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# Standing Committee on National Defence

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Chair: Charles Sousa





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Thursday, October 30, 2025

• (0815)

[*English*]

**The Chair (Charles Sousa (Mississauga—Lakeshore, Lib.)):** I call this meeting to order.

Welcome to meeting number 11 of the House of Commons Standing Committee on National Defence. Pursuant to the motion adopted on September 16, the committee is meeting to continue its study on the integration of the Canadian Coast Guard into the Department of National Defence.

Today's meeting is taking place in hybrid format pursuant to the Standing Orders. Members are attending in person and remotely using the Zoom application.

Clerk, is there anybody on Zoom?

**The Clerk of the Committee (Ariane Calvert):** Not for the first half.

**The Chair:** There is nobody on Zoom for the first half, but there will be in the second.

I ask that all participants consult the guidelines on the table. These measures are here to prevent audio feedback incidents and to protect the health and safety of both participants and our interpreters. I'd like to remind witnesses and members to please wait until I recognize you by name before speaking, and for those participating—they're not by video conference until the second half—to please raise your mic and raise your hand. Again, all comments should be addressed through the chair.

If you wish to speak, please raise your hand. For members on Zoom, of course, use the "raise hand" function. The clerk and I will manage the speaking order as best we can, and we appreciate your patience and understanding in this regard.

Now I would like to welcome our witnesses. We have Marc Mes, deputy commissioner, Canadian Coast Guard programs, and Andy Smith, deputy commissioner, shipbuilding and materiel.

I'd like to invite the deputy commissioners to make their opening statement.

You have up to five minutes. Thank you again.

**Marc Mes:** Good morning, Mr. Chair and committee members. Thank you very much for the invitation. I am Marc Mes, deputy commissioner of Canadian Coast Guard programs, and I'm joined here today by my colleague, Andy Smith, deputy commissioner of shipbuilding and materiel. Of course, the chair has already introduced us.

We really do appreciate the opportunity to speak with you today.

[*Translation*]

This is a major turning point in the history of the Canadian Coast Guard, or CCG, as we recently joined the defence team and anticipate the proposed expansion of our services in relation to national security.

To help contextualize these priorities, we'd first like to provide a brief overview of our roles within the Canadian Coast Guard.

[*English*]

As deputy commissioner of Coast Guard programs, I am responsible for delivering the Canadian Coast Guard's operational mandate and ensuring the effectiveness of our programs from coast to coast, as well as in the Great Lakes and the St. Lawrence. I provide oversight for the critical maritime programs and services that Canadians have depended on for over 60 years. These services ensure the safety of mariners on the water, protect the marine environment and enable economic prosperity through the safe and efficient movement of vessels in Canadian waters.

At its core, my role ensures that the Canadian Coast Guard delivers its mandate as an integrated, efficient service. I now invite Deputy Commissioner Smith to speak to his role and responsibilities.

[*Translation*]

**Andy Smith (Deputy Commissioner, Shipbuilding and Materiel, Canadian Coast Guard):** Good morning, Mr. Chair. Good morning to the committee members as well.

I appreciate the invitation to join you today.

As deputy commissioner of shipbuilding and materiel, I oversee the complete lifecycle of our assets—from procurement through to disposal. This keeps the Canadian Coast Guard operationally ready to provide the vital services Deputy Commissioner Mes outlined earlier.

[*English*]

My responsibilities include the acquisition of large and small vessels and helicopters. However, procurement is just one part of our work. I also oversee the maintenance and life-cycle management of the Coast Guard's fleet and shore-based assets, which ensure the continued delivery of Coast Guard services to Canadians.

Ultimately, my goal is to ensure that the Coast Guard has the right equipment in the right condition at the right time, so that our personnel can perform their vital work safely and effectively.

**Marc Mes:** As I mentioned earlier, the Canadian Coast Guard stands at an inflection point in its history, especially in relation to how we contribute to Canada's sovereignty and national security.

[*Translation*]

The Canadian Coast Guard is proud to have recently joined the defence team. While CCG will remain a civilian special operating agency reporting to the Department of National Defence, this transition will facilitate greater collaboration and interoperability with our defence partners, and strengthen synergies in the areas of infrastructure, cyber capabilities, and recruitment and retention of operational personnel.

● (0820)

[*English*]

As you know, legislation currently before Parliament proposes amendments to the Oceans Act that would formally expand the Coast Guard service to include security activities to support maritime domain awareness, with a particular emphasis on the Arctic. These legislative changes would authorize the Canadian Coast Guard to collect and share information for the purposes of security, which was previously not possible.

We will also be able to conduct security and surveillance patrols, which would include, for example, monitoring suspicious vessels in remote, northern locations and sharing the information collected with intelligence, security and defence partners.

[*Translation*]

While these represent significant changes, the Canadian Coast Guard is well positioned to meet the opportunities on the horizon and to be a force multiplier by utilizing its extensive suite of 126 vessels, 23 helicopters, sensors, shore-based assets and operational centres to collect critical information about what is taking place in Canada's maritime domain.

[*English*]

Our vessels already navigate the waters on all three coasts, as well as the Great Lakes and the St. Lawrence Seaway. We're often called "Canada's ears and eyes on the water".

The Coast Guard maintains the most substantial Canadian government presence in the Arctic, a region we know is of escalating geopolitical importance. Climate change is fundamentally altering our work environment. We see how warming temperatures are opening new Arctic shipping corridors while simultaneously creating hazardous conditions, extreme weather events and impacts to our marine infrastructure. As receding ice opens new sea routes and attracts international attention, our established Arctic presence allows us to provide enhanced domain awareness in these waters.

The large geographic area of the Arctic poses a unique challenge. Canadian Coast Guard vessels and other assets are integrating the capabilities of increasingly sophisticated digital systems. Our awareness of what's happening on the water is evolving, thanks to tools like RADARSAT, Canada's third generation of Earth observa-

tion satellites, and uncrewed aerial surveillance systems that give us eyes where our vessels can't go.

We're also working to remain at the forefront of increasingly digitalized navigational services. For the Canadian Coast Guard, that means implementing e-navigation and other digital services in our marine communications and traffic services, icebreaking and aids to navigation.

Our contributions to maritime domain awareness are also bolstered by our established partnerships with federal organizations like the Canada Border Services Agency, the Royal Canadian Mounted Police and the Canadian Armed Forces—partnerships that are strengthened through daily operational co-operation.

We also understand that effective domain awareness requires meaningful engagement and partnerships with indigenous communities. The Coast Guard has established relationships with indigenous communities across Canada. Through initiatives like the indigenous community boat volunteer program and the Canadian Coast Guard Auxiliary, we are not merely consulting with indigenous partners but collaboratively codeveloping services that respect traditional knowledge and address community-identified priorities.

[*Translation*]

**Andy Smith:** This foundation of presence and partnerships is being strengthened by investments that will enhance our capabilities in the coming years. The ongoing commitment to renewing the federal civilian fleet represents a generational and transformational investment in the Canadian Coast Guard.

[*English*]

Via the national shipbuilding strategy, now in its 15th year, the Canadian Coast Guard fleet renewal will include the acquisition of two polar icebreakers, up to six program icebreakers, up to 16 multi-purpose icebreaking vessels, and two Arctic and offshore patrol ships.

The new polar icebreakers, in particular, represent a significant advancement in our Arctic capabilities. These vessels will enable the Coast Guard to maintain a year-round sovereign presence in the high Arctic, enhancing our ability to contribute to domain awareness.

Deputy Minister Beck and Commissioner Pelletier will be appearing before this committee in a few weeks to address in greater detail the Canadian Coast Guard's transition to the Department of National Defence, as well as the Coast Guard's expanding mandate.

In the meantime, Deputy Mes and I thank you again for the opportunity to speak with you today, and we look forward to answering your questions.

• (0825)

**The Chair:** Thank you, Deputy Commissioners. I appreciate your opening statements.

To start us off on our first round of six minutes is Mr. Kibble.

**Jeff Kibble (Cowichan—Malahat—Langford, CPC):** Thank you, Mr. Chair. My questions, through you, are for Mr. Mes and Mr. Smith.

Thank you for being here and thank you for your service to Canada. I certainly would like to acknowledge the experience the Coast Guard has, especially operating in the Arctic, where they operate like no other.

Also, thank you for helping us better understand this proposed transition, as you said. However, I would suggest it is now a transition.

Were either of you consulted about the expansion prior to the introduction of Bill C-2 and Bill C-12?

**Marc Mes:** Yes, the Canadian Coast Guard was involved in consultations.

**Jeff Kibble:** Was your department and were you personally consulted, Mr. Mes?

**Marc Mes:** Yes, I was.

**Jeff Kibble:** Were you as well, Mr. Smith?

**Andy Smith:** Yes, I was.

**Jeff Kibble:** Who do you currently both report to?

**Marc Mes:** We both report to the commissioner of the Canadian Coast Guard.

**Jeff Kibble:** Who does he report to?

**Marc Mes:** He reports to Deputy Minister Beck of National Defence.

**Jeff Kibble:** Before you were consulted, how did you find out about this decision?

**Marc Mes:** I heard it through the announcement of the Prime Minister.

**Jeff Kibble:** You saw it on the news.

**Marc Mes:** Yes, that's how we found out.

Well, we were involved in the consultations. We knew that things were...but we didn't know specifically when this would be announced. It was through the announcement of the Prime Minister.

**Jeff Kibble:** Were you involved with consultations prior to the announcement in the news?

**Marc Mes:** Yes, we were.

**Jeff Kibble:** Thank you.

You mentioned that the mandate would change and would now include security and surveillance patrols. In your opening remarks, you mentioned monitoring.

Is there anything else beyond monitoring in the definition of security patrols or surveillance?

**Marc Mes:** No. It is about security. It's about the collection and sharing of information for security purposes with our defence partners, as well as surveillance, but it's nothing beyond that.

**Jeff Kibble:** Security, in the Coast Guard's definition, just to confirm, is just monitoring and nothing beyond that.

**Marc Mes:** Yes, it's the collection of information. Providing maritime domain awareness provides that level of understanding—

**Jeff Kibble:** Thank you.

I would define that as surveillance. I just want to get clarity on the security part, because it says "security and surveillance". What is your definition in terms of the role, as far as security patrols beyond monitoring?

**Marc Mes:** Right now, we collect information for the purposes of safety, and we share it for the purposes of safety.

The new authorities will allow us to collect information and share it for the purposes of security. We will be able to use new capabilities, including drones underwater, on surface and above water, to be able to provide better domain awareness to our defence security intelligence partners.

**Jeff Kibble:** Those all sound to me like surveillance. We'll talk about surveillance in a bit.

As far as security goes, would you envision having to intercept another vessel?

**Marc Mes:** No, we will not. Our vessels are not designed for that kind of combat.

**Jeff Kibble:** Do you envision having to board a foreign vessel, outside of the excellent fishery work that you do?

**Marc Mes:** Coast Guard does not board for purposes of enforcement. We do have RCMP on board some of our vessels, as well as conservation fisheries officers, as you have mentioned. We provide the platforms for that enforcement.

**Jeff Kibble:** Without any outside agency assistance, are you capable of boarding another vessel?

**Marc Mes:** We do not board other vessels.

**Jeff Kibble:** Thank you.

Now that the Coast Guard is under National Defence, despite the red hull this vessel would be classified by foreign nations as a valid surface combatant. What steps are going to be taken to give a defensive capability to Coast Guard vessels?

• (0830)

**Marc Mes:** I think it's the same thing. We remain a civilian fleet and a civilian agency under the umbrella—

**Jeff Kibble:** I appreciate that they are civilian crews, but now that it's under National Defence, a foreign nation would classify Coast Guard as a valid surface combatant or a valid enemy vessel in a time of conflict, or even in peacetime operations.

My question is, what steps is the Coast Guard going to take, now that the department has shifted and now that the role has shifted, to defend those vessels and keep the civilian crews safe?

**Andy Smith:** I think a helpful clarification at this point is that by definition, Coast Guard ships are non-combatant ships. Just by virtue of the fact that we're under National Defence, we're going to have a security role, not a defence role. Our ships will remain unarmed and not part of the Canadian Armed Forces—

**Jeff Kibble:** I appreciate that they're unarmed and that they're civilian, but foreign nations such as China will not see that. For example, they regard American coast guard ships as valid surface combatants or targets.

**Andy Smith:** That's because the U.S. Coast Guard ships are armed and, notwithstanding that they're under the Department of Homeland Security, they're clearly part of the armed forces of the United States. The Canadian Coast Guard will not form part of the Canadian Armed Forces. I would respectfully submit that to classify Coast Guard ships as “combatants” is somewhat speculative.

**Jeff Kibble:** This is what other countries will see, now that they are reporting to National Defence and fall under National Defence, despite being unarmed, as you're indicating is the plan.

Surveillance is also a new role, and the Coast Guard has some surveillance capability with navigation radars and such. What expanded equipment will be required? I appreciate that you mentioned drones as one example.

**Marc Mes:** Yes, so we will be looking and working with our colleagues at National Defence and the Canadian Armed Forces to look at synergies between sensor suites and communication suites, including secure communications, whereby we will assist in the interoperability of the two forces on the water.

**The Chair:** Thank you, commissioners.

**Jeff Kibble:** Thank you both, Mr. Smith and Mr. Mes.

**The Chair:** Chris Malette, you have six minutes.

**Chris Malette (Bay of Quinte, Lib.):** Thank you, Chair.

Through you to the deputy commissioners, thank you for being here today. Some couple of weeks ago, as I discussed earlier, I had the honour to be in Cobourg to take part in the opening of the new search and rescue station there. I'll tell you, it's a pretty good-looking facility, and the men and women who work there are very pleased to have that base.

Can you elaborate on how new and upgraded search and rescue stations, such as what I was privileged to see in Cobourg, are vital to local communities to help ensure that crews have adequate facilities and tools to support them in such crucial search and rescue efforts. In particular, in this case on the Great Lakes, in my riding of the Bay of Quinte, we do have an awful lot of... Lake Ontario is very busy and very dangerous at times.

**Marc Mes:** The search and rescue program is a critical mandated program that we deliver on behalf of Canadians to ensure the safety of Canadians on the waters. We have spent a lot of money. Deputy Commissioner Smith, through a fleet renewal plan, is also upgrading all of our search and rescue boats. We just received or are receiving the 20th search and rescue boat that we're putting across.

It's also about training and interoperability, so we continue to engage with the community auxiliaries; we communicate with first nations that are also engaging in these response programs to ensure a level of safety. It's this continuous learning, continuous training and upgrading stations, as well as the vessels that deliver, that are critical for the safety of Canadians on the water.

**Chris Malette:** Deputy Commissioner Smith, last week I was speaking to one of those auxiliary units Mr. Mes just referenced, based out of Picton in Prince Edward County. These auxiliary units, as we know, are staffed by volunteers in a lot of cases. They were expressing to me the desire to have upgraded kits, if we can, for equipment on some of these vessels.

Are there any plans in the expanded role and the subsuming, if you will, of the Coast Guard into National Defence, to upgrade any of those auxiliary units?

● (0835)

**Marc Mes:** Maybe I'll take that question, Mr. Chair, only because the search and rescue program falls under my purview.

Absolutely. The auxiliaries are a very important element of the response program. As such, there are seven chapters across the country, of which there are multiple units, and those units are growing day by day. We provide funding to cover the costs of training, travel and equipment replacement for the auxiliaries as we continue to move forward and work closely with them as they look at new equipment that they potentially could obtain. That is done in consultation with the Coast Guard through the contribution agreements that exist with each of the chapters.

**Chris Malette:** Through you again, Mr. Chair, for either of you, from your perspective and experience with the Coast Guard, what would you say are the key advantages of that integration of the Canadian Coast Guard into National Defence?

As well, Mr. Mes, I think you touched on the enhanced collaboration with indigenous communities. Where do we see that having a key advantage of expanding and improving the role of the Coast Guard?

**Marc Mes:** The interoperability with our new family members within National Defence is pretty clear.

Number one, it's about strategic planning—operational planning, now with the navy—to ensure that our waters are safe and secure.

Also, there are improved procurement opportunities with our Canadian Armed Forces, and we can leverage the renewals that we are doing on behalf of the Coast Guard but also on National Defence's behalf. There is technology and innovation in joining the efforts that are done by both organizations.

To the last point, on indigenous engagement, that's a critical piece for the Canadian Coast Guard, and it's a piece that we have really been focusing in on since the start of the oceans protection plan. We are engaging and including them in our response systems. This is an opportunity for both the Coast Guard and National Defence to work together in partnership with first nations, Métis and Inuit communities across the country.

**Chris Malette:** Thank you.

Further to that and as we discussed earlier, with the enhanced role in the north as we see it expanding, one of the mandates says that the Coast Guard is search and rescue and environmental response. Could you tell us a bit more about these, how climate change can affect the work of the Coast Guard, and how working with our indigenous partners in the north can aid in that role?

**Marc Mes:** That's a really good question, Mr. Chair.

Climate change is having a significant impact on the work we do. If we just look at incident management, as an example, there are wildfires, flooding and hurricanes. The response that we have at the Coast Guard is from a maritime perspective, but we're also able to offer capacities with our expertise in incident management and incident command systems. We also have expertise with our helicopters, including with the Canadian Air Force, and we are bringing this together.

It has changed the work that we do. We see what has happened in some of the incidences where we have vessels of concern or those that we potentially have to respond to because of oil spills on the water. That has changed, and we are now working with first nations indigenous communities, because it is a partnership. It's within their communities on the water, so we have to engage with them. When we send up incident command posts, we bring in first nations as part of the command team, so that they have a say in what happens.

**The Chair:** Thank you, Deputy Commissioner.

Thank you, Mr. Malette.

Monsieur Savard-Tremblay, you have seven minutes.

[Translation]

**Simon-Pierre Savard-Tremblay (Saint-Hyacinthe—Bagot—Acton, BQ):** Thank you, Mr. Chair.

On this October 30, 2025, I would be remiss if I did not start by reflecting on the incredible exercise in democracy that Quebecers went through 30 years ago. Had it not been for Ottawa's wrongdoing and lack of respect, I would not be in this foreign Parliament, a Parliament whose virtue is to strengthen my convictions on a daily basis. Quebecers would not be an ever-shrinking minority today, but instead would have spent the last 30 years living in freedom. I take solace in the fact that the next time will be the charm and that it will happen very soon.

Now, thank you for being here. There has been a lot of talk about Bill C-2, which became Bill C-12. Excluding the more contentious aspects that are not in the new version, which is a debate topic for another day, most of today's discussion has been about border services and less about the Coast Guard. The Coast Guard's mandate is being expanded to include collecting and distributing marine security information. Most people in the union, particularly at the Canada Border Services Agency, said they agreed with that, but were afraid they wouldn't have the necessary staff.

Do you think it's feasible?

● (0840)

**Marc Mes:** I can start my answer in French, but I will continue in English.

**Simon-Pierre Savard-Tremblay:** Feel free, it's no problem.

**Marc Mes:** When it comes to the CBSA and the RCMP, Bill C-12 highlights the importance of being a partner that knows what's happening on the water and at the border.

[English]

Having an understanding of what happens on the border is an element with which the Coast Guard can help. This is an important element. The RCMP and CBSA have a huge role in keeping our border secure.

There's a role that the Coast Guard can play, particularly in the St. Lawrence and Great Lakes, where we have this shared border. It's an eyes and ears role. For example, our lifeboats, if they're on the water, are now able to use sensors to bring that information to our partners to have a better understanding of what's on the water and provide support.

People are usually not aware of the maritime domain. The land domain borders, whether they are ports, land crossings, or those in between, are the areas of focus. The maritime border is also an area.

[Translation]

**Simon-Pierre Savard-Tremblay:** You're saying that it can be done through people and technology.

That said, will the expansion of the mandate lead to governance issues, including accountability? This is a major shakeup within the institution.

**Andy Smith:** Can you repeat the question, please?

**Simon-Pierre Savard-Tremblay:** As far as people and technology are concerned, it's fine; I understood the answer. That said, the expansion of the mandate is a shakeup in terms of accountability. Does this present new governance challenges?

**Andy Smith:** Mr. Chair, it's obviously a different form of governance. However, we are very well positioned in this regard, even though it has only been two months since we joined the National Defence team.

We're very well positioned to contribute to all of the governance tables.

**Simon-Pierre Savard-Tremblay:** I find that curious. Border services tell us that they would be overwhelmed, that they have quite significant challenges and that a lot more bodies will have to be brought on board. In your case, you say you're ready, everything's fine and there's no problem. I find it curious to see the difference in preparation.

**Marc Mes:** In my opinion, the only thing the Coast Guard lacks is the authorization to participate, engage in discussions and, in particular, share security information. With our equipment and our ships, we can do our part.

**Simon-Pierre Savard-Tremblay:** We heard testimony here from Major-General Robert Ritchie in September. He told us that there were no plans to militarize the Coast Guard or add a law enforcement component to its mandate. For you, there would be virtually no change on the military side of things.

Are you confirming that there was no discussion on this, that it was not mentioned and that this is not one of your requests?

**Marc Mes:** No, it's not at all.

**Simon-Pierre Savard-Tremblay:** Why wouldn't that be in the best interests of the Coast Guard?

[*English*]

**Marc Mes:** Right now, there is no need for the Coast Guard to have that law enforcement or be militarized. First of all, we don't have the capacity or the equipment on the ships to do that. We are a non-combatant civilian fleet.

We already support law enforcement. We have a mandate under the Oceans Act. The minister responsible for the Coast Guard can provide services to other government departments. We do it right now with the RCMP and with Fisheries and Oceans Canada. There is enforcement. We provide the platform. There is no need for the Coast Guard to have that mandate.

• (0845)

[*Translation*]

**Simon-Pierre Savard-Tremblay:** I think you also have employees who are worried and afraid of a mandate change. I imagine that they share that with you, that they let you know.

**Marc Mes:** Yes.

**Simon-Pierre Savard-Tremblay:** What do you say to them?

**Andy Smith:** That's a good question. These worries are normal, and we even expected them during the transition.

Basically, Coast Guard employees joined the organization under the Public Service Employment Act and not under the National Defence Act. The terms and conditions of employment are completely different.

At present, there is no question of militarizing or arming our ships to take part in defence missions.

**The Chair:** Thank you, Deputy Commissioner.

Thank you, Mr. Savard-Tremblay.

[*English*]

We're going to round two.

For the next five minutes, we have Mr. Anderson.

**Scott Anderson (Vernon—Lake Country—Monashee, CPC):** Thank you very much.

Can you tell me how many Coast Guard ships are currently operating in the High Arctic?

**Marc Mes:** During the summer season we have between seven and eight ships that regularly operate in the Arctic.

**Scott Anderson:** And currently...?

**Marc Mes:** Currently, we have one left that's closing out the season. The season usually closes out by mid-November. Right now we work with, number one, the demand of industry to ensure that we're able to resupply and escort into communities and, then, to provide science as well as search and rescue.

**Scott Anderson:** In the winter, to the extent that you can operate there...?

**Marc Mes:** We do not operate after December. We have sometimes gone until the middle of December, but other than that, we don't operate. However, with the acquisition of the two new polar icebreakers that we'll be getting in 2030-31, we will have all-year presence in the Arctic.

**Scott Anderson:** Just to clarify something here, you mentioned that it's a civilian operation and that your operations are not expanding, in any way, into military, but on the handout here it has "infrastructure protection". Can you define what "protection" means, then, in the context of a civilian operation?

**Marc Mes:** Infrastructure, yes. This is the contribution. If we have a level of awareness of what's happening on the water, we're able to then, by default, help support the protection of infrastructure. If agencies that have to respond, whether it's the Canadian Armed Forces, the RCMP or even police of local jurisdiction.... If there is a known threat and we identify what that is through the collection of our information, that helps contribute to infrastructure protection.

**Scott Anderson:** Do you not feel that being in an active military operation makes you combatants?

**Marc Mes:** We would never be involved in an active military operation.

**Scott Anderson:** On sharing info, I think you mentioned that you're already sharing info, in some cases.

**Marc Mes:** Through the chair, yes, we do share and have the ability to share information for safety. We collect information and then share it for the purposes of safety, and that's the authorization we have. With the new legislation that's being proposed, we will be able to collect for the purposes of security and then share for the purposes of security.

**Scott Anderson:** Are there any indications or hard data that the PRC or Russia are expanding their operations in the Arctic right now?

**Marc Mes:** That's probably something I can't comment on. I think there is media attention and there are others who talk about geopolitical interests, but I can't comment on specifics.

**Scott Anderson:** You've already answered this question, I think: The training is not going to be enhanced to include paramilitary training at all.

**Marc Mes:** It will not include paramilitary training, no.

**Scott Anderson:** What new types of equipment, infrastructure and capabilities are you going to require for the new role?

**Marc Mes:** We will, for instance, have to get secure communications capabilities. We already have an element of secure communications on our icebreakers in the Arctic. We have a system called IMIC3, which we share with the navy so that we can do some secure communications. However, it's the secure transfer of data that we will have to enhance on our ships, as well as sensor packages that include underwater sensors, which include drones and others. These are the things we're working on to ensure interoperability with the navy and sharing with our partners.

• (0850)

**Scott Anderson:** To what extent are you concentrating on autonomous...on drones?

**Marc Mes:** I mean, that's the evolution of technology, and it will be an important element. The Arctic is vast, and you all know that. We have only so many vessels in the Arctic. The Arctic is much larger, so we're going to have to use drones, both underwater and....

We know areas that, potentially, are at risk, such as critical infrastructure. We have underwater cables that we have to be very mindful of, and we're seeing that across the world. At the same time, having an awareness of what's happening on the water also will help us, and we can use drones beyond the line of sight.

**Scott Anderson:** Can you describe the new infrastructure you're going to require in the Arctic to support your new mandate?

**Marc Mes:** Right now there is no requirement. We work without infrastructure in the Arctic. We have a presence in the Arctic. The Coast Guard has a region in Yellowknife. We have SAR and MCTS bases in Iqaluit and Rankin Inlet, so we do have some infrastructure. However, for our icebreakers to work right now in the Arctic, we don't need infrastructure. We do crew changes in communities. If there is an increase in infrastructure, of course we would take advantage of that, but currently we do not have a requirement for infrastructure.

**Scott Anderson:** Thank you very much.

I'm going to pass the rest of my time to Ms. Gallant.

**Cheryl Gallant (Algonquin—Renfrew—Pembroke, CPC):** I'd just like to put this on notice:

That the committee invite the Parliamentary Budget Officer to appear for no less than two hours to discuss their new report, entitled "Planned Capital Spending under Canada's Defence Policy: 2025 Update".

**The Chair:** We have your notice. It will be circulated.

Mr. Watchorn, you have up to five minutes.

[Translation]

**Tim Watchorn (Les Pays-d'en-Haut, Lib.):** Thank you, Mr. Chair.

Thank you to the witnesses for being here today. We appreciate it.

In previous meetings of this committee, we heard from witnesses who told us, almost unanimously, that the integration of the Canadian Coast Guard into the Department of National Defence was very positive.

I'd like to hear your opinion on that, Mr. Mes. Is this the right time? Do you find it positive?

**Marc Mes:** It was very positive for all the people who work for the Canadian Coast Guard, for the people who work on a ship's crew and for the people who work in the regions. Being part of the Department of National Defence family really creates a positive feeling.

**Tim Watchorn:** Thank you.

Mr. Smith, you talked about the national shipbuilding strategy. If we look at the investments that are going to be made over the next 20 years, we see that two Arctic and offshore patrol ships, six program icebreakers, two polar icebreakers, up to 16 multi-purpose icebreakers and up to 61 small vessels will be renewed by 2045.

How do you see these investments in terms of the partnership with the Department of National Defence? How are you going to use them?

**Andy Smith:** Thank you for your question.

This is an opportunity for us.

Obviously, some of these ships haven't even been built yet. However, today we have an opportunity to meet the country's needs, including those of the Royal Canadian Navy and the Canadian Air Force, to pool some equipment and to add common equipment to today's fleet or to the ships that will be built over the next 20 or 25 years. That helps us ensure that we have common equipment, common training and common maintenance for the entire supply chain to ensure higher efficiency.

• (0855)

**Tim Watchorn:** Thank you.

How will polar icebreakers improve Canada's presence in the Arctic and the way it protects its northern border?

**Marc Mes:** First, they will enable us to be present in the Arctic for 12 months of the year.

Second, our presence will be real proof of sovereignty.

[English]

It's to be there for 12 months, for a whole year, to be that sovereign presence for the Government of Canada and for Canadians, not only with the Polars but with all our vessels. Those are the key elements.

It's also search and rescue. As the Arctic opens up and we see climate change, there's going to be an increased need to ensure that Canada and the Canadian Coast Guard are able to respond to incidents. Potentially, we see more cruise ships that are interested in the Arctic. That's of concern to us. That's a higher level of risk. We have to be ready for that, and we have to be able to respond.

It's about security, sovereignty and search and rescue, as well as support for our science. That's a key element in understanding science and our waters and supporting our science departments across the government.

[*Translation*]

**Tim Watchorn:** Thank you for that.

I have one last question for you. Sometimes we don't have enough boats to train sailors. Other witnesses have told us about the possibility of training sailors with your equipment.

How do you see that? Is that an option? If so, how would it work?

[*English*]

**Marc Mes:** Mr. Chair, again, that's a very good question.

Absolutely, we're looking at interoperability, at training opportunities for both the Coast Guard and the navy, and at being able to use all of our platforms for training. We are going to need more Coast Guard personnel; the navy is going to need more personnel. We have to be able to use the platforms that we have, from a Government of Canada perspective, to be able to train. If they have engineers who need to train on our ships, why wouldn't we use our ships to bring people into the Canadian Coast Guard to help them train and get the experience, so that when they get on a naval vessel, they're able to go forward?

[*Translation*]

**Andy Smith:** Obviously, we have the Canadian Coast Guard Academy in Cape Breton. It is a top-notch facility for training bridge officers and marine engineers. It has a world-class ice navigation simulator.

We have already invited the Royal Canadian Navy officers. They will soon be coming to the academy to fine-tune their ability to navigate through ice, which is a specialty, of course.

**Tim Watchorn:** Thank you, Mr. Smith.

[*English*]

**The Chair:** Thank you, Mr. Watchorn.

Ms. Lori Idlout, I acknowledge that your hand is up on the screen. Again, we'll have to ask the committee for unanimous consent for your intervention, given that you're not a member of the committee.

I'm going to put it to the committee now. I'm going to request unanimous consent to allow Ms. Idlout to speak.

**Cheryl Gallant:** No.

**Lori Idlout (Nunavut, NDP):** Yes, I would like to seek unanimous consent to ask the witnesses whether they agree, given that Nunavut is the only jurisdiction without a search and rescue base, that—

**The Chair:** Ms. Idlout, I apologize, but you're taking up time from the existing members, who have not provided unanimous consent. I apologize to you.

I'm now going to pass it over to Mr. Savard-Tremblay.

You have two and a half minutes, please.

[*Translation*]

**Simon-Pierre Savard-Tremblay:** I'll go back to the issue of transferring the Coast Guard to the Department of National Defence. While changes are needed, what springs to mind is that it will require a mandate change and militarization. I am not saying that it is desirable—you as experts know this—but presumably it is a necessary part of the change.

Earlier, you seemed to be saying that this was not the case. However, some analysts believe that part of the fleet will have to be armed in order to properly be accounted for as a military expenditure. Again, I'm not commenting on that, but I'd like to hear your point of view.

Are you confirming that certain ships could absolutely be modified to transport military personnel or defensive equipment?

• (0900)

**Marc Mes:** I can answer that first, Mr. Chair.

Right now, we are taking part in missions where we transport naval officers so that they can carry out their mandate. That's an obligation we have under the Oceans Act. We have a mandate to support other government departments, and the same goes for the Royal Canadian Navy. If it needs a platform, we are able to provide it and support the navy in fulfilling its mission.

**Andy Smith:** To some extent, we are already doing that. If our ships are in the north doing exercises with Royal Canadian Navy ships, we transfer fuel from one ship to another, even now. Would we be able to transport equipment or personnel from one place to another? The short answer is yes.

**Simon-Pierre Savard-Tremblay:** I'm going to come back to the issue so we can end it once and for all.

Ms. Eschuk from the Union of Canadian Transportation Employees said last June that a number of members were wondering whether the new mandate would still match the one they had been hired for. You're telling us today that you're not going to change anything at all.

I have only 20 seconds left, so thank you.

[*English*]

**The Chair:** Ms. Gallant, you have five minutes.

**Cheryl Gallant:** Thank you very much, Mr. Chair.

Has a Canadian Coast Guard vessel ever been fired upon, even by a drug runner, for example?

**Marc Mes:** Yes, it has.

**Cheryl Gallant:** What were the circumstances?

**Marc Mes:** The last case that I remember was near Cornwall, in Akwesasne.

**Cheryl Gallant:** Regardless of the official collaborative interoperability, we've seen that there have been attacks on different coast guards in the South China Sea. Given that the regular insurance companies will not cover an act of war or civil insurrection, what measures are you taking to ensure that the Coast Guard members are protected in the event that it is one of those two exclusions that regular insurers have?

**Marc Mes:** As a Government of Canada state vessel, we don't carry insurance. We're a commercial—

**Cheryl Gallant:** I'm talking about the people.

**Marc Mes:** The people as such, our crew, are Government of Canada employees. They would fall under the same insurance that anyone else would have. If there were to be an accident at 222 Nepean—

**Cheryl Gallant:** Thank you. It's the public service plan they're covered under.

**Marc Mes:** That's correct.

**Cheryl Gallant:** Has thought been given to providing the military SISIP type of insurance plan, because they may be involved in an act of war or civil insurrection that would exclude them from regular insurance through PSP?

**Marc Mes:** We wouldn't be involved in any act of war. The Coast Guard's rules of engagement are that if there is anything, we leave.

**Cheryl Gallant:** An attack by a drug runner would not be considered an act of war in Canada.

**Marc Mes:** No.

**Cheryl Gallant:** What about the pensions for the Coast Guard? Again, it's going to be collaborating with the military on surveillance, but not all adversaries see it that way. They now consider coast guards, even through you're unarmed, to be dual-purpose.

If that situation arises, how are our people, who may undergo some physical injuries, maybe career-ending injuries, protected in the way that a military member would be should that circumstance avail itself?

• (0905)

**Marc Mes:** I don't know if I necessarily agree with the assertion of dual purpose. The security mandate is an additional and complementary mandate, and it leverages all of the Coast Guard assets on the water to be able to provide an additional service through the collection and receiving and sharing of information. As such, it's not an added risk to our Coast Guard employees.

**Cheryl Gallant:** In the worst-case scenario, if there's a coastal military attack and the Coast Guard must engage through collaboration and interoperability with the military, how are your assets and your personnel designated so that the civilian maritime emergency that happens concurrently or a fishing vessel sinking would have

the top response time they would have had if they had not been consumed by a national security situation?

**Marc Mes:** To be very honest with you, our mandate continues. That is search and rescue, environmental response, and aids to navigation. If there is a search and rescue, there are international conventions whereby every vessel has to respond. We are not going to be in a situation in which we are going to be tasked in a conflict.

**Cheryl Gallant:** Are you expecting some of the members of the Coast Guard to leave if they're being folded into DND, regardless of whether they will be given a combat role?

**Marc Mes:** I suspect we will have no people leaving. I'll be very honest with you: We were very clear that we are not being militarized; we are not carrying a law enforcement role. Our crews and all of our seagoing personnel are very comfortable with that.

**Cheryl Gallant:** The current Coast Guard cutters and patrol vessels don't possess any defensive capabilities from enemy combatants, as the U.S. Coast Guard does. Are any plans under way to arm cutters or provide them with extra equipment to be collaborative and surveil and be interoperative with the Canadian Armed Forces?

**Andy Smith:** That's an open-ended question. In terms of equipment to militarize the ships, the answer is no. For either mission fits or upgrades to new builds in terms of enhancing the sensor suite and the secure communications packages, it's yes.

**Cheryl Gallant:** How long will that take, and will our ships be out of commission?

**The Chair:** We're running out of time. I'm sorry, Ms. Gallant.

Ms. Romanado, you have up to five minutes.

**Sherry Romanado (Longueuil—Charles-LeMoyne, Lib.):** Thank you very much, Mr. Chair.

Through you, I'd like to thank the witnesses for being here.

There seems to be some confusion here. I'm a very visual person, so maybe I'll help map it out for everyone.

Earlier, you mentioned that the reporting structure is that the commissioner reports to the deputy minister of National Defence. That's very clear when I'm looking at the organization chart of National Defence: There's the chief of the defence staff and there's the deputy minister of National Defence. The Coast Guard is not falling under the chief of the defence staff.

It's very clear to me that the Coast Guard is a civilian operation that augments Canada's capability with respect to maritime awareness and is an augmentation of what we can offer as well in NO-RAD. Is that correct?

I see it is. Thank you.

You provided us with a little briefing document, and I want to read out something in it, because I don't think Canadians realize just how incredible the Canadian Coast Guard is.

We talked earlier about punching above our weight. Your briefing document says this:

On an average day, the Canadian Coast Guard monitors 4,498 vessel movements, coordinates 18 search and rescue responses, assists 47 people, and saves 13 lives—

We're talking about an average day. It goes on:

—carries out 11 fisheries patrols and 11 scientific surveys with partners, surveys 3.5 km of navigational waters, and receives 6 pollution event calls

Again, this is on an average day.

This work will continue. This work is not changing. What we're doing now, through those sensors, is adding domain awareness capability in the Arctic and in our three oceans. Is that an accurate assessment of the new integration into the Department of National Defence?

**Marc Mes:** That is exactly it. It's the government seeing the benefit of leveraging the Coast Guard's large presence on the water. It's a mission that we'll be able to do that is complementary to what we are currently mandated to do.

Thank you for recognizing the work of the Coast Guard. As we have mentioned, it's an organization of only 6,000 people, 3,000 of them seagoing, and we're able to help provide these services to Canadians.

● (0910)

**Sherry Romanado:** My colleague MP Idlout wanted to ask a question. I know she didn't have the opportunity because it required unanimous consent, but she brought up the question about search and rescue in Nunavut.

Could you answer that? What is the current situation with respect to search and rescue capabilities for Nunavut?

**Marc Mes:** Search and rescue in the Arctic is becoming more and more predominant as the climate changes. Since 2015, our support for Coast Guard auxiliaries has increased from 15 to 41 Coast Guard auxiliary units. We have established a Rankin Inlet response unit, a critical Arctic piece, and we continue to assess on a daily basis, through what we call risk assessments, all of the areas across the country on the need to either augment or collaborate.

Lastly, it's an engagement with Inuit and first nations whereby they're included in that, and the auxiliary is a really good example. We continue to look at the needs in all areas of Canada from an assessment perspective of whether or not they need to be further augmented.

**Sherry Romanado:** In terms of the Arctic, we do have a neighbour to the north of us, and I'm not talking about Russia. I'm talking about the United States and Alaska.

Given the augmented capability in domain awareness, could you elaborate a little on how we could be assisting in NORAD defence by using some of the technology and capabilities that the Coast Guard brings to the table?

**Marc Mes:** We work very collaboratively with our U.S. Coast Guard colleagues, as we do with our navy colleagues. We exercise together, and we work together. We own and work on the maritime environment from an information-sharing perspective, and we are sharing that with our key domestic defence, security and intelligence partners, but that is also then provided with some of our partners that have concerns in the Arctic—the U.S. is one, and Norway

and Denmark. There's a collective effort under the Arctic Coast Guard Forum, ensuring that we are ready and able to respond to situations.

Having a greater awareness of what's on the water helps the Coast Guard prepare for situations that we have to respond to. It doesn't necessarily have to be a security perspective; it also can be from a safety perspective, and we talk about cruise ships or an environmental response and how we work together.

From a NORAD and a maritime warning perspective, it's being able to provide the information that can help support that effort as well.

**The Chair:** Thank you, Deputy Commissioners, for your testimony and for being here today to enlighten us in terms of the integration of the Coast Guard and the Department of National Defence, as well as the added facilities in regard to what you already do.

With that, on behalf of our committee, I thank you for your service, for your fleet and for all those who participate in keeping us safe. Up in the north, you're providing that surveillance and enabling Canada to be well represented.

I'm going to suspend for a moment to move to the second half of our session, with regard to NORAD modernization.

● (0910)

(Pause)

● (0920)

**The Chair:** Pursuant to the motions adopted on September 16 and September 23, the committee is meeting to continue its study on the modernization of NORAD.

I'd like to welcome our witnesses. We have Andrea Charron, director, centre for defence and security studies, University of Manitoba; and Peter Bates.

I appreciate you both for being here.

Andrea, you're on Zoom. With the buttons in your system, use the hand function and the mic with regard to language interpretation.

Mr. Bates, if you would, please consult the card to make sure that we provide for proper feedback and so that incidents don't occur. There's language translation there as well.

I will now invite Andrea Charron to make her opening statement.

You have up to five minutes.

**Andrea Charron (Director, Centre for Defence and Security Studies, University of Manitoba, As an Individual):** Thank you, Mr. Chair, for the invitation.

I want to focus my remarks on the importance of NORAD modernization for NATO and allies, the need for integrated air and missile defence, and a dedicated, named operation for the defence of Canada.

A defended North America means that allies and NATO are stronger. Given that many of the vital supply chains and defeat capabilities—including NATO Joint Force Command Norfolk—on which allies depend are based in North America. If it is not defended, then allies can be held at risk.

The functional logic that led to the establishment of NORAD in 1958 still stands. NORAD has been the front line of defence for North America ever since. The world is in a new age in terms of the variety, speed and accuracy of air and missile threats that demand integrated air and missile defence. This is the goal of golden dome, NORAD's mission to represent a component of IAMD. However, its integration into a system of systems within a single chain of command vital for IAMD does not exist yet, and, as suggested by James Fergusson, should be the goal for Canada and the United States.

General Guillot, commander of USNORTHCOM and NORAD, envisions three domes that would make up the golden dome for America—a domain awareness dome, of which NORAD is essential; an air dome for aircraft, UAS and cruise missiles, which again includes NORAD; and an ICBM dome.

This means that the United States will not have one exquisite system but several systems that need to be linked initially with off-the-shelf sensing, queuing and defeat systems of which Canada plays an important role, and from which it can benefit with Canadian-based systems. Canada has the option of refusing to be part of golden dome, which would result in the United States deploying over-the-horizon radar and land-based defeat capabilities near the Canada-U.S. border, violating Canadian airspace as necessary, and flying in the face of the logic of a joint approach to the defence of North America.

It also risks the marginalization of NORAD, which is cancellable on 12 months' notice. This would also put more pressure on our ally, Kalaallit Nunaat—Greenland. If Canada is not a participant in the defence of North America, there are other strategic locations to exploit.

The priority for North American allies is domain awareness. This includes sea floor-, land- and space-based systems, and NORAD modernization anticipates many of these systems. However, linking them, protecting them, analyzing the data and ensuring the CAF has the digital backbone and zero trust-compliant links with the United States and allies cannot be underestimated.

NORAD and NATO need to share more information and conduct exercises together to signal to adversaries that there is no seam between North America and Europe to exploit. Greenland is on the edge of this seam but is now part of USNORTHCOM. Canada needs to get to know the Danish Armed Forces better. We need liaison officers. We need to exercise with them, and we need to think of Greenland as integral to North American defence. A Canada-Greenland-Denmark co-operation agreement would further knit NORAD and NATO efforts.

While attention to the northern approaches is important, we cannot forget the western, eastern and southern approaches. The United States is opaque on far too many NORAD-related projects. The Permanent Joint Board on Defense meets too irregularly.

Basics like the fact that there is no named operation for the defence of Canada can be fixed immediately. Every time the quadruple-plus-hatted 1 CAD commander scrambles the jets, he draws from a generic O and M budget. Two of the most basic needs of the military—operations and maintenance—are lumped together, so Peter must steal from Paul for what is the number one priority of Canada, which is its defence.

I have some recommendations for the committee.

First, present a categorical multi-party statement that the defence of Canada is a core national interest and table it in Parliament.

Second, name NORAD operations in Canada and supply a dedicated budget.

Third, ensure that NORAD modernization remains the number one CAF priority and that projects are operational as soon as possible. Prioritize domain awareness projects and resist the urge to add to the CAF agenda.

Fourth, recommend a Canadian NORAD czar to coordinate whole-of-government actions and lobby the U.S. government. The CAF and NORAD cannot fulfill this role.

• (0925)

Finally, ensure that the functional logic that created NORAD guides all discussions.

Thank you.

**The Chair:** Thank you; I appreciate your opening statement.

Peter Bates, you have up to five minutes as well.

**Peter Bates (As an Individual):** Thank you, Mr. Chairman and members of the committee.

Good morning.

My name is Peter Bates and, from 2014 to 2019, I served as the Canadian political adviser to the commander of NORAD, providing strategic insight and policy advice to the command.

Since 1958, NORAD has guarded the skies and approaches to North America. Unfortunately, the NORAD we have today is not the NORAD we need. We are now engaged in a war with Putin's Russia in Ukraine, in Europe and here at home. Russia's leadership have repeatedly declared that they see themselves at war with NATO and that Ukraine is only the beginning. While they often lie, in this case we must take them at their word. Flagrant Russian violations of allied airspace, industrial sabotage, attempted murder in Europe and ongoing efforts to undermine our societies and democracies demonstrate the seriousness of their intent.

Through two world wars and beyond, North America's critical value to our friends and allies has been the ability of Canada and the United States to project combat power, military forces and munitions overseas to Europe and the Asia-Pacific. Our current adversaries, Russia and China, have invested heavily in anti-access and area denial capabilities to prevent us from doing so effectively in the future. Imagine how much more effective those capabilities will be if they can also disrupt and degrade our ability to even dispatch forces, equipment and munitions from North America.

Russia's aerial bombardment of Ukraine already demonstrates the damage that modern conventional weapons can inflict. Ukraine's targeted response against key military, industrial and infrastructure targets within Russia itself illustrates the potential of such a campaign to weaken and disorient an opponent, ostensibly even one more powerful.

NORAD's wartime mission must be to defend those assets key to our ability to project military power to support our allies and to defeat our adversaries overseas. Canadian and U.S. defence strategy has always been that we will fight forward to defend ourselves at home. NORAD must be the shield above North America that permits us to fight and win overseas.

Unfortunately, it is a long time since either Ottawa or Washington regarded NORAD as a genuine warfighting command. For Ottawa, NORAD has become a symbol of our unique partnership with the United States. For Washington, NORAD is a quaint and largely ignored adjunct to United States Northern Command.

Current Canadian plans for NORAD modernization emphasize improved sensors, domain awareness and strengthened command and control. This is vital but not sufficient to meet our continental defence needs. While you cannot defend against threats that you cannot detect, you cannot defend if you cannot defeat at least some, if not all, of these attacks. Today, NORAD is only marginally capable of doing either of these things.

NORAD's last major modernization was the binational North American air defence modernization of the 1980s, responding to a commonly agreed threat from the Soviet Union in an era of partnership and growing economic integration. This is not the situation we face today.

Under the Trump administration, the bilateral partnership we have enjoyed for decades with the United States is over, at least for now. Trump's tariffs and threats demonstrate a personal animus against this country. It is unlikely that the Trump administration would even agree to a mutually beneficial joint NORAD modernization effort. Trump would probably insist on additional payment

by Canada to the United States for the protection that NORAD provides. I regard his golden dome missile defence initiative as a similar rent-seeking effort, not a serious, achievable defence program. If NORAD and its modernization attract presidential attention, Trump may even threaten to withdraw from the NORAD agreement completely.

In short, we are already at war. NORAD must be postured and provisioned to defend key national assets critical for the protection and support of Canadian and U.S. forces outside of North America, to support our partners and allies, and to engage in combat with peer adversaries overseas if necessary.

The Trump administration is not a reliable partner for Canada and is fundamentally opposed to the bilateral partnership that NORAD represents. We must continue to work with the United States where it is in our interest and to our benefit, and we must nurture relationships with those in the U.S. who continue to value that partnership, like General Guillot. NORAD remains a valuable forum for that effort.

However, we must be careful that NORAD does not become a focus for Trump's anti-Canadian impulses or rent-seeking initiatives. If the Trump administration were to decide to withdraw from the NORAD agreement, it would be extremely difficult, if not impossible, to restore it with any future U.S. administration of whatever party.

Thank you.

● (0930)

**The Chair:** Thank you, Mr. Bates.

We'll proceed with our first round of questions for up to six minutes.

Ms. Gallant, you have the floor.

**Cheryl Gallant:** Thank you, Mr. Chair.

First of all, Ms. Charron, you mentioned the NORAD czar. Who would be best to fill that role?

**Andrea Charron:** I don't have a particular individual in mind. It has to be somebody who understands NORAD and the Canada-U.S. defence relationship well and somebody who is respected by the U.S. and Canada and could pull together not only efforts by the whole of Canada but also efforts by the United States. I suspect it would be a civilian. It should be a civilian. They may or may not have a defence background. I'm thinking about the role that Brian Mulroney played, on many occasions, to try to lobby the U.S. government. Sadly, he's no longer with us.

**Cheryl Gallant:** The Arctic Archipelago is beyond North American long-range radar. Given the satellite coverage gap that's coming, how can we put a stopgap into place so that we have coverage there, even though there will be absolutely no eyes on it for a period of time?

**Andrea Charron:** This is where the NORAD modernization projects are thinking about this. There is the Arctic over-the-horizon radar system that will be coming online, and there is the AWACS. We do have satellite coverage. We do have the benefit of allies as well. You're right: We have a gap between the north warning system eventually reaching the end of its operational life—and we are going to extend that for as long as possible—and these other systems we're waiting for, the Arctic and, potentially, polar over-the-horizon radar systems.

**Cheryl Gallant:** You mentioned what was needed. What is the shortest time frame to fill the stopgap, until that equipment is put in place for the modernization?

**Andrea Charron:** I believe most of the dates are into the early 2030s. Anything that the Government of Canada can do to accelerate them and bring them online faster is helpful. That's why I said we should not add to the CAF agenda while it has this as its number one priority.

**Cheryl Gallant:** Mr. Bates, if Canada decides not to be part of golden dome and if we don't offer any finances, what measures could the current U.S. government take to pay for our mutual defence? If we're not going to contribute to golden dome, and if we're going to receive the benefits, how could we be made to pay?

**Peter Bates:** We're not necessarily going to receive the benefits of golden dome if we're not participating in the program. The United States previously, with the existing missile defence system, made it clear, when we did not agree to participate in anti-ballistic missile defence, that we would not necessarily or inevitably be covered by that particular system, which was designed to defend the territory of the United States.

The president has already made statements in which he said that if Canada were to become the 51st state, it could get golden dome for free, and if not, they're going to charge us up to \$80 billion.

**Cheryl Gallant:** In your remarks, you mentioned that we “must take” Putin and Xi Jinping “at their word”. Why do we have to take them at their word?

• (0935)

**Peter Bates:** It's due to the continuing incursions into NATO airspace in Europe. The sabotage, including bombings, explosions, fires and attempted assassinations of industrial figures, demonstrates that the Russians are quite seriously at war with us. The problem is that we have fallen into the trap of referring to what we call “hybrid” war or “grey-zone” war. I don't like the terms “hybrid” or “grey zone”. I think we need to come forward and accept the fact that we are in fact not in the opening stages but in the middle stages of an ongoing conflict with the Russian Federation.

**Cheryl Gallant:** In your estimation, is the Canadian public aware of this? If not, how should it be made aware?

**Peter Bates:** I am hoping to make them more aware through appearances like mine, today, before this committee, and I thank you for the invitation.

I think people are becoming aware. I think the government is certainly aware, if you look at the programs the Prime Minister has indicated with regard to CAF modernization and CAF recapitalization. If we look at our allies, the German government, for example, has announced that it intends to have a regular armed force of

260,000 personnel by the 2030s. The French government indicated some time ago that they are preparing for a major war in Europe.

I think, around the world, particularly among our allies, there is the recognition that we are already in conflict. We are already in a war. We are providing incredible materiel support to Ukraine as it fights on our behalf.

**Cheryl Gallant:** You mentioned grey-zone and hybrid warfare. What would it take, do you think, to trigger a kinetic response on the part of North America or Europe?

**Peter Bates:** Right now, a full kinetic response from the alliance would require Russian incursion into an allied country. The most likely victim would be the Baltic states, where we have the Canadian brigade right now in Latvia.

**The Chair:** Thank you, Mr. Bates.

Thank you, Ms. Gallant.

Viviane Lapointe, you have up to six minutes.

**Viviane Lapointe (Sudbury, Lib.):** Thank you, Chair.

Mr. Bates, the modernization program introduces massive new digital infrastructure. We've heard previous testimony about the fragility of a single point of failure incident. In your opening remarks, you mentioned that Russia and China may have the ability to prevent our deployment of defence. Are you talking about the disabling of digital infrastructure? How should Canada build our cybersecurity and redundancy into these systems from day one? What lessons can we draw from allied modernization efforts as well?

**Peter Bates:** Digital infrastructure is not the only vulnerability I want to highlight. The other vulnerability that we're facing is that, throughout the Cold War and up until 1991, Canada and the United States had an abundance of military facilities. The United States had half a dozen embarkation points for U.S. military forces to leave the United States. It now has two. The example that comes to mind is this: If the RAF had depended on two major operating bases in the Battle of Britain, the Battle of Britain would have turned out very differently. Today, in Canada, we have two major operating bases for our fighter force. That's it. The ability of the Russian Federation in particular to attack those bases from within its own territory has only increased over the last 20 years.

Yes, the digital infrastructure is one risk. We can address that by multiplexing, by producing alternative command centres, as we have in the NORAD construct. We have the command centre in Colorado. We have the command centre in Winnipeg. We have the command centre in Florida. We have one in Alaska. If one of those command centres is disabled or is out of communication, others can pick up the slack. Similarly, we can.... In fact, in some ways, with digital it's much easier to switch those kinds of capacities. It's something that we need to be aware of, and we need to be very careful in installing this digital infrastructure. We also need to be very careful in looking at our physical infrastructure and the quantity of forces, equipment and munitions that we have to deal with real-world conflict.

**Viviane Lapointe:** NORAD modernization places a really strong emphasis on achieving all-domain awareness, and that's integrating information across the air, maritime and land space and the cyber domains. From your operational experience, what are the biggest integration challenges in achieving that vision? Where is Canada best positioned to add unique value with that?

**Peter Bates:** The unique value that we've always had at NORAD is the incredible capability of the Canadian Forces members. We have some of the best-trained, most effective military members. We just have too few of them. The folks I worked with in NORAD for five years, both Canadian and American, were top-class people trying to do the best work they possibly could for both of our countries. We have sent our best people down to Colorado. We have many of our best people at DRDC, looking at the issues of over-the-horizon radar. One of the issues with over-the-horizon radar is that traditionally it hasn't worked over the Arctic because of atmospheric disturbances. They've done an enormous amount of work to try to obviate that. We may, in fact, have the potential of an over-the-horizon radar that will work in the Arctic, which is incredible, and it's Canadian. In many ways, it's a Canadian advance. I would say that that's where our value-add is. We think hard, we work hard, and our folks know what they're doing.

• (0940)

**Viviane Lapointe:** Thank you.

Dr. Charron, modernization investments also expand Canada's operational reach in the north. From your perspective, how do these initiatives enhance Canada's ability to monitor and respond across Arctic regions? What significance do they hold for strengthening our northern defence and situational awareness capabilities?

**Andrea Charron:** Because Canada has the second-largest Arctic and the largest coastline in the world, if Canada has a better picture and understanding of what's happening in our Arctic, that information and intelligence is absolutely vital for our allies. What we don't want is to be seen as a weak link, so that adversaries can exploit us in the Arctic and then we are held hostage. That's what it does. The rangers, of course, are a big part of that. We cannot underestimate that their eyes and ears are essential. However, it is going to be these new technologies, these space-based systems.... I would add to Mr. Bates's comments that Canada has space-based expertise, and allies really want more of it. I would lean into that.

We still have what we call the "tyranny of distance". Anything we can do to make it easier for the Canadian Armed Forces to get into the Arctic as quickly as possible is going to be really helpful.

That's where, of course, the Coast Guard's moving to the DND is going to be helpful, too, because now they can collect security-based information.

**Viviane Lapointe:** Dr. Charron, I appreciate the recommendations you provided to the committee this morning.

From your research on NORAD and continental defence, how does Canada's current modernization agenda position the binational command to address evolving threats across new domains such as space and cyber, in addition to traditional air and maritime environments?

**Andrea Charron:** Well, it is going to be a help, but we have to remember that NORAD has responsibility right now for just one and a half domains: the aerospace warning control and only maritime warning.

That being said, things like the Arctic over-the-horizon radar system are going to be essential, not only for NORAD but also for civilian agencies, to give us a better understanding of what's happening.

What we really want to do is to make sure that we are able to link the systems and also that other government agencies can maximize their operations via the use of this information. That means we really all have to be on the same page. We have to push and pull intelligence and data, and we have to be able to produce a common operating picture. We do that reasonably well in a maritime sense, but we're going to have to get into the habit of making it all domains and everybody instantaneously.

**The Chair:** Thank you, Ms. Charron.

Mr. Savard-Tremblay, you have six minutes.

[*Translation*]

**Simon-Pierre Savard-Tremblay:** Thank you, Mr. Chair.

I'd like to thank both witnesses for their presentations.

Mr. Bates, you described Canada as being extremely vulnerable. In concrete terms, what are the main shortcomings of NORAD at present that could compromise the defence of North America?

**Peter Bates:** NORAD's current shortcomings affect three areas.

[*English*]

Those are lack of munitions, lack of platforms, lack of infrastructure and aging sensors. A lot of work has been done in NORAD with regard to improving the sensors so that they can actually detect some of the current threats. It's not perfect. There are vulnerabilities.

Many of the munitions that the United States and Canada have purchased over the last 20 years have been in what I call “boutique lots”. If we found ourselves in an aerial campaign similar to what is currently being conducted over Ukraine and Russia, we would run out of munitions very quickly.

As I've said before, the CF-18 may be an excellent platform, and the F-35 could be a great aircraft, but as Stalin noted, “Quantity has a quality all its own.” No matter how good your platform is, the same platform can't be in two or three places at the same time.

● (0945)

[Translation]

**Simon-Pierre Savard-Tremblay:** You said that the Canadian government was basically just checking the modernization box and saying that it was done. That's what you said.

What follow-up and accountability measures would you tend to recommend now to prevent modernization from being just a kind of public relations exercise?

**Peter Bates:** As I suggested in my remarks, the Canadian government must accept and inform the Canadian public that NORAD has a real combat role. It's not just a symbol of our partnership with the United States. It's not just about controlling civilian aircraft and preventing them from being hijacked.

In the context of war, as is the case today, NORAD plays a key role.

**Simon-Pierre Savard-Tremblay:** The pan-domain command and control concept is a purely American doctrine. There's no authenticity in just following that path. There's no sovereignty over data or anything else.

[English]

**Peter Bates:** The U.S. version of all-domain command and control has been taken up by virtually all of our allies, NATO and otherwise, although we use different words. Some refer to “pan-domain” as if that makes it more sovereign and independent.

It reflects the fact that in the current combat situations that we will find ourselves in, air, land, sea, cyber and space will all be intimately entwined. The digital gives us the capacity to combine the information and to advance the control and planning of all of those in all of those domains.

Yes, there is a need for all-domain, pan-domain and joint and combined domain, but it has to be balanced with the individual sovereign needs, sovereign capabilities and legal limits of our various partners.

[Translation]

**Simon-Pierre Savard-Tremblay:** Could you also comment on the fact that Canada lifted restrictions on missile defence activities?

**Peter Bates:** When the Reagan administration introduced the idea of a strategic defence initiative dubbed “Star Wars”, Canada was invited to participate but declined. Afterwards, there were issues with NORAD. Some doors were completely closed, and we continued to suffer the impacts for decades.

**Simon-Pierre Savard-Tremblay:** There have been impacts, but the various versions of this program, dubbed “Star Wars” under

Reagan and later called a missile defence shield under George W. Bush, have all been proposed at contentious times. For example, under George W. Bush, Iraq had just been invaded and we had no desire to join in. We said it was just more American imperialism. There were, however, reasonable grounds.

Why do you think it would be perfectly legitimate to join today?

**Peter Bates:** I think it's absolutely necessary today, but, as I said, it doesn't necessarily have to be done through Mr. Trump's golden dome.

[English]

However, General Guillot has tried to make a purse out of that particular sow's ear.

We were right to say no to missile defence when we did. In the current circumstances, it is not correct for us to stay out of missile defence today, because of the prevalence not of nuclear missiles but of conventional ballistic missiles, conventional cruise missiles and conventional drones. We need to have a roof over our heads that is able to deal with all of those, and we need to do it between ourselves and the United States.

[Translation]

**Simon-Pierre Savard-Tremblay:** Now let's talk about hypersonic missiles. Should we develop our own capabilities or leave it entirely up to the United States? I imagine your answer will be that we need to develop our skills, but how could Canada better align its innovation policies with the development of hypersonic infrastructure?

For example, experts in the field told us that they would have the expertise to do this at Valcartier.

**Peter Bates:** We absolutely need to have sovereign capabilities when it comes to missile defence. I noticed that, in the Department of National Defence's planning for NORAD modernization, it talks about the

[English]

GBAD, or ground-based air defence.

● (0950)

We should lose the previous allergy to ballistic missile defence. It doesn't matter whether it's ballistic, cruise, drone or whatever. We should be dealing with an integrated missile defence system, and we in Canada should possess capabilities of our own, both for our forces abroad—forward and in Latvia—and for defending our critical infrastructure and critical needs here in Canada, and that should include the capability to engage all missile threats.

**The Chair:** Thank you, Mr. Bates.

For the second round, it's over to you, Mr. Anderson. You have five minutes.

**Scott Anderson:** Thank you very much.

Mr. Bates, you mentioned Ukraine. Can you explain, for the benefit of Canadians, what that conflict has to do with Canada? There seems to be a tendency among some people to view them, to paraphrase Chamberlain, as people far away about whom we know nothing.

**Peter Bates:** Meanwhile, we are in our “fireproof house”.

When I was at NORAD, I thought one of the most important things I wrote for the commander was after the 2014 invasion of Donetsk and Luhansk. Throughout his career, President Putin has accelerated and escalated, starting, frankly, with the war in Chechnya, the war against Georgia, his invasion of Crimea and his seizure of Donetsk. Inevitably, in his own mind and as he has made clear in statements, he intends to go to war in a full-on conventional conflict with NATO.

If Ukraine is not successful in its defence, and if we foolishly permit some kind of ceasefire that allows Russia to hold on to what it has taken, he will continue his preparation. He has not remanaged the entire Russian economy on a wartime footing solely to conquer Ukraine. His intention is to beat us.

**Scott Anderson:** Okay.

Dr. Charron, would you agree with that assessment?

**Andrea Charron:** Yes, I would. The reason the world is so tenuous these days is that we have not one but two peer competitors. At the same time as we're worrying about this proximate, persistent threat that is Russia, we've also got what the U.S. calls the pacing threat that is China.

**Scott Anderson:** Thank you very much.

At a very high level, in terms of air warfare, what did we learn from that conflict, from the Ukrainian conflict?

**Peter Bates:** We learned that drones are incredibly difficult to deal with, and that you really do need a multilayered system. As my boss at NORAD used to say, using a million-dollar missile to shoot down a \$50,000 incoming drone is not a good use of money, a good use of time or a good use of effort.

**Scott Anderson:** In terms of the ability of Canada's CF-18 fighter fleet, how are they able to defend in the north? How effective are they?

**Peter Bates:** They will be able to defend in the north with great difficulty.

**Scott Anderson:** Dr. Charron, would you agree with that?

**Andrea Charron:** Yes, I would. They're old. Metal fatigue is a real thing, and it's a generation-four fighter aircraft that's going up against potentially generation five, five and a half and six.

**Scott Anderson:** In terms of surface to air in the Arctic, do we have anything and do we need anything?

**Peter Bates:** At the moment, the surface-to-air capability the Canadian Forces have is forward in Latvia.

**Scott Anderson:** Okay, so we have no Patriot systems in the north.

**Peter Bates:** We have no Patriot systems at all.

**Scott Anderson:** Do we have a long-range, stand-off surface-to-surface weapon like the Typhoon?

**Peter Bates:** The announcement is that the Canadian Forces will be obtaining HIMARS, the artillery rocket system. That can also fire a longer-range missile, but I have not seen any indication that we intend to purchase Typhoons.

**Scott Anderson:** We're not actually moving forward on that.

**Peter Bates:** We're moving forward on HIMARS, absolutely, but on Typhoon I don't know.

**Scott Anderson:** Okay. My understanding is that for Arctic defence, the ground army is not that important. It is mostly fleet, and mostly air and mostly sea. Is that correct?

**Peter Bates:** That is correct at present, although, again, I agree with my former commander that we'll be fighting through but not necessarily over the Arctic.

**Scott Anderson:** Okay, good.

Russian subs can go under the ice and we can't, or do we have anything that can actually go under the ice?

**Peter Bates:** I believe the Victoria class might be able to penetrate some of the edge of the ice pack for a short time, but certainly the intention with the submarine procurement program is to purchase a new generation of submarines that will be capable of operating under the ice.

• (0955)

**Scott Anderson:** We need sub bases in the Arctic, then. Would you agree with that?

**Peter Bates:** Not if we get the appropriate platforms. They could easily be staged from Esquimalt or Halifax on patrols of the Arctic. With the Coast Guard, I don't think we would actually need additional infrastructure in the Arctic to support those vessels.

**Scott Anderson:** My understanding is that it takes weeks for it to get from either the east or the west coast to the Arctic.

**Peter Bates:** My guess is that with the proper platform it could take up to a week to get to the top of the Arctic, yes, from either side.

**Scott Anderson:** Okay, good.

Dr. Charron, would you agree about the submarine bases, that we don't need them in the Arctic?

**Andrea Charron:** Not at the moment, and again, this is where we have the benefit of allies, and we can't forget that. That's why we are part of an alliance whereby we can benefit from others' infrastructure.

**Scott Anderson:** In terms of, for the benefit of—

**The Chair:** Mr. Anderson, I'm sorry, it's time.

Chris Malette, you have up to five minutes.

**Chris Malette:** Thank you, Chair.

My first question is for Dr. Charron.

In your estimation, how are the Department of National Defence's efforts to expand pan-domain awareness, particularly in Canada's Arctic and maritime approaches, progressing?

**Andrea Charron:** They're progressing slowly, but it's because it's incredibly complicated. We have to agree on a cloud system to house all the information and make sure it's secure. At the same time, we're running up against deadlines like the 2027 U.S. zero trust-compliance end date to make sure that legacy systems to NORAD aren't cut off because they're not zero trust-compliant.

This is incredibly difficult, and we have to take the Canadian Armed Forces with a digital backbone that hasn't appreciated and is only now appreciating the importance of AI and quantum mechanics, which are going to require eight different networking systems.

**Chris Malette:** Okay, and further to my colleague Ms. La-pointe's question, are there any challenges that must be overcome in developing DND's pan-domain command and control concept? How's NORAD ensuring interoperability between Canada and U.S. systems in its upgraded command and control architecture?

**Andrea Charron:** At the moment, we do have integrated command and control. The concern, for example, is that right now, if we can't push and pull air-tasking orders into the CANR command, that's going to limit us. The building there was purpose-built in the 1990s, and we're now dealing with new generations of technologies, which is why it's slated to be rebuilt.

In Canada, we tend to be one and done: We've modernized. That's it—we're done. We have to think about this as a continual upgrade and be able to change things as technology changes as well.

**Chris Malette:** Thank you very much, Dr. Charron.

Mr. Bates, some of your testimony this morning has been a little stark—some might say bleak—for instance, in your assessment of NORAD being a quaint organization in the eyes of our American friends. How would you see, then, that we move forward without...? Are you recommending that we try to fly under the radar of President Trump and Pete Hegseth in order to achieve anything in this atmosphere? I'm trying to puzzle out where you would have us go forward.

**Peter Bates:** That was the question I had when I put my presentation together. One, NORAD requires modernization and refit, and two, how do we do it with the United States, which is the partnership we have today?

I think that many parts of the modernization plan of DND are absolutely appropriate and should go ahead: the munitions, the air-to-air missiles, the domain awareness and the command and control. We should continue those, and we should work, as I suggested in my notes, with those on the American side who, frankly, are in our corner, and I would include the current commander of NORAD and the folks in the headquarters.

A lot of the modernization stuff will never get to the political level until you get to the point where it's \$50 billion, and that will, in fact, attract the attention of the secretary of defense and the President of the United States.

There are a lot of things that we can do on our own. There are a lot of improvements we can make: a new fighter aircraft, airborne early warning and control aircraft for Canada, additional tankers for Canada and a ground-based air defence system. These are all things we can do that will contribute to NORAD modernization. The new radars that we've put in place in Canada will contribute to NORAD modernization.

The more we can do on our own, the better off we will be, because we'll then be able to provide those capabilities to our American partners, particularly those who appreciate them.

• (1000)

**Chris Malette:** Further to that, Mr. Bates, you suggest, then, that we compile a cumulative list, if you will, of some of those points, so that we can counter, I guess, whenever a threat comes to us in the form of that big bill that perhaps Mr. Trump might present going forward. Do you think it's sufficient, what we're planning and what we've already started down the road with?

**Peter Bates:** I don't think it's sufficient to mollify the concerns that President Trump has with regard to this country, and I think it would simply attract his attention. I'm afraid that for DND... Particularly in the time that I was in NORAD, there was very much a sense that if we do certain things, if we spend certain money on NORAD modernization, we can mollify the Americans with regard to our defence spending overall.

I think the addition of things like the pay increase for the Canadian Forces and gathering the Coast Guard into DND were basically accounting tricks, so that we can move forward and say that we are spending more of our GDP. I am less interested in how much of our GDP we spend on defence than on the actual military capabilities that come out at the other end, which are what we need to be able to defend ourselves.

**The Chair:** Thank you, Mr. Bates.

**Chris Malette:** If I might sum up, I share your concern. I certainly hope that the cooler heads you're speaking about can prevail, but unfortunately, as we've seen with Mr. Trump and Mr. Hegseth, sometimes the cooler heads get lopped off in the equation.

Thanks.

**The Chair:** Monsieur Savard-Tremblay, you have two and a half minutes.

[Translation]

**Simon-Pierre Savard-Tremblay:** Thank you, Mr. Chair.

Dr. Charron, you talk about a gap where we're vulnerable. I'm sure you want to talk about a potentially difficult transition that could reveal some fragility. When will we be at the critical period between the time we abandon aging systems and the imminent introduction of new capabilities?

[English]

**Andrea Charron:** Thank you.

We're vulnerable now. We're at risk now. Anything we can do to get these systems online is essential.

We shouldn't forget that we have a lot of Canadian companies, such as GSTS, that have purpose-built platforms that might help us integrate some of the information. They are collecting information: satellite-based information, AIS, etc. We should be leveraging that as well.

[Translation]

**Simon-Pierre Savard-Tremblay:** I understand that there is a clear shortage of qualified personnel, which you think is slowing down modernization.

Issues also include equipment problems and organizational and cognitive architecture, as you've said several times.

Institutionally, what changes should we be making?

[English]

**Andrea Charron:** I just want to clarify: I'm not saying that our personnel aren't highly qualified, but new technologies are sometimes coming online faster than the training cycles can catch up with.

I think we have really excellent commanders who understand what has to be done. It's often, though, that the desire of the CAF versus the rest of government that has to make it happen is lagging, so anything we can do to get all of the government and all of the various agencies and federal departments online as quickly as possible, understanding that what they do is also part of our defence and security architecture, is essential.

We don't have an integrated defence strategy like that of the U.K. I'm suggesting that's maybe something we need to do to make sure that every agency understands its role in defending Canada.

**The Chair:** Thank you.

It's now over to Mr. Kibble. You have five minutes.

**Jeff Kibble:** Thank you, Chair.

Mr. Bates, you mentioned "accounting tricks". Do you see the Coast Guard as bringing capability to the defence of Canada and contributing to NORAD?

**Peter Bates:** Absolutely, I do.

As the deputy commissioners made clear, the Coast Guard has capabilities with regard to surveillance and maritime awareness and on things like infrastructure, for example. We've seen efforts by the Russian shadow fleet to destroy subsea infrastructure in the Baltic Sea. We can expect to see those kinds of attempts if the conflict continues in the wider Atlantic and possibly even in our own waters.

The Coast Guard brings real capability with regard to surveillance of that infrastructure. It brings real capability in its ability to transport Canadian Forces members as necessary.

• (1005)

**Jeff Kibble:** Thank you.

You mentioned lack of munitions and supporting NORAD, and you also mentioned fighter aircraft. Do you feel that NORAD needs the support of more than 16 F-35s?

**Peter Bates:** I think that NORAD needs more than 16 fighter aircraft.

**Jeff Kibble:** How many fighter aircraft, without referring to a specific type, do you suggest that they would need to do their job properly?

**Peter Bates:** I would suggest that 88, which has been posited as the number for the future fighter fleet is, quite frankly, the minimum that we will need. If we find ourselves in a full-out kinetic conflict with Russia, we will need many more.

**Jeff Kibble:** Thank you.

To do that job properly, would you, with your expertise, recommend a fourth- or a fifth-generation type of aircraft to achieve that mission?

**Peter Bates:** My complaint has always been that the United States spends more on defence than the rest of us combined, and they spend it on stuff they can barely afford. Then they make us buy the same thing.

Fourth- and fifth-generation aircraft are a great selling point if you're Lockheed Martin. They do not necessarily provide the capabilities that we will require for the defence of Canada.

**Jeff Kibble:** During your time at NORAD, you were having conversations about the system and the forthcoming upgrades that would be necessary. When did those conversations start?

**Peter Bates:** I was in NORAD, as I said, from 2014. The conversations had begun even before I was there, but they ramped up leading to the 2017 defence statement.

**Jeff Kibble:** We understand that the north warning system, as we've heard in earlier testimony, is effectively becoming obsolete, if it's not already, and RADARSAT will also be obsolete in the very near future.

Do you think that the golden dome will bring the end of NORAD? You said that the Americans are not showing much interest in NORAD. Is that a possibility that should be considered?

**Peter Bates:** I honestly don't believe that the golden dome will be achieved in President Trump's term.

**Jeff Kibble:** That's fair.

You don't see that NORAD would be absorbed in or be part of the golden dome.

**Peter Bates:** If the golden dome goes in the direction that General Guillot has indicated, then NORAD needs to be involved, but I wouldn't want to put it under the context of the golden dome.

**Jeff Kibble:** It would be "involved with" but not "part of".

**Peter Bates:** No, NORAD is essential for the combined aerospace defence of North America.

**Jeff Kibble:** That's fair. Thank you.

Dr. Charron, you mentioned that the Arctic over-the-horizon radar system continues to see delays. Do you think this system will be sufficient to track all the types of threats that we've discussed, including non-ICBM threats?

**Andrea Charron:** The Arctic over-the-horizon radar system is going to allow us to see a bit further into our Arctic, but we won't be able to see, again, the full extent with just that radar system. There's technology we've yet to develop to make the polar over-the-horizon radar system function, so we are going to be continuously looking for land-based and space-based systems that can give us that domain awareness.

Of course, we can't necessarily anticipate what new technologies might be coming at us as a threat and whether or not these systems can keep up with them. The north warning system, as we've known for a long time, really struggles with both the low-and-slow and high-and-fast problems.

**Jeff Kibble:** Thank you.

It seems like we should be able to have a system that deals with all of these threats or problems, as you describe them. Would you agree?

**Andrea Charron:** Ideally, but it won't be one exquisite system. There's no system that can handle all of those. That's why we always talk about a system of systems. It's going to have to be many different ones that are linked together so we can queue the system that can handle a drone and then the one for a hypersonic and then the one for a ballistic missile.

**Jeff Kibble:** Thank you. I absolutely agree that it should be a system of systems. I appreciate that.

The golden dome is being pushed as a new solution. What benefits and shortcomings do you see with that proposed program?

**Andrea Charron:** I think we have to put aside the golden dome and start talking about integrated air and missile defence, because that is what the golden dome is actually trying to achieve. It won't be achieved overnight. It's going to happen slowly but surely.

For example, we are going to be hosting FIFA, one of the largest international events in the world. Right now, we have no ground-based anti-aircraft missile systems. That worries me. We need to make sure we have a way to protect our critical infrastructure—what we call our defended asset list, which is the critical infrastructure and key defence systems—so that if we were ever attacked, we could continue to fight and not be held hostage.

• (1010)

**The Chair:** Thank you, Ms. Charron.

Thank you, Mr. Kibble.

Mr. Watchorn, you have five minutes.

[*Translation*]

**Tim Watchorn:** Thank you, Mr. Chair.

Mr. Bates, as my colleague Mr. Malette said, you painted a rather bleak picture of the future of the North American Aerospace Defense Command, or NORAD. I would point to the fact that the

Government of Canada has invested significantly in NORAD modernization, to the tune of \$40 billion. I will ask you again: If you were the boss and you had \$40 billion or more to modernize NORAD, what would be your first three positive measures for Canada?

**Peter Bates:** First, I would invest in actual capabilities, not just maritime domain awareness or command and control. In other words, invest in platforms, invest in ammunition and invest in people. The \$40 billion allocated over 20 years, I guess, is not a lot.

**Tim Watchorn:** It may be less than that.

**Peter Bates:** Even though planes cost about \$200 million each, it is not enough. We need to invest more in Canada's defence to be able to protect ourselves.

**Tim Watchorn:** I assume you support the Canadian submarine patrol program to defend Canada's three coasts.

How could these submarines be integrated into NORAD's defence system?

**Peter Bates:** Allow me to answer in English.

[*English*]

NORAD has, as Dr. Charron indicated, the maritime domain awareness issue. One of the issues we have is that the Russians and the Chinese have submarines carrying ballistic and cruise missiles. The submarines we intend to purchase for their ability to work under the ice will be capable of dealing with those types of platforms before they can pose a threat to North America.

One of the biggest problems NORAD faced when I was there was that we spent a lot of time chasing arrows but were unable to get to the archers. The submarines will give us the capability in wartime to deal with the archers, presumably and hopefully before they even let go the arrows. That's a huge capability.

[*Translation*]

**Tim Watchorn:** Thank you very much, Mr. Bates.

I'm going to finish my round of questions with you, Dr. Charron. You wrote an article, "North America's Imperative: Strengthening Deterrence by Denial".

I would like you to summarize the findings of your report, please.

[*English*]

**Andrea Charron:** Thanks very much.

Essentially, what my colleague, Jim Fergusson, and I were saying was that we cannot depend on defence by punishment—that the threat of a U.S. nuclear retaliation is going to prevent adversaries from attacking us—and that's why it's essential that we have these new systems, so we can see far out and away from North America and that, as General Guillot says, he has the time to take decisions and it doesn't always have to be a kinetic response.

Because we cannot see the full extent of our Arctic territory, that's why deterrence by denial is so important: It's all about being able to see what the adversary might be thinking about doing, and then calling them out so that we can hold them at risk and say, "Here are the consequences if you continue down this path."

**Tim Watchorn:** Thank you very much.

[*Translation*]

You also talked about a czar you'd like to see lobby the United States to promote our defence resources.

Can you tell us a bit about what their role would be?

[*English*]

**Andrea Charron:** I think it's to raise awareness of the importance of NORAD in the United States. Many people in the United States don't understand what NORAD is. One of the problems is that we don't actually refer to it as a combatant command, so it's completely out of sight and out of mind, yet it is essential to the defence of the United States.

It's also really important to draw to attention the capabilities and the role that Canada plays. My real concern was that when the Chinese balloon came over in 2023, rather than saying, "Look at what NORAD is doing," the U.S. was saying, "Why is Canada involved?" Likewise, in Canada, we were saying, "Why are U.S. aircraft in Canadian airspace?" This is as per the NORAD agreement. This is the beauty of it.

Clearly, there's a lack of education, and because the Permanent Joint Board on Defense is all but moribund.... We don't have that Prime Minister and president whisperer to help get rid of challenges or irritants before they're widely in the public, and that's what we need right now, a whisperer.

• (1015)

**The Chair:** Thank you to all of you for participating today.

I have a question with regard to NORAD's system of defence for North America and our Arctic. We also are heavily involved, steadfast, with the Ukrainian war, and \$4.5 billion has been provided in support of supplies and the training of 46,000 Ukrainian troops.

More importantly, we're doing quite a bit as Canada to support that Baltic state and that area. My question, then, is on the depletion of resources and assets by Russia in this effort and how that is being affected in the region here in the north. Do we have time? That is what I'm getting at. Do we have sufficient opportunity, given Russia's lack of ability to manage both fronts, let's call it?

I'll put it over to you first, Andrea.

**Andrea Charron:** I think Russia can manage both fronts very well.

Because they can hold us at risk, they can escalate to de-escalate, and that's always been the plan in the books, that they would lob something into the North American Arctic, where it wouldn't necessarily hit anybody but would certainly make everybody else potentially back off from what's happening in the Baltics and eastern Europe, giving Russia carte blanche to do what they want.

We cannot think about defending North America and Europe separately. We have to be integrated. We have to see that the defence of North America is the defence of Europe and vice versa.

**The Chair:** Mr. Bates.

**Peter Bates:** I would say that all the western support for Ukraine has been designed to prevent Ukraine from losing, and so far it's been insufficient to assist Ukraine in winning.

The Ukrainian people and the Ukrainian military have done a tremendous job in attriting Russian conventional capabilities.

At the same time, the Russians are recapitalizing those capabilities from their factories, with their people, in order to pursue a wider war. We need to provide Ukraine with the weapons she needs to defeat Russia.

Putin's Russia needs to lose. In every case historically, when the Russians have lost—even, often, when they have won a war—it has led to fundamental political and domestic social change. Sadly, in the past, those changes were not always positive and didn't turn out well, but I remain optimistic. My first foreign posting was in Russia. I like the Russian people, but I cannot stand their government.

**The Chair:** Thank you.

Folks, with your permission, I'm going to adjourn this meeting. Before I do, I remind you that Tuesday's meeting, as you know, is not taking place. We will try to make up for that meeting in the coming weeks.

Our next meeting will be on Thursday, November 6.

With your agreement, the meeting is adjourned.







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<https://www.noscommunes.ca>