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Chair

The Honourable Peter Kent

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● (1530)

[*English*]

The Chair (Hon. Peter Kent (Thornhill, CPC)): I call the meeting to order.

Good afternoon, colleagues, and guests.

Pursuant to Standing Order 108(2), we will continue with our study of the defence of North America.

We have two witnesses before us today from the Canadian Defence and Foreign Affairs Institute: Mr. Brian Bow, a fellow with the CDFAI, and Lieutenant-General George Macdonald, retired, also a fellow of the institute. Gentlemen, please make your opening statements.

Lieutenant-General George Macdonald (Fellow, Canadian Defence and Foreign Affairs Institute): Mr. Chairman, and members of the committee, I'm pleased to have the opportunity to participate in your review of the defence of North America. I'll keep my initial comments brief.

Previous witnesses have provided you with input on a wide range of issues related to the subject at hand. While my first-hand military experience is now dated given my retirement from the military some 10 years ago, I've maintained a direct interest in many security and defence areas through my consulting work and my association with the Canadian Defence and Foreign Affairs Institute. Having said that, I will focus my comments on NORAD to quite a few points on ballistic missile defence.

Several years of my military career were spent in NORAD or NORAD-related positions, the final one being the deputy commander of NORAD at the headquarters in Colorado Springs from 1998 to 2001. I am an ardent supporter of the partnership and am pleased to see that it remains a strong, efficient, and effective means of contributing to the defence of North America.

After 9/11, I was a proponent of expanding the NORAD mission to address other domains and was encouraged to see the inclusion of maritime warning as a step in that direction. Much of the binational cooperation that I thought we could achieve is now being coordinated bilaterally between CJOC and NORTHCOM, the Canadian Joint Operations Command, and Northern Command, which is fine. It may or may not be the most efficient way of operating but it seems to meet the needs of both nations. Lieutenant-General Beare offered you a fairly complete perspective in this regard in his comments given to the committee in May.

On a more general not, I cannot overstate the importance of our partnership with the United States in NORAD. We don't just work together; we operate in a fully integrated command. Tasks performed by Canadians and Americans are interwoven to the point where in most cases the nationality of the person performing them is immaterial. Canadians report to Americans and Americans report to Canadians throughout the structure. We share sensitive and highly classified information in order to perform the mission. We are dependent on each other even though the U.S. provides the majority of the resources. Throughout, the NORAD relationship engenders a level of trust that serves us well beyond NORAD issues. The success of the partnership and the professionalism of the Canadian military personnel have cemented personal relationships in both nations consistent with our inseparable domestic defence requirements. We Canadians benefit in the achievement of a priority national defence mission at a fraction of the cost were we required to do it on our own. Pursuing a natural evolution of the NORAD mission to retain its relevance and effectiveness must continue to be a priority.

Cooperation for aerospace warning and aerospace control along with maritime warning is good and important, but we could do much more. To that end, we should reconsider Canada's involvement in the ground-based North American ballistic missile defence system. Just as Canada participates with the U.S. in NORAD for aerospace warning and aerospace defence, it is a natural extension that Canada's participation in ballistic missile warning should evolve to engagement in ballistic missile defence. I've been an active advocate for Canada's involvement in BMD and was disappointed with the decision in 2005 to decline participation. I felt at the time, and still do, that we missed a great opportunity to reinforce our NORAD relationship, not to mention ensuring the protection of our sovereign territory from a rogue ballistic missile threat.

We subscribe to the necessity of the alliance to defend North America and yet we have abrogated our responsibility to the partnership with regard to the BMD mission. We have left it to the American side of NORAD to perform using their territory, their resources, and their rules. With improvements to the BMD system over the years there's a real risk that NORAD involvement will be marginalized to the point where the U.S. will want to consider excluding NORAD from missile warning altogether and simply execute both the warning and the defence mission themselves. I believe that we should engage the U.S. to assess how we might become involved. It is the responsible course of action for Canada.

Mr. Chairman, I look forward to providing whatever assistance I can in answering any questions you have.

● (1535)

The Chair: Thank you.

Mr. Bow.

Mr. Brian Bow (Fellow, Canadian Defence and Foreign Affairs Institute): My thanks to the committee for the invitation. I'm very pleased to participate and look forward to the discussion that follows.

Canada is confronted with a number of complex national defence questions today, and there's a danger that we will lose sight of the less urgent but more fundamental challenge of defending the North American continent from large-scale threats. There's also a risk that when we do turn our attention to focus on continental defence, we may become fixated on the politically charged issue of ballistic missile defence. BMD is, of course, an important question which must ultimately be answered, but it is not the only question.

Today I want to make a general argument for re-examining not only BMD, but also the overall architecture of our defence cooperation with the United States. I do not suggest this re-examination because I think there is an immediate crisis to deal with or that the system doesn't work at all; rather, it's because the muddling through we have done to get through past crises may have taken us down a dead-end street, limiting our options for the future.

I would identify four key features of our current approach.

One, while NORAD persists as an integrated command structure within a particular domain, the main trend since 9/11 has been a reliance on building up separate national command structures and capabilities.

Two, rather than thinking about how to develop a more integrated command structure that would bridge many domains, the focus has been on trying to make the commands we already have—NORTHCOM, NORAD, and CJOC—work together more efficiently, that is, the tri-command system.

Three, where efforts have been made to pursue more integrated forms of coordination, they have taken the form of ad hoc extensions of NORAD to other domains, i.e., the maritime NORAD system which General Macdonald mentioned a moment ago.

Four, the prospects for building on NORAD and other domains are clearly affected by lingering questions about NORAD's role and relevance, many of which stem from the unresolved question of BMD.

On the one hand, I don't think there's any prospect for us to engineer from scratch the kind of unitary, integrated, multi-domain command structure that was called for by the U.S.-Canada Bi-National Planning Group. The two countries' perspectives and priorities are clearly not identical, and each rightly wants to maintain the capacity to act on its own under certain circumstances.

On the other hand, there are reasons to think twice about just carrying on with the ad hoc NORAD-plus approach that we're currently following. Building on NORAD does carry a number of advantages. Again, these were mentioned already. More concretely, it protects an already effective structure for integrated aerospace warning and air defence, and it may be a foundation for cooperation in space. Less concretely but equally importantly, it leverages existing relationships with key offices and personnel at USNORTHCOM, preserves a potent symbol of Canada-U.S. cooperation, and could sustain and spread a very positive binational organizational culture to coordination in other domains.

There are, however, some potential problems with building incrementally on the NORAD template.

First, NORAD is an air force institution, obviously, and using it as the foundation for a broader, multi-domain structure creates the potential for, or at least the potential perception of, an imbalance of influence. That has been an issue in the effort to build a maritime NORAD as the already difficult bureaucratic process of bringing together many different departments under one umbrella has been further complicated by the perception among some of the participating departments and agencies that the RCAF and USAF are poaching on others' turf.

Second, residual tensions within the partially consolidated CJOC itself, and the gaps between CJOC and NORAD within the contemporary tri-command structure may tend to sustain an unhealthy division of labour between the services, which may exacerbate turf battles and raise questions about overlap and redundancy. At the very least, the existing tri-command system clearly leaves some significant coordination gaps with ongoing complaints from insiders and outsiders alike about over-complicated communication and decision-making, information blockages, and ambiguity about roles and responsibilities.

Third, the branding of new forms of bilateral defence coordination as extensions of NORAD may tend to obscure the fact that these new initiatives are not nearly as integrated as NORAD itself. It is difficult to say at this point, but early reports suggest that the maritime NORAD initiative, for example, will mostly feed into national domain awareness efforts without giving Canadian commanders much influence on U.S. decision-making, or vice versa. In that sense, thinking about this as maritime NORAD may give us the impression we have created more NORAD when in fact what we have created is not the same, or doesn't work the same.

● (1540)

Finally, to wrap things up, if Canada is willing to make significant investments over the next few years to try to harden the outer edges of the continental security perimeter, it may find the United States receptive to the creation of new integrated structures, especially with respect to the surveillance and control of maritime approaches, inland waterways, shipping, and other cross-border transportation systems.

This is probably the only way to stop the post-911, post-BMD drift towards separate national efforts, and to secure greater consultation, intelligence sharing, and financial resources.

Unfortunately, there is little reason to think these issues will be prominent in the upcoming election, or that whatever government comes out of that election will be prepared to open a broader debate on these issues unless, of course, there is some new catastrophic early warning failure to catalyze public demand for a broader and more effective coordination.

The Chair: Thank you very much, Mr. Bow.

We'll proceed now to the opening round of questions, which will be seven-minute slots, beginning with Mr. Chisu, please.

Mr. Corneliu Chisu (Pickering—Scarborough East, CPC): Thank you very much to the witnesses for the great presentation about NORAD.

I have an introductory question. How is the changing international security environment affecting North America from a defence and security perspective?

I'm speaking about the flexing of muscles by Russia lately in Novaya Zemlya. It is a neighbour of the United States, a neighbour of Canada. China is increasing its maritime component. They have 70 submarines on the west coast.

Could you elaborate on your opinion about these things, and what is a threat that you envisage in this area?

LGen George Macdonald: I don't think there's much doubt that the Russians' increased activity is a concern to us all. From a NORAD perspective, this isn't something that just developed since the Crimean crisis, or the Ukraine issue. It's more focused on capabilities that Russia has been working on for some time now.

They are re-establishing strategic aviation bases in the north. They are developing newer and newer technology to extend the range of cruise missiles, which are delivered by bombers. They have been more active in the north of late than they have been for the previous decade.

Even when I was in NORAD, there was a softening, if you will, of the relationship in that we undertook to advise each other when we were deploying to the north to provide some public warning of our activities.

I think that now in NORAD Russia is maybe not a direct threat, but certainly they have been penetrating international airspace and conducting flights towards North America, and of course ultimately, the cruise missile threat delivered by bombers is a threat.

No one also can detract from the fact that China is a growing power. The pivot of attention towards the Pacific is an important aspect of what we do. I personally don't think China represents a threat to Canada or to North America, but nevertheless, it is a power to be reckoned with and dealt with, and recognized throughout the international environment.

● (1545)

Mr. Corneliu Chisu: Because we are speaking about the Arctic, and in all those activities of Russia probably they are developing the Arctic, do you think it is necessary to have an overview of the policy regarding the Arctic both in Canada and the United States?

LGen George Macdonald: Even though we have perhaps some diplomatic differences about boundaries in the Arctic, I don't think there are any differences about the need to protect the Arctic as part of NORAD's area of responsibility. Indeed there is excellent cross-cooperation between the Alaska NORAD region and the Canadian NORAD region.

I think it's recognized throughout NORAD and throughout our two countries that's an area of considerable priority for the future given the change in the environment. I don't think there's any hesitation to agree with you.

Mr. Brian Bow: I think that's right. I would just add there's nothing new about that. Our relationship with the United States in the Arctic has always been characterized by a kind of mixed agenda, where there are some things where we clearly do not agree and we choose to try to work around those disagreements, and then some other things where we clearly do agree. That's nothing new.

I think the same thing is going on today where there are plenty of opportunities for increased coordination with the U.S. Almost everything that's related to the increased uncertainty about Russia's intentions in the north, and the increased uncertainties about China's role in the Pacific are both things where we, for the most part, see eye to eye with the Americans, and there's still plenty of room for us to cooperate with them.

Mr. Corneliu Chisu: I was looking at an increased military cooperation between Russia and China. Do you foresee any future threat or any necessity to change some of the policies in this regard, mostly in the Pacific area?

Mr. Brian Bow: It's true there is political cooperation with them, and some very low-level defence cooperation, but to me it doesn't seem any more prominent than their respective cooperation with a variety of other partners. There has been an overplaying, I think, of the importance of the connections between China and Russia in that, really, their strategic agendas clash more than they are aligned.

Mr. Corneliu Chisu: I'm asking you this because they recently made an agreement between them on military cooperation—

Mr. Brian Bow: They've made a number of agreements recently, yes, but I don't think any of those agreements take away from the fact that their interests in the Pacific are not necessarily aligned. There is no reason to think of the potential threats that might be posed by either of them in the long term as being exacerbated in any really meaningful way by those agreements.

Mr. Corneliu Chisu: General, did you want to add to that?

LGen George Macdonald: No, I agree.

Mr. Corneliu Chisu: You were speaking extensively about ballistic missile defence. Do you see a necessity for cooperation with the United States in this field? Do you see a missile threat?

LGen George Macdonald: I don't think the missile threat has accelerated, if you will, but it has been gradually evolving over the past several years. North Korea clearly now has the ability to launch a missile to North America. Whether they can effectively mate a weapon with that missile and deliver it with any kind of accuracy remains to be seen. Iran continues to develop even longer-range ballistic missiles.

I don't think the threat has suddenly jumped up to be an immediate crisis, but I think it still warrants our consideration to participate in the ballistic missile defence warning and defence mechanism with the United States. It's something I suppose we could put off for some time yet, but I think there will come a time when we will find ourselves in a position where we will have missed that opportunity and it will be difficult for us to re-engage—to the detriment, I think, of the integrity of our NORAD participation.

The Chair: Thank you. That's time, Mr. Chisu.

Mr. Harris, please.

● (1550)

Mr. Jack Harris (St. John's East, NDP): Thank you, gentlemen, for coming to our committee today.

On the defence of North America, I know you've both focused on NORAD to some extent. We're looking at all the broader issues, including cyber, maritime defence, etc., but just to focus a little bit on NORAD, I got the impression a little bit today....

Mr. Macdonald, you made a comment about NORAD retaining its relevance and effectiveness. Other people seem to be looking for new roles for NORAD. We know how it came about; NORAD came together in the Cold War with respect to a particular defence need. Are we really looking for something to tack onto that? I mean, cyber doesn't seem to work. In Canada it's public safety. In the U.S. it's national defence. It's both offensive and defensive, so we don't really have effective work there. There's maritime, of course; there's an aerospace command, so we're not really dealing with our navy.

Is that why we're settling on BMD, that maybe we can do it together?

LGen George Macdonald: In my opinion, BMD is the obvious natural NORAD mission that we could perform with the United States. I think it's something we've missed out on. I used the words "abrogated our responsibility" in my presentation. I believe it's something in which we morally have an obligation to participate, and we should. It's the obvious first choice, if you will.

I don't discount the possibility of working with the United States on cyber issues. I recognize the disparity between how they're dealt with in both countries, but I think there is perhaps an opportunity that we could explore, within the context of a NORAD-like undertaking, to share cyber defence issues.

Mr. Jack Harris: Sir, I know that you've spent a lot of time in the military, and I clearly thank you for your service. I understand that in addition to being a board member of this organization, you're also an active lobbyist. I see actually that you represent, on behalf of your employer, some 14 different aerospace companies, including Lockheed Martin, Lockheed Martin Mission Systems and Training, Magellan Aerospace, Lockheed Martin Canada, Kongsberg Defence Systems.

I don't mean to discount your statements, but clearly it may well be that some of your clients have interests in this sort of thing too. Is that correct?

LGen George Macdonald: I don't know. Yes, it's possible. The only company I'm aware of that has been actively involved in the last decade or so with ballistic missile defence was Raytheon, which proposed the installation of an x-band radar at Goose Bay as a Canadian contribution, if you will, toward ballistic missile defence before the decision was taken not to participate. Of the companies I currently work with, there's no substantive work we do that has anything to do with ballistic missile defence, and I think I'm right in saying not even NORAD.

Mr. Jack Harris: Thank you for clarifying that. I just wanted to make sure that was the case.

I know we give some prevalence to NORAD, and I think we're very proud of the relationship. I think you hear from time to time about the joint command and the fact that during 9/11 the Canadian commander was on duty. I think it works well for Canada and for what we do.

We were told the other day in a report prepared by a witness that in the United States their defence documents rarely or barely mention NORAD, but they emphasize the kind of binational work we do. I'm wondering if we're struggling to make more of it than it really is, in terms of the American priorities. It seems to work for Canada in terms of what we are doing now. We're being told by other witnesses that realistically, Korea is not a threat to Canada and the Russians are not a threat to Canada, from a missile point of view, and that this seems to be what we want to do because the Americans are doing it. I haven't heard a good argument that we do that, other than to say it seems logical, etc. Expense isn't obviously a question. Priorities for Canada are a question. Why would it really be necessary?

LGen George Macdonald: Joe Jockel, an academic who has written quite a bit about NORAD, said once that Canada needs NORAD more than NORAD needs Canada. Indeed, in my time in the United States, I found there were many senior American military officers who were unfamiliar with NORAD, and every time we'd have a visit to Colorado Springs I would take the opportunity to give them NORAD 101.

You're quite right in saying that there are maybe fewer in the United States who recognize NORAD's utility than there are in Canada, but having said that, General Jacoby, the current commander, is very supportive of NORAD. The PJBD is very supportive of NORAD and Canada-U.S. participation. Also, whether we continue to call it NORAD or not, or whether we change the name or develop some other arrangement, I think there will always be a need to have this bilateral, binational participation.

Ballistic missile defence is a responsibility of aerospace warning and aerospace control. We've signed up to that. Yes, you could argue that we could avoid it, that the Americans are making more of ballistic missile threat than really exists, but the reality is, too, that we are in NORAD, that it is a recognized mission of NORAD, and that the threat continues to evolve. There's hard intelligence that has identified what North Korea capabilities have developed to, and everybody knows that North Korea is an unstable regime, at best.

● (1555)

Mr. Jack Harris: Perhaps it's unstable enough not even to last longer than the next few years.

LGen George Macdonald: Potentially.

Mr. Jack Harris: Sir, could I ask you one more question? I'm running out of time, here.

I believe you spoke about the tri-command with the CJOC and USNORTHCOM and NORAD command. Are you satisfied with that, or have you argued in favour of a more integrated approach between the two countries?

LGen George Macdonald: I guess in this context I remain a pragmatist. Dr. Bow has given you some pretty good ideas about what could be done differently, and I would have argued, when NORTHCOM was set up in the States that NORAD could have piggybacked onto that opportunity to make more than NORAD, and to make more of that broader command that would be a shared command between Canada and the United States. But some years have gone by since then, and it has evolved to the tri-command issue. My approach would be that if we can improve it, yes, but I'm not sure there's the will or that the interests of both nations are consistent with making those changes.

The Chair: Thank you, Mr. Harris.

Mr. Williamson, go ahead please.

Mr. John Williamson (New Brunswick Southwest, CPC): Thank you both for being here today.

We've heard a lot about the evolution of NORAD in conjunction with the rising importance of the Arctic, although there is debate about how quickly the Arctic is changing in terms of both shipping and other possibilities in the north.

Given the increased attention to the Arctic, how do you think Canada should approach the issue of sovereignty over the Arctic looking at the question through a North American lens? I'm not talking in terms of disputes we have with the United States, but in terms of protection of the Arctic. Should that be done through NORAD, or is that something that Canada is really going to have to put an increased emphasis on, whether it's through a beefed-up coast guard or through the RCMP units that are scattered throughout the north?

What's your thought on that? What's the best way to maintain our eyes and ears in oversight of the Arctic?

Mr. Brian Bow: I think there's no single thing that we have to do and many of the things that we would have to do in order to have a more ambitious assertion of our presence in the Arctic are things that have nothing to do with NORAD. To the extent that NORAD is relevant to the Arctic, it's mostly about missions in the Arctic area that are air surveillance, air response, and some kinds of maritime activity that are relevant to NORAD. In that sense we should feel encouraged by the fact that we already have NORAD in place as a mechanism for establishing dialogue and cooperating with the Americans on some of those issues. NORAD is not a fix-all for this and we shouldn't be thinking about our approach to the Arctic more broadly as something that goes through NORAD.

LGen George Macdonald: I would agree with that. I think that obviously, the airspace control mission in the north is something that NORAD does. Maritime warning applies to the Northwest Passage as well. That's an evolving mission that has occurred and has engendered cooperation between the two countries, but there's much more that we do independently of that as well.

● (1600)

Mr. John Williamson: Right.

LGen George Macdonald: There are army exercises and the deployment of maritime patrol aircraft and space surveillance.

Mr. John Williamson: How would you both assess the maritime component of NORAD?

LGen George Macdonald: I don't have any direct personal first-hand understanding of this, but my understanding is that the evolution of it was fairly slow to start. After about four years of initiation they started to develop real information. Now they gather information from all the stakeholders who are involved and have been issuing maritime advisories for the last two or three years. NORAD is the place where all that information is fused on behalf of not just NORAD, but everybody that's involved.

I think it has evolved into a functional, useful mission and is recognized to be so.

Mr. John Williamson: Very good.

Mr. Bow.

Mr. Brian Bow: I would agree with that. It's important to recognize that maritime warning, whether it happens through NORAD or not, is an inherently much more complicated thing than air defence or air warning. If we go back to the Cold War context it's really just our air force and the American air force, two entities, cooperating with each other. It's a relatively straightforward thing, though in practice more complicated.

After 9/11 air warning obviously expanded. We had the FAA and other civilian agencies involved in the process, but it's still a relatively small number of players bringing information together into one package and trying to work with that.

Maritime warning is much more complex with many more players involved. It shouldn't be at all surprising to us that it takes a longer time for us to get to the point where we're not just in the process of actually exchanging information but we're actually in a position to make good use of it; the right kind of filtering is going on, and once information is packaged together, it can be put out to stakeholders in a way that is useful to them.

I think at this point in the process it's still very early days. A lot of the participants feel that they pool information into the centre and then it comes back to them, and they say, “That's what we told you two days ago and now you're sending it back us.”

I think in the longer term there is plenty of potential for them to get beyond that and to have a more meaningful centre that actually digests that information and can do more than just give out advisories.

LGen George Macdonald: I won't take issue with the complexity of one mission versus another, but the reality is that the kind of maritime warning that's done is kind of the core competency of NORAD: to collect information, fuse it, disseminate it, assess it, take action. It's a natural, in some respects.

Mr. John Williamson: Is the thinking behind the maritime component one of combatting smuggling? Is it security? Is it all of the above? Is it to just issue marine weather advisories? I don't know the degree of information, but what are they hoping to get out of this if they're able to get all the various parts put together, all the various agencies and whatnot?

Mr. Brian Bow: It is a security initiative. It all depends. The information will come up through the process, and then it can be shared in ways that are useful in other domains, but it is primarily a security initiative.

Mr. John Williamson: Do I have time for another question, Mr. Chair?

The Chair: You have 30 seconds for a short question and answer.

Mr. John Williamson: At the end of the day, we have this structure in place, if it goes well, with NORAD marine. To me, it seems that one strength with the air capability of NORAD was radar, but we also had the ability to send planes out to provide eyes on the ground if we needed to. It seems to me that if we're going to do that in the north as well, Canada is going to need some sort of presence there, whether it's a coast guard or marine presence, to complement what NORAD's collecting. Am I right on that thinking? What's your thought on that?

Mr. Brian Bow: Certainly there's not much point in just collecting information and not having the capability to do something to act on that information. Whether or not all of those responses have to be things that are managed directly by NATO is a question to be worked out.

I guess it depends on what we are talking about. If we're talking about Russian air incursions, then it's probably something that would be handled through NORAD. It would rely on a mixture of the air assets we already have and the ones that Americans can bring to bear. There's some room for coordination so that the two capabilities can complement one another.

If it's something else like pollution at sea, then totally different players and totally different kinds of assets would come into play.

● (1605)

The Chair: Thank you, Mr. Bow.

Mr. Chan, please, for seven minutes.

Mr. Arnold Chan (Scarborough—Agincourt, Lib.): Thank you, gentlemen, for your presentation, and thank you very much for what you've suggested.

I wanted you to comment on something that's occurred over successive governments and over a long period of time.

We've gradually seen a reduction in defence spending across the board. This has really reduced Canada's capacity to reinvest in capital and reinvest in equipment, even to the extent that it's affecting our ability to have spare parts for existing equipment. On top of that, we've started extending ourselves in a number of other missions around the world, including Afghanistan, and perhaps even our recent mission in engaging ISIL.

Do you think the gradual reduction in defence spending and these various deployments ultimately affect our capacity to invest and commit to our relationship in NORAD?

LGen George Macdonald: We have always accorded the defence of Canada and the defence of North America as the primary mission. In the end, the direct investment in NORAD is not that great beyond the personnel involved and the sustainment of fighter forces and so on that are involved.

There's no doubt, though, that there's a potential for an incipient degradation of our overall defence capability that may narrow us down to something less of an ability to deploy internationally, with the defence budget decreasing.

Mr. Arnold Chan: Dr. Bow.

Mr. Brian Bow: I would agree with that. I think that if we're going to see the direct effect of that hollowing out of our defence capacity in the next 10 years or so, it's mostly going to be with respect to expeditionary forces and not necessarily continental defence. I think if current trends were to continue over the next 10 or 20 years, then yes, it would degrade that capability, like everything else. I think in the short term you're not going to see as obvious a degradation of our capability there as you would of our ability to participate in expeditionary missions overseas.

Mr. Arnold Chan: We've seen significant problems, really, within the Department of National Defence, with respect to procurement over the last little while, certainly difficulties with respect to our procurement on issues like medium and heavy helicopters, the F-35, and most recently with respect to Arctic patrol craft.

I'm wondering whether these problems in any way also contribute to eroding our relationship with our American allies.

LGen George Macdonald: Potentially it could, if we renege on or are delinquent in providing the kind of support that we want to provide to continue to participate with the Americans either here at home, in NORAD, or internationally.

Any delay in acquiring a new fighter, for example, to replace the CF-18 beyond the useful life of that aircraft, will obviously potentially have an impact on NORAD and our obligations to defend North America with the Americans. That particularly is an example that could have a direct effect.

Mr. Brian Bow: I agree. It sort of follows from the question that if we don't have the actual capabilities, then we essentially make ourselves irrelevant, and that is just as true on continental defence as it is on other defence.

Mr. Arnold Chan: General, you suggested that our decision in 2005 to not participate in ballistic missile defence has eroded our influence with respect to our American cousins. What would the actual cost be for us to participate in that type of system? What would be an effective response from the Canadian perspective in participating in BMD?

LGen George Macdonald: In 2005, I think we could have participated probably by simply adding some additional personnel to some NORAD sites that had part of the ballistic missile defence mission. Now, in 2014, with the intent of the Americans to deploy interceptors to eastern Canada and the need to have radar to support the proper target discrimination of an incoming ballistic missile warhead, there probably would be more interest in our providing a site in Canada to build such a radar. A site in Canada would be an appropriate spot to build one, and perhaps even some indication that Canada should fund or partially fund that.

In my view, we would not necessarily have to contribute directly to ballistic missile defence if we wanted to offer some asymmetric contribution that would be useful to the two nations, either within NORAD or in some other area, but the fundamental reality is that I don't know, and we wouldn't know until we made an appropriate approach to the Americans to explore the possibility of our participation and what they might welcome as a contribution.

● (1610)

Mr. Brian Bow: Your question was what the costs would be. There are lots of different kinds of potential costs. There are financial costs, but there are also costs involved in both participating and not participating in terms of other things, like how much of our resources are put into that as opposed to something else, or how much influence we have over the actual decision-making within a missile tracking and response system.

I agree with George that we can't know until we actually have the conversation. There are a number of different unresolved questions surrounding BMD, so if somebody comes to the committee and says we should do it because if we do it we will get *x, y,* and *z,* and it will cost us these other things, they are making it up. Nobody knows exactly what would be the terms of that agreement until we actually negotiate.

The Chair: Thank you very much, Dr. Bow.

We will now move to the second round of questioning, with five-minute slots, beginning with Mr. Norlock.

Mr. Rick Norlock (Northumberland—Quinte West, CPC): Thank you very much, Mr. Chair, and through you to the witnesses, thank you for attending.

Could I have quick responses to my following questions.

I found it very interesting, not passingly strange but very interesting that my Liberal friend would talk about degradation. Let's talk about degradation. Would you say that the replacement by purchasing C-17s, the upgrades to the Hercules by already taking delivery of Chinooks, by the recent order of Cyclones, by our shipbuilding capacity that we've just announced that will regain our ability in this country to learn and to be able to build ships that our navy needs, that the LAV upgrades, tanks, and an increase in the number of people in the Canadian Forces—I could go on and on and on. Would you say that signals degradation in Canada's ability, or would you not say that it is a change from 13 years of degradation?

Mr. Bow, you can start with a short answer, because I have a few more questions.

Mr. Brian Bow: Sure. I guess my short answer would be that clearly there was a renewal of a commitment to properly fund the forces seven or eight years ago, and that showed some really tangible results. Unfortunately, it hasn't necessarily been followed through on in all areas. People have talked about this, probably within the committee and in other contexts before. The raw number of personnel in the forces isn't necessarily the only question that's involved in the strength of the forces themselves; the amount of money that's available for training and for equipment and for all those kinds of things are also important factors there as well.

I would agree with you that yes, there has been some improvement, but I think there's still lots of room for more.

LGen George Macdonald: I can certainly agree with my colleague. I think it's a question of balance. To have a capability is not to buy a C-17, but to have the people who can operate it, the training system that can support it, the logistics and the spare parts that work with that, the infrastructure that goes with that. If you have an imbalance in any of those, then you could not have that capability, as effective as it might be.

Right now we have an imbalance in that a number of capital projects are proceeding, but the operations, maintenance, and support that's required to sustain the existing and future capabilities are not adequate enough to do that.

Mr. Rick Norlock: I'm glad you mentioned that, General, because CFB Trenton happens to be in my riding. I can tell you, and it can be verified, that we do have the training capabilities for the C-17 and the Hercules, because we have just purchased simulators, which will.... If you're looking strictly at the dollars spent on fuel, etc., that's been replaced by training on the ground through these simulators, so I think, if you're looking at raw numbers, they sometimes slide.

I'm very interested and surprised, Mr. Bow, because you said something about ordering them. There are four C-17s. The replacement of the Hercules is pretty well complete. Chinooks are being delivered to Camp Petawawa. Cyclones are ordered and they're here. The LAVs have been upgraded. The tanks have been purchased. The dollar value placed on that is significant. All those pieces of equipment are being used.

We can say there has been some degradation, if you want to work your way back to World War II, and that's exactly what I am referring to in our shipbuilding capability. We lost the ability to even build a ship in this country. We are now developing. That's why it's so expensive, but it is going to create jobs, and in the long run give us capacity that was no longer there.

I do appreciate what you've just said.

I'd like to move on to what I consider something that's necessary, and you alluded to it, and that's the replacement of the CF-18s. We will have no choice. The next government will have no choice. I think there has been a signal from the other side that maybe we don't need fighter jets any longer. Then I ask, what if a really bad thing happened? In history, this country's been able to contribute a full-fledged expeditionary force, which we can no longer send. I suppose we could let things fall apart and we could be workhorses or bit players.

My question for you is about your opinion on the replacement of the CF-18s. Shouldn't it be getting into the best aircraft, fifth generation stealth fighters? We heard at this committee stealth kills non-stealth 100% of the time.

General Macdonald, even though you would have to declare something of a conflict of interest, I think your military background and experience would supersede that, I would hope.

● (1615)

LGen George Macdonald: Yes. For the clarity of everybody, I worked closely with Lockheed Martin on the F-35 initiative.

The reality is that we do need a replacement fighter. The F-18 was originally planned to meet its end life in 2020. It's clearly going to have to be extended somewhat beyond that time. It's a very capable aircraft. It's in ISIL now, in Kuwait, and will do the job there well, I'm sure. Ultimately, you'll get to a point where its capability cannot be extended beyond a certain length of time at any cost in some areas, and it's expensive to even go beyond 2020.

I think we can make a good case that we need fighters for our NORAD obligations, for our NATO obligations, for other obligations we want to undertake. I think it's important that we proceed now to make a decision on a new fighter. I think the analysis has been done.

I certainly support the concept of a fifth generation fighter, not just because of stealth but because of the information fusion and gathering capability, and of course multiplying it affects the task.

The Chair: Thank you, General. The time is up.

Mr. Harris, please.

Mr. Jack Harris: Mr. Norlock, I admire your spirited defence of Trenton and all its good works, and I thank you for that, but I will say that I don't think Davie Shipbuilding would agree that there is no shipbuilding capability in Canada, and Irving, of course, on the west coast, is working very hard to develop it. Also, the F-18s, we're told by the air force, will be capable of operating fully until 2025, so I guess we do have a little leeway for the replacement decision.

I want to ask about one thing. We talked about the priorities and potential budget issues. Canada got out of the NATO AWACS program a couple of years ago. It was done for financial reasons. We were going to save ourselves $50 million. We've been involved in that program for 25 years. It was part of the NATO smart defence. We don't expect everybody to be able to put together that kind of warning system. It's proved very effective for NATO. It helped NATO to be very effective, particularly in the Libyan mission, as one noted example, and helped Canada do its job in Libya.

If we're getting out of programs like that—which are proven, which are part of Canada's commitment to NATO with our allies—for the sake of $50 million, why would we be going around looking for other programs of, as you say, Mr. Macdonald, and quite rightly, unknown expense? We've been told everything so far, from that it would cost us nothing to that it would cost us...I think the other day the term was a considerable amount or a large amount of money. We've had generals complaining about money for readiness and forces and things like that. Why would we be seeking something else to do unless there was a compelling need?

● (1620)

LGen George Macdonald: You are referring to—

Mr. Jack Harris: I'm referring to BMD.

LGen George Macdonald: Yes. Again, our potential involvement in BMD is a moral and logical extension of the current NORAD mission in aerospace control. We do air control. We can send out fighters. We can defend against cruise missiles or bombers, but we can't defend against ballistic missiles as Canadians participating in that—

Mr. Jack Harris: This BMD can handle a cruise missile, can it?

LGen George Macdonald: No. An aircraft can.

Mr. Jack Harris: I didn't think so.

LGen George Macdonald: It's hard to say that this mission is more or less important than a NATO AWACS mission until you can actually make an apples-to-apples comparison of what the cost effect would be and what the personnel involvement would be. I don't necessarily agree with the decision on the NATO AWACS withdrawal, but I think it would be appropriate for us to explore with the United States an arrangement whereby we would at least assess what the cost would be for personnel, expenditures, and long-term expenditures for sustainment and so on for ballistic missile participation.

For all I know, there may not be any direct costs. It may be something that we can simply add on to what Canadians are doing in NORAD, for perhaps the addition of some personnel or for a contribution in some other area that's seen to be useful to the United States.

Mr. Jack Harris: One of the assumptions inherent in both your presentations and in a lot of the talk about NORAD or about DND is that this is somehow automatically a NORAD function from either the Americans' point of view or from ours, but we were told that it's not the case, that the U.S. negotiators don't assume, for example, that NORAD is the place for BMD. It isn't now. This seems to be up in the air.

I'm not sure, Dr. Bow, whether you agree with that or not, but could you clarify that the assumption seems to be that NORAD would be the place where any cooperation on BMD would take place?

Mr. Brian Bow: It certainly seems like the natural starting point, but—

Mr. Jack Harris: Natural, perhaps, but it's not, apparently, from what we were told the other day, what the Americans think.

Mr. Brian Bow: Well, the Americans are fully prepared to go ahead and build their own system on their own with little or no Canadian participation, and if they do, then it will be run through USNORTHCOM and other related commands. From their point of view on whether it has to be done through NATO, I would think the answer would be no, but I would think to the extent that we want to be involved in it, then I'm not sure I would see the rationale if I were starting from anywhere other than NORAD.

Mr. Jack Harris: So you think it's just logical, regardless of what the Americans think.

Mr. Brian Bow: Well, we already are involved, more or less directly, in a lot of the tracking part of what BMD will be about, through NORAD, and it seems odd that we would think about participating in coordination on a response through something other than the institution that manages the actual tracking that would inform that response.

The Chair: Thank you, Doctor.

Mr. Miller, please.

Mr. Larry Miller (Bruce—Grey—Owen Sound, CPC): Gentlemen, thanks for being here.

I'm going to start off with a question on the Arctic region. I think we all know it's inevitable that the north is going to be developed. There's a pretty big mineral project that's taking place right now and it is going to be shipping a lot more material out of the north end of Baffin Island. There's going to be more of that kind of thing in years to come, as well as oil and gas.

I look at a comment by NORAD spokeswoman, Captain Jennifer Stadnyk, who stated:

> Additionally, the ever-increasing numbers of vessels transiting Arctic waters emphasize the need for Norad to observe, share and act on activity in that domain. This will be studied during the Norad Next analysis.

In light of all the development up there, is NORAD ready for that increased traffic? Can you comment on that? Are they going to have to change or adapt in any way?

● (1625)

LGen George Macdonald: I suspect it's an evolving requirement. The maritime warning mission I think was originally established to address coastal approaches to the east and west coasts of North America, and was only recognized in the course of events to be effective in the north as well. That's a responsibility that is of concern to both the United States and Canada. The maritime warning mission can cooperate there.

Obviously, to prosecute a maritime target, you need something, a ship or some capability to manoeuvre on water, that gives you the ability to do that. We talked briefly about the coast guard. There's the offshore patrol ship project that will ultimately produce vessels that will have some capability in that regard as well.

The real question, from the point of view of actually prosecuting a target, is how more willing are we to increase our ability for surface combatants or for surface ships to do that? From a NORAD perspective, it's the surveillance that matters, be it surveillance from fighters or maritime patrol aircraft that input information into it, or from space-based assets like the RADARSAT constellation mission when it's fielded.

Mr. Larry Miller: You touched a little on the coast guard. That was going to be my next question.

I wasn't here, but Professor Elinor Sloan appeared before this committee on this study, and basically indicated that an armed coast guard is something the Government of Canada should consider in the defence of North America.

To get back to my first question, on the enforcement, patrol, etc., what should be done at the coast guard level to be prepared for that kind of thing? Basically, I'm asking that statement. Is that one you agree or disagree with?

Mr. Brian Bow: I think it depends.

You began your question by asking about an increase in activity in the Arctic. I think most of that activity is not something that calls for an armed coast guard. It's mostly about keeping track of what is actually there, and trying to figure out when there's something that's not quite right there, and being able to respond to that.

The first challenge is going to be the surveillance part and being able to communicate among the different participants in that information collecting process. The second part is going to be being physically capable of responding appropriately.

I don't know enough about the legal questions that are involved in setting out the mandate for the coast guard to be able to comment on whether that's a good idea or not, but certainly there will be some times when appropriate responses in the north call for some kind of armed police force. Whether that's the RCMP or some other agency, I can't say.

Mr. Larry Miller: I appreciate that.

I'm going to move south of there.

My question is for you, Mr. Bow. You're taken as an expert on Canada-U.S. relations. I want to talk about energy security here. I want to hear some of your comments about it. If the Keystone XL pipeline goes ahead, which I think most people will agree it will in time or could in time, I'd like to hear some comments in the time left on what we need to do in terms of looking after that. That's going to create an issue as well.

Mr. Brian Bow: Do you mean, to make them say yes?

Voices: Oh, oh!

Mr. Brian Bow: Is that what you mean?

Mr. Larry Miller: No, no. I wish you could, personally, but I mean that as far as security is concerned, anytime you have access points—

The Chair: A very brief answer, please.

Mr. Brian Bow: I guess my brief answer is that there is no necessary connection there. There's nothing we can do on the security front that will influence how the energy relationship goes.

Certainly there would be some people in Congress, for example, whose votes on a question like this would be formed in part based on their perception of Canada more generally. How our defence relationship with them evolves may play into that to some degree, but we should not be thinking about how best to manage our energy relationship with them in terms of changing our defence policy.

● (1630)

The Chair: Thank you.

Mr. Nicholls, please, for five minutes.

Mr. Jamie Nicholls (Vaudreuil-Soulanges, NDP): My first question is for you, Mr. Bow. I'm concerned about regional security cooperation in the Arctic. I'm wondering about our partnership with Arctic nations other than Russia, in places like Finland, Norway, and Denmark. I know that General Macdonald served in Norway, so he could probably add to this as well.

One, are they contemplating missile defence, since there are renewed concerns about Russia vis-à-vis Ukraine?

Two, I haven't been following this, but Nordic prime ministers met in Iceland in May of this year. I don't know if there was a Canadian presence there. I'm wondering whether there should be, according to you. Should there have been the presence of Canadian defence officials as well at that high-level meeting about the high Arctic? Perhaps you could discuss our cooperation with countries like Norway, Finland, Denmark, and Sweden in dealing with security in the high Arctic.

Mr. Brian Bow: I actually don't know anything about the Scandinavian countries' plans when it comes to missile defence cooperation. I literally know nothing about that, so I can't contribute anything.

I can say more generally that when it comes to defence issues in the Arctic, we have a similar kind of relationship with most of those countries that we have with the United States. There are a few issues where we have diplomatic tensions over specific questions with them, but for the most part we tend to work around that and focus on the things where we can cooperate. There are clearly a number of issues where defence or defence-related cooperation with all of those countries could be expanded from what it is.

Certainly we could have much more cooperation with them in the Arctic context on such things as search and rescue, joint patrols, coordination of surveillance, and showing-the-flag patrols. For sure there's more room there.

LGen George Macdonald: Our missile defence point of view has to be influenced by the fact that we're connected to the United States. It's quite different from that of other countries.

Even having said that, those countries that belong to NATO, as we do, have all endorsed missile defence for Europe. It's actively being deployed. We're in a situation where we agree that NATO should be defended, but not necessarily Canada with the United States, or Canada cooperating with the United States.

Mr. Jamie Nicholls: When you state that they've accepted European missile defence, who would be the lead player in that?

LGen George Macdonald: Well, the United States is clearly the lead in providing the technology or the capability, but at the Chicago conference, NATO itself endorsed missile defence for NATO.

Mr. Jamie Nicholls: My next question is for you, General Macdonald.

Mr. Norlock stated that the government has made a commitment to renew the forces. I wouldn't disagree with that. You mentioned that when procurement decisions are made, there have to be people to operate the new acquisitions and also to maintain and support. There's a balance.

In terms of Canada's strengths and weaknesses in that balance, where would you say its strength would be in terms of procurement, operations, maintenance, and support, and where would be the weakness in that balance?

LGen George Macdonald: Canada has adopted capability-based planning, which addresses all of those issues in terms of developing a capability.

Our current defence policy clearly supports the procurement of the capital projects that are listed in the Canada first defence strategy, and has broken down into the four pillars of equipment, personnel, infrastructure, and readiness how that money should be distributed.

The capital funding has been protected throughout the course of the last six or eight years, but the defence budget cuts that have been experienced as a result of striving to get to a balanced budget have largely impinged upon operations and maintenance issues: personnel, reserve personnel mostly, the training capability for the force, and I think all national procurement, which is maintenance, repair and overhaul, and spares essentially.

You can empty your bins for a while, but eventually you get to a point where you have to accept that you have reduced readiness if you haven't been able to invest in the necessary spares and logistics and maintenance that should have been done throughout the course of maintaining a particular capability.

I would say that our strength is in the people we have, the training we provide, and certainly the capital equipment. A number of the very positive projects were mentioned, but right now I would say that we are thin on the ground, from the point of view of being able to sustain them to the level that they should be.

● (1635)

The Chair: Thank you, General.

That is your time, Mr. Nicholls.

Mr. Bezan.

Mr. James Bezan (Selkirk—Interlake, CPC): Mr. Chair, in light that the NDP has three rounds of questions, and Mr. Harris used two of them without sharing one of his rounds with Mr. Larose, who is the other regular member for the NDP, I will give my time to Mr. Larose.

Mr. Jack Harris: I don't think that's possible, sir, without unanimous consent.

Mr. James Bezan: No, Mr. Larose is a regular member. PROC has not submitted its changes in membership of the committee, and so as a regular member, he is entitled to speak.

Mr. Jack Harris: As I understand the rules, sir, the time is divided between the government, the official opposition, and the Liberal Party. That was in the standing orders agreed to by this committee at the beginning of the committee.

The Chair: At the beginning of this committee, in November 2013, we did establish a rotation between the Conservatives, the NDP, and the Liberals, but it is within the latitude of the operation of the committee for a member to cede to a guest at the table. Mr. Larose, pending the reconstituting of committees, does remain a member of this committee, and Mr. Bezan, should he wish, can cede his time—

Mr. James Bezan: —to another regular member.

The Chair: —to another regular member of the committee.

Mr. Jack Harris: Well, I understand that this is often done, but in between caucuses as a courtesy, but to give it to another member who is not in your caucus I think would require unanimous consent, unless there is a rule to the contrary.

The Chair: You have a point of order, Mr. Miller.

Mr. Larry Miller: Yes, on this issue, as a chair and a long-time member in this place—and I'm sure Mr. Harris should know this and probably does—you are correct, Mr. Chair, that it is very legal for Mr. Bezan to give his question to whomever he wants, if that's what he wants to do.

The Chair: I recognize that it is inconvenient to the NDP, given the limbo that the party has left us in, but—

Mr. Jack Harris: I'm not concerned about inconvenience, sir. If it's legal for Mr. Bezan to do it—

The Chair: It is legal.

You have a point of order, Mr. Bezan.

Mr. James Bezan: Let's go to the Standing Orders. First of all, Standing Order 114(1) states:

> The membership of standing and standing joint committees shall be set out in the report of the Standing Committee on Procedure and House Affairs—

—which we did last year—

> —which shall prepare lists of members in accordance with Standing Order 104. Once the report of the Committee is concurred in,—

—which it was—

> —the membership shall continue from session to session within a Parliament, subject to such changes as may be effected from time to time.

The membership of Mr. Larose is established.

Standing Order 119 is also referenced on page 1018, chapter 20, of O'Brien and Bosc, and clearly states:

> Any Member of the House who is not a member of a standing, special or legislative committee, may, unless the House or the committee concerned otherwise orders, take part in the public proceedings of the committee, but may not vote or move any motion, nor be part of any quorum.

The difference is, and this is where I come to you, that in chapter 20, page 1027 of O'Brien and Bosc, it indicates:

> At meetings, the very principle of substitution means that it may only occur when the substituted member is absent from the meeting.

The regular member is here; therefore, he has the ability and he cannot be substituted—

> —but retains his or her right to participate and vote during the meeting.

He has a right to participate and vote, as was just described in O'Brien and Bosc, and I'm prepared to give my time. Since the NDP won't give up its time, I'm prepared to give some of the Conservatives' time to Monsieur Larose.

The Chair: Thank you, Mr. Bezan.

The clerk advises me that we do have precedents.

Without any further discussion, and in the interest of time and the witnesses....

Mr. Larose.

Mr. John Williamson: I have a point of order.

The Chair: Mr. Larose has a point of order.

Mr. John Williamson: I'm sorry. If you have a point, excuse me.

[*Translation*]

Mr. Jean-François Larose (Repentigny, FD): Mr. Chair, I would like to make it clear that the situation was actually created by the official opposition. I maintain that I am a permanent member and I do not find it at all usual to be ignored. I did not ask to find myself in this situation.

All members of Parliament have a right to do their jobs. Once again, I find myself out in the cold, cast aside. I appreciate the chair's indulgence, but I do not at all appreciate the position of the party opposite. I have a right to speak and a right to vote. I should not be ignored.

Thank you.

● (1640)

[*English*]

The Chair: Thank you very much.

On your point of order, Mr. Williamson.

Mr. John Williamson: On that, I salute Mr. Bezan turning over his right, but I would suggest that in the future, if Mr. Larose wants to be heard, he will be taking a position from the NDP.

We went through this in the House of Commons. Mr. Harris suggests that caucuses coordinate this. As the Speaker ruled in the House, we use these lists to coordinate, but if members want to stand and be heard, they have that right to do so.

Mr. Larose is a member. There are only two other NDP members. They can coordinate among themselves, but any time Mr. Larose wants to come in here, he should be granted his allotted time, and it should not come from the government side. I salute you for that. In the future, it will come from the NDP side.

The Chair: Thank you very much, Mr. Williamson.

Thank you all for the interventions.

In the interest of time and the fact that we have witnesses before us today, it is the decision of the chair that we will proceed.

Mr. Bezan, in this case, is allowed to cede his time to Mr. Larose.

Mr. Larose, please, for five minutes.

[*Translation*]

Mr. Jean-François Larose: Thank you, Mr. Chair.

My thanks to the witnesses for their patience.

In terms of the shipyards, Mr. Norlock mentioned—and I agree with him—that we have to maintain our knowledge and our expertise for the future. When we bring shipbuilding projects down to simple job creation, we lose out. We have ships that are extremely out of date.

Currently in Canada, two shipyards are working and one of them is in Quebec City. Logically, should we not be activating them all so that we can maintain the expertise, accelerate the process and expand our shipbuilding capacities in Canada?

[*English*]

Mr. Brian Bow: If I understand the question correctly, you're asking if we should use all of our capacity all the time. I think the answer to that is probably no. If the question is whether we should maintain what we think is the right amount of capacity, I think it's up to naval procurement experts, really, to sort out how much is the right amount of capacity to maintain over time. I am not one of those experts. I couldn't say.

LGen George Macdonald: I am not an expert either in naval procurement, but I respect the national shipbuilding procurement strategy process, which selected the two shipyards that will have combatant and non-combatant responsibilities for construction of vessels. One would hope there is a sharing of other shipyard opportunities beyond those projects that would be distributed equitably across Canada.

[*Translation*]

Mr. Jean-François Larose: Thank you very much for that answer.

Earlier, you mentioned Lockheed-Martin aircraft. I agree that they are excellent aircraft, but we have other options available.

Would it not be preferable to establish a balance by using several technologies, drones, for example? Could that not be an worthwhile approach: to obtain more drones and use jets in support?

I am not sure if you fully understand my question.

[*English*]

LGen George Macdonald: There will come a day, I think, when UAVs will perhaps replace manned fighters, certainly augment them more than they are today. I don't think we're there yet. I think the opportunity for that will evolve as the technology evolves. Just the mechanics of operating a UAV in domestic airspace has its own issues that have to be resolved.

Certainly, UAVs have the ability to provide a persistence and endurance that you cannot achieve through any manned aircraft, certainly not a fighter, which offers an advantage. There's a project to address that within the Department of National Defence.

There always will be, though, a desirability or an advantage to have a person on scene to provide the so-called man-in-the-loop decision-making process that you may not be able to achieve with the UAV. I think most people agree that the days of the fighter are giving way maybe not completely but gradually to UAVs.

[*Translation*]

Mr. Jean-François Larose: In that case, the balance is definitely better.

[*English*]

LGen George Macdonald: Yes.

[*Translation*]

Mr. Jean-François Larose: I have a concern about ballistic missiles. My concern is that the effectiveness of what exists now has not really been fully proven.

● (1645)

[*English*]

It's an uncertainty about the effectiveness of the countermeasures that also exist, or that are seen as perhaps even being developed.

[*Translation*]

Let us talk about the dynamics of that.

If Canada provides money to support development by the Americans, what is our guarantee in that relationship? Going by the number of reports we receive, it is not enough, given the number of missiles that could be directed at the United States. So, by investing billions of dollars, we end up with a few more, or we improve the technology. How can we be sure that the Americans are also going to use them in order to defend Canada too?

In the case of Europe, we understand that, because of the distance, their only possible choice is to use them to defend themselves.

Given the strategic priority based on the adversary's targets, what guarantees do we have that the missiles we deploy will also be used to defend what I consider important targets in Canada?

[*English*]

LGen George Macdonald: Certainly the ground-based mid-course ballistic missile defence system that the Americans have developed is a developmental program, and a number of fairly high-profile failures have occurred.

One fundamental premise, though, is that there will never be enough interceptors to defend against a prominent actor, Russia or China, in the ballistic missile environment. You are only dealing with onesies and twosies from a North Korea.

When I was deputy commander of NORAD, admittedly this was 13 years ago, I participated directly in a number of ballistic missile defence exercises in Colorado Springs, because it was assumed at that time by the Americans that we would participate, so they included Canadians in everything.

I was the acting commander in chief for a number of those exercises. I made the decisions about what targets would be engaged and how many missiles would be launched. I briefed the exercise president on what was happening. I got information from a Canadian missile warning officer to tell me about missile warning. I liaised with the American ballistic missile defence system stakeholders, and we addressed the challenges of the exercise through that.

The reality is that we will never be guaranteed that Canadian territory will be defended by the eventual system unless we are part of the equation.

The Chair: Thank you, General.

That is your time, Mr. Larose.

Mr. Harris, please; you have five minutes.

Mr. Jack Harris: I'd like to talk a little bit about the Arctic. It's a vast territory.

We've had some evidence before our committee from—I don't know whether these are your direct colleagues—the Conference of Defence Associations Institute; Mr. Petrolekas and Ferry de Kerckhove both testified that they did not think there was a military threat in the Arctic; American diplomats have also told me that they don't want to see the Arctic militarized.

Do we see the Arctic, aside from the aerospace aspect of it, as an area that we need to be concerned about from a military point of view?

We're talking about the defence of North America in general now.

LGen George Macdonald: I don't consider it a defence issue per se, from the point of view of.... I think our geography will protect us against a land- or sea-based attack.

I see it as a sovereignty issue: protection, as mentioned, of the areas of vast resource wealth, of free navigation throughout the Northwest Passage, and of people who live in the Arctic and who operate in the Arctic. I see it as a natural sovereignty issue, as sovereignty applies to the rest of Canada.

Mr. Jack Harris: Would the threats be in the nature of maintaining sovereignty, pollution control, search and rescue, and those types of things?

LGen George Macdonald: Yes.

Mr. Brian Bow: I would agree with that. My short answer to that question would be that there isn't a defence problem in the Arctic, but there are many problems in the Arctic that might call for the use of defence resources to respond to them.

Mr. Jack Harris: Absolutely. It's pretty hard to do search and rescue without military assets, as we've seen already in one or two instances.

In that context, is this the way you would see the AOPS, for example? Would that be part of the defence of North America, or of the exercise of sovereignty, as you've talked about it?

LGen George Macdonald: In my view, yes. Of course, it will be an armed vessel operated by the navy.

● (1650)

Mr. Jack Harris: I think we're talking about a 50-millimetre gun.

LGen George Macdonald: Something like that, but the reality is that often it's a presence to monitor the navigation through those waterways to monitor pollution, as you have suggested, to avoid environmental issues, or to participate in search and rescue.

Mr. Jack Harris: Yes, and you may need arms for the interdiction of people who are there who shouldn't be there, for example.

LGen George Macdonald: Having an armed vessel provides a deterrent, but I think it's also appropriate for us to be able to have that capability, even if we're just protecting our sovereignty, just as we would have an armed F-18 patrolling the north.

Mr. Jack Harris: We've had armed vessels for fisheries patrols as well.

LGen George Macdonald: Exactly.

Mr. Jack Harris: You mentioned the Northwest Passage. Let me ask you both this question then, because this is one of the areas where we disagree with our best friend and neighbour on the status of the Northwest Passage.

Do you see that as an issue in terms of the defence of North America, in terms of our knowledge of underwater submarine activity, etc.? Is that something that concerns either of you? I'd like to hear from both of you.

LGen George Macdonald: I'll speak first quickly, and I would say that the answer is no.

I think that practically, on a day-to-day basis, we are able to set aside our diplomatic differences for the sake of cooperating and coordinating, not just with the Americans, but with our other Arctic national partners, in exercising the necessary actions to protect the environment, to protect the sovereignty, and to preserve the north.

Mr. Jack Harris: If I could add on to that, we know that the Americans disagree on that. What about internationally, other nations of the world? Do they accept our position, or are they following the American position because it may suit them?

Mr. Brian Bow: I think there are lots of countries that don't necessarily accept our position on the Arctic, mostly because they interpret differently the rules on what counts as an international strait. You can disagree with a legal position and choose not to challenge it, and I think that's the main thing we're seeing. There are very few countries that have any interest in challenging the position directly.

Mr. Jack Harris: Do you think it's very unlikely that any other country would challenge Canada's position on that?

Mr. Brian Bow: I don't see it happening in the foreseeable future, but as the Arctic rapidly evolves, there may be situations where we may assert a rule, for example, on pollution control, and some countries may chose to challenge that rule, but I don't see any immediate urgency. I don't see any countries with a strong motive to challenge the position right now.

The Chair: Thank you, Dr. Bow.

That is your time, Mr. Harris.

Mr. Bezan, please, for five minutes.

Mr. James Bezan: First of all, it's good to see you both here. I appreciate your expertise and the information that you're sharing with us.

I want to take a little bit of a different direction. We're talking about NORAD, and we're talking about the Arctic, but we're talking about the defence of North America, the entire continent.

We just had the HMCS *Athabaskan* come back from Operation CARIBBE. It was working in the Caribbean Sea and throughout the eastern Pacific Ocean.

General Macdonald, can we talk about some of that maritime defence, and some of the challenges that we might have in working with some of our defence partners in Mexico and further south?

LGen George Macdonald: I know that Dr. Bow has particular expertise in Mexico, so I won't steal any limelight other than to say that the Canadian and the American navies are so closely integrated that they can essentially operate together seamlessly, as we do in NORAD, and that they share information and have a doctrine and tactics that are totally consistent, to their great advantage in operating in both oceans.

Mr. Brian Bow: I think that's right.

The very first thing to say about it is that the kinds of defence and security challenges on that side of North America are completely different from the ones in the north. What this means is that there are different services, departments, and agencies involved in those questions, and the institutional rules that govern their cooperation are different.

I think that more of the issues that are in play in the southern part of North America—and we'll call it that—are security issues, as opposed to defence issues. Again, there is a lot of room for defence assets to be made use of and for defence services to cooperate with one another across national borders, but these are, for the most part, security issues. They have to do with drug smuggling, illegal immigration, and those kinds of issues. There's a different array of partners involved in those processes and a different set of issues to be worked out.

I guess one way of connecting the dots between what we talked about earlier and what we're talking about now is that when we say "the defence of North America", on most of the issues up until two minutes ago we meant North America north of the Rio Grande. When we talk about the defence of North America in that broader arena, there are all kinds of new political and diplomatic complications involved. Mexico's constitution sets all kinds of limits on what the military is allowed to do and what kinds of relationships they can have with other countries' militaries, so it's a whole different playing field now.

● (1655)

Mr. James Bezan: Professor Bow, you wrote an article a few years back that looked at the dynamics with the U.S., especially when the U.S. makes a request for closer defence cooperation with Canada. You looked at four specific issues. You looked at Bomarc missiles with nuclear weapons in the early sixties; the 1983 decision on the cruise missile testing in northern Canada; the 1985 decision to cooperate on the strategic defence initiative, which was called "Star Wars"; and of course, the 2005 decision on ballistic missile defence.

You argued that much depends on the strength of the government here in Canada. On what defence issues do you foresee the Government of Canada being approached by the U.S. in the future now that BMD is kind of behind us? There was that interesting report on BMD done by the Senate committee. They found there was bipartisan agreement that there was some value in revisiting that. Are you seeing any other defence cooperation issues that may be coming from the United States for Canada to consider?

Mr. Brian Bow: I guess the answer is yes.

I want to go back for just a second to say that BMD is not behind us in the sense that the question has been answered in any meaningful way. I would rather say that the prospect of their approaching us and making a request is probably behind us, and if it's going to happen now, it's going to be because we initiate something. In this sense, that is an answer more directly to your question. I don't think that is the next thing that is going to come up as one of those kinds of defence dilemmas.

I'm not sure there is anything on the radar right now where the U. S. is pursuing something that they are going to be actively interested in pressing Canada to participate in and that would put the government in an awkward position. As a practitioner of politics, you could see that as good news, as oh good, we don't have one of these things in front of us, but the bad news is I think that's a reflection of the way their decision-making about continental defence is moving in a direction where they are more and more inclined to think about answering these questions for themselves rather than approaching us to participate in these things.

Really, a lot of the time, if we want to have a cooperative outcome that we're happy with, we are going to have to initiate on a lot of these issues ourselves in order to make sure that there is a conversation about some of their evolving choices, for example, in space, and their counterterrorism policies, and their decisions about things like information sharing that are related to homeland security.

The Chair: Thank you, Dr. Bow.

We do have time, colleagues, so we'll do a third and final round under the protocols established when this committee was constituted and have one NDP, one Conservative, and one Liberal question.

Mr. Harris, I understand you'll lead off for the NDP, for five minutes.

Mr. Jack Harris: To round off the Mexico question, I understand what you're saying, Dr. Bow. Would it be, based on constitutional and other issues, unrealistic or impossible for Mexico to be a partner in NORAD, even if it were desirable? Perhaps you could answer both of those questions: is it not even conceivable, or is it something that, if it were possible, would be useful, and has it ever been proposed?

Mr. Brian Bow: Mexico is sort of trying to answer that question for itself right now, not so much with respect to NORAD, but with respect to NORTHCOM.

The Mexican constitution and sort of informal political convention say that the Mexican military is under strict political control and it doesn't engage with militaries from other countries. They particularly have the United States in mind there. However, in practice, Mexican officers have been involved in exchange programs, for example with NORTHCOM, and they are actively consulted by NORTHCOM on a lot of different issues.

There is some engagement military to military between Mexico and the United States, but there isn't much of a clear connection between the kinds of issues the Mexicans and the Americans are dealing with bilaterally and the kinds of things NORAD does, for example.

The one exception to that is the maritime warning function. There may be some point further on in the future when we would want to connect up the maritime warning mission that is being undertaken on a bilateral basis between Canada and the United States with the multilateral maritime surveillance that goes on in the Caribbean and the waters off the southern parts of the United States.

● (1700)

Mr. Jack Harris: Aside from the aerospace side that would involve NORAD, and you mentioned maritime, there is military cooperation between Canada and Mexico in terms of training at some level as well, is there not?

Mr. Brian Bow: I know there is police cooperation and some police training.

Mr. Jack Harris: Mostly police.

Mr. Brian Bow: I don't know much about whether it's direct. It may be, but I don't know.

Mr. Jack Harris: Maybe your research hasn't gone that deep. We visited Halifax as a committee a few years ago. We were at the famous Trinity place where the spy was arrested. They have a vast array of maritime surveillance equipment there and they showed us some of it. I'm sure they didn't show us all of it in terms of what can be seen and how far away it can be seen mostly in the maritime domain.

Would that be tied into this NORAD maritime system as well as whatever there is in terms of satellites and aerospace? That and the one out in British Columbia, would they be two of the stations for the maritime early warning?

Mr. Brian Bow: Maybe George will add into this.

LGen George Macdonald: Absolutely. They would be of fundamental importance.

Mr. Jack Harris: Tied into the NORAD information sharing.

LGen George Macdonald: Yes.

Mr. Jack Harris: Would there be others in the U.S. that Canada would be privy to as a result of that?

LGen George Macdonald: Yes. One of the most important aspects, as you mentioned, is space-base surveillance, the monitoring of ships on a very large area approaching North America.

Mr. Jack Harris: You would think though, Dr. Bow, that the Mexicans might be interested in that from a defence point of view and not just with respect to drug interdiction or whatever. Do you know if that has ever been discussed? You say there is some interest in maritime, obviously, but are there any formal discussions going on about that kind of operation?

Mr. Brian Bow: The answer is I don't know whether there are formal negotiations on that, and I also don't know whether there is a formal agreement, memorandum of understanding, or something along those lines that governs the information sharing, but I do know that there is sharing of that kind of intelligence as part of their cooperative strategy for dealing with drug smuggling.

Mr. Jack Harris: Aside from drugs, would it be of use to Canada —leave the United States out—to have Mexican cooperation on that level of maritime domain awareness?

Mr. Brian Bow: We already have some cooperation navy to navy with Mexico directly, and there certainly is sharing of information, but again I don't know that there's enough need for a permanent kind of arrangement there.

I think there's plenty of ad hoc information sharing that goes on in connection with particular...it's mostly drug interdiction, but there is some information sharing that goes on bilaterally in that sense. I don't know whether there's enough need for there to be anything larger.

Mr. Jack Harris: One last question on maritime.

The Chair: A very short question.

Mr. Jack Harris: We have a navy, of course, and we keep sending ships abroad into the Caribbean and for piracy interdiction.

Do we need a navy to defend Canadians' largest coastline in the world?

Mr. Brian Bow: Do we need a navy? Is that the question?

Mr. Jack Harris: We seem to have lots of ships to send elsewhere, and we're busy trying to build more to keep up our fleet. Is that still important for Canada?

The Chair: A very brief answer, please, Doctor.

Mr. Brian Bow: Yes.

The Chair: Thank you very much.

We'll go to the Conservatives now.

Mr. Norlock, I understand you're sharing your time with Mr. Bezan.

Mr. Rick Norlock: It's the other way around.

The Chair: It's the other way around.

Mr. Bezan, you're sharing your time with Mr. Norlock, for five minutes.

Mr. James Bezan: I have just one question for General Macdonald.

We had talked earlier about reductions in defence spending. Canada is not immune to what happened in the recession of 2009, and the United States and some of our NATO allies were really hit hard. One of the greatest speeches I have ever heard from a foreign dignitary in the House of Commons was by Australia's former prime minister John Howard, who said that the world without a powerful United States is a very scary world indeed.

How do you see the huge defence cuts that we've seen in the United States? We hear about complete fleets that are sitting in dock unable to move because of defence cuts, and a major reduction in the number of forces they have currently in the service. I want to find out if you're thinking that this affects not only North American peace, defence, and security, but also what's happening on a global scale.

● (1705)

LGen George Macdonald: Certainly the United States is losing some capability. I think you have to look at it in the longer term, because the capability they've developed or deployed for Iraq and Afghanistan has been pretty active over the last decade. Sequestration in the United States has taken its toll.

That said, the United States still possesses a military capability that far exceeds that of any other nation on earth. Perhaps we should be more concerned about China and Russia growing not just in very incremental terms, but growing dramatically, in double-digit growth rates year over year, in their military capability. Even though it's still a long way from what the Americans have, it still has to be a concern about balance of power.

Mr. James Bezan: As a follow-up to that before I turn this over to Mr. Norlock, for that Russian buildup in particular, most of that has been going into their naval bases and military buildup in the Arctic, has it not?

LGen George Macdonald: I'm not sure that I could competently say that. Certainly there has been a lot of strategic aviation investment and investment in cruise missiles and ballistic missiles, but I think we should be concerned overall.

Mr. James Bezan: As well as their Balaklava submarine systems?

LGen George Macdonald: Yes.

Mr. James Bezan: Okay.

Mr. Norlock.

Mr. Rick Norlock: Thank you very much.

I'm assuming I have about a minute and a half, so I'll make this—

The Chair: You have two and a half minutes.

Mr. James Bezan: I did exactly my time.

Voices: Oh, oh!

Mr. Rick Norlock: Wonderful.

My friend here is a former member of the military, both in Canada and in eastern Europe. Before the Ukrainian issue appeared, my friend kept telling us to keep our eye on Russia. After you gentlemen were talking about the Russians and their intent and how it's not something we need to worry about as a threat, my friend said to me, “That's exactly what they want us to think.”

If you take a look at some of the things that Mr. Putin has said concerning Ukraine, that they were withdrawing their tanks and sort of heading east again when they were actually going in the opposite direction, and I could go on and on, you can see that he does the opposite of what he says.

My challenge to you is, how can you say it's not a threat when he is beginning to exercise his muscle? There are those of us who think that just by his actions in eastern Europe, and we know why...maybe he has designs—and I believe he does, because I'm beginning to believe my friend here—to be something of the old.... You know how powerful Russia was in the old Soviet regime. Maybe there is some reason to worry. Maybe we should approach Russia with more caution than we do and not be lulled into thinking they're not a threat.

Tell me how wrong I am and why I'm wrong.

LGen George Macdonald: I don't disagree with you. In fact, I think my answer to Mr. Bezan suggested that we should be concerned about Russia.

Mr. Rick Norlock: Thank you.

LGen George Macdonald: We can also take some solace, perhaps, in the fact that I'm not sure the Russian economy can sustain Mr. Putin's grandiose ideas about his future, but that shouldn't dissuade us from paying very close attention to it and not trusting him.

Mr. Rick Norlock: Mr. Bow will probably tell me that there is a country, which you just mentioned, that does have a growing economy and does have a capacity to build a military far superior than, I would suggest, Russia and perhaps the United States put together. Mr. Bow, could you comment on China's ability to grow their military and become a bigger threat?

Mr. Brian Bow: Certainly just the raw fact of their rapid economic growth means that the potential for growing the military is always there. People have been talking about looking in the rear-view mirror and seeing China coming for a long time.

The trick is that they are approaching rapidly, but they are still very far away. There is no near-term strategic threat from China, but certainly they have the potential to become a strategic challenger to the United States.

● (1710)

The Chair: Mr. Chan, you have the final five minutes.

Mr. Arnold Chan: Thank you.

To follow up on Mr. Norlock's point, I think the real area is the South China Sea.

Mr. Harris raised this a little earlier. I want to look at the issue of cyber-attacks and cyber-espionage, which of course is increasingly worrisome for us here in Canada. We recently saw what likely was a successful attack from the nation you were referring to in shutting down certain departments, including the CRA, completely through a successful attack on our websites.

Is this ultimately a concern for the Americans, particularly given that the U.S. military has created a separate cyber-command system, which is quite distinct from the Canadian approach? Of course, we continue to maintain our cyber-security apparatus through Public Safety. Do you have any comments or concerns in terms of confidence in our cyber-security?

LGen George Macdonald: This is a huge issue. I don't think we can rest on our laurels at all, citing what success we may have enjoyed so far to defend against a cyber-attack.

When I was in Colorado Springs, the U.S. Space Command at the time was given the responsibility for computer network operations, which has evolved to information operations and now cyber issues, cyber defence and attack. That's over a very short period of 12 or 13 years. It's gone from being asked what's an information operations action to everybody knowing the importance and significance of our cyber vulnerability.

We in Canada, I think, are somewhat behind the eight ball here. We haven't progressed as much as the Americans have in cyber-command. The interconnectedness of our economies and our infrastructure should be a wake-up call, I think, for us to take very seriously the potential of a debilitating attack.

I briefly saw an article this morning saying that by 2025 cyber-attacks could cause significant deaths, with all the concomitant impacts of a significant and well-directed attack.

Mr. Arnold Chan: Dr. Bow, do you want to add anything to that?

Mr. Brian Bow: I am not a cyber expert by any means, but I am certainly.... It's very different from other kinds of defence and security issues. Many of those other things take five, ten, or fifteen years from the time we first identify them as a potential threat to the need to respond to them.

Cyber is something that is a continual evolution. For every measure you undertake, a countermeasure can readily be developed to respond to it. I think it's the kind of thing that requires an enormous and/or costly continuous effort to respond to.

I don't know that there's any obvious basis for a much closer coordination with the Americans on this. We have clearly started out on separate tracks, and there are good reasons to maintain a separate approach, but there are probably plenty of ways in which there could be ad hoc cooperation, where you'd know about the potential for a certain kind of attack and if there's a way to even model your response on what the Americans do or at least share intelligence about that kind of thing.

Mr. Arnold Chan: General Macdonald, I want to follow up on the point about the interaction between DND staff and CCIRC. Do you see a potential problem with respect to cross-mandates between these two organizations?

LGen George Macdonald: I can't speak from recent experience, but the simple answer would be no. They cooperate and recognize each other's mandates. If anything, they're a synergistic relationship.

Mr. Arnold Chan: That's all I have.

The Chair: Thank you very much, General and Doctor, for your presentations today. It provides great grist for the mill in our study of the defence of North America.

Colleagues, I'll remind you that on Tuesday our regular committee meeting will deal with Canada's response to ISIL. We'll be briefed by officials from the Department of National Defence. Because of the importance of the information that will be shared with the committee, we will be sitting in Centre Block in room 253-D.

This meeting is now adjourned.