The Arctic is no longer an uncharted realm on the fringe of the international policy landscape. Rather, it has emerged as a region of global relevance and significance – the host of both challenges and opportunities in the geopolitical, environmental, economic, and social spheres. Dramatic physical changes brought about by a rapidly warming climate drive much of these dynamics. The Wilson Center - Arctic Circle Forum’s keynote presentations, panel discussions, and meetings touched upon all of these issues, particularly as they apply to the United States and Russia.

In the Arctic context, the two countries have a sustained record of working together pragmatically to further mutual interests. As the scale of issues in the region impedes any one nation from adequately addressing critical needs, continued engagement and cooperation between the U.S. and Russia will be key to meeting challenges also faced by other governments, indigenous peoples, non-governmental organizations, and private industry – and to fostering a peaceful and prosperous Arctic future. Science diplomacy, as evidenced by successes within the Arctic Council and the White House Arctic Science Ministerial, promotes a low-threat environment for cooperation in the region. Scientific and empirically-based initiatives must be the first step towards jointly addressing broader regional issues. Furthermore, the development of effective strategies can only be realized through frequent, active dialogue by all interested parties and via existing, flexible international frameworks and organizations.

The participants of the Forum emerged hopeful that the spirit of goodwill in the Arctic can also be leveraged to make progress on non-Arctic policy differences that mark the U.S.-Russia relationship.

**Featured Speakers**

- **Senator Dan Sullivan** (R-AK)
- **The Honorable Ólafur Grímsson**
  Former President of Iceland
- **Ambassador Kirsti Kauppi**
  Ambassador of Finland to the U.S.
- **Admiral Paul Zukunft**
  Commandant, U.S. Coast Guard
- **Georgy Karlov**
  Deputy, State Duma, Russian Federation
- **Senator Igor Chernyshenko**
  Russian Federation
- **Congressman Don Young** (R-AK)
- **Senator Lisa Murkowski** (R-AK)
- **Senator Mark Brzezinski**
  Former U.S. Ambassador to Sweden
- **Anthony Edwardsen**
  President and CEO, Ukpeagvik Inupiat Corporation
The Wilson Center - Arctic Circle Forum was organized into four thematic tracks: investment, cooperation, science & research, and security. Four significant recommendations emerged from the two days of sessions and discussions:

- **Collaborate amongst stakeholders.** Collaboration is critical for future investment and infrastructure development in the region.

- **Build upon existing cooperative frameworks and institutions.** Future policy and development actions in the Arctic must build upon the cooperative framework and institutions that already exist in the region.

- **Utilize scientific research to inform fact-based diplomacy and policy.** These tools remain the best mechanisms to build trust and maintain cooperation and sustainable development of the Arctic.

- **Prioritize pre-existing avenues for diplomacy.** The Arctic is a uniquely peaceful area of cooperation for the U.S. and Russia and opportunities to build on these successes should be a priority for all Arctic partners.
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A note to the reader:
We believe it is important to share first-person narratives, perspectives, and insights. This document should be viewed as a roadmap to the rich discussions that occurred during the Forum, which are available in full via hyperlinks.
FOREFORD

The Arctic is no longer of emerging interest to the global community. Rather, over the last decade or more, it has become a more internationalized, and less certain, landscape, with Arctic and non-Arctic nations exerting their influence. The Arctic is now seen as a region of pressing global importance, evidenced by growing concern over the dramatic physical changes occurring in this once remote and poorly understood place. Moreover, these are changes that amplify environmental shifts worldwide.

Today’s Arctic is a zone of peace, a topic of frequent international dialogue with an expanding set of stakeholders, a place of growing economic development, where nations develop rule-based claims to the extended continental shelf below the Arctic Ocean, and a region where the diverse and threatened people and cultures that call the Arctic home work to adapt to and mitigate undesired change. To be sure, the Arctic is a landscape of opportunity, but it is also a landscape of social, political, and economic challenges. These opportunities and challenges must be addressed at the international, regional, national, sub-national and community levels.

The Arctic Council is a consensus-based, high-level, intergovernmental forum comprising the eight Arctic nations (Canada, Denmark/Greenland/Faroe Islands, Finland, Iceland, Norway, the Russian Federation, Sweden, and the United States), permanent participants (indigenous peoples organizations), and observer states and organizations. For two decades, it has provided a place to address these challenges and opportunities, balancing geopolitics with the mandate for research-driven assessment and serving as a forum to support program and policy development upon which all parties can agree.

The complex relationship between the United States and Russia, along with the policy approaches of the six other Arctic nations, will continue to shape the region’s social, economic, political, and environmental landscape far into the future. To explore these topics, the Wilson Center’s Polar Initiative partnered with the Arctic Circle to host an Arctic Circle Forum in Washington, DC, one of the largest Arctic-focused events held to date in the United States. The two-day forum drew over 600 attendees and featured more than 50 speakers, including members of the U.S. Congress; representatives from the governments of the Russian Federation, Finland, Norway, Singapore, and the Republic of Korea; other international officials and dignitaries; organizations and members of indigenous communities; and a wide array of leading experts from the business, policy, science, and public spheres.

Dr. Mike Sfraga, Director, Polar Initiative, Wilson Center; Affiliate Professor, International Arctic Research Center, University of Alaska Fairbanks; Co-lead Scholar, Fulbright Arctic Initiative

Dr. Ross A. Virginia, Director, Institute of Arctic Studies, and Myers Family Professor of Environmental Science, Dartmouth College; Global Fellow, Polar Initiative, Wilson Center; Co-lead Scholar, Fulbright Arctic Initiative

Richard Smith, Co-Director, Wilson Center-Arctic Circle Forum
Host Organizations

The Wilson Center’s Polar Initiative, Washington, DC

The Polar Initiative raises awareness about the critical issues facing the Polar regions by fostering research, dialogue, and programmatic activity on Arctic and Antarctic issues. The Initiative continues to carry out its mission by convening government and non-governmental leaders, scholars, researchers, and regional experts to address the many practical questions, challenges, and opportunities that lie ahead.

The Arctic Circle, Reykjavik, Iceland

The Arctic Circle is an international organization that brings together high-level policymakers, businesspeople, and experts to discuss issues that affect Arctic peoples and their interests. The full Arctic Circle Assembly meets annually in Reykjavik, Iceland on a large range of issues, with more focused Arctic Circle Forum meetings held throughout the year in other locations.

The Wilson Center thanks former President of Iceland and current Chairman of the Arctic Circle Ólafur Ragnar Grimsson for his steadfast leadership and support, and for first suggesting the Forum’s conceptual and topical design and format.

Supporting Organizations

The Wilson Center - Arctic Circle Forum was supported by Ukpeaġvik Iñupiat Corporation, GCI, and the United States Arctic Research Commission. The North Star Group documented Forum presentations, discussions, and provided foundational materials, insight, and analysis.

ACKNOWLEDGEMENTS
Opening Remarks

Dr. Mike Sfraga opened the Forum by welcoming keynote speakers, panelists, and participants to the first Arctic Circle Forum to be held in the continental United States. Sfraga provided an overview of the Forum’s evolution and called for continued efforts to maintain and enhance dialogue and actionable strategies between Arctic and non-Arctic nations in order to address the many opportunities and challenges presented by the ever-evolving region.

President Ólafur Ragnar Grímsson welcomed Forum participants, noting the importance of continued dialogue throughout the Arctic region. Underscoring the need for continued, active engagement between the United States and Russia, President Grímsson called for a reinvigorated approach to their shared leadership role in the Arctic to ensure the region remains one of international cooperation, peace, and purposeful governance.

The Honorable Jane Harman, Wilson Center Director, President, and CEO, welcomed speakers and participants to the Wilson Center and reinforced the importance of the strategic partnership between the Wilson Center and the Arctic Circle. The Wilson Center remains committed to advancing important Arctic issues, as Harman affirmed: “The Arctic and the issues around the Arctic, I have learned late in my life, are probably the issues we can afford to be optimistic about... We have the opportunity to get this right if we work together.”

Alice Rogoff, publisher of ArcticNow and co-founder of the Arctic Circle, celebrated the Wilson Center - Arctic Circle Forum for its ability to gather “people of the globe” to consider important issues of the time. Rogoff supported the idea of cultivating “people-to-people knowledge” as an approach to further develop the Arctic through sustainable industries like eco-tourism. However, she noted, further development in the Arctic will require significant investment in infrastructure, including the creation of a reliable fleet of icebreakers to patrol and monitor the international waterways that traverse the region.

Keynote Speakers:

- The Honorable Lisa Murkowski, United States Senator, Alaska
- The Honorable Kirsti Kauppi, Ambassador of Finland to the United States
- The Honorable Mark Brzezinski, former Ambassador of the United States to Sweden
- Admiral Paul Zukunft, Commandant of the United States Coast Guard

Click on the pictures to the right to view opening presentations by Mike Sfraga, President Ólafur Ragnar Grímsson, President Jane Harman and Alice Rogoff.
Senator Lisa Murkowski (R-AK) delivered the Forum’s first of four keynote speeches. In her remarks, she discussed the increase in Russia’s investments throughout its Arctic territory, including infrastructure and resource development. Senator Murkowski encouraged the United States to match Russian investments by building new icebreakers, developing natural resources, and investing in ports and other infrastructure projects to promote sustainable development in Alaska. In doing so, she noted, the United States could substantially improve Alaska’s economy, enhance U.S. national interests, and reinforce the United States’ position in Arctic affairs. Senator Murkowski underscored the importance of a physical and political presence in the Arctic, as it signals to U.S. allies and other nations that the United States views the Arctic as an important region. Indeed, as she noted, when international relationships become strained, it is helpful to identify areas or initiatives that have had sustained and demonstrable successes based on long-term cooperation. Senator Murkowski concluded her remarks by suggesting that the United States should establish a consulate in Greenland as the government considers movement toward independence, an action that would demonstrate continued U.S. commitment to international dialogue in the region.
Program Tracks

Track 1: Investment in the Arctic

Panel 1: The Next Investment Territory

The Arctic’s ascending geopolitical profile is closely tied to its rising economic profile. Opportunities abound, as do increasingly pressing questions of legal frameworks, responsibility, and sustainability.

**Moderator:** Tero Vauraste, President and CEO, Arctica Shipping, Ltd., and Chair, Arctic Economic Council

Tero Vauraste opened the discussion by noting the Arctic region’s investment potential, particularly as shipping and communications industries are rapidly evolving. Technological advancements such as the expansion of broadband telecommunications across remote Arctic communities, will continue to make the region a more attractive investment option.

Indeed, indigenous communities are beginning to experience the benefits of recent and considerable investment in telecommunications projects, as highlighted by Anthony Edwardsen, President and CEO of Ukpaaqvik Iñupiat Corporation (UIC) in Utqiagvik, Alaska. Fiber-optic sea cables now provide broadband internet service to the community in Utqiagvik and Edwardsen expressed his hope that high-speed internet will bring even more investment to the region. Kristina Woolston, Vice President for External Affairs at Quintillion, an Alaska-based telecommunications company, echoed Edwardsen’s hopes during the Forum’s second day of discussion.
Tina Pidgeon, General Counsel and Senior Vice President at GCI, Inc., an Alaska telecommunications company, explained the importance of investment for small, rural communities. She described Alaska as “two Arctics”: in one, isolated, rural communities struggle to deliver education, health services, and economic opportunities to residents, while in the other, services are more readily provided by built-in infrastructure. An economic case for large physical investments in rural communities is often difficult to make, but the need for communication technology is great, and returns can also be significant. “The primary goal of development should be finding innovative ways to [turn] have-nots into haves,” Pidgeon said. She recommended examining shared experiences across the Arctic, finding what has been successful, and applying those lessons to new locations.

Dr. Kirill Mangush, Senior Counselor for the Russian Federal Assembly, discussed ongoing domestic and foreign direct investments throughout the Russian Arctic. Dr. Mangush noted Russia’s cooperation with China to build a large-scale liquefied natural gas (LNG) facility on the Yamal Peninsula, and also applauded the Fairbanks Declaration signed at the Arctic Council Ministerial Meeting in May 2017, which he hopes will lead to more cooperation within the Arctic Economic Council. Although Russia and the United States have worked together successfully on issues related to environmental protection and fisheries management, Dr. Mangush was adamant that U.S. sanctions have been harmful to the goal of developing economic cooperation in the region and that, at the moment, U.S. and Russian Arctic investment cooperation is essentially nonexistent.

Mark Ein, Chairman and CEO of Capitol Acquisition Corporation, highlighted the Arctic’s rich and vast natural resources and diverse environmental landscape. He described the transition from a material- to an experience-based society, leading to the creation of new opportunities for emerging industries such as Arctic adventure tourism. Ein believes the Arctic is just at the beginning of a “virtuous cycle of investment” as investment projects in new industries require the creation of support infrastructure, thereby increasing awareness and attracting more investment. He asserted that a few key investment opportunities need to emerge (infrastructure, for instance) in order to trigger and achieve sustained Arctic economic development.
Program Tracks

Track 1: Investment in the Arctic

Panel 2: Arctic Shipping, Commerce, and Tourism

With the Far North becoming more accessible, the volume of commerce, shipping, and tourism is on the rise. This reality means new opportunities, as well as new challenges, for both industry and the communities of the region.

2017, the International Maritime Organization (IMO) Code for Ships Operating in Polar Waters (Polar Code) went into effect. As Arctic Ocean sea ice continues to retreat and shipping increases, Dr. Brigham emphasized progress must be made on the implementation of this new Arctic maritime agreement.

Gylfi Sigfússon, President and CEO of Eimskip, an Icelandic shipping company, provided perspective on emerging investment opportunities in the Arctic. Currently, Eimskip conducts operations in Maine, USA; Murmansk, Russia; Nuuk, Greenland; Reykjavik, Iceland; and throughout Scandinavia and Europe. Mr. Sigfússon predicts expanded shipping opportunities throughout the Arctic in as little as three to five years. To take advantage of new opportunities and growing international demands for resources, action is needed to realize large projects, such as the creation of a system of Arctic deep-water ports. Sigfússon advocated for socially responsible economic development and environmental safeguards with applicable regulatory regimes to manage carbon emissions of nation states and industry as a way to mitigate Arctic warming.

Sven Lindblad, CEO of Lindblad Expeditions, has spent a career providing expeditions and adventure tourism opportunities in the Arctic. Lindblad considers growth in this industry to be positive on many levels; bringing people to the Arctic provides unique educational experiences.

Moderator: Dr. Lawson Brigham, Distinguished Professor of Geography and Arctic Policy, University of Alaska Fairbanks

Dr. Brigham provided context for the panel, first emphasizing that most Arctic nations are coastal and all have interests in the future of Arctic waters. Two of the Arctic Council’s three binding international agreements focus on maritime issues: Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic and Cooperation on Marine Oil Pollution, Preparedness and Response in the Arctic. In January of
and a shared, tangible connection to the landscape, while developing an informed constituency will help preserve Arctic ecosystems for future generations. Economic development and environmental protection are not mutually exclusive, he stated, but Arctic tourism requires responsible operations because the region’s harsh conditions increase the chance of accidents.

The Honorable Mead Treadwell, President, Pt Capital and former Lieutenant Governor of Alaska, shared his insights and concerns on a broad range of Arctic issues, including prevention of and response to potential maritime accidents, shipping activities, port construction, and related infrastructure development. Treadwell reiterated that implementation of the IMO Polar Code is central to responsible shipping throughout the Arctic region, but more should be done. The establishment of an international “Arctic seaway” would create a service for Arctic-crossing cargo vessels by providing icebreaking services and, similarly, a league of Arctic ports of refuge would provide safe harbors in an area known for extreme weather. Treadwell challenged participants to envision new financing schemes and mechanisms to further develop the North. For example, he proposed implementing tariffs on shipping, similar to the process used for air travel. The revenue generated from such a framework would then cover the basic infrastructure and needs for an Arctic seaway.

Russian Senator Igor Chernyshenko, who represents Murmansk Oblast, explained the extent of Russian investments in the development of its Arctic region. The Murmansk transportation node facilitates oil and gas development, as well as domestic and international shipping. Most investment projects in Russia, like the Murmansk node, are privately funded. However, current investment restrictions (international sanctions) have stopped the participation of U.S. businesses in the region. While events such as the Arctic Circle Assembly, Arctic Circle Forum, and the activities of the Arctic Council are important, Senator Chernyshenko said, the actions of Washington lawmakers have dissolved the ability of American and Russian investors to work together. He assured the panel that Russia, by far the largest Arctic nation, is aware of its responsibility to the region’s environment. Senator Chernyshenko said he is optimistic about the future, but will have little reason to remain so unless changes are made quickly to the U.S.-Russia relationship.

Desmond Raymond, Regional Director of Marine Safety and Security at Transport Canada, discussed the issue of safety in the Canadian Arctic during Day two of the Forum, noting that in a given season, the Canadian government will have 5-6 icebreakers that have to provide escorts, resupply communities, perform search and rescue missions and support scientific research. “It’s a high workload,” he said.
Ambassador Kauppi addressed a wide range of Arctic issues, including the creation of the Arctic Council, a review of the Council’s structure and efforts to date, the importance of international dialogue, and insight into the agenda of Finland’s Chairmanship of the Arctic Council, 2017-2019. Ambassador Kauppi underscored the importance of joint U.S.-Russia participation and cooperation in the Arctic. She noted that the United States and Russia were instrumental in chairing the working groups that developed the three binding Arctic Council agreements now in place, including the most recent agreement on Arctic scientific cooperation (May 2017). Without such trust and cooperation, the Arctic Council would not have evolved into an effective and consensus-driven international forum.
Panel 1: A Record of Cooperation in the Arctic

Successful cooperation between Arctic nations requires proactive, consistent, and dependable governance in the region. Representatives from Russia, Finland, and the United States addressed the state of cooperation in the Arctic and prospects for the future.

Moderator: Matthew Rojansky, Director, Kennan Institute, Wilson Center

Rojansky acknowledged the current state of affairs between the United States and Russia and applauded the panel’s theme and composition. Rojansky underscored the importance of focusing on a record of cooperation between these two countries, particularly in the Arctic. He invited the panel to think in terms of the past and the future in order to put in perspective the significance of the day’s gathering and the opportunity it presents.

The business and governance of the Arctic operates in a rules- and science-based environment, according to Ambassador David Balton, U.S. Deputy Assistant Secretary for Oceans and Fisheries, and Chair of the Senior Arctic Officials during the U.S. Chairmanship of the Arctic Council (2015-2017). The United States and Russia have common interests in the region and would not be able to pursue them without working together. Because the Arctic environment is unforgiving, many pragmatic bilateral initiatives have been implemented to build successful partnerships and address future challenges.

Mr. Georgy Karlov, a lawmaker in Russia’s State Duma, believes the Arctic will succumb to instability without coordination and cooperation to build transportation and communications infrastructure. He praised the history of U.S.-Russia cooperation on scientific research as a good area to build understanding between nations and as a foundation upon which further development in the Arctic may be realized. More scientific cooperation between observer states and the Arctic Council is needed to better understand the region and to make actionable and informed decisions and policy.

Participants agreed that the work of the Arctic Council is valuable and that it plays an important role in pan-Arctic matters, but U.S. Congressman Don Young (R-AK) expressed his desire to see more quantifiable action moving forward. Beyond his suggestion that the Arctic region form a sovereign nation, he felt strongly that the Arctic Council should pick one or two specific initiatives from the long list of identified challenges and focus the collective effort on achieving rapid and measurable success. He acknowledged the continuing struggle to convince U.S. policymakers to prioritize and fund Arctic activities, programs, and infrastructure. If the Arctic Council (or other parties) were to focus on a few issues that would attract investment plans, chances of galvanizing support in Congress would increase, he said. “The Arctic is the future of the globe as a resource and transportation corridor,” the Congressman said.

Katri Kulmuni, MP, Finland, and member of the Standing Committee of Parliamentarians of the Arctic Region, explored a wide range of issues, including U.S.-Russia relations and cooperation in the Arctic and the need for continued and enhanced international cooperation. She connected these important matters to the overall global condition. Kulmuni’s compelling narrative was sighted throughout the two-day event.
Program Tracks

Track 2: Cooperation in the Arctic

Panel 2: A View from Outside the Arctic

Many countries outside of the Arctic are not disconnected from it. Panelists from non-Arctic nations discussed their countries’ activities and interests in the region.

Moderator: Sherri Goodman Senior Fellow, Polar Initiative and Environmental Change and Security Program, Wilson Center

Goodman recalled her service at the U.S. Department of Defense at the end of the Cold War, where she led the Arctic Military Environmental Cooperation program that included the United States, Norway, and Russia. The initiative relied on scientific cooperation to clean up contamination from Cold War-era activities. Today, Goodman stated, climate change poses a similar global problem and likewise must be addressed through international cooperation. Goodman recounted a common theme among the Arctic science and policy communities: what happens in the Arctic does not stay in the Arctic. Correspondingly, cooperation that begins in the Arctic could have positive consequences that spread throughout and beyond the region.

As a resident of the Arctic and current Chair of the Standing Committee of Parliamentarians of the Arctic Region, Eirik Sivertsen, MP, Norway, shared his interactions with policymakers from outside the Arctic region. Sivertsen stated that the Arctic, which is often referred to as an environmental sanctuary, should not be made off-limits to development. Citizens of the Arctic must take center stage
when policymakers and private industry approach investment opportunities, he said.

The Republic of Korea and Singapore both hold Observer status in the Arctic Council and have focused most of their efforts in the Arctic on scientific and educational cooperation. However, emerging business opportunities are of interest to these two non-Arctic nations. The Republic of Korea’s Ambassador for Arctic Affairs, Young-jun Kim, and Deputy Chief of Mission and Counsellor for the Embassy of Singapore Sheryl Shum discussed educational exchange programs that bring citizens from their two nations to countries in the Arctic. Such programs provide opportunities for important international dialogue, a deeper, shared understanding of the Arctic, and engagement and collaboration with indigenous peoples. Scholarships to the Korea Arctic Academy, Korea Polar Research Institute, and Singapore maritime law and public administration programs are examples of important investments in human capital and international understanding needed to solve future Arctic challenges.

According to Ambassador Kim, the Republic of Korea is scheduled to complete its second icebreaking scientific research vessel by the year 2022. Meanwhile, the Republic of Korea and Singapore will continue their strong bilateral relationships with the United States and Russia. The Republic of Korea is completing its contract to build 15 icebreaking liquid natural gas (LNG) vessels for Russia’s Yamal project and Singapore is working with both countries to develop plans for ice-class shipping vessels to operate in the Arctic.
Ambassador Mark Brzezinski offered keynote remarks in an interview with Wilson Center Polar Initiative Director Dr. Mike Sfraga. Ambassador Brzezinski described research as a field that thrives on sharing ideas through cooperation. The White House Arctic Science Ministerial in September 2016 was a path-charting event and an example of the benefits of science diplomacy and international cooperation. While there were initial challenges, Russia’s ultimate participation resulted in a more robust and meaningful program, with specific scientific assignments and actions set forth. Ambassador Brzezinski noted that the essential inclusion of indigenous peoples in the Ministerial created a more informed and productive forum for discussion, where both indigenous and Western knowledge leaders were equal. “The Arctic is simultaneously a strategic challenge and a human challenge. There is a moral obligation to make sure the people who call the Arctic home remain the focal point for decisions and actions,” concluded Ambassador Brzezinski.
Panel 1: Arctic Research Cooperation: Policy, Sponsors, and Programs

The U.S. government’s Arctic research initiatives, and the resulting knowledge and understanding, directly inform key decisions in the region. On this panel, leading American Arctic officials discussed policies, sponsors, and programs dedicated to conducting research in the Arctic as well as efforts to collaborate with other countries, particularly Russia.

Moderator: Dr. John Farrell, Executive Director of the U.S. Arctic Research Commission

Dr. Farrell praised the diplomatic possibilities offered by scientific cooperation, declaring science a soft power. This cooperation is a way to show strength and determination while generating dialogue on difficult issues — without being confrontational.

Dr. Kelly Falkner, Director of the Office of Polar Programs at the U.S. National Science Foundation, provided examples of less obvious areas where the potential for cooperation exists. Fire suppression, freshwater river research, ocean current tracking, sea floor methane investigations, and ocean nutrient exchange all offer examples where multinational researchers could collaborate to make advances in science relevant to policy. She stressed the importance of research and the use of data for reaching informed decision-making on environmental issues.

Too often, international scientific cooperation is obstructed by the inability of national governments to form constructive relationships. Evan Bloom, Director of Oceans and Polar Affairs at the U.S. Department of State and a diplomat who specializes in overcoming these challenges, said a discussion about Arctic research was impossible without Russia. As co-lead of the Arctic Council Scientific Cooperation Task Force, Bloom learned that looking to overcome obstacles was better than trying to set priorities, he said. Real progress does not always mean changing laws and regulations; rather, the opportunity to create dialogue and share ideas has inherent value as well.

Dr. Martin Jeffries, Assistant Director of Polar Sciences in the Office of Science and Technology Policy in the Executive Office of the President, offered a vision for research cooperation based on the four themes of the White House Arctic Science Ministerial. Dr. Jeffries expressed his belief that the international focus should primarily be on overcoming common challenges. He suggested that data sharing is a way to facilitate regular interactions between foreign scientists. Similarly, a practical application for future Arctic research should include resiliency planning to address Arctic-wide threats, such as the effects of climate change. Arctic science could also be used as a vehicle for STEM education and citizen empowerment. Regional actors could work together to research responses to coastal erosion, melting permafrost, and severe weather events.

David Kennedy, former Deputy Under Secretary for Operations at NOAA, built on the Forum’s theme of cooperation, providing examples of international success stories. These examples included a joint U.S.-Russia marine mammal survey, the Arctic Marine Shipping Assessment (AMSA), and the Arctic Council’s Protection of the Arctic Marine Environment (PAME) Working Group.

The panel emphasized that in overcoming obstacles, from sanctions to data sharing, discoveries can be made that will improve the lives of the peoples of the Arctic. For this type of collaboration to occur, strong international scientific cooperation and organizations at the national, sub-national, and university level are needed.
Program Tracks

Track 3: Science and Research in the Arctic

Panel 2: Arctic Research Cooperation: Perspectives from the Field

Scientific research in the Arctic is inherently worthwhile for the information it yields, but is also valuable for soft diplomacy. What do the scientific researchers themselves cite as prime examples of U.S.-Russia cooperation and what challenges remain?

**Moderator:** Dr. John Farrell, Executive Director of the U.S. Arctic Research Commission

Panel participants shared their thoughts and insights on various international research projects in the Arctic. **Dr. Kathy Crane,** Professor at the University of Hawaii, cited the Russian-American Long-Term Census of the Arctic (RUSALCA), a joint census of the Arctic ecosystem that brought together Russian and American scientists on the Russian research vessel Professor Khromov. Dr. Crane said international research exposes scientists to local knowledge from remote communities and may also benefit the communities themselves.

**Nagruk Harcharek**, General Manager, Ukpeaġvik Iñupiat Corporation, has experienced the positive outcomes of collaboration between researchers and local communities first hand. He described an encounter with an Arctic expedition attempting a traverse of Arctic sea ice from Russia to Canada to Alaska and back to Russia. When the expedition realized it could not complete the attempt before the summer ice-melt, the people of Utqiagvik volunteered to help. They stored vehicles and supplies until the winter ice returned, which saved the research project. When local
communities and researchers collaborate, communities feel appreciated, researchers feel welcome, and both parties benefit from a better understanding of each other’s intentions and share in the project’s outcomes.

Dr. Dmitry Streletskiy, Assistant Professor of Geography and International Affairs at George Washington University, stressed that international research projects are not easy to establish, but are possible with persistence and a dedication to sustained funding. He said some Russian scientists avoid working with U.S. researchers due to fear of potential Russian government retribution. However, keeping dialogue open between the two countries creates the potential for amicable future collaborations. The Arctic is a data-sparse environment, and cooperating to overcome financial, logistical, and political challenges is the key to continued research and scientific progress in the region.

Regarding US-Russia cooperation, Dr. Lee Cooper, Research Professor at the University of Maryland, noted, “There’s a rich legacy that’s not that well known, going back to the 1972 environmental agreement between the USSR and the USA, signed by President Nixon and Brezhnev in Moscow, [which] led to a number of research cruises, even during the Cold War era. We had active, multidisciplinary oceanographic cruises that went across the border.”
Admiral Zukunft was interviewed by David Martin, National Security Correspondent for CBS News. In this wide-ranging discussion, he discussed U.S.-Russia security matters, the importance of the Arctic Coast Guard Forum, and the growing demand on the United States Coast Guard to operate safely and effectively in an ever-changing Arctic landscape.
Panel 1: Coast Guard Cooperation, Needs, and Challenges in the Arctic

The Arctic Coast Guard Forum facilitates an essential type of coordination among the region’s countries. As the Arctic Ocean becomes increasingly important, and visited, there is a new premium on ensuring safe operations and clear domain awareness.

Moderator: Dr. Mike Sfraga, Director, Polar Initiative, Wilson Center

The U.S.-Russia security relationship in the Arctic is based on risk, which will always dominate the conversation, according to Dr. Paul Berkman, Professor of Practice in Science Diplomacy at Tufts University. The Arctic must be thought of in a global context and “the Arctic stands alone as one of the few regions where cooperation and peace have proliferated.” The U.S.-Russia relationship has focused primarily on studying Arctic science. By controlling national interactions through rules and fact-based activities, science diplomacy helps reduce risk.

Several joint initiatives are strengthening the relationships between Arctic nations. Admiral Paul Zukunft, Commandant of the U.S. Coast Guard, who also participated in the panel discussion, described the Arctic Coast Guard Forum as the best way to conduct search and rescue, oil spill emergency response, and seabed surveying exercises. The risks to shipping and the surrounding environment increase when vessel operators do not know the waters they are transiting. Admiral Zukunft noted the importance of sharing survey data between Arctic nations and cooperating across the Bering Strait to minimize environmental risk from increased vessel traffic.

Iceland has a small population, but provides search and rescue operations for a geographic region nearly 20 times the size of the island itself, noted Commander Ásgrímur L. Ásgrímsson of the Icelandic Coast Guard. Iceland has highly capable Coast Guard staff, including a strong volunteer force, but lacks modern oceanographic charts, which makes navigating the Arctic difficult at best. CDRE Ásgrímsson highlighted the work of the Arctic Coast Guard Forum, which leverages the significant experience of each nation and addresses common Coast Guard challenges in the region, including the difficulty of accurately charting it. Lines of communication and cooperation are open between countries and the first live exercises of the Arctic Coast Guard Forum are scheduled for September 2017, involving Iceland and Greenland.

The lack of Arctic infrastructure presents a security challenge for Arctic nations, especially the United States. Panelists throughout the conference highlighted this issue and called for new investments in deep water ports, broadband communications, and icebreakers. U.S. Senator Dan Sullivan (R-AK), while praising U.S. Coast Guard operations, reiterated the difficulty he has encountered in convincing U.S. policymakers of the value of investing in the Arctic. For example, the United States Coast Guard has funding in the current fiscal year for one-third of one new icebreaker, with projections that six operational icebreakers are actually needed to complete their stated mission goals.
Program Tracks

Track 4: Security in the Arctic

Panel 2: The Bering Strait: Shared Opportunity and Responsibility

The Bering Strait is an area of both promising opportunities and crucial responsibilities. It is a dynamic landscape for communities that rely on this rich, yet fragile, environment.

Moderator: Craig Fleener, Arctic Policy Advisor, State of Alaska

This session highlighted several recurring themes from the Forum, including the observation that U.S. and Russian activities in the Arctic should be viewed in the context of national goals. Instead of looking at Russian investment in the Arctic as aggressive, the United States should start making similar defensive and economic investments in Alaska, said Paul Fuhs, President of the Alaska Marine Exchange.

Future U.S. investments should address immediate Arctic security challenges. The desperate need for an Arctic deep-water port in Alaska is crucial, several panelists said. Gail Schubert, President & CEO of Bering Straits Native Corporation, believes assets for search and rescue operations, oil spill response, and fisheries management could be staged at the port to protect the interests of local communities. Bering Sea subsistence security depends on harvest and community safety. The risks to the environment, local communities, and subsistence activities are high when two-thirds of the daily vessel traffic in the Bering Strait contains petroleum products, Fuhs said.
Mitigating the effects of development on human security throughout the region is crucial to the health of Arctic residents. Melanie Bahnke, President and CEO of Kawerak, Inc., cited the gold standard for assessing Arctic development: people must come first. Therefore, having indigenous leaders at the table for any future investment decisions is critical. The use of local knowledge to both inform and influence policies are central to the long-term welfare of the region’s communities.

Bill Eichbaum, Vice President and Senior Fellow at the World Wildlife Fund, highlighted the importance of the Bering Strait as the only area in the world where the United States and Russia are in close proximity (about 2.5 miles separates Little Diomede, Alaska, and Big Diomede, Russia). According to the World Wildlife Fund’s recent Arctic Council Conservation Scorecard, state and local implementation plans have lagged far behind federal diplomacy. Future economic development and shipping activities, as well as protection of the sensitive biological environment, will require significant cooperation between the United States and Russia – from the local to the national level.

Rector Elena Kudryashova of Russia’s Northern Arctic Federal University, outlined the depth and breadth of cooperation between institutions of higher education in the Arctic. The University of the Arctic (UArctic) is a cooperative network of universities and research centers that provide a more integrated approach to teaching, research, and service for the citizens of the North. Investing in human capital development is a way to strengthen the bonds between rising leaders, she said, highlighting the UArctic’s Model Arctic Council program, which enables young and emerging leaders to consider the political realities of the North in a dynamic setting that mirrors the work of the Arctic Council.

Echoing Bill Eichbaum, the Bering Strait is perhaps the most important location for U.S.-Russia Arctic cooperation, she added. Because it shortens the distance between the manufacturing and consumption centers of the world, the strait will see increased ship traffic as more sea ice melts. Applying local and indigenous knowledge, combined with Arctic scientific research, will strengthen U.S. relationships in the Arctic. This mindset, called “environmental intelligence” noted by Dr. Jeremy Mathis, Director of the NOAA Arctic Research Program, can be used for several security-related purposes. The Polar Code, vessel operational requirements, and vessel tracking software can create a digital geo-fence for protecting indigenous harvest regions from outside intrusions. This is just one example that illustrates the importance of investing in marine data gathering for U.S.-Russia economic and political security.
The Forum’s second day included a complementary discussion focused on the Arctic Economic Council.

The recently formed Arctic Economic Council (AEC) works to facilitate responsible and sustainable business and economic development of the Arctic and its communities. What are the environmental and social challenges of meeting economic development in the Arctic? How should Arctic investments be considered in light of community needs, priorities, and regional realities?

**Moderator**: Tero Vauraste, President and CEO of Arctia Ltd; Chairman, Arctic Economic Council

Tero Vauraste recounted the creation of the AEC, an organization created to promote “Arctic interconnectedness.” The AEC’s vision is of a more integrated supply chain, with linkages to small businesses and indigenous organizations, to create a “system of united rules and regulations” throughout the Arctic. This vision includes facilitating business communications and the creation of an overarching theme that can persist through multiple Arctic Council chairmanships.

Indigenous organizations should be central decision-makers and stakeholders in economic development opportunities in the Arctic, noted Price Brower, Chairman of the Board of Directors for Ukpeagvik Inupiat Corporation (UIC). Brower provided insight into the worldview held by Alaskan native people — namely, that people must be wise stewards of their land and resources. Brower shared the Inupiat tradition that encourages moderation in all aspects of life, taking only what is needed, and always leaving some for the next generation. No one should be left behind because of their age, ability, or wealth. Brower’s goal, and that of UIC, is to ensure the next generation learns their cultural traditions so that they endure for generations to come. From this philosophy, UIC supports responsible economic development.

Panelists noted the challenges in balancing traditional ways of life with the steady advances in technology during a period of dramatic and rapid environmental and economic change. Quintillion, an Alaska-based company, recently deployed broadband telecommunications to connect the community in Utqiagvik, AK to high-speed internet via a new fiber-optic cable. Kristina Woolston, Vice President for External Relations for Quintillion, shared the project’s goals and successes and stressed that rural Alaska has a large,
unmet demand for broadband internet. Quintillion's final goal is to create an information-carrying highway between Europe and Asia. Connecting rural communities in Alaska with one another and the world may attract new industries and lead to more diversified and sustainable economies. Woolston acknowledged that differences exist between and within rural communities on issues of economic development and that these differences must be respected and managed through direct input from local citizens.

Dr. Roger-Mark de Souza, Director of Population, Environmental Security, and Resilience at the Wilson Center, discussed three themes essential for successful global economic development: consensus, commonality, and cooperation. When stakeholders and developers find a consensus, he said, commonality among their interests is created. And, when cooperation occurs, detrimental “backdraft effects,” such as conflict from environmental degradation, can be prevented. The goals should be the elimination of conflict and development that is beneficial for all stakeholders, including future generations. The lessons learned from international development programs can inform Arctic opportunities.

Robert Sheldon, an entrepreneur and investor, described the Arctic as an “emerging economy with a mature bureaucracy.” Investing in the Arctic can be difficult because, while many opportunities exist, access requires dealing with extensive red tape and regulations. Sheldon believes that once investment reaches the Arctic, the goal should be to keep returns on such investment within the region’s business cycle to benefit both the community and industry. Working with local communities and keeping local stakeholders involved is the best way to stimulate investment growth in the region.
“The Arctic and the issues around the Arctic are probably the issues we can afford to be optimistic about... We have the opportunity to get this right if we work together.”
- Hon. Jane Harman, President, Wilson Center

“We have an awakening at the national level — that we have got to pay attention to what’s happening in the Arctic... What is our strategic approach?”
- Admiral Paul Zukunft, Commandant, U.S. Coast Guard

“The outlook for the Northern Sea Route is very strong and of course, we look forward to international cooperation in this sphere.”
- Senator Igor Chernyshenko, Murmansk Oblast, Russian Federation
“In a sense, the cooperation in the Arctic is a peace dividend after the Cold War... We are very convinced that it must be possible to continue the cooperation in the Arctic, and that it is in the interest of everybody to continue the cooperation.”

- Ambassador Kirsti Kauppi
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