittee on Transportation and Maritime Security:	
Oral Statement	3
Prepared Statement	4
The Honorable Bennie G. Thompson, a Representative in Congress From the State of Mississippi, and Ranking Member, Committee on Homeland Security:	
Prepared Statement	5
WITNESSES	
Mr. Ronald O'Rourke, Specialist in Naval Affairs, Congressional Research Service:	
Oral Statement	6
Prepared Statement	8
Mr. Luke Coffey, Senior Fellow, Hudson Institute:	
Oral Statement	16
Prepared Statement	17
Ms. Esther D. Brimmer, James H. Binger Senior Fellow in Global Governance, Council on Foreign Relations:	
Oral Statement	23
Prepared Statement	25

STRATEGIC COMPETITION IN THE ARCTIC

Tuesday, July 18, 2023

U.S. HOUSE OF REPRESENTATIVES,
COMMITTEE ON HOMELAND SECURITY,
SUBCOMMITTEE ON TRANSPORTATION AND
MARITIME SECURITY,
Washington, DC.

The subcommittee met, pursuant to notice, at 9:58 a.m., in room 310, Cannon House Office Building, Hon. Carlos Gimenez [Chairman of the subcommittee] presiding.

Present: Representatives Gimenez, Higgins, LaLota, Lee, Thanedar, Payne, and Garcia.

Also present: Representatives Green and Thompson.

Chairman GIMENEZ. The Committee on Homeland Security will come to order.

Without objection, the Chair may declare the subcommittee in recess at any point.

The purpose of this hearing is to discuss the existing and future security threats resulting from strategic competition in the Arctic region and how the United States Coast Guard and Department of Homeland Security can effectively respond to and address these threats.

I now recognize myself for an opening statement.

I want to thank our three witnesses that are appearing before our subcommittee this morning.

Today, our subcommittee will discuss strategic competition in the Arctic region and its impact on U.S. homeland and national security interests.

The Arctic is critically important to the United States' strategic interests. The United States is one of only 8 countries globally with territory above the Arctic Circle. So, what happens in the Arctic directly impacts the United States and its citizens.

Historically, our adversaries have targeted the United States in the High North to undermine our national security. During World War II, the forces of Imperial Japan saw strategic value in occupying the Aleutian Islands off the coast of Alaska, going so far as to seize some islands within the chain.

During the Cold War, Soviet aircraft and submarines regularly attempted to breach U.S. sovereignty, air space, sovereign air space, and territorial waters in Alaska. The United States' early warning missile defense capabilities focused on the Arctic as a potential entry point for Soviet nuclear missiles into the North American air space.

Today, we face a growing number of challenges from near-peer competitors. Over the last decade, Russia has been building up its military capabilities in the Arctic, including its fleet of heavy ice-breakers. Vladimir Putin has repeatedly stated his vision for the Northern Sea Route to become an alternative to the Suez Canal to facilitate faster trade between Europe and Asia.

More recently, Russia is foregoing cooperation on Arctic issues with other Arctic states as it continues its illegal and unprovoked invasion of Ukraine, thus breaking decades of precedent, in which the 8 Arctic states collaborated closely on scientific research, environmental protection, and maritime safety.

Additionally, the People's Republic of China, despite having no sovereign territory within the Arctic region, are attempting to stake out interests in the Arctic affairs.

In 2018, the CCP declared the PRC to be a so-called near-Arctic nation. The CCP and state-owned entities own and operate ice-breakers and other polar-capable ships. During the last decade, these entities showed an increased willingness to transit their vessels through Arctic waters. The United States cannot afford to ignore this increased interest in the Arctic from near-peer competitors.

As sea ice recedes and technology improves, traffic in the Arctic's maritime channels will continue to increase. This will lead to greater scientific research, natural resources exploration, fishing, and tourism taking place in the Arctic region.

Additionally, our military relies upon the flight routes through the Arctic to deploy personnel, equipment, and other material to theaters around the world.

The United States Coast Guard is an active presence in the Arctic for decades, providing invaluable search-and-rescue capabilities, patrolling U.S. waters, and upholding U.S. sovereignty at sea. Their presence enforces U.S. customs and laws concerning trade and fishing and supports the military's sustained presence at bases around Alaska.

Coast Guard's icebreakers have long been an integral component of the U.S. Government's presence in the Arctic. However, I am concerned with the delays the Coast Guard is experiencing with the new development and deployment of new Polar Security Cutters that will negatively impact the Coast Guard's ability to carry out its diverse mission set and protect the homeland in the Arctic.

Going forward, this subcommittee needs to play an active role in ensuring that the United States can effectively respond to threats in the Arctic.

I am grateful to have our three witnesses to share with us their perspective on the geopolitical situation in the Arctic and ways in which the Coast Guard, the Department of Homeland Security, and the wider U.S. Government can deter threats and protect our homeland in the Arctic. Thank you again. I look forward to your testimonies.

[The statement of Chairman Gimenez follows:]

STATEMENT OF CHAIRMAN CARLOS A. GIMENEZ

Thank you to our three witnesses for appearing before our subcommittee this morning.

Today, our subcommittee will discuss strategic competition in the Arctic region and its impact on U.S. homeland and national security interests.

The Arctic is critically important to the United States' strategic interests.

The United States is 1 of only 8 countries globally with territory above the Arctic Circle, so what happens in the Arctic directly impacts U.S. citizens.

Historically, our adversaries have targeted the United States in the High North to undermine our national security.

During World War II, the forces of Imperial Japan saw strategic value in occupying the Aleutian Islands off the coast of Alaska, going so far as to seize some islands within the Chain.

During the Cold War, Soviet aircraft and submarines regularly attempted to breach U.S. sovereign air space and territorial waters in Alaska. The United States early warning missile defense capabilities focused on the Arctic as a potential entry point for Soviet nuclear missiles into North American air space.

Today, we face a growing number of challenges from near-peer competitors.

For last decade, Russia has been building up its military capabilities in the Arctic, including its fleet of heavy icebreakers.

Vladimir Putin has repeatedly stated his vision for the Northern Sea Route to become an alternative to the Suez Canal to facilitate faster trade between Europe and Asia.

More recently, Russia is foregoing cooperation on Arctic issues with other Arctic states as it continues its illegal and unprovoked invasion of Ukraine, thus breaking decades of precedent in which the 8 Arctic states collaborated closely on scientific research, environmental protection, and maritime safety.

Additionally, the People's Republic of China, despite having no sovereign territory within the Arctic region, is attempting to stake out interests in Arctic affairs.

In 2018, the CCP declared the PRC to be a so-called "Near-Arctic nation."

The CCP and state-owned entities own and operate icebreakers and other polar capable ships, and during the last decade, these entities showed an increased willingness to transit their vessels through Arctic waters.

The United States cannot afford to ignore this increased interest in the Arctic from near-peer competitors.

As sea ice recedes and technology improves, traffic in the Arctic's maritime channels will continue to increase.

This will lead to greater scientific research, natural resource exploration, fishing, and tourism taking place in the Arctic region.

Additionally, our military relies upon the flight routes through the Arctic to deploy personnel, equipment, and other materiel to theaters around the world.

The United States Coast Guard has had an active presence in the Arctic for decades, providing invaluable search-and-rescue capabilities, patrolling U.S. waters, and upholding U.S. sovereignty at sea.

The Coast Guard also supports the military's sustained presence at bases around Alaska and helps enforce U.S. customs and laws concerning trade and fishing in Arctic waters.

The Coast Guard's icebreakers have long been an integral component of the U.S. Government's presence in the Arctic.

However, I am concerned that the delays the Coast Guard is experiencing with the development and deployment of the new Polar Security Cutters will negatively impact the Coast Guard's ability to carry out its diverse mission set and protect the homeland in the Arctic.

Going forward, this subcommittee needs to play an active role in ensuring that the United States can effectively respond to threats in the Arctic.

I am grateful to our three witnesses to share with us their perspective on the geopolitical situation in the Arctic and ways in which the Coast Guard, the Department of Homeland Security, and the wider U.S. Government can deter threats and protect our homeland in the Arctic.

Thank you again, and I look forward to your testimonies.

Chairman GIMENEZ. Now, I now recognize the Ranking Member, the gentleman from Michigan, Mr. Thanedar, for his opening statement.

Mr. THANEDAR. Thank you, Chairman. Thank you for calling today's hearing.

I thank all of our witnesses for being here today. Good morning to all of you.

With a dramatic change in climate and growing aggression from other nations, the Arctic has never been more central to America's national security. Temperatures in the Arctic are rising at three times the global average. Ice levels have begun to recede dramatically, creating both environmental catastrophe and conflict over trade routes, natural resources, fishing rights, and global power.

I am eager to learn more about how the melting ice in the Arctic will affect our national security, as well as global economics and competition.

The region also provides tremendous opportunity for cooperation, from scientific discovery to international trade. The Arctic is home to almost 4 million people, including enduring indigenous populations whose continued safety, sovereignty, cultures, and livelihoods must be protected.

The U.S. Coast Guard plays an essential role in safeguarding a rules-based order in Far North. Investing in a resilient Arctic community through disaster relief, scientific mission support, search and rescue, law enforcement, and community relations, the Coast Guard bridges the gap between the United States' military presence and our humanitarian efforts.

Unfortunately, the Coast Guard's ice-breaking capabilities are outmatched by our enemies. Rising threats from China and Russia pose a serious risk to American prosperity and security.

I look forward to hearing from our witnesses today on how our Nation can invest in the infrastructure and capabilities needed to maintain a powerful presence in the harsh conditions of the Arctic.

The Arctic does not belong to one nation. It is essential that the United States support robust international organizations to foster cooperation in the region. This work has been hampered by non-Arctic nations, like China, seeking to profit from illegal fishing and other harmful activities, as well as Russian aggression against Ukraine that has shattered the fragile trust needed to bring diverse nations together on issues in the Far North.

I look forward to learning more today about the mechanisms for cooperation in the Arctic, including international organizations and how this has been hampered by the growing threats we face. I am glad to see the committee continuing our work on this subject. It is essential that Congress continues to invest in the Coast Guard's capabilities in the Arctic, including through robust funding for new Polar Security Cutters.

Thank you again to Chairman Gimenez for calling this hearing and to all of our witnesses. I am excited. I am looking forward to your testimony.

With that, Mr. Chairman, I yield back.

[The statement of Ranking Member Thanedar follows:]

STATEMENT OF RANKING MEMBER SHRI THANEDAR

JULY 18, 2023

With a dramatically-changing climate and growing aggression from other nations, the Arctic has never been more central to America's national security. Temperatures in the Arctic are rising at three times the global average. Ice levels have begun to recede drastically, creating both environmental catastrophe and conflict over trade routes, natural resources, fishing rights, and global power. I am eager to learn more about how the melting ice in the Arctic will affect our national security, as well as

global economics and competition. The region also provides tremendous opportunity for cooperation, from scientific discovery to international trade.

The Arctic is home to almost 4 million people, including enduring indigenous populations, whose continued safety, sovereignty, cultures, and livelihoods must be protected. The U.S. Coast Guard plays an essential role in safeguarding a rules-based order in the Far North. Investing in a resilient Arctic community, through disaster relief, scientific mission support, search and rescue, law enforcement, and community relations, the Coast Guard bridges the gap between the United States's military presence and our humanitarian efforts.

Unfortunately, the Coast Guard's icebreaking capabilities are outmatched by our enemies, and rising threats from China and Russia pose a serious risk to American prosperity and security. I look forward to hearing from our witnesses today on how our Nation can invest in the infrastructure and capabilities needed to maintain a powerful presence in the harsh conditions of the Arctic.

The Arctic does not belong to one nation, and it is essential that the United States support robust international organizations to foster cooperation in the region. This work has been hampered by non-Arctic nations, like China, seeking to profit from illegal fishing and other harmful activities, as well as Russian aggression against Ukraine, that has shattered the fragile trust needed to bring diverse nations together on issues in the Far North.

I look forward to learning more today about the mechanisms for cooperation in the Arctic, including international organizations, and how this has been hampered by the growing threats we face. I am glad to see the committee continuing our work on this subject, and it is essential that Congress continues to invest in the Coast Guard's capabilities in the Arctic, including through robust funding for new Polar Security Cutters.

Chairman GIMENEZ. Thank you to the Ranking Member, Mr. Thanedar.

Other Members of the committee are reminded that opening statements may be submitted for the record.

[The statement of Ranking Member Thompson follows:]

STATEMENT OF RANKING MEMBER BENNIE G. THOMPSON

JULY 18, 2023

The Arctic is a region of increasing importance to our efforts to protect the homeland. Democrats on the Homeland Security Committee held multiple hearings and briefings on security challenges in the Arctic when we were in the Majority, and I am glad to see the current Majority continuing that focus.

We must continue to come together in a bipartisan fashion to ensure the challenges facing our Nation at our northernmost border receive the attention they deserve. Climate change and melting sea ice are opening Arctic waters to increased maritime activity, from shipping to fishing to tourism to offshore energy exploration. Global competitors including Russia and China are making significant investments to take full advantage of the changing circumstances in the region, and the United States must be ready to respond.

The Coast Guard's efforts to secure and protect the maritime domain are central to U.S. interests in the Arctic and demand Congress' attention. The Coast Guard's icebreaking capabilities are sorely lacking, making it difficult for the Coast Guard to maintain necessary presence in the region. With Congress' support, the Coast Guard has begun making historic investments in the Polar Security Cutter program to help make up for decades of negligence. This will be a long-term effort, so Congress must continue making such investments and ensure shipbuilding efforts stay on budget and meet critical deadlines.

The United States must also strategize for the coming years and decades in the Arctic, since we know that changes in the region will only continue to accelerate. To that end, the Biden-Harris administration's National Strategy for the Arctic Region, published last October, is a huge step in the right direction. The Strategy places appropriate focus on climate change and environmental protection, as well as on security. Plans for the Arctic must account for the severity of changes to sea ice and warming temperatures, which can only be understood by following the science on climate change. Importantly, the Strategy also highlights the need for consultation and coordination with indigenous communities, as well as the need for international cooperation and governance.

The Coast Guard cannot address the challenges in the Arctic on its own and must work hand-in-hand with Alaskan native tribes and communities and international allies and partners. I thank today's witnesses for sharing their expertise about homeland security priorities in the Arctic and what Congress can do to support the Coast Guard and the rest of the Federal Government in their efforts.

Chairman GIMENEZ. Again, I am pleased to have a distinguished panel of witnesses before us today on this critical topic.

[Witnesses sworn.]

Chairman GIMENEZ. Let the record reflect that the witnesses have answered in the affirmative. Thank you and please be seated.

I would now like to formally introduce our witnesses.

Mr. Ronald O'Rourke is a specialist in naval affairs at the Congressional Research Service. Since starting at CRS in 1984, Mr. O'Rourke has written many reports for Congress on various issues relating to the Navy, the Coast Guard, defense acquisition, China's naval forces and maritime territorial disputes, the Arctic, and the international security environment. He is one of the most respected authorities on naval issues and of special interest to this subcommittee, the Coast Guard's icebreaker fleet.

Mr. Luke Coffey is a senior fellow at the Hudson Institute. His work focuses on national security issues in Europe, Eurasia, and the Arctic. As a decorated veteran of the United States Army and former senior special advisor to United Kingdom defence secretary, Liam Fox, Mr. Coffey brings a unique perspective to this field. Mr. Coffey previously testified before the subcommittee in his prior role as director of The Allison Center for Foreign Policy Studies at The Heritage Foundation and we are glad to have him back.

Dr. Esther Brimmer is the James H. Binger senior fellow in global governance at the Council on Foreign Relations. Dr. Brimmer's work focuses on international organizations and transatlantic relations. During her time at the Council, Dr. Brimmer served as the project director for the 2017 Counsel Task Force report "Arctic Imperatives: Reinforcing U.S. Strategy on America's Fourth Coast". In addition to posts in academia, the private sector, and with the large nonprofit organizations, Dr. Brimmer previously served as the assistant secretary of state for international organization affairs and worked on the Department of State's policy planning staff.

I thank each of you distinguished witnesses for being here today.

I now recognize Mr. O'Rourke for 5 minutes to summarize his opening statement.

STATEMENT OF RONALD O'ROURKE, SPECIALIST IN NAVAL AFFAIRS, CONGRESSIONAL RESEARCH SERVICE

Mr. O'ROURKE. Chairman Gimenez, Ranking Member Thanedar, distinguished Members of the subcommittee, thank you for the opportunity to appear before you today to discuss strategic competition in the Arctic. With your permission, I'll submit my written statement for the record and, as you requested, summarize it here briefly.

In the CRS report on the Arctic, I'm the author of the section on strategic competition in the region and I'll be happy to discuss various aspects of that topic during the Q&A.

The subcommittee asked me to focus my prepared testimony on the Coast Guard's polar icebreakers, which I have been covering in detail since 2008 when I initiated my CRS report on the topic.

In connection with strategic competition, it can be noted that the Coast Guard's polar icebreakers don't simply break ice. They are multi-mission cutters that conduct a variety of operations in polar waters. U.S. polar ice operations conducted in large part by the icebreakers support 9 of the Coast Guard's 11 statutory missions.

In general, the icebreakers conduct and support scientific research in the polar regions. They defend U.S. sovereignty in the Arctic by helping to maintain a U.S. presence in territorial waters in the region. They defend other U.S. interests in the polar regions, including economic interests in waters that are within the U.S. exclusive economic zone north of Alaska. They monitor sea traffic in the Arctic, including ships bound for the United States. They conduct other Coast Guard missions, such as search and rescue, law enforcement, and protection of marine resources in Arctic waters, including U.S. territorial waters north of Alaska.

Discussions of U.S. Arctic capabilities often note the lack of infrastructure in the region. With their built-in capabilities, the Coast Guard's polar icebreakers act as a form of mobile infrastructure, something that can be seen when the icebreaker, *Healy*, for example, uses its built-in science support facilities to support embarked contingents of Arctic researchers.

The Coast Guard testified in April and June that it had recently signed out a new fleet mix analysis that concluded that the Coast Guard will require a total of 8 to 9 polar icebreakers. Prior to that, Coast Guard officials had stated that the service would need at least 6 icebreakers, including 3 capable of breaking heavy polar ice.

The Coast Guard initiated the Polar Security Cutter, or PSC, program for procuring new heavy polar icebreakers in its fiscal year 2013 budget. From fiscal year 2013 to 2016, the program received only minor funding. Starting in fiscal year 2017, the program has received significant funding and the first 2 PSCs are now fully funded.

The Coast Guard originally aimed to have the first PSC delivered in 2024, but the ship's estimated delivery date has been delayed repeatedly. Given the degree of design completion that GAO has reported, construction of the ship might begin no earlier than 2024. If so, and if the ship takes at least 4 years to build, which might be a reasonable estimate for a lead ship of this size and complexity, then the first PSC might be delivered no earlier than 2028. Admiral Fagan reportedly provided a similar estimate in testimony on the Senate side last week. If the first ship is delivered in 2028, that will be 20 years after I initiated the icebreaker report.

Recent substantial cost growth on other Navy and Coast Guard ship-building programs raises a question regarding the potential for a possibly comparable amount of cost growth to occur on the PSC program. If there's substantial cost growth in the PSC program, that could raise a question about whether to grant some form of contract relief to the shipbuilder, as occurred in the Coast Guard's Offshore Patrol Cutter program.

One option for Congress would be to ask CBO to conduct a more refined analysis of the potential for cost growth in the PSC pro-

gram. In addition to the PSC program, the Coast Guard is requesting funding to purchase an existing commercially available polar icebreaker that would be modified to become a Coast Guard polar icebreaker, so as to help augment the Coast Guard's polar icebreaking capability. I'll be happy to discuss that in the Q&A.

As important as icebreakers are, improving the Coast Guard's capabilities in the region would include making investments in other things as well, including manned aircraft, UAVs, communications, and shore facilities. The current project to make improvements at the Port of Nome promises to improve the Coast Guard's ability to maintain a presence in operations in the Arctic by eliminating the need for polar icebreakers to steam all the way down to Dutch Harbor in the Aleutian Islands to be resupplied before returning to the Arctic Ocean.

Chairman Gimenez, this concludes my opening statement. I'll be happy to respond to any questions the subcommittee may have.

[The prepared statement of Mr. O'Rourke follows:]

PREPARED STATEMENT OF RONALD O'ROURKE

JULY 18, 2023

INTRODUCTION

Chairman Gimenez, Ranking Member Thanedar, distinguished Members of the subcommittee, thank you for the opportunity to appear before you today to discuss strategic competition in the Arctic.

As part of my work as the CRS specialist for naval affairs, I am the head of the CRS Arctic team, the coordinator of the CRS overview report on the Arctic,¹ and the author of the CRS report on the Coast Guard's Polar Security Cutter (PSC) program.² The Arctic and PSC reports were initiated in 2010 and 2008, respectively, and have been updated periodically since then, most recently on July 5 and July 10, 2023, respectively. My other periodically updated CRS reports include the CRS report on the defense implications of great power competition, which was initiated in 2014,³ and the CRS report on U.S.-China strategic competition in the South and East China Seas, which was initiated in 2012.⁴ My biography is in the Appendix at the end of this statement.

As requested by the subcommittee, my statement focuses primarily on the Coast Guard, and particularly on the PSC program. Portions of this statement are adapted from the PSC and Arctic overview reports.

ARCTIC GEOPOLITICAL ENVIRONMENT

The CRS Arctic overview report's discussion of the Arctic geopolitical environment covers the evolution of the Arctic geopolitical environment since the end of the Cold War, the emergence of great power competition (i.e., strategic competition) in the Arctic, the impact on the Arctic of Russia's war in Ukraine, Russian and Chinese activities in the Arctic, and military (including U.S. Coast Guard) operations in the Arctic.⁵ The discussion in that report provides a geopolitical context for the material presented below, which focuses on Coast Guard polar icebreakers, Arctic search and rescue (SAR), and a U.S. Arctic strategic seaport.

¹ CRS Report R41153, *Changes in the Arctic: Background and Issues for Congress*, coordinated by Ronald O'Rourke.

² CRS Report RL34391, *Coast Guard Polar Security Cutter (Polar Icebreaker) Program: Background and Issues for Congress*, by Ronald O'Rourke.

³ CRS Report R43838, *Great Power Competition: Implications for Defense—Issues for Congress*, by Ronald O'Rourke.

⁴ CRS Report R42784, *U.S.-China Strategic Competition in South and East China Seas: Background and Issues for Congress*, by Ronald O'Rourke.

⁵ See pages 20–44 of the current (July 5, 2023) version of CRS Report R41153, *Changes in the Arctic: Background and Issues for Congress*, coordinated by Ronald O'Rourke.

COAST GUARD POLAR ICEBREAKERS

Multiple Polar Missions (Not Just Icebreaking)

Within the U.S. Government, the Coast Guard is the U.S. agency responsible for polar icebreaking. The Coast Guard's polar icebreakers, however, do not simply break ice—they are multi-mission cutters that conduct a variety of operations in polar waters. U.S. polar ice operations conducted in large part by the Coast Guard's polar icebreakers support 9 of the Coast Guard's 11 statutory missions.⁶ The roles of U.S. polar icebreakers can be summarized as follows:

- conducting and supporting scientific research in the Arctic and Antarctic;
- defending U.S. sovereignty in the Arctic by helping to maintain a U.S. presence in U.S. territorial waters in the region;
- defending other U.S. interests in polar regions, including economic interests in waters that are within the U.S. exclusive economic zone (EEZ) north of Alaska;
- monitoring sea traffic in the Arctic, including ships bound for the United States; and
- conducting other typical Coast Guard missions (such as search and rescue, law enforcement, and protection of marine resources) in Arctic waters, including U.S. territorial waters north of Alaska.⁷

Polar (Not Just Arctic) Operations

The Coast Guard's large icebreakers are called polar icebreakers rather than Arctic icebreakers because they perform missions in both the Arctic and Antarctic. Operations to support National Science Foundation (NSF) research activities in both polar regions account for a significant portion of U.S. polar icebreaker operations.

Supporting NSF research in the Antarctic focuses on performing an annual mission, called Operation Deep Freeze (ODF), to break through Antarctic sea ice so as to reach and resupply McMurdo Station, the large U.S. Antarctic research station located on the shore of McMurdo Sound, near the Ross Ice Shelf. The Coast Guard states that *Polar Star*, the Coast Guard's only currently-operational heavy polar icebreaker, “spends the [northern hemisphere] winter [i.e., the southern hemisphere summer] breaking ice near Antarctica in order to refuel and resupply McMurdo Station. When the mission is complete, the *Polar Star* returns to dry dock [in Seattle] in order to complete critical maintenance and prepare it for the next ODF mission. Once out of dry dock, it's back to Antarctica, and the cycle repeats itself.”⁸ The Coast Guard's medium polar icebreaker, *Healy*, spends most of its operational time in the Arctic supporting NSF research activities and performing other operations.

Required Numbers of Coast Guard Polar Icebreakers

The Coast Guard testified in April and June 2023 that it had recently completed a new fleet mix analysis that concluded that the Coast Guard will require a total of 8 to 9 polar icebreakers to perform its various polar (i.e., Arctic and Antarctic) missions in coming years:

- At an April 18, 2023, hearing on the Coast Guard's proposed fiscal year 2024 budget before the Coast Guard and Maritime Transportation subcommittee of the House Transportation and Infrastructure Committee, the Commandant of the Coast Guard, Admiral Linda L. Fagan, stated: “We recently—I recently signed out a fleet mix analysis that indicates we need eight to nine icebreakers.”⁹ Admiral Fagan's testimony did not otherwise characterize the results of the fleet mix analysis.¹⁰

⁶The 11 missions are marine safety; search and rescue; aids to navigation; living marine resources (fisheries law enforcement); marine environmental protection; ice operations; ports, waterways and coastal security; drug interdiction; migrant interdiction; defense readiness; other law enforcement. The two statutory missions not supported by polar ice operations are illegal drug interdiction and undocumented migrant interdiction. (Department of Homeland Security, *Polar Icebreaking Recapitalization Project Mission Need Statement*, Version 1.0, approved by DHS June 28, 2013, p. 10.)

⁷This passage, beginning with “The roles of . . . ,” originated in CRS Report RL34391 on polar icebreakers and was later transferred by the Government Accountability Office (GAO) with minor changes to Government Accountability Office, *Coast Guard[:Efforts to Identify Arctic Requirements Are Ongoing, but More Communication about Agency Planning Efforts Would Be Beneficial]*, GAO-10-870, September 2010, p. 53.

⁸U.S. Department of Defense, Defense Visual Information Distribution System (DVIDS), “Coast Guard Icebreaker Crew Completes Second Arctic Mission; U.S. Interests in Arctic Domain Depends [sic] on Fleet Recapitalization,” press release, October 19, 2018.

⁹CQ transcript of hearing.

¹⁰Congressional offices seeking further information on the fleet mix analysis may contact the author of this CRS report.

- At a June 21, 2023, hearing before the same subcommittee on the Coast Guard's emerging challenges and statutory needs, the Vice Commandant of the Coast Guard, Admiral Steven D. Poulin, similarly stated: "We were on a trajectory to build the polar security cutters, but we recently delivered to this committee and other committees our fleet mix analysis, and in that fleet mix analysis we concluded that we likely need eight to nine new icebreakers. Some of those will be heavy icebreakers like the polar security cutter that's being built at Bollinger, Mississippi. Others may be Arctic security cutters [ASCs, i.e., medium polar icebreakers]."¹¹ Admiral Poulin's testimony, like Admiral Fagan's, did not otherwise characterize the results of the fleet mix analysis.

Prior to this new fleet mix analysis, Coast Guard officials had stated that the service in coming years would need at least 6 polar icebreakers, including 3 capable of breaking heavy polar ice.¹²

Current Coast Guard Polar Icebreakers

The operational U.S. polar icebreaking fleet currently consists of one heavy polar icebreaker, *Polar Star*, and one medium polar icebreaker, *Healy*.¹³ In addition to *Polar Star*, the Coast Guard has a second heavy polar icebreaker, *Polar Sea*. *Polar Sea*, however, suffered an engine failure in June 2010 and has been nonoperational since then.

Polar Star and *Polar Sea* entered service in 1976 and 1978, respectively, and are now well beyond their originally intended 30-year service lives. The Coast Guard in recent years has invested millions of dollars to overhaul, repair, and extend the service life of *Polar Star*, but as a result of its advancing age, the ship's material condition has nevertheless become increasingly fragile, if not precarious. During its annual deployments to McMurdo Station in Antarctica, shipboard equipment frequently breaks, and shipboard fires have occurred.¹⁴ Replacements for many of the

¹¹CQ transcript of hearing. The Coast Guard in late 2020 began referring to its envisioned new medium polar icebreakers as Arctic Security Cutters, or ASCs.

¹²The Coast Guard testified in February 2020, for example, that:

The 2010 High Latitude Mission Analysis Report (HL MAR) identified the need for 6 new polar icebreakers (at least 3 of which must be heavy) under the assumption that, in the future, the Coast Guard would be required to perform 9 of its 11 statutory missions year-round in the Arctic, and meet all icebreaking needs in support of the United States Antarctic Program.

In 2017, the Coast Guard's Center for Arctic Study and Policy completed an addendum to the HL MAR. The objectives were to provide a broad overview of changes in the polar regions over the last 7 years and to provide specific information for use in determining potential impacts on mission areas in the polar regions. This addendum provides confidence in the original findings and encourages the sustained reliance on its initial recommendations on the Nation's need for 6 icebreakers, 3 of which must be heavy icebreakers.

(*Testimony of Admiral Charles W. Ray, Coast Guard Vice Commandant, on "Arctic Security Issues," before the House Homeland Security Subcommittee on Transportation & Maritime Security, February 5, 2020, p. 9.*)

In January 2021, then-Commandant of the Coast Guard Admiral Karl Schultz stated publicly that the Coast Guard would ideally like to have a fleet of 6 PSCs and 3 new ASCs, for a total fleet of 9 PSCs and ASCs. (See Jon Harper, "SNA News: Coast Guard Wants Budget 'Booster Shot,'" *National Defense*, January 13, 2021; Mallory Shelbourne, "Schultz: Nuclear Icebreakers Are Not An Option for Coast Guard," *USNI News*, January 14, 2021; Cal Biesecker, "With More Resources, Coast Guard Sees Need For Nine Polar Icebreakers," *Defense Daily*, January 14, 2021. See also Stew Magnuson, "Coast Guard Ship Modernization Under Full Steam," *National Defense*, March 3, 2021.)

¹³A heavy polar icebreaker generally has more capability for breaking through polar ice than a medium polar icebreaker, which in turn generally has more capability for breaking through polar ice than a light polar icebreaker. In the International Association of Classification Societies (IASC) classifications for polar-class ships, heavy polar icebreakers are equivalent to Polar Class 1 or 2 (PC1 or PC2) class ships, medium polar icebreakers are equivalent to PC3 or PC4 class ships, and light polar icebreakers are equivalent to PC5 or PC6 class ships. PC1 through PC5 are ships capable of year-round operation in all polar waters (PC1); moderate multi-year ice conditions (PC2); second-year ice, which may include multi-year ice inclusions (PC3); thick first-year ice, which may include old ice inclusions (PC4); or medium first-year ice, which may include old ice inclusions (PC5). PC6 are ships capable of summer/autumn operation in medium first-year ice, which may include old ice inclusions. (Source: Requirements concerning Polar Class, International Association of Classification Societies, undated, including Revision 4 of December 2019, Table 1, entitled Polar Class descriptions, p. 11–2.) For a table showing major polar icebreakers of the world organized by PC class, see Table B–1 in CRS Report RL34391, *Coast Guard Polar Security Cutter (Polar Icebreaker) Program: Background and Issues for Congress*, by Ronald O'Rourke.

¹⁴See, for example, Richard Read, "Meet the Neglected 43-Year-Old Stepchild of the U.S. Military-Industrial Complex," *Los Angeles Times*, August 2, 2019; Melody Schreiber, "The Only Working US Heavy Icebreaker Catches Fire Returning from Antarctica," *Arctic Today*, March 2, 2019; Calvin Biesecker, "Fire Breaks Out On Coast Guard's Aging, and Only, Heavy Icebreaker," *Defense Daily*, March 1, 2019.

ship's components are no longer commercially available. To help keep *Polar Star* operational, the Coast Guard is using *Polar Sea* as a source of replacement parts.

PSC Program

The PSC program was initiated in the Coast Guard's fiscal year 2013 budget submission, and envisages the acquisition of at least 3 new PSCs (i.e., heavy polar icebreakers), to be followed years from now by the acquisition of additional new ASCs (i.e., medium polar icebreakers). The PSC program was previously known as the polar icebreaker (PIB) program. Changing the program's name to the PSC program is intended to call attention to the fact that the Coast Guard's polar icebreakers perform a variety of missions relating to national security, not just icebreaking.¹⁵

The PSC program is managed by a Coast Guard-Navy Integrated Program Office (IPO).¹⁶ The Navy and Coast Guard in 2020 estimated the total procurement costs of the first 3 PSCs in then-year dollars as \$1,038 million (i.e., about \$1.0 billion) for the first ship, \$794 million for the second ship, and \$841 million for the third ship, for a combined estimated cost of \$2,673 million (i.e., about \$2.7 billion). A Government Accountability Office (GAO) report that was released on April 20, 2023, and which reports on the status of major DHS acquisition programs as of September 30, 2022, states that as of June 2022, the combined estimated procurement cost of the 3 PSCs was \$2,789 million,¹⁷ which is \$116 million (about 4.3 percent) more than the figure of \$2,673 million.

On April 23, 2019, the Coast Guard-Navy Integrated Program Office for the PSC program awarded a fixed-price, incentive-firm contract for the detail design and construction (DD&C) of the first PSC to Halter Marine Inc. of Pascagoula, MS, a shipyard that was owned at the time by Singapore Technologies (ST) Engineering. The DD&C contract includes options for building the second and third PSCs. On December 29, 2021, the Coast Guard exercised a fixed price incentive option to its contract with Halter Marine Inc. for the second PSC. In November 2022, ST Engineering sold Halter Marine to Louisiana-based Bollinger Shipyards. The former Halter Marine is now called Bollinger Mississippi Shipbuilding.¹⁸

The PSC program is using the parent design approach, meaning that the design of the PSC (Figure 1) is based on an existing icebreaker design. A key aim in using the parent design approach is to reduce cost, schedule, and technical risk in the PSC program. The parent design is German design for *Polar Stern II* (also spelled *Polarstern II*), a ship that is to be built as the replacement for *Polarstern*, Germany's current polar research and supply icebreaker.

¹⁵ See, for example, Ben Werner and Sam LaGrone, "Coast Guard Renames New Icebreaker Program 'Polar Security Cutter,'" *USNI News*, September 27, 2018. See also Sydney J. Freedberg Jr., "With Funding In Peril, Coast Guard Pushes Icebreaker As 'Polar Security Cutter,'" *Breaking Defense*, October 29, 2018.

¹⁶ A key aim in establishing the IPO was to permit the Navy to share its ship-procurement best practices with the Coast Guard so as to help the Coast Guard reduce the time and cost needed to design and procure the PSCs.

¹⁷ Government Accountability Office, *DHS Annual Assessment[:] Major Acquisition Programs Are Generally Meeting Goals, but Cybersecurity Policy Needs Clarification*, GAO-23-106701, April 2023, p. 50.

¹⁸ See, for example, Sam LaGrone, "Bollinger Closes \$15M Acquisition of Halter Marine, New Name: 'Bollinger Mississippi Shipbuilding,'" *USNI News*, November 14, 2022; Cal Biesecker, "Bollinger Completes Acquisition Of Halter Marine," *Defense Daily*, November 14, 2022; Justin Katz, "Why a Small Shipyard Merger Could Signal Bigger Problems for the US Military," *Breaking Defense*, November 14, 2022; Sam LaGrone, "Updated: Bollinger to Buy Halter Marine Shipyard, Oversee Coast Guard Polar Security Cutter Program," *USNI News*, November 6, 2022.

Figure 1. Rendering of PSC Design



Source: Illustration accompanying Sam LaGrone, "UPDATED: VT Halter Marine to Build New Coast Guard Icebreaker," USNI News, April 23, 2019, updated April 24, 2019. The caption to the illustration states "An artist's rendering of VT Halter Marine's winning bid for the U.S. Coast Guard Polar Security Cutter. VT Halter Marine image used with permission."

The PSC program has received a total of \$1,881.8 million in procurement funding through fiscal year 2023, including \$300 million provided through the Navy's shipbuilding account (\$150 million each in fiscal year 2017 and fiscal year 2018), and the remainder provided through the Coast Guard's Procurement, Construction, and Improvements (PC&I) account. The procurement of the first two PSCs is fully funded, and the Coast Guard has started to fund the third PSC. The Coast Guard's proposed fiscal year 2024 budget requests \$170.0 million in continued procurement funding for the PSC program.

The Coast Guard originally aimed to have the first PSC delivered in 2024, but the ship's estimated delivery date has subsequently been delayed repeatedly. An April 2023 GAO report states that as of August 2022, about 41 percent of the ship's overall design had been completed,¹⁹ raising a question as to how much time the use of the German parent design has in practice saved in designing the PSC. Given the degree of design completion as of August 2022, construction of the ship might begin no earlier than 2024. If so, and if the ship takes at least 4 years to build, which might be a reasonable estimate for building a lead ship (i.e., first ship in the class) of the PSC's size and complexity, then the first PSC might be delivered no earlier than 2028. Admiral Fagan reportedly provided a similar estimate in testimony at a July 13, 2023, hearing on the Coast Guard's budget before the Oceans, Fisheries, Climate Change, and Manufacturing subcommittee of the Senate Commerce, Science, and Transportation Committee.²⁰

Cost growth in other Navy and Coast Guard shipbuilding programs reported in the Navy's fiscal year 2024 budget submission and a June 2023 GAO report includes the following:

- About 10 percent cost growth since the Navy's fiscal year 2023 budget submission in estimated unit procurement costs for Navy Virginia-class attack submarines;²¹

¹⁹ Government Accountability Office, *DHS Annual Assessment[.] Major Acquisition Programs Are Generally Meeting Goals, but Cybersecurity Policy Needs Clarification*, GAO-23-106701, April 2023, p. 51.

²⁰ Cal Biesecker, "Fagan Suggests Further Delay In Polar Security Cutter," *Defense Daily*, July 13, 2023.

²¹ The estimated unit procurement cost of Virginia-class attack submarines to be procured in fiscal year 2025–fiscal year 2027 is about 10 percent higher in the Navy's fiscal year 2024 budget submission than in the Navy's fiscal year 2023 budget submission. For more on the Virginia-class program, see CRS Report RL32418, *Navy Virginia (SSN-774) Class Attack Submarine Procurement: Background and Issues for Congress*, by Ronald O'Rourke.

- About 40 percent cost growth between 2012 and 2022 in the estimated total program acquisition cost of the Coast Guard's Offshore Patrol Cutter (OPC) program;²²
- About 51 percent cost growth since the Navy's fiscal year 2021 budget submission in estimated unit procurement costs for Navy John Lewis (TAO-205) class oilers;²³ and
- About 82 percent cost growth since fiscal year 2022 in the estimated unit procurement cost of the Navy's first TAGOS-25 class ocean surveillance ship.²⁴

Some of the cost growth shown above may be due to inflation resulting from disruptions to supply chains related to the COVID-19 pandemic, some may be due to optimistic initial estimates of the intrinsic costs for building these ships, and some may be due to other causes. Cost growth in these Navy and Coast Guard shipbuilding programs raises a question regarding the potential for a possibly comparable amount of cost growth to occur in the PSC program due to inflation, underestimation of intrinsic building costs, or other causes. If a substantial degree of cost growth occurs in the PSC program, it could raise a question regarding whether to grant some form of contract relief to the PSC shipbuilder, as occurred in the OPC program.²⁵

One option for Congress would be to ask the Congressional Budget Office (CBO) to conduct a more-refined analysis of the potential for cost growth in the PSC program. Something similar occurred with the Navy's Constellation (FFG-62) class frigate program: A preliminary CRS analysis suggested that if FFG-62s were to cost about the same to construct per thousand tons of displacement as other recent U.S. military surface combatants, then the third and subsequent FFG-62s could cost 17 percent to 56 percent more than the budgeted estimates for those ships in the Navy's fiscal year 2021 budget submission. Following that preliminary CRS analysis, CBO was asked to conduct a more-refined analysis, which estimated that the first 10 FFG-62s will cost 40 percent more to build than the Navy estimates.²⁶

The April 2023 GAO report mentioned earlier provides additional information regarding cost, technical, and schedule risk in the PSC program.²⁷

Existing Commercially Available Polar Icebreaker (CAPI)

The Coast Guard's proposed fiscal year 2024 budget, in addition to requesting continued procurement funding for the PSC program, also requests \$125.0 million in procurement funding for the purchase of an existing commercially available polar icebreaker (CAPI) that would be modified to become a Coast Guard polar icebreaker, so as to help augment the Coast Guard's current polar icebreaking capacity until the new PSCs enter service, and to continue augmenting the Coast Guard's polar icebreaking capacity after the PSCs enter service. Under the Coast Guard's pro-

²² A June 2023 GAO report on the OPC program states: "The OPC's total acquisition cost estimate increased from \$12.5 billion to \$17.6 billion between 2012 and 2022. The program attributes the 40 percent increase to many factors, including restructuring the stage 1 contract [for OPCs 1 through 4] and recompeting the stage 2 requirement [for OPCs 5 through 15] in response to a disruption caused by Hurricane Michael, and increased infrastructure costs for homeports and facilities, among other things." (Government Accountability Office, *Coast Guard Acquisitions[:] Offshore Patrol Cutter Program Needs to Mature Technology and Design*, GAO 23-105805, June 2023, highlights page.) For more on the OPC program, see CRS Report R42567, *Coast Guard Cutter Procurement: Background and Issues for Congress*, by Ronald O'Rourke.

²³ In the Navy's fiscal year 2021 budget submission, the 4 TAO-205s programmed for procurement during the 5-year period fiscal year 2021–fiscal year 2025 had an average estimated procurement cost of \$556.9 million per ship, while in the Navy's fiscal year 2024 budget submission, the 6 TAO-205s programmed for procurement during the 5-year period fiscal year 2024–fiscal year 2028 have an average estimated procurement cost of \$843.4 million, a figure that is 51 percent greater. For more on the TAO-205 program, see CRS Report R43546, *Navy John Lewis (TAO-205) Class Oiler Shipbuilding Program: Background and Issues for Congress*, by Ronald O'Rourke.

²⁴ The Navy in fiscal year 2022 procured the first of a planned class of 7 new TAGOS-25 class ocean surveillance ships at a cost of \$434.4 million. The Navy's fiscal year 2024 budget submission shows that the ship's estimated procurement cost has since grown to \$789.6 million—an increase of \$355.2 million, or 81.8 percent. For more on the TAGOS-25 program, see CRS In Focus IF11838, *Navy TAGOS-25 (Previously TAGOS(X)) Ocean Surveillance Shipbuilding Program: Background and Issues for Congress*, by Ronald O'Rourke.

²⁵ For more on the contract relief granted in the OPC program, which was done under the authority provided by Pub. L. 85-804 (50 U.S.C. 1431–1435), see CRS Report R42567, *Coast Guard Cutter Procurement: Background and Issues for Congress*, by Ronald O'Rourke.

²⁶ For additional discussion, see CRS Report R44972, *Navy Constellation (FFG-62) Class Frigate Program: Background and Issues for Congress*, by Ronald O'Rourke.

²⁷ Government Accountability Office, *DHS Annual Assessment[:] Major Acquisition Programs Are Generally Meeting Goals, but Cybersecurity Policy Needs Clarification*, GAO-23-106701, April 2023, pp. 50–51.

posal, the Coast Guard would conduct a full and open competition for the purchase, the commercially-available icebreaker that the Coast Guard selects for acquisition would be modified for Coast Guard operations following its acquisition, and the ship would enter service 18 to 24 months after being acquired. The total cost to purchase the ship and then modify it to meet Coast Guard mission needs is uncertain.

Prior to 2021, Coast Guard plans did not include the acquisition of such a ship. The Coast Guard's fiscal year 2022 unfunded priorities list (UPL), dated June 29, 2021, however, included a \$150.0 million item for the lease or purchase of a commercially-available vessel to provide polar icebreaking capability until the future delivery of PSCs.²⁸ The following year, the Coast Guard as part of its proposed fiscal year 2023 budget requested \$125.0 million in procurement funding for the purchase of an existing commercially-available polar icebreaker. Congress, in acting on the Coast Guard's proposed fiscal year 2023 budget, denied the request. The Coast Guard is once again requesting the \$125.0 million as part of its proposed fiscal year 2024 budget.

Service Life Extension for Polar Star

The Coast Guard plans to extend the service life of *Polar Star* until the delivery of at least the second PSC.²⁹ The Coast Guard estimated the cost of *Polar Star*'s service life extension work at \$75 million, a sum that was funded at a rate of \$15 million per year for 5 years, with the final \$15-million increment being provided in fiscal year 2023.

SEARCH AND RESCUE (SAR)

Increasing sea and air traffic through Arctic waters has increased concerns regarding Arctic-area search-and-rescue (SAR) capabilities. Given the location of current U.S. Coast Guard operating bases, it could take Coast Guard aircraft several hours, and Coast Guard cutters days or even weeks, to reach a ship in distress or a downed aircraft in Arctic waters. The Coast Guard states that "the closest Coast Guard Air Station to the Arctic is located in Kodiak, AK, approximately 820 nautical miles south of Utqiagvik, AK, which is nearly the same distance as from Boston, MA, to Miami, FL."³⁰ In addition to such long distances, the harsh climate complicates SAR operations in the region.

Particular concern has been expressed about cruise ships carrying large numbers of civilian passengers that may experience problems and need assistance. There have been incidents of this kind with cruise ships in waters off Antarctica, and a Russian-flagged passenger ship with 162 people on board ran aground on Canada's Northwest Passage on August 24, 2018.³¹

The Coast Guard is participating in exercises focused on improving Arctic SAR capabilities. Further increasing U.S. Coast Guard SAR capabilities for the Arctic could require one or more of the following: enhancing or creating new Coast Guard operating bases in the region; procuring additional Arctic-capable aircraft, cutters, and rescue boats for the Coast Guard; and adding systems to improve Arctic maritime communications, navigation, and domain awareness. It may also entail enhanced forms of cooperation with navies and coast guards of other Arctic countries.

On May 12, 2011, representatives from the member states of the Arctic Council, meeting in Nuuk, Greenland, signed an agreement on cooperation on aeronautical and maritime SAR in the Arctic.³² The agreement divides the Arctic into SAR areas

²⁸ U.S. Coast Guard, *FY 2022 Unfunded Priorities List*, Report to Congress, June 29, 2021, p. 3.

²⁹ In February 2020, for example, the Coast Guard testified that:

The Coast Guard also understands that we must maintain our existing heavy and medium icebreaking capability while proceeding with recapitalization . . . Maintenance of *POLAR STAR* will be critical to sustaining this capability until the new PSCs are delivered. Robust planning efforts for a service life extension project on *POLAR STAR* are already under way and initial work for this project will begin in 2020, with phased industrial work occurring annually from 2021 through 2023. The end goal of this process will be to extend the vessel's service life until delivery of at least the second new PSC.

(*Testimony of Admiral Charles W. Ray, Coast Guard Vice Commandant, on "Arctic Security Issues," before the House Homeland Security Subcommittee on Transportation & Maritime Security, February 5, 2020, p. 9.*)

³⁰ Coast Guard, *Arctic Strategic Outlook*, April 2019, p. 11.

³¹ Malte Humpert, "A Cruise Ship Runs Aground in Canada's Arctic Waters; The Akademik Ioffe's Sister Ship Was Nearby, and Together with Canadian Coast Guard Ships, Was Able to Rescue All Passengers," *ArcticToday*, August 28, 2018.

³² For a State Department fact sheet on the agreement, see "Secretary Clinton Signs the Arctic Search and Rescue Agreement with Other Arctic Nations," May 12, 2011, accessed July 11, 2023, at <https://2009-2017.state.gov/r/pa/prs/ps/2011/05/163285.htm>.

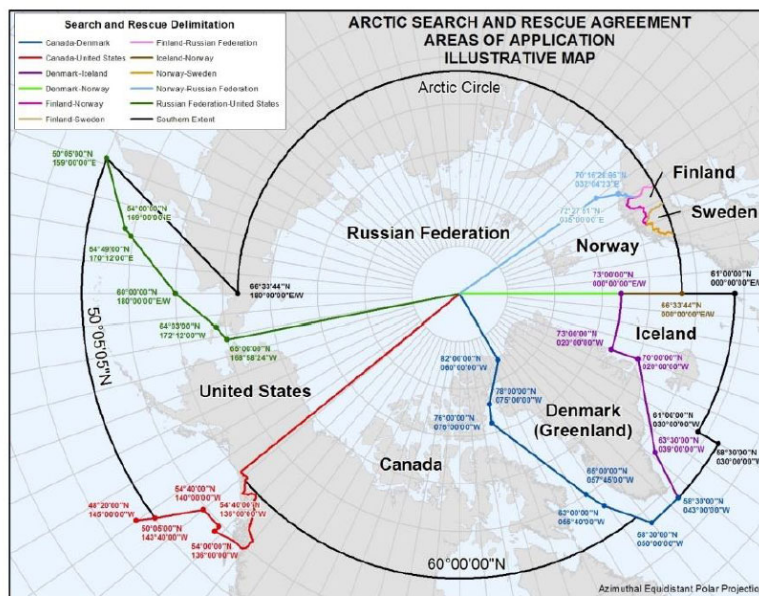
within which each party has primary responsibility for conducting SAR operations. Figure 2 shows a map of the national areas of SAR responsibility based on the geographic coordinates listed in the Annex to the agreement.

U.S. ARCTIC STRATEGIC SEAPORT

Some observers have expressed concern about whether the United States is doing enough militarily to defend its interests in the Arctic, and in some cases have offered recommendations for doing more, such as building ice-hardened Navy or Coast Guard surface ships other than icebreakers, or establishing a strategic seaport in Alaska's north to better support DOD and Coast Guard operations in the Arctic. (Anchorage, in the southern part of Alaska's mainland, was designated a U.S. strategic seaport for supporting DOD operations in 2004.) A June 2023 press report stated that a \$600 million project to expand port facilities at Nome, Alaska, will make Nome "the nation's first deep-water Arctic port. The expansion, expected to be operational by the end of the decade, will accommodate not just larger cruise ships of up to 4,000 passengers, but cargo ships to deliver additional goods for the 60 Alaska Native villages in the region, and military vessels to counter the presence of Russian and Chinese ships in the Arctic."³³

Figure 2. Arctic SAR Areas in Arctic SAR Agreement

(Based on geographic coordinates listed in the agreement)



Source: Map posted at "Arctic Region," U.S. Department of State, accessed July 11, 2023, at <https://www.state.gov/key-topics-office-of-ocean-and-polar-affairs/arctic/>.

CONCLUSION

Chairman Gimenez, Ranking Member Thanedar, thank you again for the opportunity to appear before you today, and I will be pleased to respond to any questions the subcommittee may have.

Chairman GIMENEZ. Thank you, Mr. O'Rourke.

I recognize Mr. Coffey for 5 minutes to summarize his opening statements.

³³ Mark Thiessen, "Cruising to Nome: The First U.S. Deep Water Port for the Arctic to Host Cruise Ships, Military," *Associated Press*, June 18, 2023.

**STATEMENT OF LUKE COFFEY, SENIOR FELLOW, HUDSON
INSTITUTE**

Mr. COFFEY. Chairman Gimenez, Ranking Member Thanedar, and distinguished Members of the subcommittee, I am honored to speak before the subcommittee on strategic competition in the Arctic.

With your permission, Mr. Chairman, I will summarize my prepared statement that has been submitted for the record.

The United States became an Arctic power on October 18, 1867, at a ceremony transferring the control of Alaska to the United States. With the stroke of a pen, Secretary of State William Seward ended Russian influence on North America. In his retirement, Seward was asked what his greatest achievement was. He replied, "The purchase of Alaska. It'll take another generation to find it out." I think it's safe to say that it's probably taken more than a generation to figure that one out.

In the context of strategic competition, the United States has four primary interests in the Arctic. First, ensuring the territorial defense of the United States. This is what makes our relationship with Canada so important. It also makes Greenland and Iceland the foreign operating bases of the North American continent.

Second, enforcing U.S. sovereignty in the region. In the Arctic sovereignty equals security and stability. Respecting other sovereignty while maintaining the ability to enforce one's own sovereignty will ensure that the chances of armed conflict in the region remains low. This is why the Coast Guard has such an important role to play.

Third, meeting America's treaty obligations in the Arctic through NATO.

Finally, ensuring the free flow of shipping and other economic activities in the region in line with international law and norms.

In terms of strategic competition, the United States faces two competitors in the Arctic: Russia and China. Going back to Peter the Great's two Kamchatka expeditions, the Arctic region has always held a special place in the minds and the identity of the Russian people. Therefore, focus on the Arctic serves as a low-risk and useful distraction for Russia's other geopolitical shortcomings like we've seen in Ukraine.

President Putin is acutely aware of the economic potential of the region. It is estimated that Russia's Arctic region already accounts for 20 percent of the country's GDP and could grow in the future.

Russia also sees the region as vital to its security. Up until Russia's large-scale invasion of Ukraine last year, it invested heavily in militarizing its Arctic region.

In the simplest terms, China sees the Arctic region as another place in the world where it can expand its diplomatic and economic influence and interests. China's 2018 Arctic strategy offers a useful glimpse in how Beijing views its role in the region. Running 5,500 words in its English language translated version, the strategy's littered with all of the Arctic buzzwords that we in the West just love to hear, like "common interests for all countries," "law-based governance," "climate change," and "sustainable development".

The irony, though, is not lost on observers of the South China Sea, where China has shunned international norms to exert dubi-

ous claims of sovereignty or by the fact that China is the world's largest emitter of greenhouse gases.

Even though China's closest point to the Arctic Circle is more than 800 miles away, Beijing refers to itself as a near-Arctic state, a term that is completely made up. In fact, extending Beijing's logic to other countries would mean that Kazakhstan, Belarus, Estonia, Latvia, Lithuania, Poland, Germany, the Netherlands, the United Kingdom, and Ireland are also near-Arctic states. These are hardly countries one thinks of when we think of the Arctic.

Mr. Chairman, there's been many unintended consequences resulting from Russia's invasion of Ukraine, and the Arctic is no exception. When it comes to strategic competition, there are five areas that have been impacted.

The first is the Arctic Council. Since Russia's invasion of Ukraine, the Arctic Council has all but ceased from functioning.

Second, there are new opportunities for China in the Arctic. As Western sanctions begin to bite Russia, there are new opportunities for Chinese firms to fill in the gap. But on the other hand, as an observer of the Arctic Council, and with the Arctic Council not functioning, China loses its voice in that international organization.

Third is Russia's ambitions for the Northern Sea Route. These are being curtailed by international sanctions. Last year, not a single foreign cargo ship used the route, not even one from China. Not a single ship transited the full route from Asia to Europe.

Fourth, Russia's aggression has convinced Arctic states Finland and Sweden to abandon decades-old policies of military nonalignment to join NATO.

Finally, there's been an impact on Russia's overall conventional military capability in the Arctic. Open-source intelligence reporting tells us that Russia has suffered severe consequences and losses in terms of personnel and equipment in Ukraine by Russian units based in the Arctic.

In conclusion, Mr. Chairman, the United States needs to champion an agenda that advances our national interests and devotes the required resources to the region. America's interests in the Arctic will only increase in the years to come. As other nations devote resources and assets to the region to secure their interests, America cannot afford to fall behind. Thank you.

[The prepared statement of Mr. Coffey follows:]

PREPARED STATEMENT OF LUKE COFFEY

JULY 18, 2023

Chairman Gimenez, Ranking Member Thanedar, and distinguished Members of the committee. I am honored to speak before this esteemed committee about strategic competition in the Arctic.

My name is Luke Coffey. I am a senior fellow at Hudson Institute. The views I express in this testimony are my own and should not be construed as representing any official position of Hudson Institute.

The Arctic region, commonly referred to as the High North, is becoming more contested than ever before. The Arctic encompasses the lands and territorial waters of 8 countries on 3 continents. Unlike the Antarctic, the Arctic has no land mass covering its pole (the North Pole), just ocean. The region is home to some of the roughest terrain and harshest weather on the planet.

The region is also one of the least populated areas in the world, with sparse nomadic communities and a few large cities and towns. Regions are often very remote and lack basic transport infrastructure. In Greenland, no two population centers are

connected by a road. Norway's Ny Ålesund, located on the Svalbard archipelago, is the world's most northerly permanently-inhabited place with a population of only 40. Although official population figures are non-existent, the Arctic Council estimates the figure is "almost four million",¹ making the Arctic's global population about the size of Los Angeles. Approximately half of the Arctic population lives in Russia.

The region is rich in minerals, wildlife, fish, and other natural resources. Although exact figures difficult to know, in 2008 the U.S. Geological Survey estimated that up to 13 percent of the world's undiscovered oil reserves and almost one-third of the world's undiscovered natural gas reserves are located in the Arctic.²

The melting of some Arctic ice during the summer months creates security challenges, but also new opportunities for economic development. Reduced ice will mean new shipping lanes opening, increased tourism, and further natural resource exploration. However, it will also mean a larger military presence with more actors than ever before. This is not because there is a heightened threat of conflict in the region. Instead, it is because many capabilities needed in the Arctic, such as search and rescue, are more immediately, and at least for now, more effectively, provided by the military and coast guard.

Operating in the Arctic is no easy task for the military or coast guard. Equipment must be hardened for extreme cold weather. High-frequency radio signals can be degraded due to magnetic and solar phenomena. GPS can be degraded due to poor satellite geometry. The United States has no deep-water port above the Arctic Circle. The first deep-water port planned for Nome, Alaska will not be completed until 2030—and that is if the project remains on schedule. Some of Alaska's shipping lanes have not been surveyed properly since Captain James Cook sailed through in 1778. All of this is complicated by underinvestment in the U.S. Coast Guard in recent years.

U.S. ARCTIC SECURITY INTERESTS

The United States became an Arctic power on October 18, 1867, at the ceremony transferring Alaska from Russia to the United States. At the time this purchase was ridiculed and was known as "Seward's Folly"—named after the then-Secretary of State William Seward. However, with a stroke of a pen, Seward ended Russian influence in North America, gave the United States direct access to the northern Pacific Ocean, and added territory nearly twice the size of Texas for about 2 cents an acre along with 33,000 miles of new coastline. In his retirement Seward was asked what his greatest achievement was. He said: "The purchase of Alaska. But it will take another generation to find it out."³

In the context of strategic competition, the United States has four primary geopolitical interests in the Arctic region:

- (1) *Ensuring the territorial defense of the United States.*—This is particularly true as it pertains to the growing ballistic missile threat. In this regard our relationship with Canada is key. This is also why it is important for the United States to deepen its relations with Iceland and Greenland—both serving essentially the forward operating bases of the North American continent.
- (2) *Enforcing U.S. sovereignty in the region.*—In the Arctic, sovereignty equals security and stability. Respecting the national sovereignty of others in the Arctic while maintaining the ability to enforce one's own sovereignty will ensure that the chances of armed conflict in the region remains low. This is why investment in the U.S. Coast Guard is vital to America's Arctic interest.
- (3) *Meeting treaty obligations in the Arctic region through the North Atlantic Treaty Organization (NATO).*—Six of the world's 8 Arctic countries belong to NATO. Later this year, this will increase to 7 after Sweden joins. However, NATO has no agreed common position or policy on its role in the Arctic region. This needs to change.
- (4) *Ensuring the free flow of shipping and other economic activities in the region.*—Economic freedom leads to prosperity and security. With melting ice creating new economic and shipping opportunities in the region it is in America's interests that shipping lanes remain open in line with international norms.

¹"Arctic Peoples", Arctic Council, 2023, <https://arctic-council.org/explore/topics/arctic-peoples/>.

²The USGS has not updated its estimate since 2008 and these figures remain the most widely quoted. See: U.S. Geological Survey, "Circum-Arctic Resource Appraisal: Estimates of Undiscovered Oil and Gas North of the Arctic Circle," July 23, 2008, <http://pubs.usgs.gov/fs/2008/3049>.

³Frederick W. Seward, "Seward's Folly: A Son's View," University of Rochester Library Bulletin, Spring 1967, <https://rbsep.lib.rochester.edu/487>.

U.S. STRATEGIC CHALLENGES IN THE ARCTIC

While the military threat in the Arctic remains low, U.S. policy makers cannot ignore Russia's recent activities to militarize the Arctic region or China's increasing diplomatic and economic role in the region. Both directly impact America's ability to meet the 4 aforementioned geo-political interests.

Russia's Militarization

Russia is motivated to play an active role in the Arctic region for three reasons:

(1) *Low-risk promotion of Russian nationalism.*—Going back to Peter the Great's two Kamchatka Expeditions, the Arctic region has held a special place in hearts and identities of the Russian people. With nationalism on the rise in Russia, President Putin's Arctic strategy is popular among the population. Focus on the Arctic can also serve as a useful distraction for Russia's other geopolitical shortcomings, like in Ukraine. For President Putin, the Arctic is an area that allows Russia to flex its muscles without incurring any significant geopolitical risk.

(2) *The economic potential of the region.*—Russia is also eager to promote its economic interests in the region. Half of the world's Arctic territory and half of the Arctic region's population is located in Russia. It is well-known that the Arctic is home to large stockpiles of proven, yet unexploited, oil and gas reserves. The majority of these reserves is thought to be located in Russia. In particular, Russia hopes the Northern Sea Route (NSR) will become one of the world's most important shipping lanes.

(3) *Russia's security in the region.*—Up until Russia's large-scale invasion of Ukraine in February 2022, it invested heavily in militarizing its Arctic region. In the past 15 years more than 20 military installations above the Arctic Circle have been established or re-opened after being closed in the 1990's. NATO's most recent Strategic Concept dated 2022 stated: "In the High North, its [Russia's] capability to disrupt Allied reinforcements and freedom of navigation across the North Atlantic is a strategic challenge to the Alliance."⁴ According to the 2023 NATO Summit communique: "Russia . . . maintains significant military capabilities in the Arctic."⁵

China's Increasing Role

With the focus on what China is doing in the South China Sea, its massive and questionable infrastructure investments in Africa, its threatening actions against Taiwan, and its cover-up of the origins of the COVID-19 virus, it is easy to overlook another aspect of Beijing's foreign policy: the Arctic.

In the simplest terms, China sees the Arctic region as another place in the world to advance its economic interests and expand its diplomatic influence. As a non-Arctic country, China is mindful that its Arctic ambitions in international Arctic institutions are naturally limited—but this has not stopped Beijing from increasing its economic presence in the region.

China's 2018 Arctic strategy offers a useful glimpse into how Beijing views its role in the region.⁶ Running 5,500 words long in the English language version, the strategy is littered with all the Arctic buzzwords like "common interests of all countries," "law-based governance," "climate change," and "sustainable development." The irony is not lost on observers of the South China Sea where China has shunned international norms to exert dubious claims of sovereignty, or the fact that China is the world's largest emitter of greenhouse gases.

Even though China's closest point to the Arctic Circle is more than 800 miles away, Beijing refers to itself as a "near-Arctic state"⁷—a term made up by Beijing and not found in the lexicon of Arctic discourse. In fact, extending Beijing's logic to other countries would mean that Belarus, Estonia, Germany, Ireland, Kazakhstan, Latvia, Lithuania, the Netherlands, Poland, and the United Kingdom are also "near-Arctic states." These are hardly the countries that one imagines when thinking about the Arctic. As my Hudson Institute colleague and former U.S. Secretary of State Mike Pompeo has said: "There are Arctic states, and non-Arctic

⁴"NATO 2022 Strategic Concept," The North Atlantic Treaty Organization, June 2022, p. 4 <https://www.nato.int/strategic-concept/>.

⁵Vilnius Summit Communique," The North Atlantic Treaty Organization, July 11, 2023, https://www.nato.int/cps/en/natohq/official_texts_217320.htm?utm_source=multichannel-&utm_medium=smc&utm_campaign=230711%26vilnius%26summit%26declaration.

⁶The State Council Information Office of the People's Republic of China, "China's Arctic Policy," White Paper, January 26, 2018, http://english.www.gov.cn/archive/white_paper/2018/01/26/content_281476026660336.htm.

⁷Ibid.

states. No third category exists. China claiming otherwise entitles them to exactly nothing.”⁸

China is motivated to be an Arctic actor for five primary reasons:

(1) *New Shipping Routes*.—China is unique in modern times in being a continental power that is almost entirely dependent on the sea for food and energy.⁹ New sea-lanes in the Arctic have the potential to play an important role when it comes to diversifying China’s import dependencies.

(2) *Economic Influence*.—China sees itself as a global power, and the Arctic is just another region in which to engage. China hopes to complement its Belt and Road Initiative (BRI)—a vast trading network being constructed by China on the Eurasian landmass and beyond—by investing in and constructing major infrastructure projects along the emerging sea-lanes in the Arctic.

(3) *Scientific Research*.—Whether it is for China’s sea-based nuclear deterrent, natural resource extraction, or commercial shipping, research on polar high-altitude atmospheric physics, glacial oceans, bioecology, and meteorological geology, scientific research in the Arctic is important for China’s strategic interests. As a signatory of the 1920 Svalbard Treaty, China is allowed to conduct scientific research on Norway’s Svalbard archipelago and has done so since 2004 at its Arctic Yellow River Station located in Ny Alesund.

(4) *Laying the Groundwork for Future Military Activity in the Region*.—Currently, China’s military involvement in the Arctic is limited. According to open-source reporting, the U.S. Coast Guard has spotted the People’s Liberation Army Navy in international waters off the coast of Alaska in recent years. However, there is no publicly-available evidence that the PLA Navy has ever sailed into waters above the Arctic Circle. The Pentagon has warned “that China could use its civilian research presence in the Arctic to strengthen its military presence, including by deploying submarines to the region as a deterrent against nuclear attacks.”¹⁰

(5) *Access to Minerals, Fishing, and Other Natural Resources*.—China also sees the Arctic region as a way to satisfy its growing demands for energy and food. China is a significant investor in Russian natural gas projects. There are ongoing talks between Moscow and Beijing for the construction of the Power of Siberia 2 natural gas pipeline to complement the existing Power of Siberia line. The dietary needs of China’s population can be met partly by increased fishing in the Arctic region.

A ROLE FOR NATO?

The U.S. ability to meet national security objectives in the Arctic is made possible (and easier) by the close collaboration with partner nations in the region. Luckily for the United States, 6 of the other 7 Arctic countries are either treaty allies through NATO (Canada, Denmark, Finland, Iceland, and Norway) or, in the case of Sweden, will soon be in NATO.

Considering that most of the world’s Arctic countries are in NATO, one would expect that the Alliance would place a strong focus on the region. This has not been the case. While there are training exercises that take partially place in Norway’s Arctic region, NATO has no agreed common position or policy on its role in the Arctic region. Until recently, no official document from NATO even contained the word “Arctic”. This began to change in 2022 when NATO’s Strategic Concept published that summer mentioned the “High North”—a first for the Alliance. The recent communique from the 2023 Vilnius Summit makes one brief mention of the Arctic—the first time the Arctic was mentioned in a summit communique in recent memory.

NATO has been internally divided on the role that the Alliance should play in the Arctic. Norway has traditionally been the leading voice inside the Alliance for promoting NATO’s role in the Arctic. It is the only country in the world that has its permanent military headquarters above the Arctic Circle, and it has invested extensively in Arctic defense capabilities.

⁸Radio Canada International, “U.S. Stuns Audience by Tongue-Lashing China, Russia on Eve of Arctic Council Ministerial,” May 6, 2019, <https://thebarentsobserver.com/en/arctic/2019/05/us-stuns-audience-tongue-lashing-china-russia-eve-arctic-council-ministerial>.

⁹Dean Cheng, “The Importance of Maritime Domain Awareness for the Indo-Pacific Quad Countries,” Heritage Foundation Backgrounder No. 3392, March 6, 2019, <https://www.heritage.org/global-politics/report/the-importance-maritime-domain-awareness-the-indo-pacific-quad-countries>.

¹⁰Phil Stewart and Idrees Ali, “Pentagon Warns of Risk of Chinese Submarines in Arctic,” Reuters, May 2, 2019, <https://www.reuters.com/article/us-usa-china-military-arctic/pentagon-warns-on-risk-of-chinese-submarines-in-arctic-idUSKCN1S829H>.

Canada has likewise invested heavily in Arctic defense capabilities. However, unlike Norway, Canada has stymied past efforts by NATO to take on a larger role in the region. Generally speaking, Canada is concerned that an Alliance role in the Arctic would afford non-Arctic NATO countries influence in an area where they otherwise would have none. As a sovereign nation-state, Canada has a prerogative to determine what role, if any, NATO should play in Canada's Arctic region. However, as a collective security alliance, NATO cannot ignore the Arctic altogether, and the Alliance should not remain divided on the issue. With Sweden's pending membership, this will mean that 7 out of the 8 Arctic powers will be part of the same security alliance. From a practical point of view, NATO now has no choice but to develop and implement a policy in the region. This probably explains why recent official NATO documents are starting to mention the region explicitly.

RUSSIA'S INVASION OF UKRAINE IMPACTING THE ARCTIC

There have been many unintended consequences resulting from Russia's large-scale invasion of Ukraine last year. For example, the war has threatened Ukraine's global grain exports leaving some countries in Africa and the Middle East with the threat of food insecurity. Russia is now reliant on Iran for weapons imports—something unimaginable before the war. Global energy markets have been impacted because of the war too. However, one area that has been affected by the war but doesn't get much attention is the Arctic region. There are four areas that have been impacted:

(1) *The functioning of the Arctic Council.*—The Arctic Council was founded in 1994 by the 8 Arctic states (Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden, and the United States) to cooperate in the region on non-military related issues. Over the years, cooperation has taken place on search-and-rescue operations, oil spill cleanup, and other environmental issues.

Even after Russia's annexation of Crimea in 2014, cooperation continued inside the council. But since Russia's invasion of Ukraine last year the Arctic Council has stopped functioning. No meetings take place and day-to-day operations have stopped. In May, Russia's 2-year-long chairmanship of the Arctic Council transferred to Norway. Normally, there's a big summit and a lot of diplomatic fanfare when a transfer takes place. Not this time. Instead, Russia handed over the chair of the Arctic Council to Norway during a low-key virtual meeting.

(2) *New opportunities for China in the Arctic.*—The impact of the war in Ukraine on China's Arctic ambitions are two-fold. On one hand, Western economic sanctions have created new opportunities for Chinese firms. No doubt China will try stepping in to help Russia. This will mean more cooperation between Moscow and Beijing in the Arctic region. For example, in April, Russia and China signed an agreement to increase coast guard cooperation in the Arctic.¹¹ There is also a lot of ambition regarding energy cooperation between the two.

On the other hand, with the Arctic Council no longer functioning, Beijing has lost one of its most important tools for influence in the Arctic. Since 2013, China has been an observer member of the Arctic Council and it uses this position to fund research projects and exert influence in the Arctic region. Until the Arctic Council resumes normal operations, China will have to find other ways to play an active diplomatic role in the region.

(3) *Russia's ambitious plans for its Northern Sea Route are being curtailed.*—The Northern Sea Route runs from the Barents Sea to the Bering Strait along the northern coast of Russia connecting European with Asian markets. There are some who suggest that the route could become a viable alternative—even a rival—to the Suez Canal because it cuts transit time and distance from Europe to East Asia considerably.

In some cases, this is true. Using Northern Sea Route certainly makes a trip between northern European ports to northern Asian ports considerably shorter than using the Suez Canal route. It must be pointed out that this is not the case for southern European ports like Genoa, Trieste, or Barcelona.

The Northern Sea Route is far from competing with the Suez Canal. In 2021, the year before Russia's large-scale invasion of Ukraine and the implementation of Western economic sanctions, only 35 million tons of goods transited along that route. Of this, only 2.75 million tons made the full journey between Europe

¹¹Thomas Nilsen, "Russia's Coast Guard cooperation with China is a big step, Arctic security expert says," *The Barents Observer*, April 28, 2023, <https://thebarentsobserver.com/en/security/2023/04/russias-arctic-coast-guard-cooperation-china-big-step-expert>.

to Asia.¹² This is .02 percent of the volume of goods that transited through the Suez Canal during the same year. During this period 86 ships transited the full Northern Sea Route between Europe and Asia—equal to the number of ships that pass through the Suez Canal every 36 hours.

International sanctions against Russia have discouraged the use of the route even more. Last year, not a single foreign ship used the route to transport cargo—not even from China.¹³ Only 34 million tons of goods were shipped using the route and there were no full transits linking Europe with Asia.¹⁴ Even with the Russian government continuing to invest in the Northern Sea Route, the possibility of it replacing Suez, or even drastically increasing the volume of trade transported along the route, seems remote.

(4) *An impact on Russia's overall military readiness in the Arctic.*—While Russia has not let the war against Ukraine stop it from investing and its nuclear weapons modernization program and infrastructure projects above the Arctic Circle, the invasion has taken a toll on Russia's conventional armed forces based in the Arctic region.

A good example of this is the 200th Separate Motor Rifle Brigade stationed in Pechenga only miles for the border with Norway in the Russian Arctic. This unit, specially trained and equipped to fight in Arctic conditions, participated in the initial large-scale invasion of Ukraine last year. According to media reports, of the initial 1,400 troops it entered Ukraine with only 900 survived.¹⁵ The loss of Russian armored vehicles, main battle tanks, and other associated military hardware is well-documented through open-source intelligence gathering. Undoubtedly, this loss of equipment and personnel in Ukraine will impact Russia's conventional military readiness in the Arctic in ways not yet completely understood. With the main focus of Russia's conventional armed forces being on the war in Ukraine there is less focus and fewer resources available for Russia's military in the Arctic region.

RECOMMENDATIONS

Russia is reverting to its imperial ways, and China is expanding its economic influence across much of the world. As new economic opportunities and security challenges continue to manifest in the Arctic, the United States must be prepared. The United States should:

- *Continue to invest in the U.S. Coast Guard and U.S. Navy Arctic situational awareness capabilities.*—The remote and harsh conditions of the Arctic region make unmanned systems particularly appealing for providing additional situational awareness, intelligence, surveillance, and reconnaissance.
- *Conduct Freedom of Navigation operations in the Arctic.*—Russia's dubious claim that the Northern Sea Route is an internal waterway goes against international law and norms. The United States should follow the lead of the French navy and conduct Freedom of Navigation operations in the region in a way that is in line with U.S. national interest and in accordance with international law and norms.
- *Work with allies to develop a NATO Arctic strategy.*—The Alliance should agree to develop a comprehensive Arctic policy to address security challenges in the region. This is particularly important considering the entry of Finland and Sweden into the Alliance.
- *Call for a NATO summit to be held above the Arctic Circle.*—This would bring immediate awareness of Arctic issues to the Alliance. Perhaps the Norwegian city of Troms would be most appropriate, since few cities above the Arctic Circle have the required infrastructure to hold a major international gathering like a NATO Summit.
- *Continue to raise awareness of China's questionable ambitions.*—China has declared itself a “near-Arctic state”—a made-up term that previously did not exist

¹² Malte Humpert, “Cargo Volume on Northern Sea Route Reaches 35m Tons, Record Number of Transits,” High North News, January 26, 2022, <https://www.highnorthnews.com/en/cargo-volume-northern-sea-route-reaches-35m-tons-record-number-transits>.

¹³ Atle Staalesen, “No foreign vessels in sight, but shipping on Northern Sea Route still vibrant, Russian authorities say,” December 21, 2022, The Barents Observer, <https://thebarentsobserver.com/en/industry-and-energy/2022/12/no-foreign-vessels-sight-shipping-northern-sea-route-still-vibrant>.

¹⁴ Malte Humpert, “Northern Sea Route Sees Lots of Russian Traffic, But No International Transits in 2022,” June 14, 2023, High North News, <https://www.highnorthnews.com/en/northern-sea-route-sees-lots-russian-traffic-no-international-transits-2022>.

¹⁵ Greg Miller, et al., “Wiped out: War in Ukraine has decimated a once feared Russian brigade,” The Washington Post, December 16, 2022, <https://www.washingtonpost.com/world/2022/12/16/russia-200th-brigade-decimated-ukraine/>.

in Arctic discourse. The United States should work with like-minded partners in the Arctic to raise legitimate concerns about China's ambitions in the region. So far, China's motivation in the Arctic seems to be more about economics and less about security but considering China's predatory economic behavior in places like Africa, it is only reasonable to question China's motivations in the Arctic.

- *Deepen relations with Iceland.*—Not only is Iceland an important NATO member, but it is also home to a very important air base in the Arctic region. The Trump administration ended the diplomatic sanctions that applied to Reykjavik by the Obama administration over Icelandic whaling. The Biden administration should continue to improve U.S.-Icelandic relations.
- *Deepen relations with Greenland.*—Greenland is an autonomous constituent country of the Kingdom of Denmark. Greenland has competency over most policy areas, with the big exceptions being foreign affairs, defense, and monetary policy—all of which are still controlled by Copenhagen. The United States has operated an important military base in Greenland since 1943. In 2020, the United States re-established a diplomatic presence in the capital Nuuk—the first such presence on the island since 1953. The United States should ensure that it invests adequately in the military infrastructure in Greenland and deepen relations with Nuuk.
- *Consider establishing a U.S. diplomatic presence in the Faroe Islands.*—The Faroe Islands is an autonomous constituent country of the Kingdom of Denmark located in the north Atlantic about halfway between the United Kingdom and Iceland. Like Greenland, the Faroe Islands has competency over most policy areas, with the big exceptions being foreign affairs, defense, and monetary policy—all of which are still controlled by Copenhagen. While the United States does not maintain a military base in the Faroe Islands, the country's geo-political significance is increasing. For example, in June, a nuclear-powered U.S. submarine (the *USS Delaware*) visited the islands for a port call—the first such visit by the U.S. Navy in the Faroe Islands. With a population comparable to Greenland's, and with growing geo-political importance, the United States should consider establishing a diplomatic presence in the Faroe Islands too.
- *Consider the use of Svalbard for any required scientific needs under the terms of the 1920 Svalbard Treaty.*—Due to its location in the Arctic region and its particular environmental conditions, Svalbard is very attractive for scientific research. In the past, the Department of Defense has conducted research there and it should consider doing so in the future if the need arises. This is an excellent way for the United States to “fly the flag” in a region with significant geo-political importance.
- *Preparing for the future of the Arctic Council and multilateral cooperation in the Arctic.*—It is inconceivable that the Arctic Council in its current form will function in any meaningful way as long as Russia continues its aggression against Ukraine. The 7 other Arctic states need to start thinking about alternative structures and new ways of cooperating in the Arctic region. The goal would not be to replace the Arctic Council but instead to ensure that a framework is created allowing important work to continue without Russia. The United States should lead this effort.

CONCLUSION

America's interests in the Arctic region will only increase in the years to come. As other nations devote resources and assets in the region to secure their national interests, America cannot afford to fall behind. The United States needs to champion an agenda that advances the U.S. national interest and devotes the required national resources to the region. With the Arctic becoming increasingly important in an era of strategic competition, now is not the time for the United States to turn away from its own backyard.

Chairman GIMENEZ. Thank you, Mr. Coffey.

I now recognize Dr. Brimmer for 5 minutes to summarize her opening statements.

STATEMENT OF ESTHER D. BRIMMER, JAMES H. BINGER SENIOR FELLOW IN GLOBAL GOVERNANCE, COUNCIL ON FOREIGN RELATIONS

Ms. BRIMMER. Thank you, Chairman Gimenez and the Ranking Member Thanedar and the distinguished Members of the sub-

committee for inviting me to testify today about strategic competition in the Arctic.

With your permission, I will summarize my remarks that have been submitted for the record.

The Arctic stands at the confluence of three phenomena: shifting geopolitics, climate change, and the far-reaching implications of Russia's invasion of Ukraine.

The Arctic is geographical, but is also conceptual. Just as the words "Indo-Pacific" or the "South China Sea" connote strategic concepts, so too the Arctic takes on renewed strategic importance. The Arctic is America's fourth coast, meaning increased attention needs to be paid to the interlocking strategic, economic, environmental, and social concerns in the region.

I will begin by commenting on the geopolitics and the changing institutions in the Arctic. As we've already noted in this hearing, the geopolitics of the Arctic was dramatically altered by the Russian invasion of Ukraine in 2022. Both Finland and Sweden abandoned in Sweden's case 200 years of neutrality to join America's most important in military alliance and we hope they'll be members soon.

Russia's invasion of Ukraine not only enhanced NATO, it also inadvertently stalled competition in one of the Arctic's most distinctive multilateral organizations, the Arctic Council. Founded in 1996 in the afterglow of the end of the Cold War, the Arctic Council embodied the spirit of cooperation. Decisions were made by consensus and the forum focused on sustainable development and environmental issues. By design, it did not focus on security.

Unusual for an intergovernmental body, the Arctic Council also includes 6 permanent participant organizations representing Arctic indigenous peoples. This special facility for interaction is distinctive and should be preserved. Cultural ties span current national borders.

At the time of the 2022 invasion of Ukraine by Russia, unfortunately Russia happened to be holding the chair of the Arctic Council. Obviously the other 7 paused relationships with the Arctic Council. Norway is now chair and seeks to revitalize cooperation in this body.

This strategic realignment in the Arctic builds on political shifts that were already evident before the invasion. Recent years witnessed the resurgence of great power competition. The United States faces a rising power, China, and the Russian Federation. Increasingly, countries outside the Arctic have been active in the region. The one of greatest concern, of course, is China. But that said, there are numerous observers at the Arctic Council, including Japan, India, Italy, the Republic of Korea, and Singapore, although they just joined in 2013 a longer list of members of the observer group at the Arctic Council.

But even before the war in Ukraine, Russia needed partners for economic development. Indeed, the—Russia's need for economic partners creates and opening for China. China invested \$90 billion in energy resources and most of those projects are in Russia.

An increased activity by China and Russia in the Arctic is a manifestation of another trend: great power competition in global spaces. In many parts of the world, great powers and assertive

middle powers seek access to resources. Access to areas beyond or at the edge of national jurisdiction is crucial for success in this era of strategic and commercial rivalry. Therefore, the protection of coastlines, waterways, safe commercial transit, and management of marine resources is increasingly important, placing greater demands on the Coast Guard.

Fundamental to understanding the geopolitical and economic issues in the Arctic is the phenomenon of climate change. Global warming is occurring quickly in the Arctic. Climate change is important to the geopolitics of the Arctic because it changes access to oceans. Climate change also changes livelihoods. Around 60 percent of Alaska Natives are challenged by climate change.

In conclusion, to advance maritime security in an era of strategic competition in the Arctic, the United States must continue to deepen its commitment to make progress on building a deepwater port in Nome, Alaska, continue the Polar Security Cutter program, and work with the current chair of the Arctic Council of Norway to sustain mechanisms that are value to Americans who live in Alaska.

Thank you, Mr. Chairman.

[The prepared statement of Dr. Brimmer follows:]

PREPARED STATEMENT OF ESTHER D. BRIMMER

JULY 18, 2023

Thank you, Chairman Gimenez, Ranking Member Thanedar, and Members of the subcommittee, for inviting me to testify today about “Strategic Competition in the Arctic.”

The Arctic sits at the confluence of three phenomena: shifting geopolitics, changing climate, and the far-ranging implications of Russia’s invasion of Ukraine. The Arctic is geographical, the home of almost 4 million people facing the impact of climate change that will alter lives and livelihoods.¹ It is also conceptual. Just as the words “Indo-Pacific” or the “South China Sea” connote strategic concepts, so too the “Arctic” takes on renewed strategic meaning. The Arctic is “America’s Fourth Coast” meriting increased attention to the interlocking strategic, economic, environmental, and social concerns in this region.²

The Arctic Circle begins at 66.5°N (north of the equator). Eight countries have territory in the Arctic Circle: Canada, Finland, Denmark, Iceland, Norway, the Russian Federation, Sweden, and the United States. The end of the Cold War reduced political pressures in the Arctic region. The spirit of the Norwegian concept, “High North, Low Tension” prevailed. The strategic situation has mutated into a new configuration. By 2023, renewed great power competition around the world is manifest in the Arctic region.

The Arctic intensifies the effects of decisions made elsewhere. The geopolitics of the Arctic were dramatically altered by the Russian Federation’s invasion of Ukraine in 2022. Russia’s invasion of Ukraine fundamentally transformed the security calculations of two longtime-neutral countries. As a result of Russia’s actions, Nordic states Finland and Sweden applied for membership in the North Atlantic Treaty Organization (NATO). Finland had been neutral since 1948 and Sweden had been neutral since the Napoleonic era two centuries ago. Both abandoned neutrality to seek the security of the world’s most powerful military alliance.

This expansion recalibrates politics within NATO. With the accession of Finland, 6 (and with Sweden 7) of the Arctic countries are formal allies. Finland was admitted in April 2023, bringing NATO an 832-mile land border with Russia. The upshot for the Arctic is that the region transmutes from a region with 5 NATO allies, 2

¹“Arctic Peoples,” Arctic Council, accessed July 13, 2023, <https://arctic-council.org/explore/topics/arctic-peoples/#:~:text=Topics,Arctic%20Peoples&text=The%20Arctic%20is%20home-%20to,peoples%20distinct%20to%20the%20Arctic>.

²Thad W. Allen, Christine Todd Whitman (Chairs), and Esther Brimmer (Project Director), *Arctic Imperatives: Reinforcing U.S. Strategy on America’s Fourth Coast* (Council on Foreign Relations Press, 2017).

strategically neutral states, and the Russian Federation to a zone with potentially 7 NATO allies and the Russian Federation.

NATO is a defensive military alliance, but it is also a framework for deep cooperation among the national security communities of the member states. Henceforth, the Arctic will play a larger role in the strategic operations, calculations, and exercises of America's most important military alliance. The North Atlantic and Arctic would be important for North American supplies flowing to European allies in a crisis. The institutions of the alliance will increasingly embed Arctic and High North topics into their work. For example, Allied Command Transformation states, "... the High North is an important priority for NATO" when explaining the addition of Arctic activities to its projects preparing NATO members for future challenges.³ Presidential time is valuable. The importance of the High North was exemplified by President Joe Biden's trip to Helsinki for the United States-Nordic Leaders' Summit after the July 11–13, 2023, NATO summit.⁴ Furthermore, Finland and Sweden are both members of the European Union, making 2 more E.U. members also NATO members, which could alter E.U. security discussions.

Russia's invasion of Ukraine not only enhanced NATO, it also inadvertently stalled cooperation in one of the Arctic's most distinctive multilateral organizations: the Arctic Council. Founded in 1996 in the afterglow following the end of the Cold War, the Arctic Council embodies the spirit of cooperation; decisions are made by consensus. The forum focuses on "sustainable development and environmental protection in the Arctic."⁵ By design, the Arctic Council does not address security issues. The Council has adopted 3 legally binding agreements: the Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic (2011), the Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic (2013), and the Agreement on Enhancing International Arctic Scientific Cooperation (2017).⁶

Unusual for an intergovernmental body, the Arctic Council also includes 6 Permanent Participants representing Arctic Indigenous Peoples. This special facility for interaction is distinctive and should be preserved. Cultural ties span current national borders. Indigenous peoples have lived in the harsh climate of the Arctic for over a thousand years; their expertise and perspectives can be relevant as countries seek to understand climate change.

At the time of the 2022 invasion of Ukraine, Russia happened to hold the rotating chairmanship of the Arctic Council. As part of the international response to the invasion, the other 7 members of the Arctic Council paused cooperation with Russia in that body. Upon assuming the 2-year chairmanship in May 2023, Norway sought to revitalize cooperation in the Arctic Council articulating 4 priorities: "the oceans; climate and environment; sustainable economic development; and people in the north."⁷ Another venue for cooperation, the Arctic Coast Guard Forum remains dormant with Russia holding the chairmanship through 2023.

This strategic realignment in the Arctic builds on political shifts that were already evident before the invasion. Recent years witnessed a resurgence of great power competition. The United States faces a rising power, China, and the Russian Federation. Increasingly, countries outside the Arctic have become more active in the region. China called itself a "near-Arctic" state in its 2018 Arctic Policy White Paper.⁸ In 2013, China, Japan, India, Italy, the Republic of Korea, and Singapore became Arctic Council Observers, joining France, Germany, The Netherlands, Poland, Spain, Switzerland, and the United Kingdom.

Many countries and companies are interested in access to resources. The Arctic is home to living and mineral resources. Managing access in the fragile Arctic environment is challenging. Yet, agreements are possible. Arctic countries share a concern about illegal, unreported, and unregulated fishing that depletes delicate nat-

³"The Future of the High North," Allied Command Transformation, NATO, May 12, 2023, <https://www.act.nato.int/article/the-future-of-the-high-north/>.

⁴"Readout of the Third United States–Nordic Leaders' Summit," The White House, July 13, 2023, <https://www.whitehouse.gov/briefing-room/statements-releases/2023/07/13/readout-of-the-third-united-states-nordic-leaders-summit/>.

⁵"About the Arctic Council," Arctic Council, accessed July 12, 2023, <https://arctic-council.org/about/>.

⁶"About the Arctic Council."

⁷Hilde-Gunn Bye, "Upcoming Arctic Council Chairship: Important to Have Some Cooperation With Russia on Climate," High North News, last modified April 11, 2023, <https://www.highnorthnews.com/en/upcoming-arctic-council-chairship-important-have-some-cooperation-russia-climate>.

⁸"Full Text: China's Arctic Policy," University of Alaska Fairbanks, The State Council, the People's Republic of China, January 26, 2018, <https://www.uaf.edu/caps/resources/policy-documents/china-arctic-policy-2018.pdf>.

ural resources and vulnerable wildlife. Canada, China, the Kingdom of Denmark (in respect of the Faroe Islands and Greenland), Iceland, Japan, the Republic of Korea, Norway, the Russian Federation, the United States, and the European Union are parties to the Agreement to Prevent Unregulated High Seas Fisheries in the central Arctic Ocean, which entered into force in 2021 and initially will be in force until 2037. The agreement would be automatically extended for another 5 years as long as none of the Parties object.⁹

In 2008, the U.S. Geological Survey estimated that 13 percent, or 90 billion barrels, of the world's undiscovered conventional oil resources were in the Arctic.¹⁰ Most of these resources are in Alaska and the Russian Federation. The Arctic plays an important role in the Russian economy. About half of the Arctic area is Russian coastline. Twenty percent of Russia's land mass is in the Arctic Circle and includes large cities. Russia wants others to use (and pay to use) the Northern Sea Route.

Even before the war in Ukraine, Russia needed partners for economic development. Economic sanctions promulgated as part of the international response to Russia's invasion of Ukraine foreclose options for Russia.

Russia's need for investment opens a gateway for China to be more involved in Arctic issues. High North News notes that China has invested \$90 billion in energy and resource projects in the Arctic over the past decade, largely in Russia.¹¹ China is Russia's leading trade partner, as China is for 120 countries.¹² China's investments in the Arctic are related to its Belt and Road Initiative. Yet, patterns of Chinese shipping were different in 2022. High North News reports that whereas China's COSCO shipping company had been the largest non-Russian operator along the Northern Sea Route (NSR), it did not send any ships along the NSR in 2022. In 2022, of the 314 ships sailing along the Northern Sea Route, only 36 were non-Russian-flagged vessels.¹³ Nevertheless, Chinese investment in Russia continues to grow. Chinese-Russian trade rose to a "record \$190 billion" in 2022.¹⁴ There are European countries that still have economic links with Russia. European Union countries' consumption of Russian LNG increased 50 percent since sanctions started, mostly going to Belgium, France, and Spain.¹⁵

Increased activity by China and Russia in the Arctic is a manifestation of another trend: great power competition in global spaces. For over a century the United States has enjoyed command of the seas and more recently air space and outer space. Access to sea routes, airwaves, cyber space, and satellite information are all necessary for modern economies to function, but also require using shared international spaces that may be beyond or at the edges of national jurisdiction. In many parts of the world great power and assertive middle powers seek access to resources, some of which may be in or under these global spaces. Access to the global commons and areas beyond national jurisdiction is crucial for success in an era of strategic and commercial rivalry. Therefore, protection of coastlines, waterways, safe commercial transit, and management of marine resources place extra demands on the United States Coast Guard.

Oceans are especially sensitive. At the center of the Arctic region is the Arctic Ocean, which is beyond the jurisdiction of any country. The United Nations Convention on the Law of the Sea creates the international legal regime for oceans, including the Arctic Ocean. Each Arctic country, including the United States, claims its 200-mile exclusive economic zone. The United States is at a disadvantage because it is not a party to the United Nations Convention on the Law of the Sea, which

⁹"Arctic: Agreement to prevent unregulated fishing enters into force," European Commission, June 25, 2021, https://oceans-and-fisheries.ec.europa.eu/news/arctic-agreement-prevent-unregulated-fishing-enters-force-2021-06-25_en. Accessed July 13, 2023.

¹⁰"Circum-Arctic Resource Appraisal: Estimates of Undiscovered Oil and Gas North of the Arctic Circle," USGS Fact Sheet No. 2008-3049, U.S. Geological Survey, 2008, <https://pubs.usgs.gov/fs/2008/3049/fs2008-3049.pdf>.

¹¹Malte Humpert, "Putin and Xi Discuss Further Deepening of Arctic Partnership," High North News, last modified March 24, 2023, <https://www.highnorthnews.com/en/putin-and-xi-discuss-further-deepening-arctic-partnership#:text=Over%20the%20past%20decade%20China,figure%20to%20surpass%20%24200bn>.

¹²Mark Green, "China Is the Top Trading Partner to More Than 120 Countries," Stubborn Things, Wilson Center, January 17, 2023, <https://www.wilsoncenter.org/blog-post/china-top-trading-partner-more-120-countries>.

¹³Malte Humpert, "Northern Sea Route Sees Lots of Russian Traffic, But No International Transits in 2022," High North News, June 14, 2023, <https://www.highnorthnews.com/en/northern-sea-route-sees-lots-russian-traffic-no-international-transits-2022>.

¹⁴Mikhail Korostikov, "Is Russia Really Becoming China's Vassal?" Carnegie Politika, Carnegie Endowment for International Peace, June 7, 2023, <https://carnegieendowment.org/politika/90135>.

¹⁵Malte Humpert, "EU Proposes Measures to Block Import of Russian Arctic LNG," April 3, 2023, <https://www.highnorthnews.com/en/eu-proposes-measures-block-import-russian-arctic-lng>.

provides mechanisms for countries to claim more rights. Canada, Russia, and Denmark (on behalf of Greenland) turned to one of those mechanisms, the United Nations Commission on the Limit of the Continental Shelf (CLCS) regarding their overlapping claims to the Lomonosov Ridge under the Arctic Ocean. The CLCS made non-binding recommendations in February 2023 about the extent of Russia's claim. Further diplomatic or legal work will need to occur to settle the borders.¹⁶

The Arctic, like other regions of the world, benefits from layers of global governance. Even in an era of geopolitical upheaval, cooperation on technical standards facilitates commercial, social, and environmental interactions. The International Maritime Organization's International Code for Ships Operating in Polar Waters (Polar Code), which entered into force in 2017, provides important standards for shippers operating in the Arctic and Antarctic regions. The terms of the Polar Code are mandatory under both the International Convention for the Safety of Life at Sea (SOLAS) and the International Convention for the Prevention of Pollution from Ships (MARPOL).¹⁷

Fundamental to understanding the geopolitical and economic issues in the Arctic is the phenomenon of climate change. Global warming is occurring in the Arctic possibly 3 times as fast as in the rest of the world.¹⁸ Sea ice is frozen seawater. With less Arctic sea ice to reflect sunshine away from the Earth, the planet will continue to heat up. Furthermore, the Greenland ice sheet (which is frozen freshwater) has lost ice for the past 25 years.

The on-going geopolitical shifts occurring before the invasion of Ukraine were premised on climate change. Climate change is important to the geopolitics of the Arctic because it changes access to the oceans. The warming climate means that more areas of the Arctic are ice-free in the summer, possibly opening opportunities for navigation. There could be ice-free summers in the Arctic Ocean in the 2030's. Companies and countries watch to see if navigation through the Arctic would be viable, thereby shortening shipping routes and times between Asia and Europe. Other observers counter that even with less ice, Arctic navigation would still be difficult.

Climate change challenges livelihoods. Around 4 million people live in the Arctic, and about 2 million of them are Russian; about 500,000 are Indigenous people. Around 60 percent of Alaska Native communities are "environmentally threatened" by climate change. Conditions are especially acute for Indigenous people who still hunt for sustenance. Thin ice and altered animal migrations mean hunters must travel farther for food. Migration patterns of birds and fish, and also caribou, walrus, and whales have shifted, requiring people to extend the hunting season. Warmer waters may entice fish usually found in lower latitudes to move farther north. The changing climate also affects companies' calculations. Shell ended offshore exploration in Alaska in 2015.

The Biden administration's October 2022 National Strategy for the Arctic Region includes investments in the Arctic. To advance maritime security in an era of strategic competition in the Arctic, the United States must continue to deepen its commitment to:

- Make progress on building a deep-water port in Nome, Alaska.
- Continue the Polar Security Cutter program.
- Work with the current chair of the Arctic Council, Norway, to sustain mechanisms that promote human and environmental well-being, including connections among Indigenous Peoples in the Arctic region.

Chairman GIMENEZ. Thank you, Dr. Brimmer.

Members will be recognized by order of seniority for their 5 minutes of questioning. I recognize myself for 5 minutes of questioning.

Mr. O'Rourke, how important are these icebreakers to protect America's interests in the Arctic?

Mr. O'ROURKE. I think most people would say that they are central to the Coast Guard's ability to perform its missions in the Arc-

¹⁶ Björn Kunoy, "Recommendations on the Russian Federation's Proposed Outer Continental Shelf in the Arctic Area," EJIL: Talk! Blog of the European Journal of International Law, March 3, 2023, <https://www.ejiltalk.org/recommendations-on-the-russian-federations-proposed-outer-continental-shelf-in-the-arctic-area/>.

¹⁷ "International Code for Ships Operating in Polar Waters (Polar Code)," International Maritime Organization, accessed July 13, 2023, <https://www.imo.org/en/ourwork/safety/pages/polar-code.aspx>.

¹⁸ Rebecca Hersher, "The Arctic is heating up nearly four times faster than the whole planet, study finds," National Public Radio, August 11, 2022, <https://www.npr.org/2022/08/11/1116608415/the-arctic-is-heating-up-nearly-four-times-faster-than-the-rest-of-earth-study-f>.

tic. The Coast Guard would not be able to do most of its statutory missions in the Arctic without them. They aren't the only thing that the Coast Guard would need to perform its missions, and I mentioned some of the other things, the aircraft, possible UAVs, improved shore facilities and communications, but the icebreakers are central to that. As I mentioned in my opening statement, they can be considered a form of mobile infrastructure. So, when we talk about improving U.S. infrastructure in the Arctic, the icebreakers can be considered to be part of that.

Chairman GIMENEZ. Well, how many icebreakers does the United States operate up there in the Arctic?

Mr. O'ROURKE. The U.S. operational polar icebreaker fleet is currently two ships: the heavy icebreaker, *Polar Star*, and medium polar icebreaker, *Healy*.

Chairman GIMENEZ. So, one medium and one heavy?

Mr. O'ROURKE. That's right.

Chairman GIMENEZ. How many does Russia operate?

Mr. O'ROURKE. They have about 36 government-operated icebreakers, including 6 heavys, 22 mediums, and 8 lights. Those are the government-operated ones. They also have private-sector polar icebreakers, 9 medium and 6 light.

Chairman GIMENEZ. I would think that—

Mr. O'ROURKE. If you add all those together, that's 51.

Chairman GIMENEZ. Fifty-one. But I would figure that they have a much bigger footprint on the other side of the Arctic in terms of the miles that they have on the Arctic. Is that correct or am I incorrect?

Mr. O'ROURKE. That's right. They—

Chairman GIMENEZ. But not to this level, right? Not this difference?

Mr. O'ROURKE. Russia has about one-half of the Arctic coastline. They also have 2 million people living above the Arctic Circle. They have many Arctic towns and communities. They use portions of the Northern Sea Route that runs along the Russian coast as a marine highway to connect those towns to one another. So, they have quite a lot of people and economic activity. That's reflected in their icebreaker fleet.

Chairman GIMENEZ. How many of those icebreakers kind-of operate in our sphere of influence, in our area, of theirs?

Mr. O'ROURKE. Well, their icebreakers operate primarily in their own Arctic waters, although they will occasionally send icebreakers into the central Arctic, for example, in support of taking measurements for their extended continental shelf claims.

Chairman GIMENEZ. How many icebreakers do the Chinese have?

Mr. O'ROURKE. The Chinese currently have 2 polar icebreakers, one that they purchased from Ukraine, if I remember right, the second one was indigenously built. A third one is currently under construction. The 2 that are operational have already made numerous cruises to the Arctic. In fact, one of them, the new one, the *Xue Long*, has just started its most recent cruise into Arctic waters.

Chairman GIMENEZ. What do you think that the PRC's aims in the Arctic are? What are they after?

Mr. O'ROURKE. That is a subject of conversation and curiosity and concern among numerous observers. Part of it is economic.

Some of it may relate to mining and fishing. Some of it is geopolitical. Some of it may reflect their desire to be a world power and their view that world powers need to be active in the polar regions, including both the Arctic and the Antarctic. The exact mix of China's motivations for its activities in the Arctic and what their end goals may be are a matter of discussion. Those may have shifted as a consequence of Russia's war in Ukraine and the impact that has had on the Arctic in terms of what Mr. Coffey mentioned, for example, and providing more opportunity for China to cooperate with Russia, as Russia seeks to respond to its diplomatic isolation in the Arctic from the other 7 Arctic states.

Chairman GIMENEZ. In order for the Coast Guard to conduct its mission, how many icebreakers does the Coast Guard need? What kind of mix is it that you—

Mr. O'ROURKE. The Coast Guard has testified that their new fleet mix analysis indicates a need for a total of 8 to 9. That's an increase over the previously envisaged total of 6 that included 3 heavys. So, now we're looking at 8 to 9, presumably still including 3 heavys.

Chairman GIMENEZ. Fair enough. Final one observation is that the Chinese, the PRC, has fishing fleets around the world. I said also on the Select Committee on China we are going to be looking at those activities. Apparently they are raping the oceans, OK. So, my concern would be the same, they would try to do the same thing in the Arctic region. So, maybe that is part of the reason, too, why they want access to those fisheries up in the Arctic region.

Mr. O'ROURKE. Yes. China's world-wide fishing activities are a growing concern, including what is referred to as IUU fishing, illegal, unreported, unregulated fishing. As conditions in the Arctic change, fish stocks may be migrating further north. So, we have a dynamic situation of China possibly being interested in northern fish stocks and the exact locations of those fish stocks moving further northward in response to warming waters.

Chairman GIMENEZ. Thank you. My time is up.

I now recognize the gentleman from California, Mr. Garcia.

Mr. GARCIA. Thank you, Mr. Chairman. Thank you to our witnesses. Thank you all for being here.

I just wanted to note that as our planet warms, obviously, and sea levels rise due to climate change, the Arctic is also melting at an unprecedented rate. The Arctic we know is warming, melting several times faster than other regions across the world. We know that this change is opening up new challenges for all, particularly here in the United States, and certainly opportunities for our adversaries to capitalize on.

The Arctic is also a case study in not only how climate change impacts us globally—it certainly impacts our way of life—but also impacts our national security. It is also, of course, an economic issue. I represented the Ports of Long Beach when I was mayor for 8 years, representing the ports right now, largest container seaport in the United States, the Ports of Long Beach and Los Angeles. So, I know that there is also trade implications when it comes to the Arctic and the dangers around national security and economic security.

Now, 40 percent of our Nation's cargo go through the Ports of Long Beach and Los Angeles. Our Nation's economic prosperity depends on our ability to remain adaptive in this changing maritime environment.

Dr. Brimmer, I wanted just to ask from an economic growth standpoint, do you agree that the Arctic is also critical to U.S. economic interests, both in terms of new commerce and trade?

Ms. BRIMMER. Thank you very much for your question, if I may follow up on, particularly that indeed recognizing the importance of port facilities is crucial to the economic health of the United States, as you mentioned, particularly the Ports of Los Angeles and Long Beach. Indeed, as we look at changing dynamics, we see the importance of other regions, and I would note particularly the Arctic.

Although we commented on the size of the coastline to the Russian Federation, we know that there are significant resources in the Arctic. The management of those will require careful planning for years in the future. Managing future fish stocks, managing other natural resources will be important. Indeed, because of the rapid pace of climate change, we will see increasing pressures for greater navigation through the Arctic. But that will still be difficult even if we have important resources that we all support in order to make it possible to travel in that area. There will continue to be a challenge and that will be important for the United States.

Mr. GARCIA. Great. Thank you. So, we also have, of course, national security issues here. So, the world is rapidly changing. Our adversaries are quickly evolving with that change. It is certainly essential to our national interests and our security of our allies in the United States that we are meeting this important moment.

Now, we have concerns that our operational capacity and our competitiveness in the Arctic is falling behind both Russia and China. I think that has been mentioned already here today. So, the Coast Guard obviously needs the tools to operate in this new landscape. As it has been mentioned, it has been discussed also here, Russia has upwards of 40 operational icebreakers while China is mobilizing their commercial shipping capacity. You just obviously mentioned also the increasing that is happening around fishing as well around the Arctic. The United States, however, is still operating with just two polar icebreakers. It is the same two icebreakers that we know that we roughly had about 60 years ago.

Also, Dr. Brimmer, from a NATO perspective, with Finland and Sweden's ascension to NATO, am I correct that the Arctic presents a unique opportunity for us to strengthen our global alliances with the other 6 Arctic NATO nations, particularly around global civility and economic prosperity?

Ms. BRIMMER. Yes, sir, indeed, this is a remarkable moment for NATO, America's most important military alliance. Indeed, the arrival of Finland brings with us a highly competent country with expertise in the High North, which will be extremely important. Of course, it also brings a land border with the Russian Federation and Finland of over 800 miles. But it also brings us expertise in the High North.

This will be increasingly important. Ironically, we're having to go back to look at maps that were so familiar during the Cold War. We're talking again about the Greenland-Iceland-UK gap, that area

in the North Atlantic which would be important if there ever had to be resupply for Europe from North America.

So, indeed, there's both importance strategically, yet this is an opportunity for NATO to deepen its cooperation, drawing on the expertise of its existing and new members in the defense of our democracies.

Mr. GARCIA. Thank you. I wanted with the time we have left, Dr. Brimmer, in 2017, there was a bipartisan task force on Arctic imperatives that of course you helped lead. You made it clear, and I want to quote: "that the U.S. needs to increase its strategic commitment to the region or risk leaving its interests unprotected." Now, the task force identified several key goals around the Arctic. How do you think we are doing as a country meeting these goals with the remaining time that we have?

Ms. BRIMMER. Sir, I would say our grade is only about a C+ at this point. We have made important developments since that report in that now there is funding for the Polar Security Cutters, which is extremely important, as my colleagues have pointed out, that the United States has interests in the Arctic and the Antarctic. However, we will need increased investment in infrastructure and in diplomatic support for these new obligations.

Mr. GARCIA. Thank you. Thank you very much.

Chairman GIMENEZ. The gentleman's time has expired. I now recognize the gentleman from Louisiana, Mr. Higgins.

Mr. HIGGINS. Thank you, Mr. Chairman. Ma'am, gentlemen, thank you for appearing before us today.

I had the great honor of sitting next to Don Young for 6 years, the Congressman that represented Alaska for so long, so many decades. When I came to Congress in 2017, Don favored me, sort-of put his arm around me and helped me navigate through the complexities of this bizarre realm. I came to call him friend. I have always respected my elder and Don shared great wisdoms from his decades of serving the American people and the people of Alaska.

So, I would like to jump into, Mr. O'Rourke, I am going to discuss during my time of questioning the significance of the Polar Security Cutter program and building icebreakers because Don told me on several occasions that it was one of the most important tasks that we could complete. He considered it legacy stuff to get that done. It was so important that America had presence and dominance in that technology and we were very much falling behind our potential adversaries in the Arctic regarding navigation.

We discussed climate change. Don made it clear. Don had been a tugboat captain during the course of his life. He understood the waters. He said there is always going to be ice. So, regardless of climate change, it is not going to become the Caribbean up there. So, you need icebreakers. The nature of the ice may change, but we need vessels that can navigate effectively with 21st Century technologies through Arctic waters.

Mr. Chairman, I am going to be citing from, and therefore I would like to submit for the record, the Congressional Research Service report entitled "Coast Guard Polar Cutter Security Cutter Program Background and Issues," updated July 10, 2023, to be submitted for the record, Mr. Chairman.

Chairman GIMENEZ. So ordered.*

Mr. HIGGINS. Thank you. Regarding the fiscal year 2024 procurement request, I fully support it. Mr. O'Rourke, I want to clarify that because the significance of this program has been made clear to me for 7 years now. I have very high confidence in the Louisiana shipbuilder, Bollinger, who has inherited that program with the purchase of the originally contracted shipbuilder.

So, let's jump into the 2023 GAO report. May I do that with you, Mr. O'Rourke? You are familiar with that report?

Mr. O'ROURKE. My testimony was the June report from this year that reported on the design completion for the ship.

Mr. HIGGINS. OK. They are related. I am referencing a report from April of this year, which studied the development of the program through September 30 of last year.

Mr. O'ROURKE. Right. Mm-hmm.

Mr. HIGGINS. As of last year in September, here are some quotes from the GAO reported. They stated that, "Design immaturity and the shipbuilder's inexperience working with the specialized steel needed for hull construction remained the program's top risk." They stated that, "Oversight of the program was hampered due to some shipbuilder's deficiencies." This was the nature of the program, I am just trying to clarify, before the current shipbuilding contractor purchased the program and the responsibility of completing it. Is that correct?

Mr. O'ROURKE. That's right 'cause their data was prior to the shipyard sale.

Mr. HIGGINS. Roger that. So, in my remaining little bit less than a minute, Mr. O'Rourke, please explain to America and the committee just how important this program is and how significant Congress' support for that program is for the future stability of our Nation and indeed peace and prosperity throughout the Western Hemisphere and beyond.

Mr. O'ROURKE. Mm-hmm. Yes, I'd be happy to do that. I will say that I attended any number of hearings over the year where Representative Young was up on the dais, so I remember him very well as well.

The Coast Guard will tell you that the PSC program is one of its top two acquisition priorities, along with the Offshore Patrol Cutter program. So, it doesn't get any higher than that. Although two of the PSCs are now fully funded, we are in the process of funding the third. The program of record includes at least three PSCs. So, this year's funding request supports the continued funding for that third ship.

As I mentioned earlier with the Chairman, these polar icebreakers are central to the Coast Guard's ability to perform its various statutory missions up in the Arctic, not just icebreaking, although icebreaking clearly is quite important, but the other 8 missions as well that are on the books for the Coast Guard to perform up there.

Mr. HIGGINS. Roger that. Thank you, Mr. O'Rourke.

Mr. Chairman, I yield.

*The document has been retained in committee files and is available at <https://crsreports.congress.gov/product/pdf/RL/RL34391/246>.

Chairman GIMENEZ. The gentleman's time has expired. Do you require additional time?

Mr. HIGGINS. I have an additional question, Mr. Chairman. Go to a second round.

Chairman GIMENEZ. Now, we are going through a second round. I recognize myself for a second round. I yield my time to the gentleman from Louisiana.

Mr. HIGGINS. Sir, if I could, Mr. Chairman, I would like to shift to Russia. I think it is important that we acknowledge the presence of Russia in the Arctic is historically reflective of their Arctic territory that they hold. I believe there is on the line of 4 million residents, human beings living in the Arctic area, the designated area, and over half of those are citizens of Russia. Their landmass, I believe they have over 1,500 miles of coastland or I don't exactly recall, but it is a lot, much more, maybe 15,000 miles of coastland.

So, when you consider the entire weave of coast, the point is that Russia has a right to a presence in the Arctic as opposed to China. I think it is important, and I would like you all to potentially address this, I think it is important that the United States work with Russia regarding securing trade routes and navigation routes that are emerging, as technology for vessels emerge, and as the nature of Arctic ice changes. We do not want Russia to partner with China, which we are beginning to witness. This is a concern to me.

So, beginning with Mr. O'Rourke, if you could comment, and then we will go to Mr. Coffey and Dr. Brimmer.

Mr. O'ROURKE. Yes. I'll just make two quick points. One would be to reinforce what I said earlier, that Russia's sense of being diplomatically isolated from the 7 other Arctic states as a consequence of the war in Ukraine has encouraged Russia to increase its cooperation with China in the Arctic. That is creating new opportunities for China in the Arctic that are above those that they were already pursuing.

The other thing I'll note is that even though the war in Ukraine has disrupted the operations of the Arctic Council and has led to Russia's diplomatic isolation in other ways from the other 7 Arctic states, there are still forms of cooperation that continue, even in this situation. For example, the United States and Russia continue to cooperate in the regulation of sea traffic through the Bering Strait, in the performance of the agreement that the two countries reached about the regulation of that sea traffic in 2018. So, there is some limited degree of cooperation under way between us and Russia, even in this larger situation.

Mr. HIGGINS. Mr. Coffey.

Mr. COFFEY. Thank you, Mr. Higgins. As a Arctic power, as an Arctic state, as you alluded to, Russia has every right, and it's Moscow's prerogative to deploy military forces, construct military bases wherever it so chooses to, as long as it's on the territory internationally recognized as being part of the Russian Federation.

Where the concern lies is when you look at what Russia has done in other regions around the world on its periphery, whether it's in the Caucasus, South Caucasus in particular, in Syria, of course with Ukraine. That's when there's a concern that Russia might try something in the Arctic.

In terms of the idea of—

Mr. HIGGINS. Let me just interject. We concur that Russian military presence is a threat world-wide. We are specifically discussing the Arctic region. I ask you to stay focused on that because it is a unique international challenge, the Arctic region.

Mr. COFFEY. Yes. As long as Russia maintains its military forces inside the borders recognized as being part of the Russian Federation, it's their prerogative to do what they want with them. The concern will become when they decide to use these forces outside of the borders of the Russian Federation.

In terms of the notion of cooperating with Russia, I don't think this is a—in any meaningful sense, in the Arctic or otherwise, I don't think that this is geopolitically possible right now. There is a growing relationship between Beijing and Moscow. But Beijing is very much the senior partner and Russia is the junior partner.

I know, Mr. Higgins, you asked me to stay restricted to the Arctic, but often these geopolitical issues are interconnected. That is why a strong Ukraine will equal a safer and more secure Taiwan. As China's junior partner, anything we do to weaken Russia will indirectly weaken China. China is watching how we respond to Ukraine because they have their eye on Taiwan. A stronger Ukraine could perhaps deter China from doing something in Taiwan.

Then, ultimately, this comes back to the Arctic——

Chairman GIMENEZ. My time has expired. We need to move on. Sorry.

Right now, I recognize the gentleman from California, Mr. Garcia.

Mr. GARCIA. Thank you, Mr. Chairman. Thanks again to our witnesses.

I just wanted to also just follow up. The Arctic is—obviously, we talked a little bit about the economic impacts, there is climate impacts. We also know obviously national security impacts, which we have discussed.

The Arctic is also home, of course, to people. Four million people, as we know, inhabit the Arctic region today, many of them also indigenous groups.

Dr. Brimmer, how does the U.S. Coast Guard and other organizations serve the safety and well-being of those that call the Arctic home?

Ms. BRIMMER. Thank you very much for the question because, indeed, out of the 4 million people who live in the Arctic, about 500,000 of them are indigenous peoples. Indeed, those include our fellow citizens in the great State of Alaska.

I would like to say that, indeed, that the Coast Guard provides important search and rescue for people who are working on the coast lines. As the coast lines change, there is greater challenge for those, including those who are still subsistence hunters, that it is important to have the infrastructure to support the well-being of people who actually live in the Arctic.

If I may combine this point with the earlier conversation about the role of international organizations that support people in the region, the Arctic in essence has layers of international organizations. I will note that whatever the future of the Arctic Council, the ability to bring together indigenous people, including those in Alas-

ka, is an important support for those people. Whatever the venue is, that's an important structure to help with human well-being and human security.

Mr. GARCIA. Also, as far as the Arctic Council, what role does indigenous groups, indigenous peoples play in kind of the international cooperation, you know, within the Arctic Council? After Dr. Brimmer, if anyone else wants to also answer, that would be great.

Ms. BRIMMER. Indeed, the Arctic Council was unusual among international organizations, in that it actually has a structure for nongovernmental participation. There are 6 groups associated with indigenous peoples that are part of the Arctic Council. Four of those groups include people in Alaska. So, they actually have an opportunity to speak and participate in the activities of an international organization, which is unusual and something that is of value to Americans in the State of Alaska.

Mr. GARCIA. Mr. Coffey, do have any additional comments on that?

Mr. COFFEY. No, only that I concur that regardless of the future of the Arctic Council, there has to be some mechanism that can help address the legitimate concerns and needs of the indigenous peoples of the Arctic region.

Mr. GARCIA. Great. Thank you. I yield back.

Chairman GIMENEZ. The gentleman yields back.

I recognize the gentleman from Louisiana again. Mr. Higgins, do you have any additional questions?

Mr. HIGGINS. I would like to give Dr. Brimmer an opportunity to respond to my line of questioning regarding the significance of some level of cooperative engagement between the United States as a heavy presence in the Arctic with the geographically and population density-dominant international presence in the Arctic, which is Russia, as opposed to allowing Russia to develop a relationship in the Arctic with China. Dr. Brimmer, would you respond to that line of questioning?

Ms. BRIMMER. Thank you, sir, for the opportunity to respond to that important question. If I may, I will highlight particular points.

The first is that, of course, the United States and the Russian Federation share important duties of search and rescue, particularly in the Bering Strait. Indeed, that is one of our oldest international principles, is search and rescue. So, both countries take that very seriously.

Second, I will say that it is beneficial for the United States to work with Russia in international bodies, such as the International Maritime Organization, which is responsible for the Polar Code that actually governs the requirements for ships in the region. That's an important structure.

The third is to say that the Arctic Ocean itself, the center, is the High Seas. So, in addition to the important activities we've talked about in terms of our territorial waters and our extended economic zone, there's actually a portion that is beyond all national jurisdiction. Again, we need to work with the Russian Federation and the other Arctic countries in bodies that manage the High Seas.

Finally, to say that the expansion of NATO is extremely important in this area, where it'll be important that the United States

works with its long-standing allies in the Arctic, such as Norway and our new allies, such as Finland and we hope Sweden. Because that work in the Arctic will increasingly take up planning and strategic time for NATO as a whole. Thank you.

Mr. HIGGINS. Thank you, Dr. Brimmer.

Mr. Coffey, I am going to give you an opportunity to comment on the significance of the Coast Guard Polar Security Cutter program, if you would, good sir.

Mr. COFFEY. Yes. It is a key component of America's ability to enforce its own sovereignty in America's Arctic region and to protect our sovereignty from foreign adversaries. It is one component of many that the Coast Guard will use to complete its mandated missions, but it is important. Thank you.

Mr. HIGGINS. Thank you, sir. Thank you all for being here today.

Mr. Chairman, I yield.

Chairman GIMENEZ. The gentleman yields.

I now recognize the gentleman from California, Mr. Garcia.

Mr. GARCIA. I yield back.

Chairman GIMENEZ. The gentleman yields.

I now recognize the gentlelady from Florida, Ms. Lee.

Ms. LEE. Thank you, Mr. Chairman. I appreciate you holding this important hearing.

All of our witnesses, we appreciate you for being here today. The Arctic's growing strategic importance has made it imperative that America is prepared to confront the unique challenges and opportunities that this region presents. Your experience and expertise is appreciated here today.

Mr. Coffey, I would like to begin with you and return to the questions that you were engaged in with Mr. Higgins. In particular, you commented on some of the, I believe, common interests in Russia and China in that region. I was interested in your perspective on whether there is an area where the interests of Russia and China in the Arctic diverge.

Mr. COFFEY. Well, thank you for that question. As I alluded to, Russia is very much the junior partner in this relationship. One of the consequences of international economic sanctions against Russia is that Russia has looked for other markets and China has swooped in to take advantage of the situation. Much of the energy that was once exported to Europe is slowly finding its way to other places, including China, and at below-market rates. So, China understands that it's in a position to benefit in the maximum manner from its engagement with Russia right now.

Right now, Russia is so dependent on China that I cannot see a situation in the near future where Russia would become a strategic competitor against China, certainly not one where Russia would align with us to counter China or try to go against China. In fact, I think it would be completely impossible for the United States to engineer such an outcome to the point that we shouldn't even try. We should acknowledge that China and Russia will be our main strategic competitors in the Arctic region, and we should develop and prepare our national security architecture under that assumption.

Ms. LEE. Do you anticipate or foresee any scenario where Russia could attempt to impede our access to the Northern Sea Route, the United States or other countries?

Mr. COFFEY. Well, international sanctions has actually impeded the use of the Northern Sea Route. If you look at the data from last year, not a single cargo ship, foreign cargo ship, used the route. Not a single ship of any flag made the full journey from Asia to Europe.

Russia has claimed that a lot of the Northern Sea Route is internal waterways and that certain fees must be paid in order to use this route. Then, of course, you are reliant on Russian search and rescue and Russia's icebreaking capabilities, and that also incurs cost.

So, right now, I wouldn't say that, you know, Russia is, you know, preventing any internationally-flagged ship from using the route. They either make it difficult or the geopolitical circumstances, in this case economic sanctions, make it cost-prohibitive.

The French have actually conducted freedom of navigation operations, the French Navy has, up along the Northern Sea Route. As far as I know, that is the only NATO country that has done such a thing. But certainly, the United States would be within its rights to do so. But whether or not right now would be the right time for that is a matter for policy makers.

Ms. LEE. Mr. O'Rourke, I would like to bring you into this conversation. What additional insight or perspective would you add to what you have been hearing on this subject?

Mr. O'ROURKE. Well, one of your earlier questions was about a divergence of interests, if any, that exists between China and Russia in the Arctic. There is potentially a latent one, one in the background that may become more in the foreground at one point. That concerns the Arctic Council.

China in the past has raised questions about the Arctic Council as the correct institution or forum for Arctic governance because they are more on the outside of that than Russia is. Russia is one of the 8 voting states of the Arctic Council. So, there's a potential for the two countries to develop different viewpoints regarding the continuation of the Arctic Council as the primary international forum for Arctic governance.

The other thing I will mention is regarding the Northern Sea Route, the Russian legislature has been active. They have passed a new law regarding their regulation of the Northern Sea Route that may put Russia more directly at odds with the U.S. legal position regarding those claimed internal waters. Whereas in the past we may not even have had a basis for having a freedom of navigation operation because there was no excessive claim regarding government ships, that may have changed now with the passage of that new Russian law. So, that is another situation that is worth watching.

Ms. LEE. Thank you. With that, Mr. Chairman, I yield back.

Chairman GIMENEZ. The gentlelady yields back.

Does anybody have any other questions? I will now recognize the gentleman from California, Mr. Garcia.

Mr. GARCIA. Thank you, Mr. Chairman. I just wanted to go back. So, the Biden-Harris administration's national strategy for the Arctic region, which was published, of course, just last year, is a vital step in creating a cross-agency plan for the Arctic as it relates to the United States.

I wanted to start off by asking, Mr. O'Rourke, several Arctic strategies have been developed in recent years by the White House, DOD, Homeland Security, and the Coast Guard. Not all have been fully implemented yet. So, how useful do you think these Arctic strategies are? How would you characterize the status of implementation?

Mr. O'ROURKE. I think they're useful as a statement of goals. They, in some cases, may be somewhat aspirational. If you say that a strategy is something that has to reconcile ends, ways, and means, then these documents, like many other strategy documents that come out of the Executive branch, may not actually pass the test of being a strategy in that regard, of reconciling ends, ways, and means and setting priorities. But they are useful in terms of identifying interests and identifying lists of goals to be pursued and lines of effort for attaining those goals.

Mr. GARCIA. Thank you. Dr. Brimmer, what steps do you think the Coast Guard should take to ensure that its Arctic strategies align with the national strategy for the Arctic region?

Ms. BRIMMER. Thank you very much for the question. I think it's important that in addition to the support for the investments we've been discussing for the Coast Guard that they continue an important relationship between the Coast Guard and the State Department and the Defense Department is also important. Indeed, the Coast Guard actually helps extend American diplomacy by the work that it does with other countries, both in the Arctic and around the world. So, I think that's important to continue.

The types of structures that are important are interagency. I will say that back when I was heading the International Organizations Bureau, we used to say we were interagency before it was fashionable. One of the great strengths of the United States is the ability to integrate military, economic, diplomatic, and other forms of power. That has to have an interagency component, which means that resources such as the Coast Guard and the Department of Homeland Security needs to also work closely with our diplomatic community as part of projecting America's interests internationally.

Mr. GARCIA. Also, Dr. Brimmer, last, what key efforts and metrics should the Coast Guard include when planning for its own implementation of the national strategy?

Ms. BRIMMER. Some of the things that should be considered indeed are the types of challenges that the Coast Guard faces because America faces them. One of them is first, of course, defending sovereignty on our coastlines and other waterways. But also, it means economic defense, such as guarding against the illegal, underreported, and underregulated fishing as another example in our maritime resources. So, those types of considerations also need to be a part of planning for the Coast Guard on its mission. Thank you.

Mr. GARCIA. Thank you. I yield back.

Chairman GIMENEZ. The gentleman yields back.

Anybody else have any other questions?

Seeing none, I want to thank the witnesses for their valuable testimony and for the Members for their questions.

Members of the subcommittee may have some additional questions for the witnesses. We would ask the witnesses to respond to these in writing, pursuant to committee rule VII(D). The hearing record will be open for 10 days.

Without objection, this subcommittee stands adjourned.

[Whereupon, at 11:04 a.m., the subcommittee was adjourned.]

