

A New Ocean in the North: Perils and Possibilities



OCTOBER 5, 2017

**Briefing of the
Commission on Security and Cooperation in Europe**

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ABOUT THE ORGANIZATION FOR SECURITY AND COOPERATION IN EUROPE

The Helsinki process, formally titled the Conference on Security and Cooperation in Europe, traces its origin to the signing of the Helsinki Final Act in Finland on August 1, 1975, by the leaders of 33 European countries, the United States and Canada. As of January 1, 1995, the Helsinki process was renamed the Organization for Security and Cooperation in Europe (OSCE). The membership of the OSCE has expanded to 56 participating States, reflecting the breakup of the Soviet Union, Czechoslovakia, and Yugoslavia.

The OSCE Secretariat is in Vienna, Austria, where weekly meetings of the participating States' permanent representatives are held. In addition, specialized seminars and meetings are convened in various locations. Periodic consultations are held among Senior Officials, Ministers and Heads of State or Government.

Although the OSCE continues to engage in standard setting in the fields of military security, economic and environmental cooperation, and human rights and humanitarian concerns, the Organization is primarily focused on initiatives designed to prevent, manage and resolve conflict within and among the participating States. The Organization deploys numerous missions and field activities located in Southeastern and Eastern Europe, the Caucasus, and Central Asia. The website of the OSCE is: <www.osce.org>.

ABOUT THE COMMISSION ON SECURITY AND COOPERATION IN EUROPE

The Commission on Security and Cooperation in Europe, also known as the Helsinki Commission, is a U.S. Government agency created in 1976 to monitor and encourage compliance by the participating States with their OSCE commitments, with a particular emphasis on human rights.

The Commission consists of nine members from the United States Senate, nine members from the House of Representatives, and one member each from the Departments of State, Defense and Commerce. The positions of Chair and Co-Chair rotate between the Senate and House every two years, when a new Congress convenes. A professional staff assists the Commissioners in their work.

In fulfilling its mandate, the Commission gathers and disseminates relevant information to the U.S. Congress and the public by convening hearings, issuing reports that reflect the views of Members of the Commission and/or its staff, and providing details about the activities of the Helsinki process and developments in OSCE participating States.

The Commission also contributes to the formulation and execution of U.S. policy regarding the OSCE, including through Member and staff participation on U.S. Delegations to OSCE meetings. Members of the Commission have regular contact with parliamentarians, government officials, representatives of non-governmental organizations, and private individuals from participating States. The website of the Commission is: <www.csce.gov>.

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Commission on Security and Cooperation in Europe Washington, DC

The briefing was held at 3:32 p.m. in Room G11, Dirksen Senate Office Building, Washington, DC, Paul Massaro, Policy Advisor, Commission on Security and Cooperation in Europe, moderating.

Panelists present: Paul Massaro III, Policy Advisor, Commission on Security and Cooperation in Europe; Julie Gourley, Senior Arctic Official, U.S. Department of State; Ina Peltonen, Embassy of Finland in the United States; Rear Admiral Michael F. McAllister, Commander, 17th Coast Guard District, U.S. Coast Guard; Melanie Bahnke, President and CEO, Kawerak, Inc.; and Mark Smith, CEO, Vitus Energy.

Mr. MASSARO. Well, thank you all for coming today. Good afternoon, ladies and gentlemen. Welcome to today's briefing on Arctic infrastructure and environment. My name is Paul Massaro, and I am the policy advisor for economic and environmental issues at the Helsinki Commission. I'd like to thank the Senate Arctic Caucus, Senate Oceans Caucus and Congressional Arctic Working Group for co-hosting this event with the commission today.

The Arctic is a topic of increasing interest to the Organization for Security and Cooperation in Europe, or the OSCE. This organization has a mandate to monitor economic and environmental issues within this region, which includes all eight of the Arctic nations that make up the Arctic Council, the primary international forum for discussion of Arctic issues. It is the OSCE Parliamentary Assembly, however, that has been most active on the Arctic and the OSCE context. This assembly has a special representative on Arctic issues and has passed resolutions dealing with the Arctic in the past at a number of its summer meetings.

The Arctic is clearly a region of growing global importance. It is resource rich and looks to become a route through which goods can be transported more efficiently. It is also a region of enormous biodiversity and environmental importance. As the Arctic gradually becomes more accessible, so do our opportunities to reap the benefits of its sustainable development. Our briefing today will examine the importance of the Arctic to U.S. policy-makers both for its economic viability and environmental implications. In addition, it will

analyze the challenges we face in playing a leading role in the region and unlocking its economic potential.

We are grateful to have such distinguished panelists with us today. I look forward to hearing your thoughts on this developing issue. First, we have Julie Gourley, who was at our last briefing as well, who joins us from the State Department. Julie is the current United States senior Arctic official, a position she has held since 2005. She is also the primary U.S. representative to the Arctic Council, where she manages the State Department's Arctic Council portfolio and helps forward U.S. foreign policy interests in the region.

Following Julie, we have Iina Peltonen who joins us from the Finnish Embassy to the United States, where she is an external economics officer. In her current position, she works on Arctic issues, focusing specifically on the environmental and energy issues.

We'll then hear from Admiral Michael McAllister, who is the Commander of the 17th Coast Guard District. He is responsible for Coast Guard operations throughout Alaska, which include protecting life and property, enforcing federal laws and treaties, and preserving living marine resources. His knowledge of the U.S. Government's engagement in the Arctic will be beneficial to hear.

Next we have Melanie Bahnke, who joins us from Alaska. Melanie is the president and CEO of Kawerak Inc. She is a tribal member of the native village of Savoonga and is a passionate advocate for Native American rights in Alaska.

Finally, we will hear from Mark Smith, the CEO of Vitus Energy and a third-generation Alaska resident. He began as a deckhand with Smith Lighterage in 1973 and eventually purchased the family business in 1987. Since selling the original company, Mark has been active in Alaska's energy and transportation industry. We will conclude with Q&A session.

I'd like now to give the floor to our first panelist, Julie Gourley, who will discuss the State Department's outlook on the Arctic and our role in the region's development. Julie, the floor is yours.

Ms. GOURLEY. Thank you, Paul, for inviting me back to the Helsinki Commission. It's nice to be here.

This is a great topic, and it's a nice time to talk about it a little more in-depth now that the United States has passed the Arctic Council chairmanship on to Finland, and we have a little more space to think and breathe now and think deeper thoughts about the Arctic.

So about infrastructure, which is a particularly interesting topic in that region—a hot topic right now—it's getting a lot of attention in the Arctic Ocean, frankly, as everyone in this room probably knows, because the ocean is much less frozen than it used to be, and the ice that is there is thinner, and it's easier to break with ice-strengthened ships. So that means there's more stuff going on in the Arctic Ocean than in modern human history.

When any of us would sit around talking about infrastructure, you would normally think of roads and bridges and telephone lines, and the electricity grid, and pipelines and so forth. And that's stuff we take for granted. But the state of infrastructure in the Arctic is very different from that, and very much less robust.

So, for example, with diminishing sea ice, shipping in the Arctic Ocean is starting a little bit of an uptick. Which does not mean that the Arctic Ocean, which has a couple

of very famous shipping routes—the northern sea route over Russia and the northwest passage over Canada—are seeing anywhere near the level of shipping that the rest of the world is. But with respect to past shipping patterns, especially in the northern sea route, there is quite a bit more activity.

But there's very little infrastructure in many parts of the Arctic—in Alaska, in northern Canada, in the northern Arctic regions of Russia and in Greenland—to actually support large-scale commercial shipping in the Arctic. For example, there are very few deep-water ports. And there's certainly a lot of talk about developing one in Alaska, possibly in Nome. I think our Kawerak will probably talk about that a little bit more. The main one that is the most familiar to people is the one in Murmansk, Russia. And the rest are the bulk of the deep-water shipping capacity and port capacity is along the Arctic coast in Russia.

For another thing, highway and railroad infrastructure is sparse in those same areas. Now, I'm not talking about the five Nordic countries, which are a completely different situation. But certainly in Alaska, Canada, and Russia, again, there's not a lot of road or highway or railway infrastructure to support deep-water ports, which means that there's not really any ability to support commercial-scale container shipping. So the shipping that is going up a little bit, certainly a lot for the northern sea route but not a lot compared to the rest of the world, is mostly bulk shipping—for example, gas hydrates going from the Barents Sea around over to China.

Russia is actively marketing the northern sea route, north of its Arctic coastline, as both a shorter route between Europe and Asia, and a safer one that's free of piracy and, at least for now, the traditional kinds of criminal activity, like human smuggling and arms trafficking and drug trafficking, and so forth. Although the number of voyages in the northern sea route has actually increased quite a bit in the last decade, the shipping activity is still very insignificant compared to the Suez Canal or the Panama Canal, which are sort of the main shipping lanes that the northern sea route is sometimes compared to, and that people are looking to as a model for the future of shipping in the northern sea route. But I think people like Caitlyn Antrim in the audience know that that's way in the future.

So the infrastructure situation is quite a bit different in the Nordic states, the five Nordic states, where just this week, actually, there's been new interest in building an Arctic Corridor Railway that would connect Northern Europe with Russia's Arctic deep-water ports, and it would eventually connect to the China Belt and Road initiative that you may have heard about. But the idea—and maybe Iina will know something about this—is that it would connect Rovaniemi, Finland with Kirkenes, Norway, a port city on the Barents Sea, and then tie into other deep-water ports along the Russian coast, and then eventually tie in with China, which would give China much more direct economic ties to the Arctic than it has now.

So with respect to economic development, in recent years there's been a lot of focus on that in the Arctic region, again, because the sea ice is melting and the permafrost is thawing and things are opening up in that part of the world. Things like offshore oil and gas development, cruise tourism, deep seabed mining, perhaps commercial fishing one day, in addition to deep-water port development and commercial shipping, which is why plans like the Arctic Corridor Railway are starting to be made.

Another critical area of infrastructure in the Arctic is intel communications, and that's not something people normally think about when you think about infrastructure,

especially in the Arctic where you're immediately thinking about ports and ships and roads. The lack of telecommunications infrastructure in the Arctic is why we, in the United States, initiated new work in that area in the Arctic Council during our recent two-year chairmanship period for the Arctic Council. And Finland has taken it over. So it's continuing on these next two years under Finnish leadership.

I'll say just a little bit about that. Many telecom technologies are already in use today in southern parts of the Arctic. And those kinds of technologies vary based on the user needs. The communications over the northernmost part of the Arctic north—way north, way up and into and over the ocean—are only possible with limited capabilities, such as radio and satellite technologies. But that's kind of all there is up there now.

So as a result, it's important to note that no single technology alone will meet all the telecommunications needs in the Arctic. The solutions to the connectivity gaps around the Arctic will vary along with the needs of the end-user community. And that is exactly what's going on right now in the Arctic Council—our two years looked at sort of the whole infrastructure picture and the enormous gap that is in the Arctic. And now we're looking more at who the end-user community is, who the individual end-users might be and what their actual needs are.

For example, there are fiber optic cables being laid in parts of the Arctic. I think people in this room probably have heard about the Quintillion Project that's, I think, going from Japan over to England and around through the Bering Strait and over the northern part of Alaska, which is allowing Alaskans to tap into this fiber optic cable and, for the first time ever, be able to have broadband in the northern areas, in Barrow, for example. It's pretty exciting. It's a real game changer for northern Alaska that fiber is actually now being laid in the water and they'll be able to tap into it.

The purpose of the Quintillion Project is mainly to link the financial markets in Europe and Asia through the much shorter route, which will—even though it's in milliseconds of time that are saved—the timeliness of connectivity between the markets is huge for financial markets. So that's the main purpose for this cable being laid. But of course, it has this added benefit of being able to provide a lot more connectivity in the Arctic.

But as they're installed, opportunities like that will happen. The satellite industry is doing the same thing, and looking similarly to the Arctic for new constellations. I think the Iridium constellation, which is quite old and has been up there for a long time is one of the companies that is looking to the Arctic and I believe is also working with the IMO on search and rescue capability through satellite technology. So there's broadband, and there's satellite all being built up on the Arctic now.

With the increase in shipping traffic, there's also a demand for on-board telecommunications services for business needs, such as navigation aids and data transfer and vessel tracking. There are also customer needs onboard ships, such as for email and internet access. So with increasing ship traffic, there will continue to be increasing demands, not just for commercial capabilities, but for search and rescue backup and support to offshore development activities.

Search and rescues, in particular, is another area the Arctic Council focuses on, and the needs therein. And not only in Coast Guards practicing and keeping fresh in how to operate in that environment, but also how to take advantage of existing telecommuni-

cations, which are pretty thin up there, but which will be improving as time goes on and as this task force and the Arctic Council continues.

So I'll stop, but the bottom line is really that economic development can't happen in any significant way without supporting infrastructure. And that's really why it's one of the very main topics, one of the top, top topics being talked about in the Arctic right now. And infrastructure itself is a form of economic development. So it sort of has this double benefit in the Arctic. And in a region like that in the world, where there's very little infrastructure now, of creating jobs by its very creation and also creating jobs by being in place and supporting other kinds of human activity.

Thank you.

Mr. MASSARO. Great. Thank you very much, Julie. It's always so exciting to hear you speak. I love this idea of an Arctic Corridor Railway, especially how it connects with the One Belt One Road initiative of China. One of the things I also focus on at the commission are the OSCE Asian partners. And all of the Asian partners are very concerned, to say the least, about China's project. At least, they're paying very close attention to it. And also this idea of the milliseconds saved for financial markets. This is the kind of thing that really got me into Arctic issues to begin with, is these exciting types of projects.

On another note, I wanted to let everyone know that we are expecting Senator Sullivan to drop by at some point and make a few remarks. I'd ask that panelists take a short pause when he comes in. He's running a very tight schedule and we'd be very excited to have him come speak shortly. With that, I'd like to hand it over to Iina.

Ms. PELTONEN. Great. Thank you for the invitation to this event. And this is a great opportunity to contribute to this discussion as a representative of the current chairmanship of the Arctic Council. I'm just so happy that you are keeping the Arctic on the agenda, because we think that the Arctic is, nowadays, more important than ever for all of us, because what happens in the Arctic doesn't stay in the Arctic, as our president says.

Well, first, I would like to say a couple of words about the background of Finland and the Arctic. Well, of course, because Finland is located in the Arctic region, the Arctic is obviously an important region for us. And it's not only regional issue, but it's a mindset of viewing for all of us. And about the Arctic Council, the whole genesis of the Arctic Council goes back to Rovaniemi, a city on the Arctic Circle in Finland. Almost 30 years ago the first ministerial meeting of the Arctic countries, focusing on environmental protection in the Arctic led to the Rovaniemi process, and eventually the establishment of the Arctic Council 1996.

Well, in Finland we have been actively working on our national Arctic strategy in the past few years. And the key areas in that strategy, they are ranging from foreign and the EU policies, Arctic know-how and business, of course, sustainable development and infrastructure, for instance. Finland is, at the moment, the chair of the Arctic Council, but also of the Arctic Economic Council. But I'm going to focus on our chairmanship in the Arctic Council.

Well, now having assumed the chairmanship of the Arctic Council from the U.S. in Fairbanks in May, our mindset and minds are even more concentrated on the Arctic, more than usual. And we appreciate a lot the achievements of the U.S. chairmanship. And we are happy with the very smooth transition. And continuity is the key word in the work of the Arctic Council. And we would say that a Finish chairmanship is like a continuation of the U.S. chairmanship. Of course, not in every detail, but in many issues.

But now we are doing our best to guide the Arctic cooperation forward as a region of peace, stability, and constructive cooperation. And that spirit is also reflected in the title of our chairmanship program: Exploring Common Solutions. And as I said, for us, the Arctic is not only a regional issue, but something that is very intimately linked with the fundamental questions of global order, common challenges and solutions. This is why our chairmanship program also refers to two major international milestones of the past years—the Paris climate agreement and the Sustainable Development Goals. And they form an umbrella under which therefore stated priorities of our chairmanship. And now I'm going to tell you a little bit about them, one by one.

First, there's environmental protection. That's our first priority. And environmental protection has been the core of Arctic cooperation from the very beginning. It is directly reflected in the health of the ecosystem and human well being. And if you will allow a clumsy idiom in this context, the Arctic is very much like the canary in the coal mine of climate change, like an early indicator of where we are headed globally. We have, of course, now the current discussion on the Paris agreement here in the U.S. But for us Finns, and also the EU, the implementation of the Paris agreement remains extremely important. We think urgent action on mitigation and adaptation is really needed. And all common solutions we are able to find in the Arctic. They really are going to be helpful. If I mention one concrete example of this work, Finland is currently exploring practical ways to reduce especially black carbon emissions.

And another priority is connectivity. This is directly a continuation from the U.S. chairmanship. And the same priorities are also in the work of the Arctic Economic Council. And as Julie said, well-functioning communication networks and services are a lifeline for human activities. And it is also needed for economic development. The Arctic is no exception in this. As I said, we continue the Arctic Council's work on this and explore ways to enhance the connectivity and availability of program services in the Arctic, together with the indigenous peoples, local communities, the private sector, and researchers. Of course, this includes all technologies, meaning satellite connections and cables, for example.

And our third priority is meteorological cooperation. And this is something really under the auspices of the Arctic Council. We think improved cooperation in meteorological research, observation and services are highly valuable in many sectors, not least in maritime transportation and public safety. Getting better data coverage and better forecasts will improve our ability to manage climate and water-related risks and benefit us all. And of course, we work closely with the World Meteorological Organization with this. And it will probably not hurt that the director-general of WMO is currently a fellow Finn.

And then our fourth priority is education. And education is something we Finns value very highly. It is also an essential building block in sustainable development, and also local involvement. We find creating fair educational opportunities improve the resilience of local communities and the region as a whole. We want to make sure that all children in the Arctic have access to and will receive a quality education. In this work, we emphasize teachers and their work. Therefore, Finland already proposes to strengthen the network of educational specialists, in cooperation with the University of the Arctic. Developing modern teaching methods will be at the core of this effort.

And in addition, it has something to do also with Julie and you, colleagues, when you go to the Arctic Council meetings. I just want to mention that Finland also decided to arrange all the Arctic Council meetings in an environmentally friendly way. And that

means in practice that Julie and her colleagues, they don't have any paper meeting material, for example. They just have to eat or they also have some local food, as much as possible. And there's no unnecessary transport. And actually, in Finland these environment-friendly meeting arrangements are not so familiar either. So the ministry for foreign affairs of Finland and WWF Finland, they developed together guidelines for this. And this is something new also for us.

But in the end, as I said, those four priorities are our themes. And if you want to read our chairmanship program, this is also an environmental-friendly thing that we don't have paper copies, but you can scan the QR code here and download it from the internet. And you can find it in Finnish, Swedish, English of course, and Russian, and Sami language.

Thank you.

Mr. MASSARO. Thank you very much, Iina. And I too am a huge fan of low paper events. I know our communications director is here. Perhaps we can try out a barcode thing in the Helsinki Commission in the future. It's very exciting technology. Well, thank you so much for going through your priorities, Finland's priorities, for the Arctic Council chairmanship. And very happy to hear that we have so much in common. Should be an exciting chairmanship.

Admiral McAllister, the floor is yours. Thank you.

Adm. MCALLISTER. All right. Well, good afternoon, everybody. I'm going to talk a little bit on infrastructure needs from the perspective of the U.S. Coast Guard and how we work in the international or global environment to address civil Coast Guard-related missions, given infrastructure constraints.

So just as a quick introduction, I'm honored to lead about 2,500 Coast Guard men and women in Alaska that work in the U.S. Arctic providing safety and security and environmental protection, of what we call stewardship operations, really around the clock, every day of the year.

And I'm going to continue this theme of discussion about infrastructure, but I'm going to stretch the definition a little bit, because when I looked it up in Dictionary.com the definition I got was underlying foundation or basic framework as of a system or organization. That's pretty broad. But it gives me an opportunity to talk about things beyond just traditional physical infrastructure and public works. So I'm going to talk a little bit about things like informational infrastructure, mobile infrastructure, shared and collective infrastructure, and governance and policy as infrastructure concerns. To try to keep it within bounds, I'm going to talk specifically about infrastructure as it relates to increased maritime traffic, which Julie described in her remarks.

Let me start with the strategic perspective a little bit. There have actually been a lot of strategic-level studies that list infrastructure needs, things like the White House's national strategy for the Arctic region. The Committee on Maritime Transportation and Security did a 10-year prioritization of infrastructure, which was a very good work. The Coast Guard has its own Arctic strategy, which lists infrastructure needs that are relevant to an organization like the Coast Guard. And then the Council on Foreign Relations put out a bit recently on Arctic imperatives reinforcing U.S. strategy on America's fourth coast, which talks a lot about infrastructure needs as well. So this is not necessarily a new body of work. We've been thinking about these things for a long period of time.

And there's some commonality amongst all these different strategic works, things like deep water or safe harbors, search and rescue capabilities, oil spill capabilities, communications, what we call maritime domain awareness, navigation and bottom mapping or hydrography. But if you put all together, it's a very long list of national needs. And it will come at great national expense. So it's important for us to prioritize, to identify what needs to be done first in order to provide for safe and secure uses of the Arctic. I was at an event recently, and I believe it was Senator King from Maine who said, this is necessary work as the Bering Strait—you know, that is the narrow waterway between Alaska and Russia—becomes one of the most strategic places on Earth with the increasing traffic through the northern sea route and northwest passage. I think it'll be many years before we see that come to fruition, but certainly the trends are all in that direction.

So what are our infrastructure needs in the U.S.? What should our priorities be? And how do we work across nations to get there? I'm going to provide you my thoughts as an operator, a practitioner, using the Coast Guard's Arctic strategy framework.

The first thing that we need and are working on trying to get is informational infrastructure. And primarily from a Coast Guard perspective, that's what we call maritime domain awareness, knowing what's going on out there. And our general model for gaining and using maritime domain awareness is we collect it, we fuse it, we analyze it, and we disseminate it. And there are shortfalls, really, in all of those.

Julie has already mentioned things like satellite shortfalls. And there's some great work being done out there, both on the government side and on the commercial side, to put additional satellite capability into polar orbits. And you know, just as an example, we, the Coast Guard, are now working through our Department of Homeland Security to put small satellites into space to help improve the detection of emergency position indicators for search and rescue, as an example. And so it's an exciting world ahead, but there's very little capability there today. About 4.7 percent of the U.S. Arctic bottom—the ocean bottom—is mapped to today's standards. And so the National Oceanic and Atmospheric Association [NOAA] is using all of its resources, along with Coast Guard resources, commercial resources, to try to get them on a path where they can do accurate mapping for more of the U.S. Arctic.

As Iina said, environmental sensors are a big issue for us. Just as a kind of a data point, the weather and ice forecasts that we get in the U.S. Arctic typically are good for about two to three days, whereas in the lower 48, Washington, D.C. as an example, they're accurate for about five to seven days. Just the lack of sensors in the region makes it more difficult for us. And I would certainly tell you that weather is more important in the U.S. Arctic, where everybody attempts to work around the weather constraints in order to operate.

Vessel tracking: We use automated identification systems, but those only apply to large vessels, so we can't necessarily track well small vessels. And that's a gap that we need to fix in our maritime domain awareness. And then there's human sensors as well, trying to gain the traditional knowledge of members of coastal communities and include that in our work. We need to be able to fuse that through some sort of common operating picture. And we need decision support tools in order to take all this information—a vast amount of information—and make good decisions from it.

But it doesn't end with decision making at a government level. We need to be able to disseminate that information and tailor it to individual users. And I think Iina had mentioned that as well. You know, I can share it with Coast Guard ships, but it really

needs to be shared with commercial fishermen. It needs to be shared with masters of vessels who are on long voyage routes. It needs to be shared with subsistence hunters so that they can use this information in a way that helps them perform their missions, their duties, their activities in a safe and secure manner. I'll argue that governance is an important part of infrastructure as well. There's been some progress made on commercial vessel safety, as an example, with the release of the polar code recently. And frankly, we already work pretty well across nations to harmonize some different rulesets that we have.

So as an example, when the cruise ship *Crystal Serenity*, which was the first really large cruise ship to go through the northwest pass, first proposed their route, we worked side-by-side with the Canadian Coast Guard and with Transport Canada, their equivalents to the U.S. Coast Guard—to ensure that the rules that we were going to apply to ensure that that ship made that transit safely were harmonized between the two countries. And at the end of the day, it was frankly Canada that had the more conservative or more stringent requirements that led to all of the safety features—or many of the safety features that the *Crystal Serenity* put in place in order to ensure that that inaugural cruise was going to be as safe as it possibly could be. So that's how we work across governments to take the highest level of safety and security that we can manage together.

We're doing a variety of other things. I know Melanie is probably aware of this, as is Mark, but we're trying to manage our waterways in a smart manner as well, because only a small percentage of waterways are mapped accurately. For example, we recently set up a safe transit route through the Bering Sea, the Bering Strait, and into the Chukchi Sea. It's a route that has been surveyed. And we told folks: If you stay inside this route you can be assured that you will have good, safe water, and that you are avoiding conflicts with subsistence activities, with migrating marine mammals, as an example. And so it's a route that addresses many different concerns in the best possible way. We're about to present that through the International Maritime Organization for their consideration, and then it will become a global set of recommendations.

There was some mention of fisheries. Actually, there is viable commercial fishing going on in the U.S. Arctic. It's actually at the state level. Salmon is a commercial fishing—it was exempt from that particular moratorium. But it just demonstrates how commercial fishing is a sustainable activity in the Arctic. And so we need to bring the right governance structures to ensure that that can be managed in a sustainable way.

It's good to have good governance, to have good policies, but you also need effective presence. And this is where the kind of traditional infrastructure and hardware comes in. We in the Coast Guard use a mobile infrastructure approach. We send ships, we send aircraft, we send people during open water seasons into the Arctic to ensure that we have a good presence. They are providing the nation's sovereign presence. They're visible and they're out there and they have law enforcement capability, they have defense capability. And they're the United States flag in our exclusive economic zone, on our extended continental shelf and our territorial seas.

With the recent discussion on ice breakers and recapitalization of ice breakers, those ships will allow us to conduct Coast Guard missions throughout the year in any ice conditions. So that's an important capability for us to have. Unmanned systems are being tested and offer great promise as well. And then there's the supporting infrastructure. Communications was something that Julie mentioned. The ability to stage and receive ships, even if it's on an emergency basis, speaks to the need for ports. Don't necessarily need to be transshipment ports, but they need to provide some level of services.

And then let me finish up with partnerships. And Iina mentioned this as constructive cooperation. And for the Coast Guard, partnerships are important. We need to be able to pool our resources to respond to significant events. So as an example, recently we conducted an exercise called Arctic Chinook. It was done under the Arctic Council Search and Rescue Agreement. And it focused on a cruise ship incident where the cruise ship was many hundreds of miles from the nearest hub city. And it involved transporting people from the water to shore, taking care of them on shore, moving them to a hub community where they could get some level of first aid, and then onward movement to a metropolitan area where hospitals would be able to get the advanced aid.

One of the capabilities that we demonstrated there was something called an Arctic Sustainment Package. Again, in a remote area you might not have landing strips. You might not have anybody there. The Department of Defense dropped tents, pararescuemen with EMT or first aid capability, vehicles, on the beach. And they were able to provide the first level of care for people who were in an exercise term, injured during this particular event. Canada has these Arctic packages. The U.S. has some of them. And really, if there's a cruise ship event out there, we're going to need all of them working together. And so it was actually a pleasure to have the Canadian Air Force participate in that exercise with us. We had observers from Russia. I believe we had some from Finland, Norway, and, of course, Canada.

And I would be remiss if I didn't say an important part of our partnerships is about tribal engagement. Anything that we do in terms of infrastructure needs to be respectful of our tribal interests. And, as Julie had said, it needs to provide an opportunity for sustainable economic development from a local perspective as well.

In closing, I'll offer that infrastructure is necessary. We do need to think more broadly about it. It's not just about the public works. And we need to establish this infrastructure, particularly for maritime safety, security, and environmental protection, in advance of need. And that may be hard. That's a catch-22 because a lot of people are reluctant to do it until they see the traffic. So the catch-22 is the traffic—it needs to precede the traffic. And that partnerships will remain critical to our achieving our collective goals.

Thanks very much.

Mr. MASSARO. Well, thank you very much, Admiral McAllister. I particularly like you quoting Senator King. It's for those reasons, the Bering Strait becoming the most strategic area in the world, things like that, that the commission staff felt it necessary to hold a briefing like this. It seems like this issue is emerging very, very quickly. And in fact, although you say—and I completely agree—that we need to establish this sort of thing in advance of need, we're already behind in many aspects on what is needed.

So with that said, I'd like to turn it over to Melanie Bahnke. Thanks so much, Melanie.

Ms. BAHNKE. Thank you, Paul.

Distinguished leaders and guests, thank you for the opportunity to join you today. It is an honor to share our people's infrastructure priorities in the Arctic. I am Melanie Bahnke, originally from St. Lawrence Island, located in the center of the Bering Strait, where you really can see Russia from our houses. I serve as a president and CEO of Kawerak, a consortium of 20 Federally recognized tribes representing our region's 15 communities. Kawerak has twice convened leaders from our communities to identify prior-

ities related to a changing climate and the increase of shipping through the Bering Strait. That input is what informs my testimony today.

The U.S. is an Arctic nation. And for us, the Arctic is our homeland. The ocean's abundance of marine life has sustained our communities for thousands of years, and we intend to be here for the next 10,000 years and beyond. We are witness to one of the largest marine mammal migrations on Earth. The well-being of our communities as we live our native ways of life is entirely dependent on our marine ecosystem. Change for us is constant. The impacts of colonization have had lasting impacts on our communities. The reality of our climate and ecosystem changing and increased shipping in the Arctic adds another layer of urgency to ensure that we native people do not become an endangered species.

For the U.S. to ensure that our value system as a nation and the rule of law drive the future of the Arctic, it is imperative for the U.S. to prioritize and prepare for engagement with the people of the Arctic in a very real and meaningful way. I would like to remind this commission of the U.S.'s special relationship with its indigenous communities, as defined by our history as a nation and the body of Federal Indian law that makes up our relationship as Federally recognized Indian tribes. It is the responsibility of our leaders in Washington honor and uphold that government-to-government relationship that we share.

With that in mind, I have several recommendations and thoughts for your consideration. Number one is basic human needs. Our hearts go out to the states and the territory of Puerto Rico whose communities were devastated by natural disasters. We all understand the Federal Government's role in repairing infrastructure when this occurs. This same level of responsibility exists for government to bring infrastructure to areas of the U.S. in places where it is nonexistent. Some of our communities are, just like people in Puerto Rico, obtaining drinking water from streams. Many indigenous communities in the Arctic still lack the most basic infrastructure that is enjoyed throughout the rest of the U.S., namely water and sewer and adequate housing stock.

I would like to express appreciation to the agenda that Finland has outlined as it takes over chairmanship of the Arctic Council. The focus on the implementation of the Polar Code, as well as the well being of our Arctic communities in the areas of health, water, energy, and infrastructure is good news to us. Let me shed some light on the very real human issues with the lack of community infrastructure that we face in our region. The population in the Bering Strait region is roughly 10,000, with continued growth at 10 to 20 percent every decade. Over 20 percent of the homes in the region are overcrowded, with multiple generations or multiple families living under one roof. Some families sleep in shifts due to the limited floor space and overcrowded homes.

Too many homes are dilapidated, substandard and unfit for the Arctic environment. My home community of Savoonga faces the highest overcrowding rates of any census area in Alaska, 61 percent. These are statistics that we are not proud to share, because for us these are not statistics. They are our family members and extended family. Five communities in the Bering Strait region remain unconnected to running water and sewer. One in three infants require hospitalization in communities without running water and sewer. As a developed nation in the world, this reality in the United States Arctic is, for us, unacceptable. It is where the rubber meets the road.

President Trump has zeroed out funding to address what we call a silent sanitation crisis in rural Alaska. We have requested a congressional hearing to examine water and

sewer regulatory issues through the Alaska Federation of Natives, and look forward to working with members of our delegation on that front. We also look forward to engaging in knowledge sharing across the Arctic to address our common challenges.

Number two, erosion, natural disaster preparedness mitigation and response. The Governor of Alaska has on more than one occasion declared disasters in our region due to extreme weather events. The lack of shore ice protection, compounded by changes in the weather that brings extreme winds, is resulting in erosion of our coastal communities. Five communities in our region are listed as being in imminent danger. Infrastructure is needed to protect these communities from literally falling into the sea. Disaster preparedness mitigation and response mechanisms are needed. And this requires investments in infrastructure. For some communities, relocation is the only option.

Number three, oil spill preparedness and response. While I would like to commend the Arctic Council's work on oil spill preparedness and response, we remain very concerned at the community level that we have yet to prepare and train for such an event. Commandant Zukunft of the United States Coast Guard clearly expressed at an Arctic naval conference this summer that it would be impossible to recover from an oil spill in the Arctic environment. His words are very concerning to us, and we appreciate his honesty, as we are aware that oil exploration will continue under Russian waters and as the Trump Administration explores opening U.S. offshore exploration.

Our communities are on the frontlines. And in the event of an accident happening—whether it's a shipping accident from a tanker transporting petroleum materials or the risks that may occur with exploration—we urge the United States to make an investment in preparing our communities to respond. During the Cold War, the Alaska Territorial Guard served as the eyes and ears of the United States, ready to serve when asked. Men from our rural communities in Alaska continue to serve in the U.S. military at higher rates than any other ethnicity in America.

I would like to suggest the establishment of an Arctic Territorial Guard that perhaps is embedded with the U.S. Coast Guard with a specific mission to ensure ship to shore communications occurs and that our local community members are training and prepared for oil spills and other disaster response. We can no longer be in a position just hoping nothing goes wrong, given the nearest Coast Guard assets are several thousand miles away. We need an ongoing commitment to work with and ensure that we're prepared at the community level.

Number four, transportation systems. The Arctic is in need of a deep-draft port and harbor system. The increased shipping through the Bering Strait is a reality, not just a projection. We lack a deep-draft port that has been developed. Our communities are accessible only by small aircraft and summer barges. We lack a ferry system. The U.S. used to provide a barge, the North Star, to provide basic necessities to rural Arctic communities. A supplement to the Bypass mail system is needed to provide equity in the cost of living and doing business for Arctic communities, one that takes into consideration reducing the cost of shipping heating oil, gasoline, and building materials, for example. Intermodal transportation systems must be funded.

Number five, hunter safety and access. Among our primary concerns with an increased presence of commercial traffic through the strait is the safety of our hunters, as well as the safety of our marine mammals. While the Coast Guard and NOAA have identified necessary improvements that the U.S. must take, it is imperative that these systems are funded and developed to facilitate real-time communication between vessels,

our communities, and hunters. Internet connectivity will be enhanced with the upcoming Quintillion fiber optic cable implementation through the Bering Strait region. But current plans only include connecting a few hub communities, such as Nome. Our other coastal communities are in need of enhancement to allow connectivity with the rest of the globe.

Ship-to-shore communication infrastructure from the Bering Strait to the Canadian border is needed. An investment in our local communities to provide information to passing traffic on ice and for information sharing between hunters and larger vessels is needed. The use of drones, managed by our communities, can inform both communities and ship traffic to reduce the potential of conflicts. Ultimately, we must continue to work with the shipping industry, with regulators and our Russian neighbors to establish marine mammal avoidance protocol during the fall and spring migrations. Kawerak has published subsistence-use maps as a first step. However, additional research is needed to develop baseline information about the natural resources in the Arctic. We recommend establishing an Arctic research facility located in the Bering Strait region so that development in the Arctic is informed by science and local knowledge.

Number six, economic development opportunities. The increased shipping in the Arctic brings with it the opportunities for economic development. Our rich natural resources and culture can provide a window to jobs and a path out of poverty. As people who bear the most risk, our people should also stand to benefit from economic development opportunities in the Arctic. Government can help by providing the startup resources and technical expertise to facilitate sustainable development opportunities, including tribal enterprises that create eco tourism facilities and other economic development opportunities. The cruise ship Crystal Serenity has twice voyaged through the Arctic. Our tribes could benefit from a hand up, not a hand out, to boost economic development in this poverty-stricken region. We want to be participants in the global economy, but this will require investment by both the public and private sectors.

In closing, while the Bering Strait is considered an international strait, which all ships and aircraft enjoy the right of transit passage which shall not be impeded, the region is our homeland where Inupiat, Siberian Yupik and Central Yupik communities have lived for thousands of years. We inherently have the right to live our way of life and urge that this shall not be impeded. President Trump revoked President Obama's executive order, 13754, that provided for a level of protection and formalizing engagement with our communities in the Bering Strait on the issues of natural resources protection, erosion, and preparing for increased shipping and the need for infrastructure in our remote communities. We urge this Congress to take action, restoring Executive Order 13754. And if this is not possible, at least be informed by our work on the order as you prepare for policymaking in the Arctic region.

The Arctic is our homeland. In the Bering Strait, the U.S. and Russia are neighbors. We are family, separated by national borders and the international dateline. It is my hope that leaders of the Arctic nations that define the boundaries of the Arctic remember that. We are communities that neighbor each other in an extreme environment. And if Arctic infrastructure is to be responsibly developed, it will take partnerships internationally and locally. The First People of the Arctic must be afforded participation in this process.

Thank you, again, for the opportunity to share infrastructure priorities from the perspective of indigenous people whose homeland is the Arctic. [Speaks in a native language.]

Mr. MASSARO. Well, thank you very much, Melanie, for coming all the way here from Alaska today and for a very real picture of what's going on in these Arctic communities. I'd like now to hand the floor of to Mark.

Mr. SMITH. Thank you so much. Glad to be here. I'd like to have some good provocative discussion here in the Q&A, so I'm going to rush through my points because here at the tail end a lot of folks have touched on the points that were also in my remarks.

Just a brief background; my great uncle was in the original gold rush, and from there, followed the economy down to the red gold in Bristol Bay, and was part of the salmon industry. And that's where I grew up, in the family homestead in Bristol Bay, part of a tug and barge company that really got its start in the fisheries business, and then as the Federal Government and the Bureau of Indian Affairs specifically started investing in basic schools and other village services, the U.S. Post Office came in, that was the origin of the family company. So a lot of the transportation businesses that got started really were through a Federal infrastructure investment.

So from the private sector, you know, my punch line and my remarks will basically be driven down to the fact that as a pioneer state we really look to the Federal Government to help us provide a lot of the basic infrastructure that provides safety and economy. And that economy is with better ports and with sharing infrastructure development that is done on a sustainable and local business.

Just starting off with some of the needs, the Arctic does need basic shipping services, as relates specifically to the private sector and international shipping. There is very little that we see coming across the northern route and the northwest passage that has any place to stop. Even the Crystal Serenity that you mentioned does not have a port it can go to. It has to anchor offshore. So if there is any true trouble or any needs for repairs or anything in an emergency basis, that ship actually has nowhere to go. Literally, once it gets up to Barrow it's 1,000 miles from the nearest place where it can tie to a dock. So that's sobering, as I think everyone looks at the international aspect of shipping.

From a more local level, my company serves the communities that Melanie was referencing. And it is, it's—I'm going to say—a third-world situation, where there are no improvements. We literally hit the beach with tank barges to offload fuel and other vitals. And I'm sure that Admiral McAllister knows that if you talk to anyone in the civilized world about running a tank barge ashore, they'll scream and say how that can be. But in Alaska, that's a necessity. And we have to build and accommodate, and we have to watch the weather, and we have to have very specific local knowledge in our captains to be able to do that safely.

Another point is that just as far as seeing any other repair services for us, again, we're literally 1,000 miles. So if we have a major repair that we need to do to any of our vessels, it is about a 20-day round trip out of the arena. So we're looking for the Federal Government to possibly put in a major port where we can get a cluster of services that will ultimately reduce our costs of operating in the environment and reduce, in turn, the cost that the villagers in the Bering Sea area have to pay for such services.

The second topic I wanted to touch on is how these projects happen. And typically, in contracting, a project will be put out and bidders will bid on it, and we'll have what we would call an outside contracting firm come in, provide the infrastructure, bring in all of the parts, the pieces and the labor to do that infrastructure, and then leave. And ultimately, that's probably the most cost-effective way of doing infrastructure develop-

ment, but it's probably not the best way for Alaska, because we want to include those people that provide services on a local level to participate at a higher level. So if we can do infrastructure development in more of a slow-motion and ultimately get to the point where we have a satisfactory product, it will have a much more impactful benefit on the local level than we do when we go through traditional contracting routes.

This ties into the second point I have as far as being sustainable. And as a private sector individual, I want to see healthy communities, communities that have growth, communities that have hope, and where investment is made. And again, that only is going to happen if we have improvements in infrastructure—even maintenance of infrastructure that has been put in historically and yet still needs improvement.

This is also part of the oil and gas experience. We saw Shell come in and put nearly \$7 billion into northwest Alaska. And the truth is, my company literally didn't see a dollar of that and that's, to me, quite remarkable because everything that happened with Shell that came in, and that tremendous amount invested, as Melanie mentioned, there's 10,000 people in the Bering Straits area, how many people, again, didn't see a dollar of that development. I think that there is a variety of things that we can do as a government that can help make sure that when we do have infrastructure development, that we do have resource extraction, that there's some way for more benefit to the local communities.

A final point—again, mainly addressed to the Polar Code and the other vessels that will transit our area and our Arctic—we need infrastructure to just comply with the Polar Code. A couple of the items that are notable is just making sure that there's no waste discharged overboard in the Arctic, that we have a place to pump slop tanks—again, things that are usual for port services in the civilized or developed world are not available in Alaska. So we see vessels that come into port and they have an expectation of what those port services are and they just literally don't exist.

One of the things that both public, private, state and municipalities can do is to start developing those basic infrastructures that allow vessels transiting there to comply with some of the regulations that are currently being adopted for the Arctic.

A final note on charting. I appreciate the admiral hitting on charting. I love to get on a soapbox and talk about NOAA. NOAA does a good job of doing very high-definition charting, but what they tend to avoid is actually the most critical part of Alaska navigation, and that is the transit between the ocean and the coastal communities. So we have good ocean charting, but very poor charting at the interface between the coast and the ocean. So river entrances, those areas where we need to transit, where we need good data when we deliver fuel to Savoonga, for example, we need to get as close as we possibly can to literally float hose across the surf line and into the community. And those are the areas that NOAA tends to avoid. They have actually said they don't care about anything less than 4 meters in depth. And my response is, I don't care about anything greater than 4 meters of depth because we operate shallow-draft equipment.

There's a lot of things that we would like to communicate from Alaska to the folks here in Washington and others that make decisions about how money gets spent and what it's focused on in Alaska. I, again, look forward to questions.

Thank you.

Mr. MASSARO. Well, thank you so much, Mark.

And Mark and Melanie, thanks a lot for bringing a local perspective in here. Obviously, the Helsinki Commission generally sees things from a foreign policy direction and

that's the impetus for me behind this as a foreign policy guy. But I think one thing that I definitely got out of both of your testimonies is that the foreign policy and the domestic policy are very much intertwined in this case in a huge way in that Bering Strait area.

With that in mind, let's enter that robust Q&A question that you talked about, Mark. Let me begin with a question and then we'll open it to the audience. That question is about something that has been mentioned by all of you as sort of a side entity and something, of course, that is very central to the commission's work, and that is the Russian Federation and their investment in the Arctic.

I guess we all know, from a Coast Guard perspective, that Russia has an enormous fleet of icebreakers. We know about the Northern Sea Route Administration which escorts vessels in that area, sometimes without really giving them a choice, and all sorts of other stuff. They've made major investment in that area. And I was wondering, and maybe let's start with Julia and anybody else that would like to comment on this—what implications does that have for U.S. infrastructure development in the Arctic and for the infrastructure development in the Arctic of other Arctic nations?

Ms. GOURLEY. Well, that's a good question, Paul. I can't help but think that the more activity is happening in Russia, the more it will sort of incentivize the other Arctic coastal states to invest in the region, too.

But it's not always, I guess, clear, so Russia puts out its intentions and how far it's actually going to be able to go. I mean, investing in the Arctic is extremely expensive and the Russian economy is not as great as it once was. So there are great intentions and great plans, but I guess we'll see how far Russia can actually go with it. They certainly do have a much larger icebreaker fleet than we do. And Admiral McAllister knows that better than anyone.

I think it's probably a good thing on the economic development side that Russia is investing a lot and it'll probably end up helping the other countries along and sort of moving the ball forward. But on other fronts, geopolitically speaking and militarily speaking, I wouldn't even venture a guess.

Admiral McAllister may be able to speak to that more.

Mr. MASSARO. Iina, would you like to say anything to that? We'll just move down the line. You can so no, by the way. [Laughter.]

Ms. PELTONEN. I'm not going to say no.

Mr. MASSARO. That's what I like to hear.

Ms. PELTONEN. As you know, Finland is located next to Russia.

Mr. MASSARO. Right.

Ms. PELTONEN. And we are used to living with our neighbors the last more than 70 years also peacefully, and hopefully the next years are going to be even more peaceful. Well, we are seeing that any economic investments in the Arctic areas in Russia are, of course, very good investments. And as Julia said, it is very expensive and we all know the Russian economy is not in the best position at the moment. And the Arctic Council is still doing some projects in Russia because the infrastructure in the Arctic areas in Russia, they are quite old and they are also not so environmentally friendly. So we are not worried.

Mr. MASSARO. Well, if Finland is not worried, then it must not be that big of a problem.

Ms. PELTONEN. Yes, we are absolutely going to continue our constructive cooperation in the Arctic Council with Russians because while the Arctic Council has been the international forum where all the Arctic states have done very constructive cooperation all these 21 years now. And we are going to continue, hopefully continue and try to explore solutions to continue that cooperation.

Mr. MASSARO. Fantastic.

Admiral McAllister, would you like to comment?

Adm. MCALLISTER. Russia has actually been making investments in a variety of different areas that are of interest to us. As an example, they've been investing in LNG ships that are ice class, capable of moving LNG year-round in any ice condition. And they've obviously been investing in military capabilities. They've already got an extensive ice breaking fleet and they're expanding that fleet. They've been investing in research. We see research vessels not only from Russia, but from a variety of countries that are in the Arctic. Many of those the Department of State permits because they cooperate and research to do work in the U.S. exclusive economic zone.

We should look at this activity for its opportunities, not necessarily any threats that it might pose. As an example, with the increasing Arctic traffic of all types, the Coast Guard recently reached out to our Russian counterparts in the Marine Rescue Service that does oil spill response and we asked them if they'd like to update the 1990 agreement that we have between the United States and Russia called our Joint Contingency Plan, and they jumped at the opportunity, said yes, we should update it and we should exercise it. And so we're on a track to be able to exercise that. It's a bilateral agreement between the United States and Russia, because as more traffic moves through, whether it's on the Russian side or the U.S. side, the oil doesn't care. If spilled, it's going to end up in both our nation's waters and we need to be able to work cooperatively to both prevent that from happening in the first place, and if it does happen to be able to respond.

So we look at a lot of the things that are happening there as opportunities to leverage the cooperative relationship we have with Russia and many of our civil missions.

Mr. MASSARO. Great, thanks so much.

Melanie, would you like to say anything to that?

Ms. BAHNKE. From an Alaska Native perspective, where we're totally reliant on our marine mammals, the marine mammals and the currents also don't care about our geopolitical boundaries. And we need to find the balance between development with disregard to the environment versus locking everything up.

And on the U.S. side, we might develop all of these wonderful regulations to protect our environment, but we have no control over what's happening on the Russian side. And so as tensions between the United States and Russia heighten, we're concerned that opportunities for cooperation become diminished. We saw an international Search and Rescue Agreement developed. With the U.S.'s withdrawal from the Paris agreement, it's concerning because we're unsure of how we're going to make sure that the marine mammals that cross the geopolitical boundaries are protected, the natural resources are protected, but also that we develop responsibly.

I think joint investment in infrastructure in the Arctic by the Arctic nations is an avenue that should be explored. We talk about how many icebreakers Russia has like we have to make sure that we're competing with them, but why not cooperate in the shared use of these icebreakers, for example? I think that's an avenue where there's potential

for the Arctic nations to come together and talk about co-investment in infrastructure in the Arctic.

Mr. MASSARO. Thank you.

Mark, you got anything for that?

Mr. SMITH. I do. But again, not to spend too much time, I have the pleasure actually of leasing a couple of Russian tankers, of bunkering in the Russian Far East. And I have to say that my dealings with the Russian companies have been very straightforward. And as we look right across, and I'm delighted to hear Melanie's perspective as well, there literally are divided families. The Bering Sea is actually a community, and if it wouldn't have been for the Cold War, I'm sure we'd be much closer. I'd love to see more open trade with our folks and much more open communication.

We have an entire market there where we do much of the same thing. The Russians actually do a few things better perhaps than we do in serving some of their ports. They certainly are more supportive with their icebreaker fleet. So I'll just echo there that there is a reason behind some of the icebreaker fleet along with the fact there's a very material part of our entire energy reserves that are above the Arctic Circle. And as we continue to consume petroleum over the decades, we're certainly going to see a lot more development and ice breaking and Arctic experience are going to play heavily in that.

Mr. MASSARO. Yes, go ahead, Admiral.

Adm. MCALLISTER. I did want to add in, I think all of us have talked about the Arctic as a place of cooperation, and I certainly think that's true. I will tell you, from a regional Coast Guard perspective, I actually meet with my Russian counterparts routinely on fisheries management, particularly high-seas illegal fishing, oil spill response, search and rescue—the Arctic Council sponsored an exercise, Russia participated in that as well—and on managing our waterways, as Melanie mentioned. The submission that we'll have to the International Maritime Organization on our waterways suggestions may actually be jointly sponsored by the United States and Russia. So there's actually good cooperation.

But with the global political situation as it is, the U.S. needs to be able to protect its sovereign rights. I think that's where this icebreaker issue comes in; you can't protect your sovereign rights during an era of cooperation or an era of conflict if you don't have access to the region, and icebreakers provide you that access. And whether that access is for civil missions or defense missions or research or some other future need, it provides you the critical access that the mission needs.

Mr. MASSARO. Thank you.

Oh, Iina.

Ms. PELTONEN. Well, now I'm speaking as a representative of Finland, not a representative of the chairmanship of the Arctic Council, but we are taking all these arctic issues very seriously. And we have actually a couple of solutions with the icebreakers. [Laughter.] I just want to mention we need this LNG-powered icebreaker in two years. It costs \$150 million. And we are ready to cooperate with the U.S.

Mr. MASSARO. Is this a sales pitch? [Laughter.] Right here before your eyes! Great, great, well, thank you so much, Iina.

Questions?

Go ahead, please.

QUESTIONER. My name is Caitlyn Antrim. I'm with the Rule of Law Committee for the Ocean, and I got interested in the Arctic because we wanted to know who owns what and who has to negotiate with who.

I've had a particular interest in the Russian development of their Arctic bases. I'm not talking from a security perspective, but being able to put 125 people throughout the winter in a place where they aren't crowded together, where they can actually live an isolated but normal life, whether something like that could provide a needed presence on the Arctic coast, provide service for helicopters if they're needed, a staging area for emergencies, public health, other government services, and a place for situs from NSF projects. I haven't heard anything of that concept being discussed in the United States, but looking at what Russia did makes me think maybe we should.

And I'd like to hear more about that possibility from an American infrastructure point of view, starting as a government operation, but it might expand far beyond that. It's a long way from Anchorage to the north coast of Alaska and only takes a little bad weather to keep you from being able to get there. I'd like to see if you've heard any talk of that, if you think it's a good idea, bad idea, too expensive?

Mr. MASSARO. Anyone you'd like to direct your question to?

QUESTIONER. Potentially the admiral and Melanie, because I see some of the opportunities for some of the things you raised by having a presence there.

Mr. MASSARO. Great.

Let's go ahead and start with Admiral McAllister then. Thank you.

Adm. MCALLISTER. We actually run an annual Arctic operation called Arctic Shields. We've been running that for about eight years now, where I press forward helicopters and ships and people on land to be able to carry out Coast Guard missions when there's open water or ice-congested, but not totally ice-covered water. We actually have a fair amount of experience doing that. As an example this last summer, I put about 25 people and 2 helicopters in Kotzebue and they conduct search and rescue missions throughout the region.

We haven't necessarily found the need to be there during the winter when the ice prevents movement on the water. So from a Coast Guard perspective, maybe that's a future need, but it's not necessarily a current need. But what you describe is certainly possible. In fact, industry is doing it right now. If you went up to Prudhoe Bay, Deadhorse, that's an industry-led, year-round operation which we could draw a lot of lessons from in terms of how to have the appropriate infrastructure for future operations that demand it.

Mr. MASSARO. Melanie?

Ms. BAHNKE. Not too sure I really understood what you were saying is happening over in Russia other than that they've put in place a remote station where 125 people are. Is that correct? So I guess I would argue that in the Bering Strait we have 16 such staging areas: Nome, which has a population of 4,000, and 15 outlying communities ranging down to little Diomedes in the middle of the Bering Strait with a population of 80. I would prefer that we look at those as staging areas and invest in infrastructure in those communities.

We have advocated for and continue to advocate for the U.S. Coast Guard to have more of a presence and establish a station in our region. And we support their Arctic Strategic Plan, and it's just a matter of funding them. Their presence is needed year round.

Just because international vessels aren't traveling through the Bering Strait during the winter doesn't mean that there isn't activity out there during the winter months. I'm not sure if I answered your question, but I think there are 16 staging areas in the Bering Strait region that we could look at and a Coast Guard station is very welcome.

Mr. MASSARO. Can we take other questions?

QUESTIONER. Hi. My name is Mary Harrington. I'm with the State Department and I work on the Russia Desk. And this question is directed towards Julia and Admiral McAllister.

I was wondering if you could comment on the Law of the Sea Treaty and whether the fact that the United States hasn't signed it holds us back in terms of our engagement in the Arctic.

Thank you.

Adm. MCALLISTER. You want to take a shot at that first? You've probably got the more in-depth experience with it.

Ms. GOURLEY. It's the other half of my office. [Laughter.]

Well, as far as I know, I don't know that the position of the U.S. Government has changed, although I'm walking on thin ice here. But as far as I know, we still support the accession to the treaty. I'm looking at Teresa Hobgood, who's our congressional liaison and knows everything, to make sure I'm not saying anything wrong. But I guess it still remains to be seen—there hasn't been an official pronouncement made yet.

Adm. MCALLISTER. I'll simply offer, the Coast Guard's position is that we should accede to the treaty. We think it's important from a variety of perspectives. It is the framework that allows us the types of freedom of navigation that we enjoy on a routine basis. It allows us to be at the table when other nations submit claims for the Extended Continental Shelf. If and when we want to submit our own claim from a U.S. perspective, we'll need to be a signatory to the treaty to do that.

And I understand that concerning a lot of this and other provisions, we follow them under customary international law to begin with, so that's been the argument that we don't necessarily have to sign on for this. But I think the more global conflicts in the maritime realm we see, the more important it becomes for us to have the credibility of being a signatory to the treaty when we try to uphold its provisions.

Mr. MASSARO. Other questions, please.

QUESTIONER. Hi. Alyson Azzara from the Maritime Administration. This question is for Mark.

You talked about federal investment in infrastructure. Is there an appetite from the private sector to also invest in your needed components and the structures or to co-invest in things that you think are critical for the region?

Mr. SMITH. Yes, but I have to say the appetite is small, and that relates to another comment that Melanie made. So, 10,000 residents in the Bering Straits area, perhaps 50,000 in the arena. You may have heard folks gently and sometimes stridently complain about the cost of fuel in the Arctic, and that's directly related to the expense. And so to put the burden of developing very expensive infrastructure on the private sector that I operate in, you're really putting it on a very small base of consumers. These consumers also happen to be some of the poorest demographic in the United States. So there absolutely is not the appetite or even the capacity for me to charge my consumers enough to build important infrastructure. It has to be 99 percent based on something greater.

Mr. MASSARO. Thank you.

Any other questions?

Yes, please, Melanie.

Ms. BAHNKE. Alyson, not that I represent industry, but as a person that lives in a region where infrastructure investment is needed, I think the Federal Government could play a role in enticing the appetite of industry by way of tax credits. There are other mechanisms such as disadvantaged business zone, investment enticement. Within the native community, Alaska Native corporations when provided a hand up, not a handout, have risen to the top. There's a list of top 49 businesses in Alaska and a big portion of that is made up from Alaska Native corporations. And I think ANCs should be considered as a potential partner in any public/private investments that will improve infrastructure in our region.

I mentioned earlier that our hearts go out to Puerto Rico, for example, right now, and we all get government's role in responding to repairing infrastructure when it comes to natural disaster. But I think we do really need to take a look at that responsibility. The U.S. has claimed authority over our region. We're part of the U.S. Alaska is not a territory, we're a state, not that that makes it any better than Puerto Rico, but there is an obligation for government to create infrastructure where it's absent, not just to play a role in repairing it when it's been devastated.

So that's my comment to your question. There might not be an appetite right now by industry, but I sure think that the government could invite them to dinner.

Mr. SMITH. Just to follow on, too, Alaska really is a pioneer state. If you think about the American West 150 years ago, that's where we are. We have a bunch of island economies that are not connected with roads. We don't have electrical interties. We live a very isolated existence and there's just not a possibility, even if industry did have the appetite. It's just the scale isn't appropriate at this time.

And it truly is that once you have a transportation infrastructure it allows any economic opportunity to be amplified. When you have a way of getting your goods, your services, and your resources that you're extracting or harvesting to market, you're going to stimulate economic activity. So it's something that's going to have to see a national investment on.

Mr. MASSARO. Great, thank you.

OK, I have one more question. As a guy that's coming from outside the Arctic bubble and having just begun working on these issues, I guess working on them for almost about one year now, I was hoping maybe Julia or Admiral McAllister could take this on, maybe somebody else.

It seems to me like there are just so many different federal agencies working on this issue, just so many have a piece of it. I was wondering, is the approach integrated? Are there better ways to go about this? To what extent is it a too-many-cooks-in-the-kitchen issue, if at all?

Ms. GOURLEY. You've asked one of the most important and common questions asked, Paul, by lots of people out there. And actually, the last administration did attempt, a couple of the agencies who play in the Arctic, the Arctic Research Commission and I'm trying to remember who else, to put together an organogram of all of the agencies. There are at least half-a-dozen executive branch departments and all of their subagencies,

together it's 25 to 30. To piece it all together and connect all the dots was very challenging. And it's a fascinating-looking chart, actually.

I don't know that there are too many cooks in the kitchen, because the fact that there are so many agencies actually doesn't equate to too many bodies or too much disruption. We actually function amazingly well at the working level. We have monthly collaboration, and the last administration had a higher-level similar interagency body at the political level. And it's all worked amazingly well for as many cooks as there are in the kitchen here.

Personally—and I'm not saying this with any bias, but just purely from observation through the Arctic Council and working with the other Arctic states—I feel like the U.S. Government weirdly enough hangs together better and has more coordination than most of the other states. Which is odd, given how big we are, but we actually do collaborate quite well. That's not to say we couldn't do it better. We certainly could always do things better, but it's a pretty small federal community, even though it's a large number of agencies. And it's pretty well-integrated. We'll have to see how it continues.

Mr. MASSARO. Great to hear.

Admiral, do you have anything to add?

Adm. MCALLISTER. I'll just add, from a regional or a local level, because that's where I spend more of my time, that we look to have the collaboration bodies as well, because that's the point of delivery of various services. Just as one example, we were able to set up not too long ago an Arctic Waterways Safety Commission that brings together a variety of Alaska Native communities to advise not only the Coast Guard, but all federal agencies on issues as they relate to this increase in traffic and maritime issues.

And Julia's right. I mean, even at the regional or local level, some agencies are more engaged than others. But we, at least within the Coast Guard, make it a point to work collaboratively with our other federal agencies, with our state equivalents and with the tribal interests to ensure that we're not duplicating effort and that we're closing the most important gaps first. And that's sometimes the best we can do.

Mr. MASSARO. Great. Well, thank you all so much. We'll conclude the briefing there and thank you all for coming. [Applause.]

[Whereupon, at 5:01 p.m., the briefing ended.]



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