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The Arctic as Emerging Geopolitical Flashpoint Proceedings of the 45th Canada-United States Law Institute Annual Conference - Climate Change and the Arctic: Profound Disruption, Uncertain Impact

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THE ARCTIC AS EMERGING GEOPOLITICAL FLASHPOINT

MR. STEPHEN PETRAS: Yes. Welcome back, everyone. We'll continue our conference now. And it's time for our next panel, which will look at the Arctic as Emerging Geopolitical Flashpoint. Our moderator is Professor Robert Huebert, associate professor at the University of Calgary, Department of Political Science and former member of the Canadian Polar Commission. He is a senior research fellow at the Center for Military and Strategic Studies in Canada. In November of 2010, he was appointed as a director of the Canadian Polar Commission. His research interests are many, and include the law of the sea, Canadian Foreign and Defense Policy, Circumpolar Relations. He publishes on these issues and on the issues of Canadian Arctic security, maritime security, Canadian defense. He is a widely published author on these topics, and his most recent book is "Canada and the Changing Arctic: Sovereignty, Security and Stewardship." He also comments on Canadian security and Arctic issues in both the Canadian and international media. Rob, over to you.

DR. ROBERT HUEBERT: Thank you very much, Stephen. I'd like to thank both yourself, Ted, and the Canada U.S. Law Institute, for inviting me to this very outstanding seminar discussing a critical point I'd like to pick up on a point that that was provided to at the very beginning by Mike, on the context of the fact that so many of these issues are assumed to be new issues, they often have not attracted the attention of a lot of people, but just as the aspects of the environmental change that's been occurring within the Arctic is not something that is new, so too the topic that we are now going to be delving into-the geopolitical changing nature of the Arctic-is not something new. It may be attracting new attention, but we are very fortunate that we have four speakers that have been addressing this issue for a very long period. Once again, as we go forward, in terms of our consideration of these issues, we have to remember that the Arctic from at least the early 1950s has always been geopolitical and it has always been strategic. It has been in the context, of course, of one of the major frontiers of possible either war deterring or, if deterrence had broken down, war fighting, between the great powers in the period of the Cold War. And this is often overlooked for the simple reason, as we all are aware, that out of sight is often out of mind, and so the significance is often overlooked and cannot be overlooked and misunderstood today. The driving features of course, as this panel knows all too well, are, of course, the great power politics. The type of weapon technologies that we're talking about in the geography have ultimately made the Arctic a critical location when we talk about geopolitics. However, at the same token, the fact that the Arctic is so critically influenced by what is happening from a geopolitical perspective, and just as the Cold War was the element in which it made it such a dangerous region, the warming of relations between the Soviet Union slash Russia and the natural allies

of the northern countries meant that when relations improved following the Gorbachev initiatives, we saw amazing geopolitical cooperation occurring. And once again, we tend to think of geopolitics only in the negative context. We saw the creation of the Arctic Council, a groundbreaking organization that is the first of its kind to actually incorporate the voices of the Northern Indigenous peoples. We saw the highlighting from a political perspective of the growing threat of environmental security, particularly climate change. And so we saw a whole host of geopolitical positive elements in this period appeared that many people, including Michael Byers, who will be talking, are of course referring to Arctic exceptionalism. However, we have also entered into since at least 2014, a renewed recognition of the more negative elements of geopolitical rivalries that seem to be developing between the Russians and the other Arctic northern states. And this, of course, is now shaping much of the discussion that we will be hearing about today. At the same time, the entry of China as an interested Arctic state has also begun to achieve a significant amount of attention. We are very fortunate to have four outstanding voices to talk to us and to present their ideas and thoughts on the Arctic as a geopolitical flashpoint. Now you can all read their detailed bios, but I'd just like to make a couple of comments. If you have not read Michael Byers' work on the changing nature of the international nature of the Arctic regime, you have to run to the bookstore and start looking at his vast literature that he has written on this material. I may not always agree with Michael on every point. There is no taking away his knowledge and his understanding and his tracking of the issues for a very long time. We are also fortunate that we have one of the new rising stars on understanding what is happening within the Arctic, and that is, of course, Rebecca Pincus. Once again, if you have not read Rebecca's work at this point in time, you definitely have to be going to the nearest computer to read this afterwards. She is, in fact, a voice that we will be hearing from for a very long point in time. We are also very fortunate to have two critical actors in the creation of how we are in fact responding to many of these issues that are before us. We have, of course, Rear Admiral Martin La Cour-Andersen, who is the current defense attaché from Denmark for Canada and the US. But I will point out that he is about to become the commander of Joint Arctic Command and Denmark and Greenland, and as such will be playing a critical role in terms of how the Western Alliance members are, in fact, responding to this changing geopolitical environment. And last but definitely not least, we have Jonathan Quinn, who is, of course, at the center of the Canadian efforts to deal with the new realities within continental defense. He is the director general and has been given the responsibilities of heading the cooperation with the Americans of how we will be proceeding in this new environment. Without further ado, I'd now like to hand over to Mike. Mike, go ahead. You have the floor.

PROFESSOR MICHAEL BYERS: Well, thank you, Rob, and thank you for the overly generous introduction. I want to stimulate a lively debate when we get to the discussion period. So I am perhaps going to over present my position. I will leave it to the rest of you to decide whether I'm over presenting or not. But let me start off by talking just about how insanely difficult and dangerous the Arctic is as a region for operations of all kinds. I don't know how many of you have traveled

in the Arctic. Rob and I have traveled there frequently. The striking things are the sheer remoteness involved. Most people don't realize this, but Canada is almost exactly as tall as it is wide. Now the distance between a southern Ontario and northern Nunavut is almost exactly the same as the distance between the Pacific Coast and Newfoundland. So, vast distances involved. And that doesn't take into account the additional distance from northern Nunavut to the North Pole, which is, of course, in the middle of a large and hostile ocean. The extreme weather that is involved, you know, I've been in in ships in the Arctic, in 30 foot waves, in conditions that would stress any kind of a vessel that wasn't designed for deep sea storms. We hear about the fact that the sea ice is melting-and it is melting-but that additional open water presents its own hazards. If you're in such a storm, and the air temperature is below freezing, then the spray from the wave activity and the impact on the ship will freeze on the superstructure of the vessel. It's called icing, and it can cause vessels to become unstable and even to overturn. So, we've got the vast distances, we have the extreme weather, and then, of course, we have total darkness in winter, which adds another element that people from the South tend to forget, which make operations even more difficult and dangerous. In the last decade, I've lost four colleagues to aircraft accidents in the Canadian Arctic. The two accidents involve both concerned a loss of visibility. But they emphasize the point that this is, in fact, a difficult and dangerous place in which to operate. Adding to the challenges. There's limited infrastructure, limited services. Consider the fact, for instance, that the United States does not have a single deep-water port along the north coast of Alaska. So, serious infrastructure deficits. It's even worse in Canada. The situation changes as you move to the Eurasian Arctic, but with dramatically limited infrastructure and services. Canada's search and rescue helicopters deploy to the Arctic from Vancouver Island, Nova Scotia and Newfoundland and Labrador, flying thousands of kilometers to get to an accident scene. And all this has caused some Canadians to point out, in the case of General Natynczyk, the then Chief of the Defense Staff, a decade ago, that if someone were to invade the Canadian Arctic, the first job of the Canadian Armed Forces would be to rescue them.

And that's actually a serious point. The primary mission of the Canadian Forces in the Arctic is indeed search and rescue. There's been a long history of cooperation among the different Arctic countries, including between NATO countries and the Soviet Union and then Russia. I want to add a little bit, to Rob's brief exposition on that. The cooperation started during the Cold War. Take the Polar Bear Treaty in 1973, which helped prevent that species from being driven to extinction by the use of helicopters, by big game hunters. Take the COSPAS-SARSAT Asset Program, the use of satellites as relay points for search and rescue beacons created by the Soviet Union, Canada, France, and the United States in 1979 has since rescued tens of thousands of people, not just in the Arctic, but around the world, and continues to function beautifully, which is why some of you might not have heard about it. The first rescue happened in 1982. It was a beacon that was picked up by a Soviet satellite and relayed to a ground station in Ottawa and a rescue in in northern British Columbia as a result.

So it started during the Cold War. The United Nations Convention on the Law of the Sea, which is central to the governance of the Arctic Ocean, was negotiated in 1982 during the Cold War. And some of this cooperation has continued, despite the much-increased tensions between Russia and the West. So, the Arctic Coast Guard Forum was created in 2015, a year after the annexation of Crimea. Now people often ask me, well, you know, you know, what about Russia and Vladimir Putin and his evident aggression? And listen, I don't trust Vladimir Putin further than I could throw him. He is a thug. He is an autocrat, a dictator. He is engaged in serious violations of human rights. And the annexation of Crimea was illegal under international law. But I want to adopt a realist perspective for the moment. What are Russia's interests in the Arctic? It's the largest country in the world. It has a vast Arctic all to itself. It's Arctic, like the North American Arctic, is cold, dark and dangerous. It's an expensive place to operate. It's engaged in economic development in that region. A significant portion of its GDP comes from its Arctic. It's benefited from international cooperation; it has rights to the oil and gas of its extended continental shelf because of the UN Convention on the Law of the Sea. And when you think about Russia's interests in the Arctic, it's in the stability of that system, the development of its resources, the development of its shipping route through the Northern Sea route. And as a country that has an economic and demographic decline and engaged in adventures in Eastern Europe and in Syria, you know, not provoking conflict in the Arctic is the Russian realist interest. The situation in the Kola Peninsula tends to confuse this quite a bit, at least for media observers, because, of course, the Kola Peninsula is, of course, where a great deal of Russia's strategic deterrence is based. The submarines that access the Arctic and the Atlantic oceans from the Kola Peninsula, the intercontinental ballistic missiles located there. But remember that Russia is, quite ironically, a nearly landlocked state, that the Kola Peninsula is a global issue for it because of the nuclear. Forces that that it has to deploy from there. And let's not confuse that element with the regional element of the Arctic. We need to see it in a slightly different context to not be confused by what Russia is doing there or indeed what NATO does in places like the Norwegian Sea or the Barents Sea. There is a front line between east and west in that region. And I would point out also here, it's a front line that does not involve sea ice. So the conditions, while challenging for naval operations, are not different from the North Atlantic. I regard that particular sphere as a as an extension of the front line between NATO and Russia in Europe and in the North, in the North Atlantic, that it can be distinguished. That doesn't mean it's not of extreme concern. But the Arctic itself is still a realm of relative stability and cooperation.

Very briefly, because people will want to hear this. What about China? Well, again, I wouldn't trust President Xi further than I could throw him, which wouldn't be very far. I have enormous concerns about China's behavior across a wide range of activities. But from a realist perspective, what are China's interests in the Arctic? Well, access to shipping, it's the world's largest shipping state, access to resources, the world's largest manufacturing state. And just like everywhere else in the world, we don't see China invading and claiming territory. We see China engaging in foreign investment and international trade. And in the Arctic, China

is not an Arctic state, and it's challenged with the same remoteness and extreme conditions as any other country. And it needs the support of coastal states, and it needs the support of territorial states to access those shipping routes and access those resources. And a reflection of this realist interest is the fact that the China has not taken a position on the Northwest Passage dispute between the United States and Canada, where it could provoke a great deal of mischief if it wished, and it's chosen not to do so. There are issues, obviously, with China that make this situation quite delicate. I'll give you an example of the Canadian government recently blocking the sale of a gold mine in Nunavut to a Chinese state-owned company. Gold, I will point out, is not a strategic resource. 60% of the world's gold is used in jewelry. But the Canadian government invoked national security concerns for blocking that sale. And this enables me to make a final point, in that when we're looking at the Arctic, we need to consider what's happening in domestic politics. The Canadian public is very concerned about China at the moment because of the detention of the two Michaels, which is related to the Meng Wanzhou extradition process in Vancouver. We have a minority government in Canada. The main opposition party is trying to make China an election issue. This makes it very awkward for the Canadian government as it tries to get the two Michaels out while also appearing strong on China. I don't know whether that influenced the decision on the Hope Bay gold mine, but it quite possibly could have. And the final point on domestic politics is there is politics within governments and between different government departments. We should not forget about this, that there's competition for financial resources, there's competition for turf. And sometimes it's in the interests of one or another department to play up the Arctic security threat. So, for instance, when Mr. MacKay was Minister, the Harper Government decided to allocate funding for Arctic ships. The Department National Defense decided that it wanted that funding and it didn't want it to go to the Canadian Coast Guard, and as a result, we have the Arctic offshore patrol ships, which are not combat vessels and could be operated just as easily by the Coast Guard, but the Department of National Defense is a far more powerful political force within the federal bureaucracy. And to give you one final example, again, when Mr. MacKay was Minister, on two occasions, the Stephen Harper government turned down a request from the Canadian Forces for armed drones. At that point, the Department of National Defense switched its sales pitch and started to talk about Arctic drones. There was no need for these drones in the Arctic. They wanted them for Afghanistan and Iraq. But the Arctic element made it far more palatable, far more interesting to their political masters. So, the concluding point is we need clear eyed assessments. Let's not be naive about Russia or China. But let's also not be naive about ourselves. The Arctic is a cold, dark, dangerous place. It's not where the next world war will start. The next World War, if it happens-and I hope it doesn't-will probably spread to the Arctic. But the Arctic is not a geopolitical flashpoint. Thank you.

Dr. HUEBERT: Well, thank you very much, Michael. We now will be turning to Admiral Martin La Cour-Andersen. Admiral, you have the floor.

REAR ADMIRAL MARTIN LA COUR-ANDERSEN: Many thanks. And thank you for the kind introduction as well. As you said, sort of, I'm quite

fortunate. I'm going to be dealing with these issues from the very much hands-on from me from the 1st of June as commander, Joint Arctic Command, Denmark which is actually in Greenland itself. So, I'll be looking at the at the Danish forces in Greenland, the Faroe Islands, and of course, the vast sea area which the Kingdom of Denmark covers as well. And can I just pick up on one point sort of from Mike, the previous speaker. When talking about the Arctic and I this is something that I would like, but I always sort of underline it is still a very cold, dark and difficult place to operate. The weather is often terrible. The infrastructure is lacking. It's difficult to communicate. So, it's sort of like, seen from a purely military perspective of course, it is very, very difficult to operate. So it's just something that people who have not been there, they tend to forget and they see this as they hear about climate change. And of course, we've got the global climate change online event taking place hosted by President Biden right now. But people see this sort of vast open area. It is not like that. Just to pick up that point. Of course, there are many things I could talk about, and I'm prepared to take any questions. But I do have sort of a prepared statement because this is just an easier way to do it. So just to talk for 5 or 10 minutes.

As you know, climate changes have put the Arctic on the map. It is quite clear that the rapidly melting sea ice and the more accessible Arctic waters, the U.S. calls it the blue Arctic now in their, in some of their some of our strategies-it's creating both new challenges but also new opportunities and some of these opportunities-trade, economic development, investments-are great, indeed welcome, as we seek to foster a more stable and secure Arctic. But there are a number of challenges which we have to tackle head on. And seen from a Danish point of view, these are not just mere speed bumps. They are serious military and political challenges which require a strong dialogue and close partnership between allied Arctic states. We see great power, politics, and competition unfolding, which will lead to increased tensions in the area, if not handled properly. So, let me just sort of underline the last three or four words here. As it was talked about, Russia has increased its focus on the Arctic, enhancing their military capabilities, most notably on the southern bases along the northern Russian coast, we see significant sea and air strike capabilities. Is it for defensive or offensive purposes? Yeah. The jury's still out. It can certainly be used for purely defensive purposes. But we do see an increasingly Russian focus on capabilities which can be used in offensive operations. And again, seen from a Danish point of view, Greenland is now clearly within reach of Russian fighter aircraft. China. We talked about China before as well. China is now calling itself a near Arctic state. It's also increased its ambitions in the region. And their interests are wide ranging, from trade and science to access to resources and sea routes, as well as influence on general Arctic issues. We're all familiar probably with the Belt and Road Initiative, which people argue are anything from an honest trade tool to maybe a Trojan horse for Chinese led sort of regional development and indeed, a stepping stone for a Chinese military expansion. Militarily, the Arctic and the North Atlantic regions are vital for transatlantic security. And here I'm sort of looking at this from a European point of view. This is in regards to reinforcement to the European continent, as well as North American security, of course. And this requires that NATO-we've

not talked about NATO before, but I would like to bring NATO in now. This requires of nature pays appropriate attention to the region. And Denmark certainly sort of welcomes the increased attention by NATO on the Arctic, where large parts are within SECURE's area of responsibility. And we do see that reflected in some of the more forward leaning NATO thinking, most notably what is called the NATO 2013. And sort of again, seen from a Danish point of view, NATO's exercises in the region could be a more explicit example of NATO's increased attention and emphasis. Also, individual states, both Arctic and non-Arctic, have increasingly directed their military focused towards the Arctic. All Arctic states are in general sort of strengthening their capabilities. Some may see this as a clear path to tension and conflict. However, military presence, even somewhat increased, does not equal conflict. Each Arctic state has its sovereign territory to monitor and defend, and national interests to safeguard in the Arctic, like in any other region of the world. In that sense, the Arctic is no different. It is just massively more challenging and complex now. But you know, just like in civilian traffic, the risk of incidents and accidents increase if you have more traffic. Likewise, the potential for misperception and the risk of unintended military incidents increase when more military assets are present. We must constantly bear that in mind. However, the Arctic is not the Wild West, as is sometimes depicted. You talked about the Arctic Council. It is a deeply rooted cooperation in many areas. It is not within its mandate to talk about security, but all other areas are talked about in the Arctic Council, and we see a very good and constructive dialogue. And we also have UNCLOS, which sets a common framework. Now maybe turning a bit inwards here, as an Arctic ally, the Kingdom of Denmark has its national interests. We have a continued military presence in the region, with ships on land and in the air, and we've had that for decades now, building up an inherent Arctic expertise. But, we do realize we need to do more now. We've decided to increase our presence in the North Atlantic and in the Arctic. We are strengthening our military defensive capabilities with a what we call an Arctic package in order to increase surveillance, command and control and communications. That is in addition to a range of capabilities in most notably anti-submarine warfare and our abilities which are already in the area. For us, the key is situational awareness. We need to know what is going on. And it is difficult. We could talk for ages about satellite surveillance and communication and sort of basic communication as well. But it is just difficult. As soon as you go beyond 78 degrees. But we will invest in some high-tech unmanned systems and capabilities now in the region. Let me just highlight a few. We will actually invest in drones now, long range drones. We will invest more in space, with ground station satellite communication and surveillance. We will be building now a radar on the Faroe Islands, which is maybe sort of it's not the Arctic, but it covers an important sort of access route, which people sort of familiar with the sort of military debates about accessibility and Russia will be very familiar with. We are looking at how to better fuse all our data. We're looking at coastal radars on Greenland. And, we are, not least, looking at even more, even closer cooperation with our Canadian and Norwegian friends, which is, of course, key.

That's it. We're just five and a half million people. We are a very, very small nation. And we can do nothing by ourselves. We realize that. So safeguarding the Arctic is a collective effort, and we will always do that in cooperation with our allies and partners, always seeking their advice and cooperation. And when I say cooperation, of course, for us, the U.S. is still the primary ally. The U.S. has interests in the Arctic and in Greenland itself. We've got to lay our base. So, the U.S. is present, and our cooperation with the U.S. is key. So, I'll stop here and I'm ready to take questions. Thanks.

Dr. HUEBERT: Thank you very much, sir. Equally excellent presentation. We now turn to Rebecca Pincus. Rebecca, the floor is now yours.

PROFESSOR REBECCA PINCUS: Thank you, Rob. Thank you for the introduction. Thank you to this wonderful panel. As Robert noted at the top, everyone on this panel has so much expertise. So, I think I'm going to try to offer a little bit of an overview of some of the international law and governance issues in the Arctic and try to sort of parse out this idea of a flashpoint, because, as Martin La Cour-Andersen just noted, there's a lot of media coverage that sort of takes quite an alarmist view. And I think it's worth unpacking that a bit. So, hopefully you all see my slides now. Please, someone let me know if you do not. So at the top, I also need to note that while I do work for the Naval War College, I am sharing my personal conclusions with you. So, this is not an official position of the War College, the Navy, or the Department of Defense.

So, one of the first points that I want to make is that I wanted to offer a map, because I think that could be really useful to get everyone on the same page. Here's a map of the Arctic Ocean. As many of the speakers have noted, it's important to recognize that it's an enormous space. It is one of the world's oceans, and when you look at this map, it's easy to see that from a geographic perspective. Russia is the largest state in the region and really kind of dominates the Arctic coastline. There are eight states in the Arctic region, Canada, Denmark, through the island of Greenland, Finland, Iceland, Norway, Russia, Sweden and the United States through Alaska. We've already heard about the Arctic Council and Arctic Coast Guard Forum. Those are sort of two of the major governance regimes in the region. And I would note that Russia will take the chair of both of those in just a few weeks from Iceland. It is important to note that both the Arctic Council and the Coast Guard Forum are consensus based organizations. So the fact that Russia has the chair does not mean that Vladimir Putin will be driving these in any sort of direction. The Russian programs for their chairmanships have been circulated in advance and accepted by all of the other Arctic states. These are consensus based organizations. Eight votes are required to take any kind of action.

I would also like to note that most of the Arctic Ocean falls under state jurisdiction. Through easy regulations up to 200 nautical miles and that UNCLOS supplies in the Arctic Ocean and gives us a basis for determining maritime boundaries. While the United States is not yet a party to UNCLOS all of the Arctic states, all of the Arctic coastal states excuse me, signed something called the Ilulissat Declaration in Greenland in 2008, in which they pledged to uphold the principles of I'm close and use that as the basis for governance in the region. So while the U.S. is not party, it has signed the Ilulissat Declaration and pledged itself

to use UNCLOS as the basis for determining maritime boundaries in the region. So that's really important. UNCLOS gives us a very solid basis for maritime governance in the region and for delineating maritime boundaries. As this map shows, the circumpolar Arctic waters are all part of state EEZs.

I would note that maritime boundaries in the region are settled. There are vanishingly few boundary disputes in the Arctic region and the ones that persist are relatively low level of concern. So as you can see in this map, there is a maritime boundary disagreement between the United States and Canada up in the Beaufort Sea. It is a relatively small area under dispute. And obviously the U.S. and Canada are close allies. And so this is not a boundary dispute that we really have a lot of concerns about. There is another terrestrial boundary dispute between Greenland, Denmark and Canada and the Norris Strait between the two countries here, it's over a small island called Hans Island, which is a small, rocky outcropping with no economic value. Again, Denmark and Canada are very close allies and the Hans Island dispute is not a concern. So, when you hear that the Arctic Ocean or the Arctic region is sort of there's a scramble for the Arctic, it's the Wild West, there are no laws governing it, this is really quite far from the truth. In reality, there are not border disputes in the region that we need to worry about spilling over into conflict for many of the reasons that earlier speakers have noted. I will say that there is one sort of ongoing border dispute that is sort of large and of concern, and that is over the extended continental shelf. As this map shows, there are claims. I can show you a little bit more. So this map, the stripey areas in the center are extended continental shelf claims from Canada, Denmark, Russia and a notional one from the United States. And you can see they all sort of overlap in the middle on the Lomonosov Ridge here, which runs across the Arctic Basin. The claims of Russia, Denmark and Canada all overlap on the North Pole, and just a few weeks ago, Russia extended its extended continental shelf claim to push even further into areas claimed by Canada and Denmark. So we have overlapping ECS claims to the very central Arctic Sea floor.

It's important to note that the extended continental shelf claim is just for resources on or in the continental shelf on the sea floor. So primarily, we're thinking about perhaps oil and gas resources in the seabed, polymetallic nodules and other minerals on the seabed, and any species that live on or in the seafloor. All three states, including Russia, have followed the process laid out in UNCLOS to make claims to the extended continental shelf through the Commission on the Limits of the Continental Shelf. The Russian claim has been sent back several times for additional scientific data. The Russian government has complied with these claims, and so while we do see sort of large areas of overlapping claims to the extend continental shelf, we see also that Russia is following the process laid out in international law. I would also note that the CLCS, the commission is not going to adjudicate these claims. All it ascertains is the scientific validity of them. In this case, we should expect three-way negotiations between Russia, Canada, and Denmark. Those negotiations have not yet begun. And further, as our speakers have noted, any type of economic activity in the central Arctic seabed is incredibly remote, incredibly hazardous, and incredibly costly. Seabed mining is an industry in its infancy. The costs of conducting any kind of activity on the central Arctic

seabed would be extreme. And so, the economic impetus to resolve these claims is very low, which is why they have been moving at a very slow pace, and it's why we, while there's certainly an overlapping claim here, it's not something that I would argue we should worry about, because it is a very slow burn issue and we are talking about an industry that is not going to be active for decades hence. So, we have certainly some breathing space right now for these claims to be worked out through international law processes, which they show every indication of being. So, that gives us signs for hope as well.

As our speakers have noted, reductions in Arctic Sea ice are opening shipping lanes across the Arctic region. There are three major ones: the Northwest Passage through the Canadian archipelago, that's the red route on the left side here, the Trans-Polar Route directly across the North Pole, that's in green, and then the Northern Sea Route along the Russian coastline, which is the blue lane there. This coastal states, Canada and Russia, are taking very different approaches to regulating traffic along these routes. So, Canada has shown significant priority to environmental protection and the interests of the Indigenous communities, the First Nations along those routes. Russia is moving to develop the Northern Sea Route very aggressively, and they're trying to develop resources along the Northern Sea Route, as well as encourage shipping. I'll just note quickly, the Trans-polar Route is not yet open-again, it's going to be a future route once the sea ice has largely disappeared, which will be much later in the century. So the Trans-Polar route is very notional at this point.

Here are a couple of diagrams that show some of the economic interests at stake. So, in the upper left here, you can see a map of the Russian coastline. The red and gray areas are potential oil and gas fields, and you can see they're very significant. The Northern Sea Route is the yellow line that runs through them. And so Russia's economic plan for the rest of the century really is to develop the oil and gas in its Arctic and develop the northern shipping route as a shipping lane that will help enable Russia to send oil and gas either west to Europe or east to Asia. And the revenue from the shipping route will help offset the tremendous costs associated with developing Arctic resources, which are more expensive to develop given all the constraints that earlier speakers have mentioned. Russia already derives approximately 20% or so of its GDP from the Arctic region, and that percentage is expected to grow through the century.

So, I would echo Mike's point about the economic importance of the Arctic to Russia, and I think that's important to keep in mind. The bottom right here shows that the Northern Sea Route, that red line, is a fast shipping route between ports in northern China and Japan and parts of Northern Europe. However, there's a lot of questions about the Northern Sea Route. Although Russia used the recent Suez crisis to offer the NSR as an alternative to Suez, as our speakers have noted, enormous shipping hazards remain. There is a lack of charting. There is a lack of coastal support infrastructure. There are ice hazards. And Arctic shipping is not a substitute for the just-in-time shipping model that currently dominates global commercial shipping. So, we are not likely to see enormous growth in Arctic shipping through the NSR or any time soon. It is likely to be primarily shipping route used to move Arctic resources from Russia to their markets because of the

significant potential for delays and the high costs associated with it. But you can tell from this map why China might be interested in the region, because China is the world's largest shipper and it also imports enormous amounts of raw materials, including oil and gas. But again, this is primarily an economic interest. I would note and echo what earlier speakers have said, including Mike and the Admiral and Hajo as well, as the Arctic opens up for increased maritime activity, the chance of a disaster, whether that's a human disaster or some type of maritime accident or environmental disaster, goes up. And we see some examples in the pictures here. We've had problems with cruise ships in the Arctic Ocean. Those are very risky given the sometimes very large numbers of passengers that are on cruise ships moving up into the Arctic. We see the risk of an oil spill in the Arctic region, which is particularly concerning as Russia races ahead to develop its resources. As yet, we do not have a good way of getting oil off of ice, and that is something that is a concern on the right hand side there. At the bottom, you see a picture from the Greenlandic tsunami which was triggered by permafrost thaw caused by climate change. The thawing permafrost in one of the Greenlandic fjords caused the coastal to the coastal land of the fjord to collapse. And that landslide triggered a tsunami in the fjord that wiped out a village. And so we're likely to see more disasters in the Arctic region in the future, whether that's as the cause of climate change, oil and gas development, increased human activity or others. And so that's one of the most immediate concerns when we think about the potential for some kind of trigger or accident. And I would say it's a human or environmental disaster that is the greatest risk at the moment.

I would note at the top, these are the two U.S. icebreakers, the Healy and the Polar Star. The U.S. is currently investing in icebreakers in order to improve its response capability to any kind of disaster. And I think that's a really important effort, and we can certainly talk about that more in the Q&A, if you like.

The last slide I'm going to offer you here is just a slide that breaks down a little bit of the major dynamics going on across the military, environmental, economic and diplomatic spheres, and gives you a bit of a timeline and a sense of when these things are going to happen, because I think there is a lot of focus on what's going on in the Arctic region, the idea that there is a lot of competition and scramble for either influence or resources or military activity, and I would urge the audience to pass out the different types of risk, their nature and their timeline, because I think once that goes on, it's a little bit easier to sort of pull these different dynamics apart and talk about them in isolation, rather than sort of stirring them all together into some into a large pot of worry soup. So, I'd encourage you to be a little bit more specific and sort of unpack the idea that there is a scramble for the Arctic. Obviously, there are certainly drivers of tension, but they are discrete. I'm going to stop there and look forward to the conversation. Thank you.

Dr. HUEBERT: Thank you very much, Rebecca. Excellent overview of many of the challenges that we are now facing. Last but definitely not least, I now would like to turn the floor over to Jonathan Quinn. Jonathan, you're up.

MR. JONATHAN QUINN: Thanks very much, Rob. Good morning, everyone. And it's great to see you again, Rob. It's been a while, but I remember fondly meeting you up in Yellowknife a few years ago and we were in the lead up

to the Strong, Secure, Engaged process. So, unlike Michael and I guess like Admiral La-Cour Andersen, I'm going to read from some prepared remarks here. I'm not as comfortable speaking off the cuff, and as a bureaucrat, I do have to worry about staying on message a little bit. So that should also help me stay on time too. I'm conscious of the clock as well. But of course, look forward to the discussion and the opportunity to answer some questions afterwards. So I'll just kind of launch right into it.

So, the Canadian Arctic comprises more than 40% of Canada's territory. It's a fundamental part of Canada; our heritage, identity, and future as a country. And as others have said, the Canadian Arctic's harsh climate, vast geography, sparse population, limited infrastructure pose really significant obstacles that limit access, make operations difficult, and make it challenging, as others have also pointed out, to benefit from the potential wealth and resources that it offers. That calculus, though, is continuously changing. It's not changing quickly necessarily, but it does have the potential to transform what was once or and remains a very isolated and remote region into a theater of broader strategic competition. So, over the next 10 minutes or so, I'll just quickly outline the view from national defense on the evolving Arctic security environment, the Canadian Armed Forces' current northern footprint, some of our nascent future plans, and also some opportunities for collaboration with the U.S. and other allies in the Arctic.

So, first on the security environment. And maybe just before launching into this, I'll just say it's great to hear from other speakers that we are very much on the same page on a lot of these issues. So, that's always comforting to hear. So, from our perspective, I think the Arctic is at an inflection point where big issues like climate change, technological advancements, military advancements, economic interests, and geopolitical competition are all coming together in a way that makes this region more and more strategically important. Climate change is altering the physical landscape in the north, and more frequent and severe extreme weather events, as has been pointed out, thawing permafrost and changing sea ice conditions, pose a threat to northerners, to their livelihoods and to critical northern infrastructure, including military infrastructure. Extreme weather conditions are also bringing added demands for the military to support domestic emergency response and search and rescue operations. As Michael pointed out, this is a particular challenge, just given the vast geography and the current kind of footprint of the Canadian Armed Forces with search and rescue assets permanently stationed much further south. And the vast instances obviously affect response times to a significant degree. We also expect this demand to grow significantly in the coming years. It's, as Rebecca just pointed out, that we don't think that's necessarily going to happen really, really quickly, but as more and more activity happens up there, we do expect that demand to increase. And we have to consider in the Canadian military how to meet that growing demand without undermining our ability to fulfill other core missions. So consequently, defense planning will really need to take into consideration all of the evolving risks, threats, and opportunities, interests, and capabilities of the region. So, as strategic competition grows stronger globally, we don't think that the Arctic is immune. And again, this is the challenge of going last, as others have pointed out, it does remain very largely a region

marked by cooperation. And most regional actors, including Canada, remain fully committed to keeping it that way. At the same time, it's also clear that international interest and competition have increased, and as others, including Rob, have pointed out, these considerations aren't new. They're evolving, though, in our eyes, at a more rapid pace than they have in recent history. Some states are demonstrating a much more assertive posture in the region. They're developing and using advanced military and dual use capabilities to operate in the Arctic, while new technologies such as advanced cruise missiles, hypersonic weapons, also bring in threats that can reach North America through the Arctic. And when you combine this kind of more traditional military activity with some of the below threshold tactics that we're seeing from competitors to advance their interests and undermine ours, it gives us a bit more pause about intentions over the longer term. And in this context, China and Russia have been particularly assertive in developing Arctic capabilities.

So, I'll start with a few words about Russia. So again, as others have mentioned, Russia maintains the largest military presence in the Arctic. They continue to invest very heavily in infrastructure, advance capabilities, and conduct major military exercises in the region. This includes the development of layered capabilities meant to limit Western military options and freedom of movement. It is, though, really important to remember that Russia is an Arctic state, with the largest Arctic territory and coastline, as was really nicely illustrated by the map that Rebecca just showed. And so we really need to take that into consideration when we're examining the kind of defensive military buildup in Russia in the Arctic. However, Russia continues to develop and test their offensive capabilities that can strike North America through the Arctic, which from our perspective is probably more concerning than that than just kind of the general buildup in the Arctic itself. So, Russia can, and will, as we've seen, use military power to fulfill its political goals. Obviously, much different context, but we've seen this in Ukraine and Georgia, and we can't discount down the road that it could do so in other regions. Russia's bold and provocative activity is below the threshold of armed conflict as well include being recent attempts to interfere in democratic processes, also point to concerning intentions.

And now China. So as a self-styled near-Arctic state, China has become increasingly involved in Arctic affairs, as illustrated in their 2018 Arctic White Paper and Polar Silk Road Initiative. So China is obviously not an Arctic state. Not even a near-Arctic state, for that matter. But we can see through its actions that it's attempting to build a case for a greater role, presence and voice in the region, and through a degree of collaboration with Russia in energy projects and in its economic and scientific engagements with other Arctic states. China is looking to enhance its presence, influence and access in the region and to buttress its position that it's a legitimate Arctic stakeholder and participant in Arctic governance. And China employs a really wide range of below threshold tactics in the Arctic, using all levers of state power, political, economic, military, while avoiding direct confrontation and assuaging concerns about what its long term intentions may be. So to provide a credible deterrent to potential adversaries in the Arctic environment, we think Canada really needs to demonstrate that it has the

capability, the capacity to defend the northern approaches to North America. And it's also, I think, important to note that we hear a lot of skepticism about likelihood of anything like this happening. But it's in our eyes, important to note that potential adversaries don't even need to fire a single missile to unnecessarily achieve their objectives. Without credible defenses against the kinds of sophisticated, purpose built offensive weapons that Russia and China possess and are continuing to develop, Canada and other allies could be vulnerable to coercion, even if, as I said, a single missile is not fired. And above and beyond those more troubling appointments as well. Just because of the increasing activity, the Canadian Armed Forces obviously have a role to play in responding to safety and security incidents around the country. And we need to do more to be able to do that more effectively in the North.

So, I'll shift gears a little bit now and just talk about where we are and where we think we need to go in the Arctic from a national defense perspective in Canada. So, the Canadian Armed Forces' permanent presence in the North is anchored by Joint Task Force North in Yellowknife, and it has approximately 300 personnel with detachments in white dwarfs and around. Canadian Armed Forces is also represented by over 1800 Canadian Rangers across 60 communities in the north. They perform surveillance, patrol, search and rescue duties, and they're a really important source of local knowledge for us. So through this presence, the Canadian Armed Forces interacts with northerners, contributes to northern communities, and advances broader Government of Canada Arctic priorities. Some of the current and planned investments to enhance northern capabilities include the new Arctic Offshore Patrol ships for maritime surveillance that Michael mentioned and gave a version of a back story on.

Also, space-based surveillance and communications capabilities, upgraded northern airfields, and remotely piloted surveillance systems that again, Michael alluded to in his comments. So, from our perspective, this footprint's a starting point, but we know we need to do more and increase our presence in the Arctic. So, modernizing NORAD in partnership with the U.S. is really at the core of our broader work to enhance Canada's approach to continental defense in the Arctic. Keen observers of Canadian politics may have noticed that this past Monday, the 2021 federal budget reinforced that mandate, and included some initial relatively modest seed funding for NORAD modernization and continental and Arctic defense priorities over the next five years. We think that this is a good start and hopefully is a sign of more things to come. So, as a top priority, similar to what the admiral mentioned, we think we need to develop a layered system of systems to provide all domain awareness for the defense of Canada and North America. And this begins with a network of sensors that would operate across all domains, from underwater to space. And although it's certainly not just an Arctic problem, awareness of our northern approaches will be key as well to restoring some of the deterrence value that North American geography once provided and supporting NORAD's aerospace warning and control. And also, the maritime warning function, which in our eyes have assumed renewed importance. So, we believe developing our capabilities in an enhanced approach to continental defense can realize mutual benefits not only for the defense of Canada, but also for

Canadian communities, including especially northern and Indigenous groups. A concrete example of this is our Advanced Microgrids towards Arctic Zero Emissions-long title, but a much more easy acronym, AMAZE project. So, this is a project that'll modernize the power and energy system of the current North warning system, and reduce reliance on fossil fuels and reduce the cap's carbon footprint. And obviously the outcomes of this AMAZE project will also benefit other federal government facilities, and also remote civilian communities in the far north in reducing greenhouse gases and providing a kind of different alternative energy sources.

So finally, just before concluding, I will highlight that cooperation will continue to define how Canada operates in Arctic. The US is Canada's premier partner in the region. Prime Minister Trudeau and President Biden recently announced a road map for a renewed US-Canada partnership, which includes expanding cooperation on continental defense. And importantly for our conversation today, Arctic security. They also directed their respective ministers and secretaries of Defense and Foreign Affairs and State to meet at the earliest opportunity to further coordinate our respective contributions to collective security. Canada is fully committed to continue working with the U.S. to defend North America through a modernized NORAD, and broader domestic and continental capability enhancements. We want to continue to deepen our defense cooperation with Arctic allies, such as Norway and Denmark, to increase surveillance and monitoring of the broader Arctic region. We regularly invite many of these Arctic allies, as well as partners such as the U.K., to participate in some of our annual northern operations. And NATO, as has been mentioned as well, we in recent years there's been a renewed focus on the north by NATO. We fully support NATO operations and defense and deterrence activities throughout the NATO area of responsibility, which includes the High North. The Alliance must have the ability to undertake operations throughout its area of responsibility. and this includes current NATO's deterrence and defense plans and activities. We think cooperation with NATO allies in protecting the alliance's sea lines of communication is vital, and it's particularly important in light of the challenges posed by Russian maritime and undersea capabilities from the Bering Sea to the GIUK gap. And in addition, ongoing efforts to modernize NORAD and strengthen continental defense more broadly will ensure that a secure North America can project force that is including in support of NATO's allies. The deterrence value of protecting NATO's western flank is also important.

So finally, a few key takeaways, I guess. So, in closing, I just wanted to come back to the title of today's panel. So from our perspective, I don't think we necessarily consider the Arctic to be an emerging geopolitical flashpoint. It has been, again, as others have pointed out, a real key strategic region since the Cold War and its importance to Canada's security and identity has never been in doubt. We also don't necessarily think that violence is about to erupt in the region anytime soon. But we do think of the situation in the region as this kind of more of a slow burn that's gradually gaining in intensity as climate change, emerging technology, and economic opportunities increase the pace, presence, and intensity of competition in the region. So, in light of these threats, these opportunities, we're

fully committed to the security and interests of northerners and protecting Canada's north. We will continue to work with likeminded international partners to safeguard the rules based international order that Rebecca has helpfully laid out and uphold regional governance in the Arctic. These established rules and principles have ensured peace and stability in the region for decades, and we see no reason why that shouldn't continue going forward. As we advance, our work will actively pursue opportunities for collaboration to ensure that critical investments in Canadian Arctic capabilities contribute to broader priorities in Canada and beyond, and also bring socio economic benefits for northerners. And I will leave it there. Thank you.

Dr. HUEBERT: Wow. You guys did not disappoint. As I said, I was expecting great things from all four of you. And obviously this has been an incredibly rich discussion. I think a couple of themes emerge before we get into questions. And just once again, just to set it into the overall stage of what we're trying to address. I think that one thing that the audience needs to take away is that the factors that are leading to either cooperation, competition, potential conflict, are long term, embedded, multivariable factors. In terms of understanding the Arctic, one of the problems that we always face is that there tends to be a superficial examination by many without a full appreciation of all the different variables that Rebecca, Michael, Jonathan and Martin have brought out so clearly for us. And I think it's important to reflect upon, even when we talk about cooperation, environmental security, how much we have discovered occurs outside and unintended effects. All of the panelists have talked about the importance of Arctic the Arctic Council as a contributor to the geopolitical cooperation. And it is in fact, important. It is also important to note that it's precursor, The Arctic Environmental Protection Strategy, was actually created as a function of confidence building; Finland wanted to create some way of being able to bring in the new Soviet Union, Russia into cooperation with the other Arctic states. And they picked environmental issues because they thought the Arctic was, in their term a pristine environment and therefore everybody could agree on it, since it was a clean environment. The irony, of course, is once the creation of the Arctic Environmental Protection Strategy under the leadership of the Finns and heavily supported by the Canadians, as soon as they started looking at the issue, they were astonished to discover just how much of an environmental threat and disaster that outside issues, particularly related to the Industrial Revolution, were affecting the Arctic. We found that there were persistent organic pollutants to a level that was greater than in southern climes, climate change was discovered. And so, I think that you need to take away that you cannot just simply read what is in the headlines today to understand where the conflict is going. The second theme that relates to this and is something that we haven't talked about but still needs to be thrown into the overall pot is, of course, in this theme of long-term unintended consequences that have such a major impact. The one issue that we haven't talked about in terms of how it is affecting the long term geopolitical environment of the Arctic is, of course, the changing nuclear strategies and capabilities that the core powers are having. When we look more closely in the context of what is happening within Russia and the United States, we see substantial policy change. We see the development of weapons systems

that ultimately were being developed into 2000 to 2003. I'm talking about the MiG 31s and the Kazan, the F-35 and their tactical nukes, the low yields on the Ohio. These are factors that have not yet been factored into our thinking in terms of security. These are the type of issues that, of course, for the new generation of scholars that are looking forward, will be having to grapple in terms of the spillover effect that occurs in this particular context. This discussion obviously has elicited a huge list of points and discussion that people want to begin. But I've got a request from Michael, first of all, to lead off in terms of the question that he has for Jonathan. I'll let Michael once again, we have a very substantial list here, but you can ask your question to Jonathan. You're muted.

Prof. BYERS: Yeah. Thank you, Rob. Thank you, Jonathan. Fabulous discussion. I know one has to be careful about trusting journalists who quote government officials. So, the Globe and Mail might not have quoted your deputy minister accurately last month. But Jody Thompson said at a conference, and this is the Globe and Mail quoted, "we should not underestimate at all the threat of resource exploitation in the Arctic by China in particular. China has a voracious appetite and will stop at nothing to feed itself." And I guess the question for you is, is there a concern within the Canadian Department of National Defense that China at some point might seek to extract resources from the territory or the exclusive economic zone or the legally recognized continental shelf of Canada? And if that that is not the concern, which resources was the deputy minister speaking about?

Mr. QUINN: Thanks for the question, Michael. Thanks for using us and into the discussion and putting me on the spot to talk about a quote from my boss. That's much appreciated. I'm kidding. I think in answer to your question, the key point at this point is that we really don't know. And I mean, there's been all kinds of scholarship about kind of long term Chinese planning, what their global ambitions are. There's lots of things to point to with the Belt and Road Initiative and the extension of that to the North through the Polar Silk Road, that kind of call into question, I think from Canada's perspective, what those long-and in the case of China, I think we can say very long-term-ambitions are. So I don't think and not to put words in Deputy Thomas's mouth, but I don't think that she meant that there's an immediate threat or a sense in Canada that China is kind of going to immediately start unlawfully extracting resources from Canada's exclusive economic zone or anything like that. I think it's just a bit of a concern over the long term of what those long term ambitions might be, and a sense that based on what we see and hear coming from the Chinese government itself, that those long term ambitions could very likely and very possibly conflict with Canada's interests over the medium and long-term as well. So, I don't think she intended to be alarmist or say the sky is falling today. It's more just a kind of making sure that we're well prepared to protect and defend Canadian interests over the long-term, depending on kind of whatever the future might hold. And as others have mentioned, investing in the North is massively expensive, massively difficult. It's not a short term endeavor at all. So, if we need to start preparing for that uncertain future down the road, we really need to start today. So I'm not sure if I answered your question directly, but that's what I would offer.

Dr. HUEBERT: Thank you. I've got a question for Martin and for Jonathan, and this is in regards to NORAD modernization and potential movement of Greenland towards independence. And the question is, in your views, as Canada and United States move to modernize NORAD, and as there seems to be movement to incorporate elements that are truly based in other aspects of the Danish surveillance capability. What are the future plans in terms of dealing with the prospect of an independent Greenland and what does that mean in terms of the NORAD modernization process? So, Martin, if you could lead off on that, please.

Admiral LA COUR-ANDERSEN: Oh, thanks for that, and thanks for bringing up Greenlandic independence. Maybe just two or three words as a background. The Greenlandic Government has got a so-called home rule, i.e. certain elements of government have been delegated to the Greenlandic government. That includes taxes, education, health care, but it does not include foreign security and defense policy that is retained by the by the government of Denmark itself. There is, of course, right now there's been an election in Greenland, local election with a new government. And we're sort of. We see, of course, statements of independence. Clearly, we do. And it's something we are always talking to the Greenlandic government about. We have got a very close dialogue with them on defense and security matters. But talking about sort of the ultimate responsibility for defense, security and foreign policy matters, that still rests with Denmark proper. So sort of moving on from that, NORAD, purely a of course, a U.S.-Canadian bilateral partnership, financial corporation, but we are as a state very interested in the modernization of NORAD. We are very interested in how the capabilities of a modernized NORAD fits, how we can fit into that picture with Danish capabilities. And of course, there's been some talk about the Thule Air Base. It is part of the US ballistic missile defense. And some other things. And we are talking to our Canadian and U.S. friends about how the how the capabilities of Thule Air will fit into the larger picture. I'm sorry, I can't be more specific, but this is also sort of an open line. I'm on the record, so I don't know, Jonathan, if you'll be more specific, but what would you please.

Mr. QUINN: Thanks very much, Admiral. I probably won't be much more specific and certainly won't speak about Greenlandic independence at all. But maybe I would answer that question just by saying that Canada's focus on NORAD modernization is primarily a bilateral binational conversation with the United States. But what I would mention is that, I mean, Thule Air Force Base, it was mentioned that it's been used for NORAD exercises. And what I would say is that I think from our perspective that the greatest advantage that Canada, the US and its allies have in this kind of emerging time of strategic competition is our friends and allies. And we would see certainly great advantages in cooperating with all of our Arctic allies, sharing lessons, collaborating on research and development technology, taking advantage as well of our respective geographic locations as well. So, I think that while modernization itself is really kind of a Canada-U.S. treaty level agreement, and we're looking to kind of enhance what we bring to the table in that regard, as I mentioned in my remarks, we're very interested in collaborating with other allies, including Denmark, on all of that. And

as the Admiral mentioned, we see lots of opportunity there to share best practices, to work together, to kind of defend our collective interests in the region.

Dr. HUEBERT: Thanks very much. This one is for Professor Pincus. Professor Pincus, you have written extensively on the rising triangle, as you've worded it, in terms of the growing competition between Russia, China and the United States in general. What is your view now in terms of how that will influence the broader security issues within the Arctic? And where do you see that in the long term?

Prof. PINCUS: Great question. Big question. Thank you. I think, to sort of try to give them a simple answer. There's strong alignment between Russian and Chinese economic interests in the region. Russia wants to develop and sell oil and gas and build a shipping route. And China's clearly looking for sources of energy and is also a major shipper, as I noted. And so we see some sort of fitful economic cooperation. There is some Chinese investment in the Yamal LNG project, in the Arctic LNG 2 project, and in some other energy projects along the NSR. And we're seeing some COSCO shipping as well. China's also building ice hardened LNG tankers for Russia. This cooperation is not as fully fledged as we might expect. There are some stumbling blocks along the way. Russia is not an easy business partner. I think that's sort of widely apparent. A lot of companies have run into trouble, and there's some natural friction there that has impeded some of these deals from moving forward. So, that's sort of on the economic side. When it comes to military interests, they're really in opposition. Russia is building up its military capabilities in the Arctic, and that is not necessarily surprising given the dynamics of Russian interests in the region and new technological abilities. But the prospect of Chinese military activity in the region is not something that Russia would welcome. And, you know, we do see some hints that the plan is interested in developing polar capable submarines there specifically and trying to flesh out their nuclear triad. They've made some mentions about polar operations, and that's something that I think would cause a real shift in the security dynamics in the region and probably trigger some more tension between Russia and China. And so it's a complex mix. There's some coincidence of economic interests. There's dissonance in security interests when it comes to political interests, I think there's also dissonance. Russia has historically been very interested in keeping Arctic governance to the Arctic states. China is clearly trying to take a say in Arctic governance. And so there's some opposition there. Long term, I think that the dynamic will be largely driven by things that happen outside of the Arctic region. The trajectory of Russia-China cooperation is, I think, to a large extent driven by U.S. decisions, in fact. And it'll be interesting to see what happens in the next several years. Thanks.

Dr. HUEBERT: Thank you very much. Now, I've got a question that goes to Professors Pincus, Byers, and myself. And this is in regard to the Northwest Passage. Do you think the *Kiwi Roa* case has a potential to undermine Canada's claim that no innocent passage rights exist in the Northwest Passage? Why is Canada's difficult to defend position re innocent passage still necessary when the polar cold brings IMO rules in line with Canada's environmentally and safety driven regulations? Well, I should have included Jonathan on this too. We could

have got rid of a government official, but I will put you on the spot, Jonathan. Michael, if you can lead off and Rebecca and I'll have a quick comment.

Prof. BYERS: Yeah. Thank you. For those who don't know, the Kiwi Roa is a small, very small yacht that is operated by an adventurer from New Zealand. It's flagged by New Zealand. It sails around the world. And last summer he decided to sail through the Northwest Passage. This caused considerable concern in Nunavut, which at that point was COVID free and was working very hard to stay COVID free. He did assure people he would not stop at any community, that there was no health threat. He also, because he likes public attention, claimed that that he had a right to transit through the Northwest Passage because it was an international strait. The Canadian government had, I think, several options. One was to contact the government in New Zealand and get them to essentially say that they supported Canada conducting an interdiction and arresting this guy for violating the COVID rules that had been adopted in the Arctic. But another option was simply to ignore him. He didn't represent a foreign country. He was simply an individual. And if you arrested him, you would simply draw global attention to the Northwest Passage issue. So, because he posed no health threat and the global media wasn't paying any attention, the Government of Canada simply chose to look the other way. For scholars, I'm sure this will show up as a sentence and further analysis of the Northwest Passage dispute. But I hope it's only a sentence because it doesn't deserve more than that in terms of the polar code and IMO rules and the Northwest Passage. You know, it's good to see the international rules strengthening. They're still not as strong as Canada's rules, but they are being strengthened and one could conceive in the future some sort of negotiated outcome whereby Canada and the United States would find a solution to the Northwest Passage dispute, that they didn't deem these waters internal waters, which is Canada's current position, but might actually have enhanced international rules protecting shipping and environmental interests. But until the two countries start talking about this, you know, it's a debate that that only people like us will ever have.

Dr. HUEBERT: Rebecca, only have a couple of minutes, if you can concisely weigh in, please.

Prof. PINCUS: Yeah, I don't have a lot to add. You know, I think Professor Byers really nailed it. I would say that Kiwi Roa you know, maybe, yes, in a very, very small way, as Mike noted, it was not representing a state position. So I don't think it was a large incident. And. The Canadian Northern Framework clearly emphasizes environmental protection and First Nation interests. And as long as that is the emphasis of the Canadian government, I don't see this governance structure changing much because there's not a lot of traffic going on. Thanks.

Dr. HUEBERT: Thank you very much. And just very briefly, not terribly surprising. I, of course, disagree with Michael and Rebecca, on this one. And I think that Canada lost an opportunity to actually establish as the law students in this audience will know. Canada's claim is that the Northwest Passage is an internal water. The essence of that is that we can control international shipping, t, the possibility of carrying health security issues, i.e. the pandemic. I think that that clearly, if Canada was serious about utilizing internal waters, that was an opportunity that we missed to make the point. But I'm also of the opinion, which

is a minority position, that we should never in 2017 we should have also, if they were internal waters, never allowed the Chinese vessel to go through, the Xue Long through the Northwest Passage. Unfortunately, Stephen is not going to give us the extra half an hour that I know that the richness of this discussion really facilitates. So I'd like to take this time before I hand over to Stephen to thank all four of you for what I knew was going to be an outstanding series of presentations and discussions. And I would invite anybody in the audience who did not have their questions answered-and there was a lot, I'm sorry about that-to get in touch with these four leading lights on these very critically important issues. So thank you very much. Over to you, Stephen.

Mr. PETRAS: Yeah, thank you very much, Rob, Michael, Martin, Rebecca, and Jonathan. That was an expert deep dive into the important geopolitical issues facing the Arctic. My takeaway is we need to keep our eyes open on these matters and our fingers crossed. So, at times you are calming, at times you are provocative. We appreciate the depth of the discussion. It's now time for our next break. This is going to give you a chance to step away from your screens. This will be about a ten-minute break. We will start back. Exactly at 11:40 a.m. So see you back at 1140. Thank you.