



HOUSE OF COMMONS
CHAMBRE DES COMMUNES
CANADA

Standing Committee on National Defence

NDDN • NUMBER 011 • 1st SESSION • 42nd PARLIAMENT

EVIDENCE

Tuesday, May 10, 2016

—
Chair

Mr. Stephen Fuhr

Standing Committee on National Defence

Tuesday, May 10, 2016

•(0845)

[English]

The Chair (Mr. Stephen Fuhr (Kelowna—Lake Country, Lib.)): Good morning everyone. I would like to welcome our guests, Lieutenant-General Stephen Bowes and Brigadier-General Mike Nixon. Thank you very much for coming to committee today. We have a lot to pack in this morning. However, before I give you the floor for your opening comments, I believe we have a point of order from Mr. Garrison.

Mr. Randall Garrison (Esquimalt—Saanich—Sooke, NDP): Thank you very much, Mr. Chair.

All of you know that due to travel arrangements and commitments, I missed last Thursday's meeting, but the member for North Island—Powell River was here and brought to my attention something that happened at the meeting, which I find quite disturbing. It was something that happened a lot in the last Parliament. We had not seen it yet in this Parliament. It was an attack on one of our witnesses and their credibility by Ms. Gallant.

I think witnesses who appear here at our invitation should expect tough questions, but they should expect fair questions. Therefore, I would like to give Ms. Gallant a chance to apologize on the record for her remarks about the Rideau Institute and its funding, which were completely spurious.

Mrs. Cheryl Gallant (Renfrew—Nipissing—Pembroke, CPC): Thank you, Mr. Chair.

I think my questions were perfectly in line. For one to know how an organization is being funded may reflect upon the way in which they are promoting, especially our defence. If there are outside interests, it is important for the committee to know that it is not just Canadians who are paying for the institution to go forth.

The Chair: Mr. Garrison.

Mr. Randall Garrison: Thank you, Mr. Chair. I am disappointed that rather than taking the opportunity to apologize for something that was quite obviously based on a drop-down menu on a website, which even Ms. Gallant's constituency association shares, she has essentially repeated the same attack on our witness. I'm very disappointed.

Thank you.

The Chair: We'll consider that matter closed. It's on the record.

I would like to continue with the meeting.

General Bowes, I believe you're speaking on behalf of both parties?

Lieutenant-General Stephen Bowes (Commander, Canadian Joint Operations Command, Department of National Defence): Yes, I am.

The Chair: Sir, you have the floor for 10 minutes.

LGen Stephen Bowes: Mr. Chair and committee members, good morning. My name is Lieutenant-General Stephen Bowes, and it is my pleasure to be here today to discuss Canadian Armed Forces' operations and activities in the Arctic.

I am accompanied by Brigadier-General Mike Nixon, who is the commander of Joint Task Force North, which is responsible for the planning and conduct of operations in the north, including the Arctic.

As you know, Canada's Arctic region is immense. It comprises some 40% of Canada's overall land mass, and 75% of its coastline. Its size, combined with its austere climate and conditions, present a complex environment in which the Canadian Armed Forces must be prepared to operate at any time.

To give you a sense of the challenge, General Nixon's area of operations spans four time zones, with harsh terrain, limited daylight, and poor weather conditions for much of the year, with time and space posing a significant challenge in providing a response.

[Translation]

The Canadian Arctic is expected to experience an increase in overall activity in the coming years due to developments in areas such as natural resource exploitation, adventure activities and maritime traffic; this in turn would likely give rise to new requirements for support from the Canadian Armed Forces, such as search and rescue and supporting civilian authorities in consequence management.

[English]

The Canadian Armed Forces make a vital contribution to the fulfilment of Government of Canada priorities in the Arctic. Our tasks include demonstrating a visible presence to exercise sovereignty, conducting surveillance and control of Canadian territory and approaches, carrying out search and rescue operations, and providing assistance to government partners when called upon.

[Translation]

As confirmed in the Prime Minister mandate letter to the Minister of National Defence, the Arctic remains a Government of Canada priority. The specific roles and activities of the Canadian Armed Forces in the Arctic are, however, being examined as part of the ongoing defence policy review.

[English]

As commander of the Canadian Joint Operations Command, I'm responsible for exercising command and control of all Canadian Armed Forces operations, including those in the Arctic. Those are two very important categories, NORAD and Canadian Special Operations Forces Command.

The Canadian Armed Forces maintains a presence and can bring to bear specific capabilities in order to operate in the north. As I already mentioned, Joint Task Force North, under General Nixon's command, is based in Yellowknife, with detachments in Whitehorse and Iqaluit, as one of six regional task forces under the umbrella of our Joint Operations Command.

Joint Task Force North is responsible for conducting routine and contingency operations in the north and also for the development of the Canadian rangers and Junior rangers programs in the north. Joint Task Force North also liaises with the territorial, municipal, and indigenous governments in order to prepare for rapid and effective responses to emergencies.

The Canadian rangers are a subcomponent of the Canadian Armed Forces reserve. They play a central role in the Canadian Armed Forces tasked to demonstrate visible presence and exercise Canadian sovereignty in the Arctic. The Canadian rangers are currently approximately 5,000 strong in remote locations across Canada, including about 1,700 with 1 Ranger Patrol Group, which is responsible for the Canadian north. Rangers possess unique skills, local knowledge, and expertise that allow them to carry out a wide array of tasks as part of their regular duties, including search and rescue, north warning site patrols, community evacuations, and flood and fire watch. The Canadian rangers are truly the eyes, ears, and voice of the Canadian Armed Forces throughout Canada's north. As such, they also report on both routine and extraordinary activities, such as the presence of suspicious vessels.

The Canadian Armed Forces Arctic training centre, in Resolute Bay, operated in partnership with Natural Resources Canada, provides a facility capable of supporting individual and collective Arctic cold weather training. The training centre, which can accommodate about 140 personnel, also has the capability to serve as a forward operating base if needed.

The Canadian Forces station Alert, under the command of the RCAF, the Royal Canadian Armed Forces, is a signals intelligence facility designed primarily to provide situational awareness in support of military operations. It also possesses a geo-location capability that can assist with search and rescue missions, as well as support to research conducted by other government departments in the Arctic. You will have already heard about other capabilities National Defence and the Canadian Armed Forces can leverage in support of its Arctic activities, such as the north warning system and NORAD's forward operating locations in the north.

In terms of operations, the Canadian Armed Forces conduct three major operations each year, which generally take place in the high, western, and eastern Arctic: Operation Nanook, Operation Nunaliut, and Operation Nunakput. Operation Nanook is the Canadian Armed Forces' largest annual exercise, which integrates participation from the Canadian Army, the Royal Canadian Navy, and the Royal

Canadian Air Force, as well as whole-of-government partners. The main effort of Operation Nanook 2016 will focus on a response to an earthquake event in the Yukon territory, with a defence scenario being conducted in vicinity of Rankin Inlet in Nunavut.

● (0850)

[Translation]

Notably, Op NANOOK 15 included a firefighting scenario in which Canadian Armed Forces operated with federal, territorial and municipal agencies in response to a simulated wildfire in the town of Fort Smith.

That has underscored how these training scenarios help prepare our forces for real-world events, as Canadian Armed Forces have deployed to support the current response to the wildfire in the Fort McMurray area.

[English]

Operation Nunaliut is a sovereignty-based exercise that employs southern-based Canadian Armed Forces elements as well as the Canadian rangers in High Arctic operations in the challenging period of late winter.

Finally, Operation Nunakput takes place in the western Arctic each summer to exercise sovereignty and interoperability with our RCMP, Department of Fisheries and Oceans, and Coast Guard partners.

In addition to these flagship exercises, the Canadian Armed Forces continues to train through a series of cold-weather, resupply, maintenance, and surveillance exercises each year to ensure that we are ready and have the necessary situational awareness to operate in the Arctic environment.

[Translation]

To support the execution of these operations, and to synchronize and coordinate Canadian Armed Forces activities in the region overall, the Canadian Joint Operations Command has developed a plan for the North. This is a five-year plan which incorporates our operational activities with associated infrastructure and capability requirements as well as engagement with whole-of-government and international partners. The current plan looks out to the year 2020.

[English]

Finally, as you will have heard throughout my remarks, the Canadian Armed Forces works in close co-operation with other federal, provincial, territorial, municipal, and indigenous government partners as well as our regional allies to ensure we are delivering on the government's commitments and priorities in the Arctic. For the Armed Forces, that can range from support to consequence management in the north to providing support in response to a major disaster.

●(0855)

[*Translation*]

That co-operation also extends beyond Canada's borders, as Canada has a number of bilateral arrangements for co-operation in the Arctic. For example, the Tri-Command Arctic Framework lays out a roadmap for enhancing military co-operation for defence, security and safety operations in the Arctic with the United States. Canada also co-operates with the Arctic states on search and rescue activities in the Arctic.

[*English*]

In conclusion, the armed forces continue to work closely alongside a wide range of partners to deliver Canada's needs and objectives in the Arctic.

Thank you for inviting me to appear here today. I'm pleased to respond to any questions you may have.

I'd just like to terminate my opening remarks by saying that today we have teams in the west with the folks in Fort McMurray. I can tell you how impressed I am in monitoring, from a distance, not just our team, but also the Government of Alberta; emergency response staff; firefighters—structural and wildlife—from all over the region; the RCMP from K Division, and the manner in which they've responded; volunteer organizations and the manner in which they've responded; and even the Canadian Red Cross, that organization that we've come to rely on in the most desperate of times; and Canadians, who have rallied to this with a sense of community that is truly inspiring.

Thank you. I'll answer any questions that you may have.

I brought in General Nixon. We have a regional task force structure with six joint task forces, and his focus is the north.

The Chair: Thank you very much for your comments, General Bowes.

I would like to turn the floor over to Mr. Rioux. You have the floor for seven minutes.

I would just like to remind the committee to try to focus its questions on the task at hand. There's lots to talk about in the north—I understand that—but sticking to the north as it relates to aerial readiness would be appreciated.

[*Translation*]

Mr. Jean Rioux (Saint-Jean, Lib.): Thank you, Mr. Chair.

My thanks to the witnesses for being here today.

On the environmental front, we know that global warming will bring about tremendous changes in the Arctic. As a result, this region will become more attractive. Will that have an impact on maintaining the sovereignty of our territory?

I have a few other subquestions for you. In terms of the military bases, do you think that this will lead to changes or relocation? You have an action plan until 2020. Will there be a relocation, considering the new context or the new environment created by global warming?

[*English*]

LGen Stephen Bowes: First to understand the question, we're always evolving the threats and the situation in the Arctic, as we are with any part of the world. As the situation unfolds, we adapt. We make recommendations to the Chief of the Defence Staff. If it requires new resources, he takes that information forward as military advice to the government and engages the force developers, which means primarily the services. That situation can evolve.

For the situation we have at hand, the balance between NORAD's mandate.... You've heard General St-Amand testify here, and I understand that you spent a couple of days down in Colorado Springs, so you have a pretty sound understanding of what NORAD does, what its missions are, and what its force posture is toward the protection of the continent.

Within the context, we have the resources we need to exercise surveillance from a CJOC perspective in the north today. There are always challenges in the future, and we need to be postured towards thinking about the future.

[*Translation*]

Mr. Jean Rioux: I will go back to global warming more specifically.

The Arctic will be more attractive, in terms of the various resources, such as fish, metals, and so on. In addition, we need to have control over the region.

In your view, what does that mean in terms of threats to Canada's sovereignty in the short and medium term?

[*English*]

LGen Stephen Bowes: We don't recognize at the moment the existence of a direct military threat to the Arctic. In the context of looking at Canadian sovereignty, we would look at it from the perspective that the Department of National Defence is not the lead ministry with regard to the whole-of-government team in the Arctic; there are many other players. That question, then, needs to be addressed at multiple levels across government to get an understanding of what environmental change is going to bring to the north.

I would point out that capabilities we're bringing on-line, such as the Arctic offshore patrol vessel and the establishment of the facility in Nanisivik, will give the Canadian Forces a greater posture in the north going forward, just as at the same time, as part of the plan for the north, we're building operational support hubs to be able to facilitate operations, should we be required to do so.

In terms of consequence management, however, really our focus is on our ability to respond to and reinforce other government departments who have the lead in responding to contingencies.

General Nixon?

• (0900)

Brigadier-General Mike Nixon (Commander, Joint Task Force North, Department of National Defence): As we have seen already in the short term, traffic in the north—adventurers, people with a desire to trek their way to the geographic or the magnetic North Pole—has been increasing over the last few decades as technology has enabled people to be able to conduct such undertakings.

In the long term, the effects of global warming on manoeuvrability in the north is going to be extremely gradual. A good example would be the multi-year ice that breaks off from the polar ice cap and then clogs up some of the transitways. It has, in some cases, a more negative effect than positive effect on transit in opening the sea, at least for the foreseeable future.

Having said that, we will see more people in the north, whether it be adventurers, or folks conducting exploration for resources. As General Bowes has mentioned, it's not a question of Defence, but a question of whole-of-government input and control.

[Translation]

Mr. Jean Rioux: Could this movement, and the interest in the Arctic lead to challenges to our sovereignty and borders?

[English]

BGen Mike Nixon: I would say not, assuming that individuals who do transit through the north have done so from a legal perspective—as they all do—and haven't just shown up. There's rarely a case where no one contacts Canada Border Services before entering sovereign Canadian territory. It is part of our country, including most of the waterways.

[Translation]

Mr. Jean Rioux: My understanding is that you are not seeing any threats to our borders in the Arctic. With the climate change, you don't expect our borders to be challenged. Our borders in the Arctic seem to be clearly established at an international level.

BGen Mike Nixon: No, there are no threats. We are expecting more activity, but not threats.

LGen Stephen Bowes: No military threats.

[English]

For the longer term, other departments—with the changing climate and the drive for resources by nations that aren't even part of the Arctic Council—may see players such as western Pacific nations have a greater presence in the north. However, Global Affairs Canada and others are better positioned to answer those questions, but from a military perspective there's nothing foreseen at this time.

[Translation]

Mr. Jean Rioux: Thank you, Mr. Chair.

I am prepared to share the rest of my speaking time.

[English]

The Chair: Thanks for the responses.

I'm going to give the floor to Mr. Paul-Hus for seven minutes.

[Translation]

Mr. Pierre Paul-Hus (Charlesbourg—Haute-Saint-Charles, CPC): Thank you, Mr. Chair.

Good morning, General Bowes.

I would like to understand the relationship between the Canadian Joint Operations Command (CJOC) and the U.S. Northern Command. You are the one in charge of maintaining the relationship with the U.S. Northern Command.

In your view, are the Canadian Armed Forces meeting the U.S. Northern Command's expectations from a strategic and tactical standpoint?

[English]

LGen Stephen Bowes: That's a great question, so thank you.

NORAD is responsible for air defence, aerospace defence, and it is responsible for maritime warning. A few years ago, North Command was stood up and added to the NORAD command structure. From a Canadian perspective. With Lieutenant-General St-Amand as the deputy commander there and the more than 50 years of successful history in working that binational relationship towards our collective defence of North America, we see NORAD as a great success.

NORTHCOM is still a new organization, much like CJOC, as a post 9/11 entity, if you will, just as CEFCOM, Canada Command, and CANSOFCOM were stood up in 2005-06 period, and with the CJOC merger just a few years ago.

As for the rules of organization, looking at it today is only good as a snapshot in time. For today's construct, I have no concerns about the relationship and would say that we're meeting the expectations of our respective governments and our respective bosses, noting that the change of command is different and noting that in the American context it's sometimes very difficult for American leaders to understand how Canada works. Given the size, scale, and scope of the United States, it's not easy for them, whether it's Canada or other nations, to understand how other organizations work.

The thing is, we're always looking at evolving our relationship to say that we have a responsibility as learning organizations. For every activity we do—everything, every operation, every exercise we run—we run an after-action review process. We compile lists of lessons identified. We try to develop processes and people responsible for ensuring that those become lessons learned, and we try to evolve.

We're also looking at circumstances and at how things might change, not just at what's going on today. In Operation Nanook, we'll have an earthquake scenario in the Yukon, and we'll use that to test. It's no different from using the forest fire in Fort Smith last year as an example to test our needs on a domestic basis.

As we look at the context of the world today and the threats toward North America—or the challenges—and then towards Canada, we're always asking ourselves where we are going to be five years and ten years from now. I think those are really good questions. A lot of them are about strategic political intent. Internally, we'll have that very good process after we run an exercise. As an example, with Vigilant Shield in the fall, with NORAD and NORTHCOM, we would be engaged in a process and asking how we could make it better, in that we responded to the crisis that was painted in the scenario of today, but how would it be tomorrow if the following things were different...?

That's what's going to generate a lot of very good and healthy professional dialogue. I gain a sense that you've seen that. We need to be mindful that we can't stand pat. We need to be aggressive in our thinking and we need to be looking to how we can make things better.

I offer that. I know your question is a teaser. There's something else that's in behind there.

Some hon. members: Oh, oh!

LGen Stephen Bowes: You throw it on the table. We're ready to go.

• (0905)

[*Translation*]

Mr. Pierre Paul-Hus: I have another question, but it's for General Nixon.

Let's talk about the operational forces. We know that, in Canada, various task forces have regular brigades and more sizable reserves.

In terms of the North, right now, most of your task force is made up of Rangers. To do our evaluation, we need to know some things. We know there are not a lot of threats, but we want to ensure that some sort of sovereignty is being enforced. In your view, are the resources you have for your Joint Task Force North sufficient? If not, what would your needs be?

[*English*]

BGen Mike Nixon: Thank you.

[*Translation*]

If I may, I will answer in English.

[*English*]

The force posture in the north is small, very small when you relate it to the geographic size, but relatively speaking, it is sufficient when you relate it to the population size, the population density. There's a total of 110,000 people in Canada's north, in all three territories combined.

Those Ranger elements that are in nearly every community, less 10, are the Canadian Armed Forces presence, if you will, 365 days a year. When we conduct operations, as General Bowes mentioned, for example, such as Nanook 2016, which will be an earthquake scenario in Yukon—it's not the High Arctic by any stretch, but a population density area—the resources to support the response to that incident will be from the south. That's the case with virtually every operation we conduct. We exist as a planning and execution

agency headquarters with supporting elements, but then we're augmented with operational control over elements that deploy north. They can be air force, navy, or army. In most cases, it's a combination of the three.

[*Translation*]

Mr. Pierre Paul-Hus: You said that offshore vessels were required for your operations.

Is there a pressing need?

BGen Mike Nixon: For vessels?

• (0910)

Mr. Pierre Paul-Hus: I am referring to offshore vessels.

[*English*]

BGen Mike Nixon: The Arctic offshore patrol ships?

Mr. Pierre Paul-Hus: Yes, do you need them as soon as possible?

BGen Mike Nixon: I believe the construction procurement process is in line with the changing focus of the navy when it comes to maritime patrolling in the north.

I don't know a lot about the ship itself. I'm not in that realm, but I do know that it's not an icebreaker. It's ice-capable, which means it will extend the time that the navy can operate in the north from what it now is, with the current maritime coastal defence vessels primarily.

LGen Stephen Bowes: The fuelling station in the north will allow it to stay longer as well.

Last summer we had four maritime coastal defence vessels and I had the pleasure of going aboard one in the Beaufort Sea. They provide great capability of putting a presence in the north and going into communities all across the north.

The Arctic offshore patrol vessel will just take it another level, especially with a helicopter integral to its capability. It will be a tremendous step forward when we bring it online.

The Chair: That's your time. Thank you very much, sir, for your answer.

I'm going to turn the floor over to Mr. Garrison.

Mr. Randall Garrison: Thanks to the witnesses for appearing today and particular thanks for the comprehensive look at our presence in the Arctic.

I am going to take the chair seriously, as I always do, when he talks about air readiness. In the context of the Arctic, it seems clear to me that air readiness is about more than just a response to foreign threats. In fact, on a daily basis, it's about the kinds of things you talked about: surveillance, search and rescue, and disaster response.

I started my career working in the north. I volunteered on search and rescue. The way we did it was to lie down on the ramp of the Hercules and look out the back. I did that several times. I am interested in search and rescue and how far we've come since those days.

Could you talk a bit more about search and rescue and the air part of search and rescue operations?

LGen Stephen Bowes: Our search and rescue technicians are still prepared to do that if they need to. They'll do what they need to do to get the job done. They are an incredible class of Canadians, and I've watched them on video jumping into locations where the average service personnel would say that takes a special brand of courage.

For our SAR posture, we keep and analyze statistics. We use operational research on an ongoing basis to ensure that we have the optimum posture going forward. But it's a complex environment. Only 4% of search and rescue incidents occur north of the 55th parallel, so if you draw a line among the northern provinces in the west toward Fort McMurray and just a little bit north, and draw it along and cover off northern Quebec and a little part of northern Ontario, only 4% occur beyond that. However, every one of them is complex just by virtue of the environment.

We have a SAR posture across the country that is optimized toward where the majority of incidents will occur, but with a capacity to surge forward, depending on the scenario and the circumstances, in response to a crisis in the north.

The reality of our geography in Canada is that most of the people live in the south, which means that even routine military operations are almost expeditionary in nature in our own country. We project over long distances. To fly from Winnipeg to the high north is like flying from St. John's, Newfoundland, across the Atlantic.

We are mindful of that in everything that we orient toward the posture, but we have a whole range of assets. The way that we work, even beyond the immediate response search and rescue posture, which I know you've been briefed on.... At least, I believe Admiral Ellis was here. No, excuse me, he was at the Senate. My apologies.

It's a subject that is worth a deep dive on its own. We can get from Winnipeg with a primary Hercules in four to eight hours depending on where the incident is in the Arctic; with a Cormorant in about 12 to 16 hours depending on where it's at; and we can work through some of our hubs in the north to extend assets over range. Working off of Baffin Island, we had many of the assets touch down in Iqaluit, refuel there, and then carry on to station.

It's a complex posture and a lot depends on the circumstances, the nature of the incident and what we have to throw at it.

Mr. Randall Garrison: In terms of the recapitalization needs generally of the Canadian Forces, where do the Hercules, the Cormorant, and the search and rescue planes fit into that recapitalization program?

LGen Stephen Bowes: It's a great question. I'm a force employer, and so I just ask and ask and ask. I'm not in any way trying to be humorous, but the Commander of the RCAF is responsible for force development to the Chief through the Vice-Chief of the Defence Staff, who is, overall, responsible for capability development. Then at that level, they'll link in with the deputy minister in terms of prioritizing, consistent with government policy, which projects are in order.

I don't focus on that. I don't deal with it at all. My focus is down in operations. The ADM(Mat), Rear-Admiral (Retired) Pat Finn, who was here at this committee, could tell you where the projects are.

If necessary, I'll take a supplementary question and get an answer to you on that.

• (0915)

Mr. Randall Garrison: I guess you're saying you have made requests.

LGen Stephen Bowes: I haven't made, nor has my headquarters made, a request regarding capability. Statements of capability deficiency can be generated by CJOC but tend not to be for large items like that. It's part of a routine capitalization plan, and that's squarely in Lieutenant-General Hood's lane.

It would, frankly, be inappropriate for me. He's the master of understanding his air assets and what needs to be recapitalised in order of priority.

Mr. Randall Garrison: I guess I'd ask kind of the same question about the Twin Otters. I'm a big fan of Twin Otters, having flown in them a lot. They have four based in Yellowknife, I believe. Is there a need for another base that might have more Twin Otters, or are things adequate as they are?

LGen Stephen Bowes: I don't know about that. I love the Twin Otters and I hope we get if not a life extension then a replacement of the capability. These are the things we simply want.

I deal with an air force commander. The commander of 1 Canadian Air Division wears multiple hats. He works for me as the joint force air component commander, and so when I have a requirement, I define an effect. We call it an RFE, or a request for effect. He determines the platform that's suitable to go forward to do this. So in the same vein, if we were looking at the Arctic and we needed more of something, we would describe an effect, not an airframe. We describe a capability or a niche that needs to be performed, and they conduct the analysis and determine what's necessary.

As to the future of the Twin Otter, I'm not certain about.

BGen Mike Nixon: I do know that the Twin Otter life extension project is in process.

The Twin Otter is a phenomenal airframe, a phenomenal piece of equipment. It has a secondary search and rescue, or SAR, role. It's primarily for transport in the north, because that's exactly what it was designed for.

In fact, when you talk to some of the pilots from 440 Squadron who reside in Yellowknife and you ask them if they were king for a day and could replace the Twin Otter what they would replace it with, they'd say with a Twin Otter, because it is one of a kind. The only four are the ones we have in the inventory of the Canadian Armed Forces.

LGen Stephen Bowes: They're very robust.

Mr. Randall Garrison: Thank you very much.

The Chair: I'm going to turn the floor over to Mr. Gerretsen.

I think you were indicating that you are going to split your time.

Mr. Mark Gerretsen (Kingston and the Islands, Lib.): I'll be sharing my time with Mr. Spengemann.

General Bowes, I just want to go back to a comment you made earlier, because I think it underscores the whole discussion about defence in the north. I believe you said you don't recognize a threat in the north, or you don't currently recognize a threat in the north.

What do you define as a threat? Is that something that's real or is that something that's potential?

LGen Stephen Bowes: What I said was that we don't recognize the existence of a direct military threat to the north. There are all kinds of threats and challenges everywhere to our ability to control our space, from a CBSA perspective, etc. There are other government departments dealing with challenges, but I'm talking about a direct military threat.

There is a very low probability that another foreign nation is going to apply military force against Canadian territory.

Mr. Mark Gerretsen: Okay, I appreciate that comment, and I'll try to use an analogy here. Perhaps it's not the best one, but when you think of our first prime minister, Sir John A., going on a mission to build a railroad across the country, he didn't do it because the U.S. posed an immediate threat. He did it to build sovereignty. He did it to create that sense of autonomy within our own nation to prevent the possibility of a threat.

I think of the situation that we have in the north in a similar fashion, in that you would want to make sure that what we're doing now protects us against a potential military threat in the future.

Is that fair to say?

LGen Stephen Bowes: So—

Mr. Mark Gerretsen: I don't want your comments to be taken in the context of your not seeing a direct military threat; therefore, that we shouldn't be concerned about Arctic sovereignty. I say this now because when you first said it, that was the way I interpreted it.

LGen Stephen Bowes: Yes, and that's a great point and that would be very fair.

I'm very concerned about sovereignty, just as any Canadian would be.

When you look at military threats, you have to break them into capabilities and intent. There are nations that are developing capabilities to be able to operate in the Arctic, and intent can change quite rapidly. We do have to be prepared.

Is there today or was there a direct military threat to our Arctic? The answer is no, we don't recognize one today.

Can there be in the future? It can change because intent can change in other nations, not just the one that most people would easily identify, Russia. But there can be other scenarios in the future, if you walk out far enough. But those can go in a variety of different ways.

There is no doubt that military activity in the north has helped Canada develop the north. In my travels across the north, I have seen the footprint of the RCAF in the north quite positively, in what it has

offered to the country in the way the north has been developed. Last summer, I was in Inuvik and was reminded that it was formerly a signals facility, a part of the original standup of the town. As we go across the Arctic, to control your territory, you need to be able to be dominant, which means that you have to have the ability to go through the breadth and depth of your territory at your will.

That's why we choose exercises, not just in the summer, which a lot of Canadians have typically seen. To me, one of the best operations we do is Op Nunavut in the middle of February and March, when the weather is not good. I have been up there with them, standing on an ice floe when they were on the ice on a freshwater lake, in this particular case, when it was -58. The environment will kill you faster than it will in desert terrain.

• (0920)

Mr. Mark Gerretsen: Thank you. You've answered my question. I think I'm eating into Mr. Spengemann's time.

Mr. Sven Spengemann (Mississauga—Lakeshore, Lib.): Gentlemen, thank you both for being here and for your expertise and service.

I'm going to take you away from the Arctic, General Bowes, for a second and ask you if you could outline to the committee the intersection of your responsibilities, if any, with NORAD's Operation Noble Eagle.

LGen Stephen Bowes: My role in Operation Noble Eagle is simply as a recommending authority. I'm one of the four officers who are recommending authorities to political authorities for a decision to act should an Operation Noble Eagle incident take place and a decision is required. On the Canadian side of the border, I'm behind the Chief and the Vice. The commander of the Royal Canadian Air Force is behind me.

Mr. Sven Spengemann: Do you have resources under your control to respond, or will you not be asked to respond directly?

LGen Stephen Bowes: Every resource that is necessary would be brought under control in that incident to respond as required.

Mr. Sven Spengemann: Thank you. That's helpful.

I wonder if we could go back to sovereignty, which two of my colleagues have touched on. Can you expand a bit more for members of the committee and the Canadian public what the concept of sovereignty is all about, in particular, the intersection between military and civilian components of it?

My sense is that sovereignty is as much a function of how well we occupy a space as it is how well we defend it.

I wonder if you could briefly comment on what sovereignty means and how it might be changing in the context of the Arctic?

LGen Stephen Bowes: It's an outstanding question.

The challenge is that this is a policy issue. From our perspective, our lead in what we do to support sovereignty is the associate deputy minister for policy. I would put it to you that it's not a military term, and so I risk stepping out in trying to provide a definition of activities in which so many actors in this town participate.

By demonstrating our ability in the Canadian Armed Forces to move through our terrain, our airspace, and our waterways, we demonstrate our ability to control our terrain, commensurate with civil authorities like the RCMP and other territorial and provincial authorities.

Mr. Sven Spengemann: I'm mindful of the time, Mr. Chair, if I could just have a brief follow-up.

The Chair: You have about 20 seconds.

Mr. Sven Spengemann: Is it fair to say the buildup in civilian infrastructure in the Arctic is a component of sovereignty, as is your ability to support that buildup as it evolves?

• (0925)

LGen Stephen Bowes: Absolutely, yes. Every piece of infrastructure in the north can be used by a host of different government agencies, just as we're partnered with the Department of Natural Resources and with the Arctic training centre. There are plenty of examples.

Mr. Sven Spengemann: Thank you, both.

The Chair: We're going to move to five-minute questions now.

Mr. Fisher, you have the floor. You're free to split your time, if you like.

Mr. Darren Fisher (Dartmouth—Cole Harbour, Lib.): Gentlemen, thank you very much for being here. I appreciate your service.

This may come across as a bit of a summary, but we know that our north warning system is aging, and the ice floes are receding, thus opening up the Northwest Passage and allowing increased activity and travel through there. There's also the question of who owns what in the Arctic, which may take a long time for us to figure out. I'm not talking about today, or even in the next five to 10 years, but possibly in the next 50 to 60 years.

General Bowes, I think you said something to the effect that there would be greater defence of the north. You didn't necessarily say there would be sufficient defence of the north. I guess my question would be, should our defence focus, our infrastructure investment, and our procurement focus be on all of these common occurrences in the north? Is that where we should be focusing our plans right now, on the issues in the Arctic strictly?

LGen Stephen Bowes: Let me answer that outstanding question by pointing out that I have three missions: the first is the defence of Canada, the second is to assist in the defence of North America, and the third is to promote security and stability abroad when called upon.

It's difficult for me, in the travels I have done, and even in this job over the last year, to see a Canada that is inward-looking without understanding that it's part of an international community and that any threat to international stability is a threat to the long-term security of Canada. I think we need to take a much broader view of what constitute threats and challenges to Canada's security, and I don't think you can do one without the other.

It is inconceivable for me to understand how a direct military attack against the United States wouldn't impact Canada. We need to think more broadly. That doesn't mean that as those climatic conditions change under what you described, the Arctic becomes

more of a focus. I'm not suggesting that, and I'm not recommending that, but I'm not refuting that either. That's a policy question as to where we should go, but I don't think that we can focus on any single area. We're dependent on international trade, and we're dependent on peace and stability in so many ways.

We look at our standing commitment over 60 years to NATO and collective defence, and we did that for good reasons. Those reasons are still extant today, so we need to have a broader focus in what we do. The relative weight of resources to task is in the purview of the Chief of the Defence Staff for military advice to the government. I think he's positioning himself to do that under the defence review, as an example, close-in of the kind of dialogue you're referring to.

Mr. Darren Fisher: Do I have—

The Chair: You have about two minutes left.

Mr. Darren Fisher: I probably won't need the whole two minutes.

I'm not sure if either of you have an update for me on the *Harry DeWolf*. I know you've insinuated that you probably can't wait for that to come on board, but do you have an update or progress report on where we are with the *Harry DeWolf*, the icebreaker?

LGen Stephen Bowes: I don't think we have one on the timelines. We can get that and add it in, but I did have a chance last November to visit the Halifax shipyards to see how they were constructing it, and so on. I'm an army general, and I'm in a joint job. I champion the interests of the air force, the navy, and the army, and I'm excited to see that capability, to see what Canadians are doing down there, and to see what we're going to be able to bring on board.

Mr. Darren Fisher: You visited the Halifax shipyards?

LGen Stephen Bowes: I did.

Mr. Darren Fisher: Did you see the Dartmouth side, where they're cutting the steel?

LGen Stephen Bowes: I'm from Bedford, by the way. I was born and raised in Bedford, so we're getting down close.

We didn't go over to the facility because of time and space constraints, but they had lots of graphics to show us how proud they were that the steel was cut and then transported across the bridge.

The Chair: Very good.

Ms. Gallant, you have the floor for five minutes.

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

First of all, could you tell us how you would coordinate with the Canadian Coast Guard should there be a situation? Do you have any control or interactions with the Coast Guard should it become necessary?

LGen Stephen Bowes: We have interaction with the Coast Guard every day, both here in Ottawa at higher headquarters level, and all the way down to our search and rescue coordination centres. The Coast Guard is responsible for maritime search and rescue, and we have the air component. Complex search and rescues, as an example, in Atlantic Canada involve assets from more than one government department from time to time. We have liaison staff embedded.

You see the CJOC here, the Joint Operations Command. It's at headquarters in Ottawa. We have a significant piece that is partially my component commander for the north, if you think of it that way, but I also have regional joint task forces right across the country. General Eyre is one of the commanders in Alberta, but we have two on each coast that are well integrated with the Coast Guard.

• (0930)

Mrs. Cheryl Gallant: Now, we see cruise ships on our east coast. For instance, right now there's a cruise ship nearing Halifax harbour. While we don't have passage of cruise ships through the Arctic yet, we don't want to wait until something happens to have the necessary infrastructure in place.

At this point, if a vessel were going through the Northwest Passage and there was a need for some sort of evacuation, or making sure that people were not interfacing with others for whatever reason, but they needed health care, how would you conduct an operation in that set of circumstances?

LGen Stephen Bowes: Any operation in that scenario would be whole-of-government.

First off, we track cruise ships. Cruise ships don't enter the Arctic without our knowing about it. We know when cruise ships go in. There are cruise ships in and around Arctic waters in the summer. They have done so for a number of years, and we track them. We make a great deal of effort on it.

I'll give you an example of a success story developing what we call maritime domain awareness. We have three MSOCs across the country, one on the Great Lakes and one on each coast. Those operations centres bring in data from a variety of sources to help develop a picture for our admirals on each coast who are joint task force commanders and plugged into the CJOC. What they see, I see. So we develop that picture.

Maritime domain awareness refers to not just "there's a ship here"; it's understanding who's on board. It's a much more comprehensive concept of where they are coming from and where they are going. Depending on the nature of the vessel, I can declare it a vessel of interest and we can track it.

What's really interesting about this, though, is the five partners concept. Everything we see at DND is shared with the RCMP, Coast Guard, Department of Fisheries and Oceans, and Transport Canada. We work together, through our various operations centres, to track and understand the nature of the activity.

To get to the specifics of the question, it depends on the scenario. Some cruise ships entering pull a shadow ship, which is available to conduct its own rescue. Other ships perhaps don't, but it speaks to regulatory issues that are beyond the purview of the Department of National Defence.

If we had to, if a ship went aground... We have conducted an exercise in the past. It's about time, space, distance, and the conditions. We're fortunate that it's the summer months for the cruise ships, and therefore it does give us a bit of an edge, but ultimately, because of the dispersal of air force, the only way to pull people off cruise ships is to bring in another ship, transfer people to that ship, and pull them out. That's unless we set up over time an air bridge and a helicopter, or use austere landing fields and our C-130 Hercules, if we were able to do that, depending on the scenario and the geography.

It's extremely complex, but we have contingency plans. We're prepared to react accordingly.

Mrs. Cheryl Gallant: Thank you.

The Chair: I'll give the floor over to Mr. Miller for five minutes.

Mr. Marc Miller (Ville-Marie—Le Sud-Ouest—Île-des-Sœurs, Lib.): General Bowes and General Nixon, I know it's been said twice, but I'll say it another time: thank you for your ongoing service.

General Bowes, you touched briefly on our relationship with the indigenous peoples in the north. Perhaps you could expand a little on that and where you see added value specifically with respect to our relationship with the Canadian Rangers. Is there value in deepening and strengthening that relationship, or broadening it with a view toward ensuring ongoing territorial sovereignty?

LGen Stephen Bowes: I'll turn it over to General Nixon in a second to give a more comprehensive answer.

I learned very early in my career the value of the Canadian Rangers. I was a lieutenant in 1987 on an exercise. The battle captain for our unit that was involved was a gentleman named Walt Natynczyk, who went on to do bigger and better things. We spent about three weeks up on Baffin Island working with Ranger patrols. I realized that I and the group of soldiers I had with me would have had difficulty surviving in that environment if we hadn't listened to and learned from our Rangers.

It's a huge contribution to what we do. They enable us to survive—to shoot, move, and communicate. It means we can go anywhere and dominate in the Arctic, on a ground basis, year-round, and be able to survive.

To bring it forward to the role they play in communities, I saw in my travels the positive role image. Young Rangers wanted to be just like their elders in a community. By and large, the health of the community was a reflection of just how healthy the Ranger patrol element was.

It's a great program, and one that we truly do rely on. I have challenged people who've sought to denigrate the importance of the Rangers in the north. It's off base. It's a very important part of what we do.

Mike.

•(0935)

BGen Mike Nixon: Yes, sir.

The 1 CRPG resides in the north—north of 60—with one exception. There's a patrol in northern B.C. that's only accessible from the Yukon. So there is one patrol from 1 CRPG that's actually in British Columbia—in Atlin, B.C. It is an army unit. 1 CRPG belongs to the Canadian Army. It's under OPCON of JTFN. It is the largest unit in the Canadian Armed Forces, by the way, numerically speaking, with about 1,750 rangers spread across those 60 communities that I mentioned.

We recently had a visit to Yellowknife by the Canadian Armed Forces ombudsman to look at the ranger program, specifically in the Arctic, to identify some challenges that they're facing. They do have challenges, as any organization does. I believe it was in the mandate letter of the Minister of National Defence to look at expanding the ranger program writ large, which is across all five ranger patrol groups.

The ability to do that would be predicated on expanding the ranger instructor pool first, the personnel who provide the military instruction to the rangers. When they're on the land with the ranger patrol, it's questionable who is actually instructing whom, because the rangers are the experts. I spent last weekend in the Baker Lake area with a patrol, and it was an eye-opening experience to see their abilities on the land. They are experts in that field, and that's what we need to promote and to harvest.

The ranger program has been around for almost 70 years. It's going to continue, and it can only get better. As General Bowes alluded to, paired with that is the junior ranger program, which is kind of like cadets, but it isn't. It's based on survival skills and the like. That is another success story, in the north in particular.

The Chair: In the interest of time, Mr. Bezan, you'll have the last question. Then we'll suspend very quickly to change to our second panel.

You have the floor for five minutes.

Mr. James Bezan (Selkirk—Interlake—Eastman, CPC): General Bowes, it's good to see you again. It's been a while since we've had you here.

General Nixon, thanks for joining us.

I'd like to express our gratitude to the two of you, and indeed all members of the Canadian Armed Forces, for the work that you do in protecting Canada.

General, you were recently down in Colorado Springs, as we were as a committee. We had some interesting conversations with Admiral Gortney, looking at the entire threat field that we're dealing with. You mentioned that a threat to the United States is also a threat to Canada, and vice versa is true as well. That's what we heard quite clearly from Admiral Gortney.

The last time we were down there as a committee, we were talking about NORAD Next. This time, we're talking about the evolution of NORAD. One of the areas that we started to touch upon was the expansion of the domains that NORAD has looked at.

Do you see any value in having a more integrated command and control of how the land base security operations should be coordinated?

LGen Stephen Bowes: I'll break out from the land first. I'll work backwards and then I can come back on the land side.

It's early days, but here's where we're at. The commander of NORAD, the NORTHCOM group, understands very well the development of capability that Russia has embarked on over the last 15 years and that dynamic. Concurrent with that, we follow very closely developments around the world, developments of extremist organizations and the like.

So the question that came with staff—whom I have going down there all the time, and likewise coming up here, who are involved in tri-command staff talks and who work in syndicates—is that we're a learning organization, to hark back to comments that I made very early in the meeting. We try to do this and are very sincere about doing it. As we run exercises towards continental defence—both on what you would view as traditional military threats but also other threat scenarios—we try to do things better and we postulate questions and challenge ourselves.

Admiral Gortney was championing a concept for the evolution of NORAD. I think it's early days and ultimately whether we do this is up to the Chief of the Defence Staff. I haven't formulated my recommendation to him, but, ultimately, it's his responsibility to provide that advice to the Government of Canada. I don't know where that will go, but I think there is great value in continuing to explore it, even if all that it ever does in the outcome is to make us better at doing what we do today. How can that be a losing proposition for Canadians? There are a lot of questions that need to be answered, a lot of things that need to be teased out.

On the land side, just to bring it down, it's not as clear as it is in the air piece. We have NORAD, we have well-defined terms of reference and we understand that. Even on the maritime side, perhaps work still needs to be done to ensure that the leadership understands what we have in place and how that values citizens across both sides of the border.

On the land side we have a different construct that is often very difficult for U.S. leadership to understand. We have a regional joint task forces. We're a thinly populated country along a border with the United States, and lines of communication on our continent run north-south. As a division commander down in Atlantic Canada, I knew very well all of the adjutants-general of all of the National Guard elements in the New England states. I had a great deal in common understanding, because the way of life in the Maritimes is very similar to that in the core New England states. I understand that concept. So it is all the way across the country.

So we have a regional task force where on any given incident, the land component commander whom we designate is also one of my regional joint task force commanders. We're very good at dealing with being double and triple-hatted in responsibilities, as long as we ourselves understand what we need to do.

General Eyre is the division commander out west for the army. He's a regional joint task force commander. He can also be a land component commander for a particular crisis, and we have other ways of tackling the problem. So I think we're in early days of trying to understand this. If it's to develop a model simply to make it easier for the United States folks to understand how we're organized, then I'm not sure where the value is in that. So we will really tease out what the value propositions are and show how these make Canadians more secure, how they make us safer, how they enable us to respond to crises. We have a lot of work to do on this one, but we are committed to looking at and making sure that we do business better.

• (0940)

The Chair: Thank you very much for your comments and for your presence here today at committee, and thank you for your service.

I'm going to have to suspend now for just a couple of minutes to switch the panels. Thank you, gentlemen.

• (0940)

(Pause)

• (0945)

The Chair: Welcome back. I thank everybody for appearing today.

We don't have much time, given that we have four people speaking, and I would ask you to please be extremely disciplined with your 10 minutes so that we can ask some questions. It will be difficult for us if we're not. You'll probably see me weigh in at 10 minutes if we're not there and I would ask you to focus your comments on our topic of aerial readiness.

I'd like welcome to Michael Byers, Robert Huebert, Adam Lajeunesse, and James Ferguson. Thank you very much.

I'd like to open with James, because you're calling from a long way away, and in case I lose the feed, I'd like to hear from you upfront. You have the floor for a maximum of 10 minutes.

Dr. James Fergusson (Professor, Department of Political Studies, University of Manitoba, As an Individual): Good morning.

I thought I would focus my brief on the issue of Canadian participation in the United States' ballistic missile defence program, specifically the ground-based midcourse defense system currently deployed in Alaska and California, given that this is one of the issues outlined in the defence review guidance.

To begin I want to emphasize three key points.

First, under current circumstances, whether Canada participates or not will have no significant impact upon the NORAD relationship, Canada-U.S. defence relations in general, and the Canada-U.S. relationship as a whole.

Second, if circumstances change and the United States comes to the conclusion that Canadian participation or, more accurately, Canadian territory becomes vital to the missile defence of the United States, a failure by Canada to participate will have a major impact on the relationship and the future of NORAD. This may result if the United States proceeds to establish a third interceptor site in the northeastern United States.

Currently, the United States is completing environmental studies for a possible third site in either upstate New York, Michigan, or Ohio. If this occurs, the United States may also conclude that to make the system effective, and thus ensure the defence of the eastern seaboard and the Great Lakes region, a forward-deployed X-band tracking radar in Canada may be essential as a result of the gap between the current X-band radar at Thule, Greenland, and U.S. territory. This, of course, would also significantly alter the negotiating dynamic concerning the meaning of participation, which I will clarify shortly.

Finally, under current circumstances, as well as changed ones, the real issue is whether the Canadian government and the Canadian public believe that it is essential that Canada be defended from a limited ballistic missile attack involving a nuclear warhead, by proliferating states such as North Korea. Canada cannot and should not expect the United States to defend Canada, for a variety of strategic and political reasons. Legally, U.S. Northern Command, responsible for the ground-based system, is only mandated to defend the United States and cannot be expected to expend one or more interceptors to save a Canadian city, unless its potential target may directly impact, via the blast or radiation effect, an American location, such as Detroit. In failing to defend ourselves, Canada places American decision-makers in a horrible moral dilemma of expending an interceptor to save Canadian lives, but in so doing potentially undermining the ability of the United States to defend itself.

Any decision regarding whether Canada should or should not acquire its own missile defence capability requires the government to obtain as much information as possible about the U.S. system. To do so will cause the Canadian government to publicly, and without reservation, endorse the U.S. missile defence effort as the first step into discussions and, possibly, negotiations with the United States. This has been partially done in the context of the NATO system. Even so, this fundamentally means that the government must reverse the 2005 decision, but not formally commit to participation, because no one actually knows what participation would really mean.

It is clear, however, from the failed negotiations in 2003 and 2004, that the United States will not provide a formal guarantee to defend Canadian cities, will not give command control to NORAD, and will not give Canada detailed access to operational planning under current circumstances. This has not changed, and will not change until Canada decides to invest capital and seeks to acquire and deploy some relevant missile defence system component on Canadian soil, which will enhance the defence of the United States as well as Canada, whether it be a tracking radar or a full-fledged interceptor site. In other words, Canada must contribute a meaningful capability of value in order to truly participate with the United States in the missile defence of North America, thus altering the negotiating conditions and reversing the above three noes, which in turn will provide assurances that Canadian cities and the population are defended.

A meaningful contribution, of course, requires that Canada first acquire detailed information from the United States about the system, additional valuable requirements of the system, the costs and, of course, whether the United States will agree to settle with the capabilities of Canada—which, I would add, Robert McNamara, Secretary of Defense in 1967, offered to do with the ABM system. Perhaps the United States will decide that there's nothing for Canada to contribute for now. Even so, the government will have opened the door and acquired valuable information and knowledge for an unforeseeable future.

● (0950)

Regardless, it is time for the government, Global Affairs, National Defence, and the public to realize that we cannot free-ride on the American missile defence system, and we cannot expect that an asymmetric contribution, such as offering to pay for the modernization of the north warning system, will result in a U.S. missile defence guarantee.

In effect, the government must invest in a meaningful way in order to ensure the defence of Canada.

Thank you. I look forward to your questions regarding this issue or anything else concerning the defence of North America or global security politics.

The Chair: Thank you very much for your comments, and thank you for keeping it brief. We appreciate that.

I'm going to turn the floor over to Mr. Byers.

You have the floor for up to 10 minutes.

Dr. Michael Byers (Professor and Canada Research Chair, Department of Political Science, University of British Columbia, As an Individual): Thank you very much.

It's a great honour to be here. My comments are directed at all the members, but especially to the members of the new government, because you have some very difficult decisions to make.

I'm going to start by providing just a bit of context. Let me preface this by saying that I think you will have to recommend to substantially increase Canada's defence budget. We are currently drifting below 1% of GDP. I suspect that you will need to increase that to at least 1.5% and perhaps even 2% of GDP. This has an impact on the issues that you are discussing in this committee.

Just to flesh that out with a bit of context, the Canadian navy is in serious trouble. It has no supply ships. It has no air defence destroyers. Its marine coastal patrol vessels have been deemed unworthy of a mid-life refit. The submarines are close to 30 years old and have spent most of their lives in refit and maintenance. On the navy, I could go on.

The army is in serious trouble. The fleet of armoured trucks is for the most part undeployable and seriously in need of replacement. For example, if you are thinking about engaging in United Nations peacekeeping on any scale, you'll need to replace those trucks first.

The air force is in trouble. Canada's search and rescue fixed-wing planes are approaching half a century in age. Our fighter-jet fleet is 30 years old. There are serious concerns about metal fatigue. We have only 14 long-range search and research helicopters. In this, the

second-largest country on earth, the Canadian Forces, the Royal Canadian Air Force, is on record as saying that they need at least 18 to do the job properly.

Again, I could go on. The north warning system needs to be upgraded.

This is all core context, because it amounts to tens of billions of dollars that you will need to spend.

Let's talk about the situation with regard to air warning and defence in the north. I want to deal first with the issue that has come before this committee in the past year or so, that of drones for Arctic surveillance.

The good news here is that the Canadian Forces and the Canadian government more generally are actually pretty well equipped right now in terms of Arctic surveillance. We have RADARSAT-2, which is the world's best synthetic aperture radar satellite built for the Arctic. We have funding committed for the first three satellites in the RADARSAT Constellation. You should think hard about increasing that to the proposed six.

We have the northern watch system, which is highly functional but needs to be upgraded in the next 5 to 10 years. We have the Aurora maritime patrol aircraft, 14 of which are going through a major refit process. There are four more for which the parts for the refits have been acquired. I would recommend that you refit all 18. They provide an excellent surveillance capacity. Transport Canada has two Dash 8s, and one Dash 7. They overfly every foreign vessel visiting Canada's Arctic.

There are other capabilities. There are RCMP officers in every single northern community. That's surveillance.

Do we actually need drones for the Arctic? Well, on my priority list of spending, they simply wouldn't be there. I would like to gently suggest that the reason they have been put forward in the context of the Arctic is that the previous government twice denied a request from the Canadian Forces to acquire drones for use in armed conflicts overseas. They didn't get it for those, and the Arctic may have been an additional argument that was introduced. Be careful about this.

In terms of fighter aircraft, I've already mentioned that the CF-18s are getting very old. They desperately need to be replaced. They need to be replaced within a reasonable budget, and the planes that replace them need to be not just capable of Arctic operations but suited for Arctic operations. Be very careful about costs here. Some of these planes are proven and have set costs. One of the planes that could be under consideration is not yet proven, is not yet complete, and has uncertain costs. Then you have other factors that come into play, like changes in the exchange rate between Canada and the United States.

• (0955)

The acquisition budget for the F-35s of \$9 billion for 65 planes was set at an exchange rate of 92¢ on the U.S. dollar. At today's exchange rate, at 77¢ to the dollar, you can only buy 56 F-35s, so consider whether or not your government, within a set budget and a minimum number of planes, is going to be able to acquire some of the aircraft under consideration. That should be part of the actual statement of requirement, a minimum number of planes for the set budget.

Another issue concerning the F-35 that I just want to flag is the single engine. I know you've heard testimony on this, and you've been told that fighter jet aircraft engines are becoming progressively more reliable. That indeed is true, but twin engine jets are still more reliable than single engine jets. I would refer you simply to the U.S. Air Force safety center website, which actually has charts that show the reliability of different engines and different planes. The single engine planes like the F-16 are getting more reliable, but they are still not approaching the reliability of comparable twin engine planes.

I heard a very strange comment from one of your previous witnesses who was citing the fact that because trans-ocean civilian airlines are moving from four engine to two engine planes, somehow that makes the F-35 appropriate for the Arctic. I don't think anyone in this room would want to fly from Ottawa to London, England, on a single engine civilian aircraft.

I looked at the safety record of the Boeing 777, the world's safest twin engine civilian aircraft, and somewhere in the world, at least once a month—once a month—a Boeing 777 loses an engine. We never hear about it because they have a second engine that they can fly and land safely with, but be very careful about this.

Finally, on missile defence, I have heard previous witnesses being asked in this committee about the possible costs of Canada joining missile defence. There are actually numbers on this. We know how much the U.S. government has spent on its midcourse interceptor system here in North America: \$40 billion U.S. We know how much they are spending per year to maintain and grow that system: \$1 billion U.S.

You might imagine, and perhaps you might want to ask, whether the United States will let Canada join for free. I doubt it. If we say that perhaps they would want us to pay our share of the retrospective costs of building up the system, the Canadian population is one-tenth that of the United States, so that's \$4 billion. If they say that they want us to pay one-tenth of the ongoing annual cost, that is \$100 million. You can ask them, but it needs to be factored in, in terms of considering all of these different priorities, as do the risks that are being addressed. If you assume that North Korea is somewhat rational, and it has a choice between sending an intercontinental ballistic missile toward Canada or the United States that draws a bright red line back to North Korea and invites almost certain retaliation, it has a choice between doing that and putting its nuclear warhead on a small private yacht and sailing it into Seattle, Los Angeles, or Vancouver Harbour.

Again, I'm not saying that you shouldn't take risks seriously; I'm just saying that you need to consider costs, you need to consider the

degree of risk, and you need to actually consider whether or not the money that is being asked for by some other experts, which they're asking you to spend, actually has gone through a careful risk analysis.

In my analysis, we're good on surveillance in the Arctic right now and we'll be so for the next 20 years. There's no need for drones. We do need long-range fighter aircraft for the Arctic, but they need to be twin engine planes and they need to fit within a reasonable budget. We don't need to join U.S. missile defence because the threat, relatively speaking, does not top out on that priority list, and the cost of joining is likely to be prohibitively high in a very stressed budget situation where you are already going to have to significantly raise Canadian defence spending.

Thank you very much.

• (1000)

The Chair: Thank you very much.

I'm going to give the floor to Mr. Huebert.

You have 10 minutes.

Dr. Robert Huebert (Associate Professor, Department of Political Science, University of Calgary, As an Individual): I'd like to thank the members of the committee for giving us the opportunity to come before you to discuss one of the critical elements of Canadian security.

I would begin by pointing out that there is a tendency to view the Arctic as somehow a separate, peaceful component that does not have a bearing on overall Canadian security. This is completely wrong. The Arctic is as much a part of Canadian security as one can imagine any other component is, and for that matter the geopolitics of the Arctic have always been there. I remind the committee members that the reason the Americans in all probability got to buy Alaska from the Russians had everything to do with the first Crimean War, which is something that we often forget, to our peril.

What does the committee need to be aware of in the changing elements of geopolitics of the north? We have the rhetoric of co-operation and, indeed, from the period of the end of the Cold War to the current period, we have seen tremendous co-operation between the Arctic states. Canada, the United States, and Norway spent billions helping the Russians decommission the preceding Soviet nuclear-powered submarine fleet, first through the AMEC program and subsequently through the G-8 program. There was significant co-operation in that period, and it will be remembered as a golden era.

We are now seeing at least three major geopolitical trends that are integrating Arctic security interests into all the larger interests. What are these three trends?

The first, and the one that most people pay the most attention to, is the development of new resources and resource opportunities in the Arctic. With the recognition of the impacts of climate change, people become aware that the Arctic does offer things such as transportation routes for cruise ships of a very large size. This is only one that people put at the forefront.

The second major component that has changed is the interest of other states in the Arctic. Back in 1998, anyone who suggested that China would be interested in the Arctic would have been laughed out of the room. The idea of the Arctic and China just simply wasn't going to be corrected. In 1999 we had the first visit of a Chinese vessel into Canadian waters when the *Xue Long* visited at Tuktoyaktuk. This has continued on a steady progression. The Saudis are also very interested in the Arctic. They have said openly that part of their rationale for allowing oil prices to collapse was to drive out both the shale producers and the Arctic producers. In other words, it's the outside interests.

But the biggest factor that I would bring to the attention of the committee that you have to bring forward into your considerations is the fact that there is a growing strategic imperative on both the part of Russia and the United States that is increasingly going to conflict. That will ultimately spill into the Arctic. Let me be clear. It is not about fighting over the extended continental shelf, fighting over diamond mines or oil or gas resources; it's about the necessity of both Russia and the United States pursuing core strategic requirements that will require us to be very cognizant of what is happening in this context.

What are some of these major factors?

First and foremost for Russia is the maintenance of nuclear stability or what we in the west refer to as "nuclear deterrence". We tend to be focused on the realities of dealing with insurgencies and other aspects of conflict in Afghanistan and Syria and elsewhere. But the Russians have never wavered, from Yeltsin onward, that their core strategic requirement is nuclear stability. To maintain nuclear stability, they have put most of their funds in the rebuilding of the northern fleet. We have seen that they've had major failures in being able to do so, but they have stayed the course in rebuilding their nuclear missiles, nuclear-powered subs, and their attack subs, and are now in a very vigorous phase of rebuilding these forces. This also ties into why we have seen the Russians also rearming many of their northern bases. Publicly, they state that they are doing this in the context of an opening northern sea route, and that is part of the answer. But the other part is to provide protection of their northern fleet as part of their nuclear stability.

● (1005)

The second component of what the Russians have always told us they see as a major threat—and this is in all their documentation—is the expansion of NATO.

How does that spill over into the Arctic?

Yesterday, it was announced that, for the first time since polls have been maintained, a majority of Swedes are now in favour of joining NATO. One of the core issues that Canada will be facing is that if the two Arctic neutrals, Sweden and Finland, decide to join NATO—and there are growing indications, at least in the open literature, that they are moving towards this procedure—then we could see a major change in how the geopolitics of the Arctic will then transpire.

The third element we see within the American context is, of course, the interaction with the American ballistic missile defence system. Let's move to the Americans, for a moment, and see how this spills into the Arctic.

Two of their major elements have direct ramifications, as Dr. Fergusson has already made clear. A major element of the ABM system is their base in Fort Greely, Alaska. They currently have 26 interceptors. They're putting in another 14. This is where they have the bulk. Of course, they are looking to place them elsewhere. Now, this is not about defending the Arctic; this is about defending a North Korean launch, but the Russians, according to the literature, are starting to see it as something different.

The second factor for the Americans is their acceptance of an expansion of NATO. They were the ones who were pushing for an expansion of Georgia, which, of course, had ramifications in the 2008 Georgian-Russian war, and we suspect that the Americans are in favour of the Finns and the Swedes joining NATO. We see these factors all coming together.

Where does that leave Canada?

With regard to the two major defence alliances we have had, Dr. Fergusson has already very capably laid out the issue in terms of ABM and what it means for NORAD.

For Canada, the major security ramifications we have for NATO are coming up very quickly. Should Sweden and/or Finland ask to join NATO, we as a member will be participating in that decision. That will have ramifications. If we say no, we run the risk of encouraging Russian aggressive behaviour. If we say yes, there will be ramifications for us with regard to the type of co-operation that we have been able to build in other forums, such as the Arctic Council. There are real decisions; we can't sit on the sideline in this particular context.

What happens in the future with regard to our considerations for Arctic security?

First and foremost, it is not about who owns the North Pole or who gets to say where the continental shelf goes. These are all important issues from a foreign policy perspective, but they are not the core issues from a security perspective.

Rather, what is happening is that the Arctic will increasingly be one of the central geopolitical realities of the international system. Russia and the United States have core security issues. We can expect that China will increasingly start to have core strategic interests. We saw for the first time last September a Chinese naval task force coming into the Aleutian Islands. We've never seen that before.

The question for Canada, and the question that you have to face, looking into both the short term and medium term, is how does Canada then allocate the resources necessary to ensure that our northern security—not sovereignty, but security—is properly protected, given the fact that the Americans, the Russians, and the Chinese, regardless of how nice we may wish to think things are, will actually be seeing the area.

Thank you very much.

● (1010)

The Chair: Thank you for your comments.

I'll turn the floor over to Mr. Lajeunesse.

You have the floor for 10 minutes.

Mr. Adam Lajeunesse (Postdoctoral Fellow, Department of History, St. Jerome's University, As an Individual): Thank you very much. The committee has my speaking notes, so I will endeavour to be brief.

I will begin by stating the obvious, that geopolitical tensions have increased considerably in the Arctic over the past few years. The principal reason for this has been the renewal of Russian Cold War-era strategic bomber flights buzzing the North American air defence identification zone—both the Canadian and American side. To my knowledge, there has never been a violation of our airspace; however, I am sure you have received detailed knowledge on that from your visit to Colorado Springs.

I should point out that these activities are primarily political or, at the very least, as political as they are military. It is Russian posturing. It is an attempt by the Russians to use the Arctic in a very visible way to send a very visible message to Canada and our American allies.

This said, it is important not to overstate the military threat that these activities represent. Those Russian bombers are not an immediate military threat. They are large, slow planes that are very easily tracked. In fact, the Russians intentionally fly them at very high altitudes so that they are very easily tracked by our air defence radar.

Russian bases that have spread across the north have also received considerable attention, mostly in the popular media, and have been represented as a kind of threat to the North American Arctic. I would point out that this is probably an overestimation of that threat. Russian soldiers stationed in the Russian Arctic are not a particular threat to the North American Arctic.

Furthermore, Russia has also been rebuilding its navy, and most of that navy, of course, has been positioned in the Arctic. Again, this has often been misinterpreted as an attempt to remilitarize the Russian Arctic and the Arctic considered more broadly.

From a historical perspective, it is important to remember that, since at least the beginning of the Cold War, the Russians have kept the bulk of their most valuable naval assets in the Arctic, not because they intend to use those assets for Arctic purposes, but simply for geographic reasons. The Arctic is, ironically, the Russians' best port area. It is Russia's only ice-free port area and the only area with easy access to the world ocean. Russian assets based there are not necessarily meant for the Arctic.

The Russians have also been rebuilding their submarine capability. Now, these boats are intended largely for use in the Arctic. The Russians have historically had a very strong under-ice presence through most of the last decades of the Cold War.

Again, it is important to note that the Russians are not expanding into a vacuum. The Americans and perhaps the Brits—information on that is still classified—but the Americans at least have maintained an under-ice capability since the end of the Cold War. In fact, the Americans have sent an average of two nuclear attack submarines under the ice into the polar basin every year since 1990. The Russians are not expanding into a vacuum there, and our allies have a very strong competency in defending the Arctic Ocean at present.

The Russians also have a national interest in restraining military operations in the Arctic. Their strategic interests dictate co-operation rather than tension and competition. The reason for this is primarily economic. About 20% of the Russian GDP comes from the Arctic, and in fact developing the Arctic—primarily oil and gas, but also mineral resources—is one of Russia's most important tasks in the years ahead. Vladimir Putin has labelled the region a “strategic resource base”, and with good reason.

Russia's oil and gas deposits further south in its older fields, primarily in western Siberia, are depleting quickly. The costs of lifting oil from those regions are increasing very dramatically, which means that Russia will need to develop the Arctic. This is an existential requirement for the Russian state to maintain itself in its current state. For Russia to develop the Arctic, it needs foreign capital and foreign technology, and it is going to be hard to attract that capital and technology, be it from the west or from China or even India, if the region is perceived as one of competition.

This said, it is also important to recognize that Russian domestic politics are often at odds with its strategic requirements and its broader national interests. The creation of a siege mentality, which Vladimir Putin has succeeded in doing and which has kept his approval ratings so high, demands the kind of posturing that we have seen in the Arctic. It demands that Russia be seen messaging the west and demonstrating its strength in that region, which is, of course, emotionally very important to Russia. Russia is an Arctic country like Canada and, therefore, action in the Arctic has outsized importance and visibility.

• (1015)

Of note here is Russia's new cruise missile capability, which they demonstrated very recently in Syria. An attack on an ISIS position last November was carried out with the Russians' new Kh-101 cruise missile. Using this asset was entirely unnecessary. ISIS has no early detection capability, no air defence, and so the use of this very advanced cruise missile was, and can only be understood as, messaging to the west. It was a message that they have this new capability and, most importantly, that they have a very long reach.

This applies to the Arctic because it demonstrates Russia's ability to attack most crucial North American targets from areas just northwest of the Arctic archipelago, either from submarines or from bombers. As such, NORAD does need to look at an all-domain awareness, or at least a multi-domain awareness, moving forward, as you heard from Admiral Gortney. An attack on North America could come from either the maritime or the air domain. Russia is, of course, a threat in both of these areas. The threat is not probable, but it is possible, and it is our military's job to analyze the possible, with the probable ever in mind.

As such, Canada and the United States will need to further develop their maritime co-operation. We will need to enhance our understanding of one another in that region, and we are going to have to convey to our militaries that NORAD does have an existing maritime domain awareness mission, because, of course, that mission does exist. However, there is, let's say, a lack of understanding within both militaries that that mission exists.

Where does Canada go from here? There is probably no need at the present time for expanded maritime assets for surveillance. The assets we have, as Dr. Byers has mentioned, are suitable. What needs to be expanded is our co-operation and the forums through which we communicate with one another. Any type of further integration and co-operation with our American colleagues through NORAD or other means is, of course, desirable.

Canada is going to have to expand its air defence. We are going to need to continue to intercept Russian bombers as they buzz the North American air defence identification zone. However, this isn't going to be a combat mission, or at least it is highly unlikely that this would ever evolve into a combat mission. So I would advise, contrary to what Dr. Byers says, that we not put Arctic capabilities too high on our priority list. It is still a priority, but this is not something that we are going to need to devote too many resources to in the future.

The Arctic will not be, or will almost certainly not be, a combat theatre. We should view it as a region that needs to be watched, a region that needs to be guarded from Russian posturing. We need to watch for increased Russian posturing, both in the air and, potentially, moving forward, under the ice or on the sea.

Thank you.

•(1020)

The Chair: Thank you for your comments.

We're going to open up with our usual seven-minute round of questions. I'm going to give the floor to Mr. Spengemann.

Mr. Sven Spengemann: I will share any remaining time with my colleague, Mr. Gerretsen.

Thank you to all four of you for being here, for your tremendous work, and for offering us your insight and counsel.

I'd like to start with a question for Professor Byers on the issue of fighter aircraft and the replacement thereof, and I'd like to start with anecdote.

I had the privilege of completing part of my civilian flight training right here in Ottawa, at Ottawa Aviation Services, in a little single-engine aircraft. At the time, Ottawa Aviation Services had a policy of suspending flight operations any time temperatures went below 20° C. They did that, not because of a general lack of capability of the aircraft, but because of the realization that if a student went down in the Gatineau hills as a result of engine failure, she or he would be in serious trouble. That's within a very tight radius of Ottawa. I appreciate your testimony on the single-engine versus twin-engine paradigm, especially given the unique nature of the work that these aircraft are going to be doing in the Far North, not here in the Ottawa area.

I'm wondering if you could complete for the committee the analysis of the replacement of the fighter aircraft, looking at interoperability, refuelling issues, runway length, and then, most importantly, the evolving threats that we face, both domestically and from foreign forces. Give us your insight on what the criteria should be for our next fighter aircraft.

Dr. Michael Byers: I also have a personal interest in this, in that I have a 15-year-old son who wants to fly fighter jets.

Certainly, the Canadian Arctic is extraordinarily large. It's 40% of the second-largest country on earth. We have very extensive maritime zones. We have, at the moment, twin-engine fighter jets that we chose because of the safety provided by a second engine, just like the U.S. Navy chose the F-18, and has bought a lot of replacement Super Hornets, again for the second engine, because of the safety over hostile ocean—or Arctic, in our case.

If we were to choose a single-engine jet for the Arctic, we would have to substantially improve our Arctic search and rescue, so that we could get to pilots quickly if they had to parachute to safety.

Again, you might not hear this from the air force; it's a harsh reality. They're not looking at the fighter jet for Arctic security; they're looking at the replacement fighter jet for operations overseas. That's why they want particular planes.

We have a fleet of F-18s. The logical thing, from my perspective, is to do a fleet extension of Super Hornets, which could fulfill the exact same mission, require relatively little new training for mechanics and pilots. And, of course, we know that we can afford the Super Hornet. We don't know if we can afford—

Mr. Sven Spengemann: Just briefly, Professor Byers, on the two threats I mentioned, domestic and international, what, in your view, would be the capabilities of the Super Hornet to respond to either of those? Domestic being the threat of airborne, domestic terrorism that we studied in Colorado Springs and elsewhere...but also international interdiction threats against Russian long-range bombers and other air assets.

Dr. Michael Byers: Look, if you're happy with what the CF-18 has done in the last 30 years—and I am—clearly it's suitable for the North American mission.

In terms of the overseas mission, the decision that would need to be made is whether we want to be the tip of the spear on the first day of attack against an enemy that has highly capable surface-to-air radar and missiles. We haven't fulfilled that role. We leave it to allies. More recently, in places like Libya, our allies have used cruise missiles or drones for that mission.

There are also other serious questions as to whether or not our new fighter jets might be rendered obsolete in 15 or 20 years by unmanned fighter jets. Investing a massive chunk of our defence budget in an as-yet-unproven, fifth-generation plane that might become obsolete fairly quickly has always struck me as a bit of a gamble.

•(1025)

Mr. Sven Spengemann: Thank you for that. I'll pass the remaining time to my colleague Mr. Gerretsen.

Mr. Mark Gerretsen: My question is also for Mr. Byers. General Hood came before this committee a number of weeks ago and commented that no U.S. Air Force F-16 has experienced an engine failure since 1991. And that's a single-engine aircraft.

First of all, do you concur with that comment? What's your response to it?

Dr. Michael Byers: I think what the general was referring to is that the latest version of the F-16 has not yet experienced a catastrophic engine failure resulting in a crash, but the newest version of the F-16 has acquired relatively few hours so far. It's a bit like looking at the Saab Gripen that is produced in Sweden—it has relatively few hours of flight time, and so it's difficult to tell.

Again, fighter jet engines are massively more reliable now than they were 30 or 40 years ago. The F-35 will be more reliable than the F-104 Starfighter was. But it's a question of whether you actually factor in reliability and pilot safety as part of your consideration, all things being equal in terms of the choice of plane?

The Canadian situation is almost unique. Again, it's the second-largest country in the world, with massive Arctic and marine areas and relatively few airports. These planes do not glide well. It's all of these factors.

The same general pointed to the Norwegian situation. I've been to the Norwegian Arctic. They have incredible infrastructure. They have incredible search and rescue. They have chosen to fly single-engine fighter jets, but it's not the Canadian Arctic.

Mr. Mark Gerretsen: Okay. Thank you.

Mr. Byers, you and Mr. Fergusson both talked about the ballistic missile defence program. You seem to have competing views on it. You both mentioned that there's a cost associated with it.

I'm curious, from your position on it, if either of you have a sense as to what the actual cost is going to be. That seems to either be a deterrent, quite often, or something that is encouraging us to go down that route.

Mr. Fergusson, would you like to provide an answer to that, first.

Dr. James Fergusson: The simple answer is, no one knows. You won't know until the doors open to enter into discussions with the United States. You won't know until those discussions then proceed to what Canada may be willing to contribute or could contribute to effectively get access.

The numbers that Professor Byers is using are mythical numbers. You can't take the value of investment in ground-based missile defence since roughly 1996 and say that somehow the U.S. is going to charge us a proportion of that. What if they will? Nor will they ask us to invest to pay back research and development costs. That's not going to be on. We're talking in terms of the Canadian investment, specifically what the cost to buy the product will be, and then you get into other sets of issues. Otherwise, no one knows.

Mr. Mark Gerretsen: I want to give Mr. Byers an opportunity to respond.

The Chair: I would love to hear it too, but unfortunately I'm going to have to pass the floor over to Mrs. Gallant.

Mrs. Cheryl Gallant: Thank you, Mr. Chairman. I'll be sharing my time with Mr. Bezan.

This question is for Drs. Ferguson and Huebert. In what capacity should Canada be considering participation in BMD and cruise missile defence: detection, interception, or developing the science and technology?

Also, how beneficial would it be with respect to missile detection and interception to have Sweden and/or Finland on board?

Dr. Robert Huebert: Thank you very much. I'll go first, I guess.

It's almost to the point of being a no-brainer. When we look at missile proliferation, when we look at the technologies that are now being developed.... Adam made reference to the most recent Russian cruise missile. What the Russians and Chinese are also developing is a hyperkinetic cruise missile capability that is probably going to be about six or seven times the speed of sound. This is the new technological reality that we are talking about. The submarine factors are already coming into the context. To pretend that these type of technologies are not being developed with countries that have very different interests from Canada is just simply sticking our head in the snow, to be honest. Therefore, any type of participation, first and foremost with the Americans, is a complete essential to Canadian security.

In terms of working with our allies, it's not just going to be the Swedish and the Finns, it's also going to be the Norwegians. The Norwegians will be retrofitting their advanced ice-capable frigates to have an ABM capability. They're not saying this officially, but it's being discussed in all the open literature. They're going to a maritime-based ABM capability that they will then integrate with the Americans. This is what the future is becoming. I think that the essence of what we need to do is to provide security to Canadians against this type of threat.

• (1030)

Mrs. Cheryl Gallant: Dr. Fergusson.

Dr. James Fergusson: From my perspective, first of all with regards to the Swedish and Finnish involvement, that raises the issue of course of what the future holds for the NATO-based American phased adaptive approach to missile defence and whether you want to add a site for further defence. That be actually a site to defend North America rather than Europe. So I don't think they're going to make one difference either way in terms of North American defence.

In terms of technologies, in terms of opportunities in the missile defence world, that train left the station two decades ago. Canada did not engage. The American research and development program is well advanced across the board in missile defence. The likelihood that there are any opportunities for Canadian firms or Canadian technology is extremely low. There may be some firms that are somewhat engaged on the margins as a function of the integrated nature of the Canada-U.S. defence technology and industrial base.

Cruise missile defence in terms of warning and identification of cruise missiles is a problem, which I think you probably heard from Admiral Gortney. There are numerous potentials in that area in terms of Canada's involvement in terms of the early warning. It's really about surveillance, reconnaissance, tracking, target identification, and cruise missile defence, which is vitally important. The capacity to intercept cruise missiles is already in place with the F-18s and will be in place with any replacement of the F-18.

About missile defence, it's difficult to know. I can tell you right now that, if Canada proposed an interceptor site in return for direct access to command and control of the defence of North America as a whole—a low probability of attack, but it's greater than zero—the United States would be interested in providing that capability in some form of negotiated arrangement.

Possibly as well, as I mentioned, tracking radars will be important if the United States proceeds down that path. They have alternatives, of course, in radar. They could put in offshore radar, as they have in the Pacific right now and off Alaska.

So there are some opportunities, but they're not great ones. I hope that answers your question.

Mr. James Bezan: I'm going to concentrate my question to Professor Huebert and the discussion you were having about the Russian and the Chinese threat, as well as about the unpredictable actors, such as North Korea and Iran, especially with Iran's testing of their ballistic missiles this past weekend.

What have we learned from Russia? Professor Lajeunesse talks about Russian posturing, but Russian posturing in Ukraine turned into an invasion, an occupation, and an illegal annexation, and they're escalating the aggression in the Baltic Sea. Do you see this potentially spilling into the greater geopolitical arena with, as you pointed out, the relationship between Arctic states, particularly the United States and Russia, and how it will impact us here?

Dr. Robert Huebert: I would totally agree, and I would even go further to suggest that the manifestation of Russian defence and willingness to use military force really starts not with the Ukrainian crisis but rather with the Georgian intervention. We saw at that point in time the Russians become clear about the defence of what they refer to as the “near abroad”, where they will use military force. We've seen it in Georgia, we've seen it in Ukraine, we are now starting to see what some refer to as “hybrid warfare” within the context of the Baltic states, Moldavia, and the list goes on.

As Adam has made very clear, the Arctic is also, in terms of both their statements and actions, part of this near abroad—in other words, a key strategic geopolitical location. That's not to say that the Russians will automatically resort to the use of force in defending their interests. They will try to co-operate, because it's obviously in their interest to do so. But when they make the calculations—as they did in Georgia, and as they did in Ukraine—that they in fact ultimately have to use some form of military force, through posturing, through the type of interactions they've been having with the Finns and Swedes in the last year, we can expect to see this.

In other words, it's not to say that it's the extremes of peace or war, but rather hardball politics. I think the period of co-operation that we've had in the Arctic for the last 10 years has really blinded us to the realities of what they will be doing, and I think we ignore that at our peril.

Mr. James Bezan: I appreciate those comments.

•(1035)

The Chair: I'm going to give the floor to Mr. Garrison. You have the floor for the last question, after which we'll suspend. We'll have to ask the guests to leave very quickly, because we have a bit of

committee business to do and we have to be out of here at four or five minutes after the hour.

I'll thank you in advance for your attendance.

Mr. Garrison, you have the floor.

Mr. Randall Garrison: I want to go back to Professor Byers to talk about the priorities for recapitalization. I certainly share his concern about the massive need we have for recapitalization, whether we're talking about the army, the air force, or the navy.

Given that Canada doesn't have unlimited resources, I'm going to ask you to do a bit of a prioritization here and tell us what you think our priorities need to be in that recapitalization—and, obviously, where ballistic missile defence would fall, since it's unlikely to be free.

Dr. Michael Byers: On missile defence, a decade ago I worked very closely with former foreign minister Lloyd Axworthy on the issue of missile defence. There was a lot of concern expressed by many of the same voices you've heard today and in previous sessions about how the United States needed Canadian participation, how they were pushing for Canadian participation, how we needed to have facilities in Canada.

When former prime minister Paul Martin said no, the Americans shrugged and worked around the issue and developed a capability that did not require Canada.

When Professor Fergusson says, “expand radar in Canada, probably at Goose Bay”, my response would be yes, and it could probably be placed in southern Greenland also. Be aware that there is pressure here, but it may not be not quite as real as some people would want you to think.

In terms of priorities, I think if you were to ask the U.S. defense secretary what his priorities would be involving Canada's capabilities, he would say, I want you to replace the CF-18s; I want you to replace the army trucks, so that you can actually deploy your army abroad in significant numbers; I want you to replace those supply ships, because right now you're completely dependent on the U.S. Navy, and we want you to be able to form task groups on your own—etc., etc.

Any ally of Canada looking at us objectively would say that participation in missile defence is way down the list, because so much else in our military is broken.

Thank you.

Mr. Randall Garrison: Professor Lajeunesse, you talked a lot about the Russian threat. I wonder whether you have a comment on Canada's joining ballistic missile defence as it would affect the Russian perception of Canada.

Mr. Adam Lajeunesse: Frankly, I don't think it would affect the Russian perception of Canada all that much, and even if it did, it wouldn't really matter. The Russian perception of Canada is as an appendage to the United States. From a geopolitical and from a military perspective, the Russians see Canada as a link to the U.S., so whether we are participating in missile defence or not is not going to have any real ramifications in our relationship with Russia, at least not in any meaningful way.

Mr. Randall Garrison: There's been a lot of concern expressed—not at this table, but outside—about the impact of both ballistic missile defence systems and the proliferation of other weapons systems around the world.

I'll ask Professor Lajeunesse and Professor Byers, do you see any impact on the larger question of arms proliferation from Canada participating in the U.S. missile defence ?

Dr. Michael Byers: One thing that hasn't been mentioned and needs to be mentioned, because it's a decision that will need to be made by this government in all likelihood, is how Canada's new Canadian surface combatants will be equipped. There will be a push from the navy to make them Aegis class and to have the radar and the standard missile-3s that would enable them to provide missile defence capabilities, as the Norwegians are evidently planning to do.

That's a big ask that you'll get from the navy. Having that Aegis-class capability on a surface combatant will probably add somewhere in the range of half a billion dollars to the cost of that single vessel. This is a big one. It's coming.

How you think about missile defence in the North American context will necessarily bleed into that later debate.

● (1040)

Mr. Adam Lajeunesse: I think missile defence will become increasingly important as the years go by. Over the past 10 years, we've seen this proliferation of ballistic missile capability, and not just capability, but the intent to get capability by actors like North Korea and Iran.

As Canada is facing the recapitalization of both its navy and its air force simultaneously, I do agree with Dr. Byers that in terms of priorities, which have to be set, missile defence—depending on the cost, which we do not know—will be toward the bottom end of that priority list.

Mr. Randall Garrison: Thank you very much.

The Chair: Thank you very much for appearing today, everybody. I would like to suspend for a couple of minutes, so we can get to committee business.

[Proceedings continue in camera]

Published under the authority of the Speaker of
the House of Commons

SPEAKER'S PERMISSION

Reproduction of the proceedings of the House of Commons and its Committees, in whole or in part and in any medium, is hereby permitted provided that the reproduction is accurate and is not presented as official. This permission does not extend to reproduction, distribution or use for commercial purpose of financial gain. Reproduction or use outside this permission or without authorization may be treated as copyright infringement in accordance with the *Copyright Act*. Authorization may be obtained on written application to the Office of the Speaker of the House of Commons.

Reproduction in accordance with this permission does not constitute publication under the authority of the House of Commons. The absolute privilege that applies to the proceedings of the House of Commons does not extend to these permitted reproductions. Where a reproduction includes briefs to a Committee of the House of Commons, authorization for reproduction may be required from the authors in accordance with the *Copyright Act*.

Nothing in this permission abrogates or derogates from the privileges, powers, immunities and rights of the House of Commons and its Committees. For greater certainty, this permission does not affect the prohibition against impeaching or questioning the proceedings of the House of Commons in courts or otherwise. The House of Commons retains the right and privilege to find users in contempt of Parliament if a reproduction or use is not in accordance with this permission.

Also available on the Parliament of Canada Web Site at the following address: <http://www.parl.gc.ca>

Publié en conformité de l'autorité
du Président de la Chambre des communes

PERMISSION DU PRÉSIDENT

Il est permis de reproduire les délibérations de la Chambre et de ses comités, en tout ou en partie, sur n'importe quel support, pourvu que la reproduction soit exacte et qu'elle ne soit pas présentée comme version officielle. Il n'est toutefois pas permis de reproduire, de distribuer ou d'utiliser les délibérations à des fins commerciales visant la réalisation d'un profit financier. Toute reproduction ou utilisation non permise ou non formellement autorisée peut être considérée comme une violation du droit d'auteur aux termes de la *Loi sur le droit d'auteur*. Une autorisation formelle peut être obtenue sur présentation d'une demande écrite au Bureau du Président de la Chambre.

La reproduction conforme à la présente permission ne constitue pas une publication sous l'autorité de la Chambre. Le privilège absolu qui s'applique aux délibérations de la Chambre ne s'étend pas aux reproductions permises. Lorsqu'une reproduction comprend des mémoires présentés à un comité de la Chambre, il peut être nécessaire d'obtenir de leurs auteurs l'autorisation de les reproduire, conformément à la *Loi sur le droit d'auteur*.

La présente permission ne porte pas atteinte aux privilèges, pouvoirs, immunités et droits de la Chambre et de ses comités. Il est entendu que cette permission ne touche pas l'interdiction de contester ou de mettre en cause les délibérations de la Chambre devant les tribunaux ou autrement. La Chambre conserve le droit et le privilège de déclarer l'utilisateur coupable d'outrage au Parlement lorsque la reproduction ou l'utilisation n'est pas conforme à la présente permission.

Aussi disponible sur le site Web du Parlement du Canada à l'adresse suivante : <http://www.parl.gc.ca>