

Standing Committee on National Defence

Wednesday, February 18, 2015

• (1535)

[English]

The Chair (Hon. Peter Kent (Thornhill, CPC)): Good afternoon, colleagues. We are gathered to continue our study of the defence of North America.

We have two witnesses with us today. Our first witness, from now until approximately 4:45, from the Department of National Defence, is Brigadier-General Kelly Woiden, chief of staff, Army Reserve. We will be joined later, also from the department, by Colonel Moritsugu, the commander, Canadian Forces information operations group, CFS Alert.

General Woiden, we will proceed with your opening remarks, please, sir.

Brigadier-General Kelly Woiden (Chief of Staff, Army Reserve, Department of National Defence): Mr. Chairman, members of the committee, thank you very much for the opportunity to appear today regarding your ongoing study of the defence of North America. I have a very few brief opening comments.

First of all, I'm here today as a member of the defence team, and I note that in your various other meetings you have heard and in the future will hear from a wide variety of military leaders and defence officials to cover this important and broad topic.

My role today, at your request, is to speak to one component of our overall defence posture in Canada's north, namely our Canadian Rangers, for which I am designated, on behalf of the Canadian army commander, as designated authority. It's called the Canadian Ranger National Authority. To that end, I will be happy to answer any questions you have on the Rangers from a force generation point of view.

Next week you will hear from General Loos on the operational or force employment perspective involved in northern sovereignty and the defence team as a whole. In March, Rear-Admiral Bennett will address the overall role of the reserve force throughout Canada.

The Canadian Rangers are a subcomponent of the Canadian Armed Forces Reserve. They are organized into patrol groups to provide the military presence in sparsely settled northern coastal and isolated areas of Canada which cannot conveniently or economically be covered by other elements of the Canadian Armed Forces. While the Rangers do not provide a traditional defensive capability, they are relied upon to report unusual activities, to collect data of significance to the forces, and conduct surveillance and sovereignty patrols as required. They also execute tasks such as assisting ground search and rescue, community evacuations, flood and fire watch, and survival training for our defence team.

In addition, the Rangers provide a valuable cultural component to our operations as they provide direct linkages to the communities we visit, and to the people we encounter.

We completed our expansion to 5,000 Rangers in 2013 and are nearing completion of a project to modernize their distinctive uniforms. We are delivering new tents this spring and we are on track to replace the Ranger rifle, the Lee-Enfield, starting in summer 2015.

Much has been written about the rifle replacement and for clarity, I would like to stress that there is no current shortage of parts but there will be in the medium term, and that is the principal reason for the replacement program. It remains a robust, appropriate weapon for our Rangers, who use it for protection from predators while on patrol.

As a visible demonstration of Canada's dominion in the north, the Rangers are dedicated, knowledgeable members who provide selfsufficient, lightly equipped mobile forces in support of Canada's military sovereignty and domestic operations.

Mr. Chairman, that concludes my opening thoughts, and I'm happy to answer the committee's questions.

Thank you very much. Merci beaucoup.

The Chair: Thank you, General.

We will begin our first round of questions with Mr. Chisu.

Mr. Corneliu Chisu (Pickering—Scarborough East, CPC): Thank you, General, for your presentation.

I will go ahead with questions regarding the Canadian Rangers. The library's briefing notes state:

The Canadian Rangers have been the military's "eyes and ears" in Canada's North since 1947. According to DND, the Canadian Rangers "provide patrols and detachments for national-security and public-safety missions in sparsely settled northern, coastal and isolated areas of Canada that cannot conveniently or economically be covered by other parts of the CAF [Canadian Armed Forces]." This includes conducting surveillance and sovereignty operations in the Arctic. Currently, there are approximately 5,000 Canadian Rangers organized in 179 patrols across Canada.

How important are the Canadian Rangers to the security of Canada's Arctic?

I'm looking at in the context that in the Arctic, even though it is not perceived yet, there is a great threat from Russia. Russia reinforced extremely well their northern areas and became more aggressive in the northern areas. We need to admit that we have a border with Russia there. In this context, how will the Canadian Rangers fulfill this role of eyes and ears for us?

Also, what training are they going through? I was in the operation in Gjoa Haven on King William Island once, and I don't remember exactly when, but it was in 2001 or 2002. I saw that they are very good people and very eager to learn, but their equipment is outdated. Probably their Lee-Enfield rifles are from the First World War. What is their training? They will need some kind of training. What line of training are you using for that?

BGen Kelly Woiden: Sir, there are a couple of questions there, and I'll attempt to phrase them and put them together in context.

First of all, the Rangers are part of a larger, broader defence team. They are a component, as you mentioned. They provide observation and sovereignty presence patrols and presence within the Arctic, and not just in the Arctic but in the northern portions of our country and the isolated regions of our country. Our Rangers are not just in the Arctic. As I said, they are located along most of the northern portions of each of the provinces on each and either coast and in isolated regions across the country as well. As that broader part of the defence team, they provide the initial eyes and ears and are facilitators or enablers for the defence team.

We'll clarify a few things. One, they do provide north warning system facility inspections. For the northern warning sites, they go back and conduct regular, determined exterior inspections to make sure predators and weather conditions have not destroyed these facilities and to make sure they're intact. They—

• (1540)

Mr. Corneliu Chisu: Excuse me. Do they have the technical expertise to do that?

BGen Kelly Woiden: They only look at the external component. I will go to the training and what the Rangers are and are not able to do, and what the expectation is of them.

First of all, just to go back to what a ranger does, a ranger comes in as a member of his or her community, and as a very experienced individual. We consider them trained upon coming into the ranger program. They are trained because they are able to exist and operate within the environment, the local environment, that they're from. Probably a good distinction is that they're local to their patrol area, not necessarily able to operate anywhere within North America, or certainly within Canada. It's a very important component. They're equipped, and lightly equipped, with the equipment that they have personally equipped themselves with because they bring that expertise, that knowledge to repair and maintain the equipment that they do have, whether it's boats, snow machines, or ATVs, again having that skill set that is not resident in many cases within the Canadian Forces to the same extent.

They're outstanding members within their communities, whether it's northern communities or across the rest of the country, the northern part of the country. What they are able to do most succinctly is bring those skill sets to be able to operate and endure, exist, within the regions in which they are. They help enable the Canadian Armed Forces when we deploy. Whether it's an Arctic response company group or an immediate response unit from the regular units that go out and conduct training in the north, they help facilitate that training, and more importantly, as well, help us to reduce the environmental and social impact of coming into some of the communities.

The last point, if you will, sir, is on the training. They are already trained. We consider them qualified and experienced to be able to do their primary mission, which is to observe and conduct normal patrols and sovereignty activities. We do conduct what we call the development period one and development period two training as a function of their ongoing training 12 days a year, which we pay them for. It's not a lot, but in many cases just to be able to get up to some of the regions is about all we're able to do in those communities because of the expanse of the AOR, area of responsibility. That DP one training is primarily just to show them how to wear their uniform, be able to conduct an interface with the military agencies that they're working for and other government organizations.

The last piece, development period two, is for their leaders, who have been elected within their groups to become patrol commanders and then do a little bit of planning and activity. Probably one of the key things to remember is that every Canadian ranger patrol group has a full-time component out at the Canadian ranger patrol group headquarters that goes out and conducts the training and supervises the training, and conducts that activity for the most part in the operations as well.

That's it in a nutshell. Basically, they come already trained, and we then utilize them and give them some additional training in order to be able to facilitate and interact with the other agencies.

Mr. Corneliu Chisu: You were mentioning in your speech-

The Chair: A very brief question, please, Mr. Chisu.

Mr. Corneliu Chisu: —that you were delivering new tents. Are they the Weatherhavens or are they individual tents?

BGen Kelly Woiden: They are our patrol tents. We provide patrol equipment. One of the fundamental concepts of sustainment for the Rangers is that they come already equipped. They know best what snow machine, what equipment, what jackets and stuff work. It would be pretty hard to provide all of that in some of the communities we're talking about. What we do is we compensate them for the use of their equipment, so in many cases they're able to recapitalize over a period of time. But they are, in fact, compensated for the use of their equipment.

The Chair: Thank you, General.

Mr. Harris, for seven minutes, please.

Mr. Jack Harris (St. John's East, NDP): Thank you for joining us, General. I have an enormous number of questions about the reserves in general and the Rangers in particular. I wish we had you for a little longer.

I note that you're one of the longest serving, most senior, army reservists. As I mentioned to you earlier, you probably know a lot of retired people who are still waiting to get their pensions after that being announced in 2007. That's sort of outside your mandate. Would you care to comment on that, though?

• (1545)

BGen Kelly Woiden: There has been quite a lengthy delay that's on record as being a problem, both the pension and the severance activities. I can just tell you that the process itself is known and recognized. Admiral Bennett—and I don't mean to deflect this—at the policy side is working on this issue within the VCDS mandate and with the department to look at that. I believe you'll have a chance to chat with her later.

Mr. Jack Harris: Okay. Maybe we'll leave it for someone else to deal with then.

On the Rangers, I know that they operate throughout the Arctic, but also in Labrador, and on the Northern Peninsula in Newfoundland, for example, as well.

You were talking about the paid training that they receive. I wonder if you could describe what the nature of the pay would be for a ranger. It seems to me that you have a very valuable reserve force here, who are essentially on standby, with the capability of operating where no one else can. Are they only paid for training days, or are they paid to be there and to be available and to be willing to take up the task that's assigned to them? Is there something more than just training days pay? I know reservists in cities get paid for their Thursday night or their weekend warrior stuff or camps and whatnot. These folks seem to me to be dedicated and available at call. Is there some extra pay for that?

BGen Kelly Woiden: Anytime they come out and conduct what we call force generation training, that constitutes three types of patrols. Types one to three are a routine patrol training exercise and the multiple patrol training exercise. That's what we call force generation. That's normal training, and that would be comprised of those approximately 12 days. Those are average paid days per Canadian ranger. That's our baseline funding.

Mr. Jack Harris: Is that per year?

BGen Kelly Woiden: Per year.

Now I'll talk about the other three types of training. This has to do with force employment. That's through CJOC, Canadian Joint Operations Command.

CJOC, through the regional and joint task forces, can call out and task the Rangers to assist in other activities, for example, training activities such as Operation Nanook and Operation Nunalivut. That's extra pay and funding over and above that baseline 12 days.

Mr. Jack Harris: May I interrupt for one second.

You talked about patrol activities. Is there a routine? For example, if you have a ranger group in that particular area, do they do a surveillance patrol once a week, once a month, or once a year? Is there an actual patrol? They are there for surveillance. Do they go out and surveil the larger area in which they are living?

BGen Kelly Woiden: The basic concept is that when a ranger is out, not even when he's paid, he is acknowledging that fact, that he's providing observation. He's providing sovereignty just by wearing his hoodie, being out there and observing any unusual activities. That's been the premise of the ranger program right from its inception.

If they see or are aware of any suspicious activity, they would report it and it would come through the appropriate operations centre, and then an appropriate response would be done.

Mr. Jack Harris: Do they have a role in search and rescue, for example, if someone is lost near the community in which they reside?

BGen Kelly Woiden: As a function of the domestic operations capability, they can, in many cases, aid the local government authorities—that may be the RCMP or any first responder organization—and may assist in ground search and rescue.

By the very nature of some of the very small communities, a ranger is very apparent and very prominent. In some cases, the local police will approach the Rangers. They will get authority to conduct a ground search and rescue, and it's coordinated through CJOC.

When they go on tasking, they are then placed on a category of service that we call class C service, which gives them full pay and benefits while they are on the search.

Mr. Jack Harris: Are the Rangers typically leaders within their community, or would they be kind of rank-and-file members of the community who take this on? Do they come from the leadership group?

BGen Kelly Woiden: It's a combination from all spectrums.

In many cases, they are in fact leaders within the smaller communities. In many cases, they are very educated folk. They also, more than anything else, have a very clear and strong understanding of local community and their environment.

Many of them are individuals who have prominence. They can be an elder within the native community with their local Inuit or other tribes within the first nations peoples across the country. However, they could also just be rank-and-file folk because of their background and knowledge, for instance, the local snowmobile mechanic who has done well and he's the best guy.

• (1550)

Mr. Jack Harris: And he's clearly an expert.

In Labrador I met a ranger who told me that one of the functions of their unit was to do survival training for allied nations, other countries who want to have some capability of survival in the north.

How widespread is that use of Rangers as assistance to our allies?

BGen Kelly Woiden: It's not so much for the allies. In that particular case, there is an Arctic survival training camp that the European nations utilize, and because the local expertise happens to be within the Rangers, they have contracted them to support and provide survival training. That's not unusual. Again, it's to be able to live off the land, conducting local sustenance training and hunting and survival skills.

We also do the same thing whenever we take Rangers, for example, in support of the Arctic survival training that's done in Resolute for the air force. We bring Rangers out there to show how to do winter shelters, live off the land, how to fish in a survival context. We do that with most soldiers, and we take that training opportunity when we put them in a northern operation. **Mr. Jack Harris:** The Inuit have been doing that for centuries, teaching people how to live in the north.

BGen Kelly Woiden: Absolutely.

The Chair: That's time, Mr. Harris.

Mr. Norlock, go ahead for seven minutes, please.

Mr. Rick Norlock (Northumberland—Quinte West, CPC): General, could you provide some more details strictly with regard to the surveillance tasks carried out by the Rangers and how they directly contribute to the defence of North America and more specifically to Canadian sovereignty over the north? Perhaps you could add to that some insight as to the level of interaction and interoperability between members of the Canadian Armed Forces reserves and regular force members or reservists of the U.S. military and how these contribute to the defence of North America.

BGen Kelly Woiden: Yes, sir.

When it comes to surveillance, again it's a part of their day-to-day presence. That, I can't stress enough, is one of the advantages we have.

When they're out on the land, out in isolated regions, if they see something unusual.... I'll just use an example from Resolute. There was a First Air aircraft crash in Resolute. Among the very first people on site were the Canadian Rangers. They were local. They were close, and they were able to respond.

They're there not just for domestic activity—there's the observation or sovereignty piece—but also for security, such as when there is unusual boat traffic or unusual aircraft fly over top, or a periscope pops up out of the ice, and those types of things happen. This type of passive surveillance is a real-time piece that's then transmitted back through the chain of command. They all recognize it as a function of their day-to-day responsibilities to do that. Unless they're purposely tasked, they are given a sovereignty patrol to conduct, which is a specific type of patrol they do in conjunction with the rest of the defence team. But normally it's a day-to-day activity to be out in the isolated region.

Mr. Rick Norlock: Thank you very much.

I've spoken personally to one of the folks in charge in northern Ontario, Captain Rittwage. He speaks very highly of the persons he commands. I believe that's in the northern part of Ontario. Whereabouts would that be exactly? Is that in the areas of James Bay and Hudson Bay?

BGen Kelly Woiden: That's correct.

The Canadian Rangers go all the way along James Bay, up Hudson Bay, along the east coast, right up to the Arctic Circle, right to the edge of the Arctic Circle where it goes into Quebec.

It's a little bit of a misnomer. Almost everyone believes the Arctic portion, or the isolated region, is within only Inuvik, the Northwest Territories, and Yukon. But there is actually a portion of that in Quebec, just in a very isolated region. In fact, I'm going to Kuujjuaq and Schefferville this weekend to participate in a training exercise of the 2nd Canadian Ranger Patrol Group out of Quebec.

The conditions are very austere. You don't have to go very far, for example, even north of Winnipeg, until you're in an isolated region and in pretty austere conditions. Northern Ontario can get very austere very quickly as you start moving two or three hours north of the Canada-U.S. border.

• (1555)

Mr. Rick Norlock: I did ask about the interoperability with our ally to the south. Specifically what kind of training or what kind of activity would they do together that would contribute to the defence of North America?

BGen Kelly Woiden: There are a variety of exercises. I'll speak to the ones in my lane that I'm aware of, from the army perspective, and certainly within anything the Canadian Rangers and army reserves have done.

We have joint training exercises or we invite the United States military forces to train with us on exercises such as Operation Nunalivut and Operation Nanook. We have northern training exercises. Anything conducted north of 55° is considered a northern training exercise, a NOREX. We have done that repeatedly, and we will continue to do so, and increasingly both the United States Army National Guard and the army reserve units will participate with us. As recently as a few months ago, 5th Canadian Division did that up in Labrador.

Mr. Rick Norlock: Thank you.

I also note there has been a role for a reserve unit other than the Canadian Rangers, namely the Yellowknife Company in the Canadian Arctic. I believe that is also within the purview of your responsibilities. I wonder if you could expand on what its duties are.

BGen Kelly Woiden: Absolutely.

The Yellowknife Company is a company minus organization that was set up I believe in about the 2009-10 timeframe established at that time to expand and have more of a military presence, in this case a primary reserve presence in the north.

It is a company of the Loyal Edmonton Regiment, so it's part of that organic unit. It has been fairly slow to continue and it is primarily a rifle company, not necessarily Arctic trained when it gets full operational capability. It has yet to achieve IOC. The company will be around 135 strong, ultimately.

Mr. Rick Norlock: You said "yet to achieve IOC".

BGen Kelly Woiden: Sorry, initial operating capability.

We are building the nucleus of leadership, which is the critical portion. We're now at about 38 folks in that company and continue to slowly expand. But they don't have a specific role in northern training other than being a force generator for anything that would happen within 41 Brigade, which they come under.

Mr. Rick Norlock: Thank you.

In an interview given in June 2012 you stated that during the mission in Afghanistan the army reserve transitioned from a strategic force to an operationalized force. Can you explain that so the average person out there can understand what that means? Would there be a reversion to the strategic force now that combat operations are completed?

BGen Kelly Woiden: What essentially occurred is that as we were more protracted in operations within Afghanistan the reserve became more operationalized. What I mean by that is that as we were force generating task forces to go out for deployment every six months around 2005-06 we started to see that almost 20% to 25% of those task forces were comprised of reserve soldiers. These task forces that went out, because of this component, we were then force generating an operational component. So the term "operationalization of the reserves" was a result of what we call line of operation 3, a more sustained, deliberate operation of which we would then find ourselves continually in a force generation mode 4.

We now consider ourselves more of an integrated force so that as we go through there remain specific capabilities for line of operations 1 and 2, both of which are domestic operations. We have specific role mission at task 4 for the reserves: our Arctic response company groups or territorial battalion groups, which I think you are aware of, and then line of operation 3, which again is the sustained mission. If one comes up, we would be expected to provide certain capabilities for that task 4 on a specific integrated role.

• (1600)

The Chair: Thank you, General.

Your time is up, Mr. Norlock.

Ms. Murray, please, you have seven minutes.

Ms. Joyce Murray (Vancouver Quadra, Lib.): I'm going to start with a question about the regular reserve force that you are the chief of staff for.

I understand that in an earlier committee, the committee members heard that there was a challenge with reservists returning from Afghanistan or from operations. They may be in contact with their commander for maybe three months, and then after that they are back into their workplace or civilian life of some sort. It was a problem that mental illness challenges were not identified the way they were with the regular forces. The committee made some recommendations to address that.

Can you tell me if those recommendations were implemented or how that concern that reservists were falling between the cracks in terms of mental challenges and PTSD is getting addressed?

BGen Kelly Woiden: Yes, ma'am.

I'll keep my comments to my specific responsibility and my awareness of the problem.

As we had individuals come back from operational tours they then returned to their class A part-time unit in many cases, if they were a part-timer.

Where the problem began and was of issue was if the individual became non-effective, no longer paraded, the unit was not aware, and they were essentially released. In most cases for all the right reasons the individual decided they no longer wanted to stay in. That was a small number. There was concern that some of those folks and soldiers may have had issues and whether they were able to access the level of care. Part of the problem we had was if they were still in the unit we could track them and provide that level of care, but unless they self-identified, this became a bit of an issue. There was not a large number but there was that potential.

I must admit I don't remember exactly what the recommendations of the committee were. I would have to get back to you on that.

Ms. Joyce Murray: Yes, that's the situation I was raising, but my question really is, what's being done to address that? The specific recommendation included chains of command remaining in regular contact with CFHS case managers and taking an active interest in the soldier's treatment program, as well as ensuring that there was some follow-up and tracking. Is there a change of procedure? This was written in 2009.

BGen Kelly Woiden: Correct. Yes, there has been a variation and change to the joint personnel support unit, how the individual and the reservists would get into the joint personnel support unit, and that interaction with the unit. What I was referring to was the individual who was released, who was no longer in the military system, and how it's very difficult for the unit to have any responsibility for the individual because they're no longer in the system.

Ms. Joyce Murray: So we haven't figured that out yet.

BGen Kelly Woiden: What it is now—and again I would probably refer that to Veterans Affairs and the other aspects of the JPSU—is that there is the ability to come through Veterans Affairs and identify an issue and a problem, and to come into the support system that is there. Once an individual leaves the unit, it's very difficult for a commanding officer or the chain of command to maintain contact with that individual.

Ms. Joyce Murray: Yes, reserves are a different category from just leaving a unit as a full-time soldier.

BGen Kelly Woiden: I would say it would be the same issue with a regular soldier who left and did not identify that he or she had a problem.

Ms. Joyce Murray: The other recommendation had to do with the Canadian Forces improving their informing and educating military members and their families about the nature and treatment of OSI, but with an enhanced focus on reserve force commanders, particularly those—

The Chair: Excuse me, Ms. Murray, we have a point of order.

Mr. Bezan.

Mr. James Bezan (Selkirk—Interlake, CPC): Mr. Chair, I'd just like to remind Ms. Murray that we just finished doing a study on ill and injured, and we're now dealing with defence of North America. We heard from reserve command when we talked about ill and injured. I wish that she'd actually talk about the defence of North America since that's what we're studying.

• (1605)

Ms. Joyce Murray: I thank my colleague, but perhaps he doesn't believe that illness and injury have anything to do with—

Mr. James Bezan: No, not at all. That's not what I'm saying.

Ms. Joyce Murray: —the defence of North America, but I do, so I'd like to continue my question here.

Mr. James Bezan: We're talking about operations and protection.

Ms. Joyce Murray: This one particularly.... And these are people, so I'm talking about how people are being treated and cared for.

Recommendation 21 particularly mentioned those who resided some distance from a military installation, so the enhanced focus on commanders to be aware of the personnel, their families. Let me link this to the Rangers. What are the concerns on a human resources level, if any, with the personnel in the ranger service? What kind of challenges are there?

BGen Kelly Woiden: I think you'll find that the Rangers have the exact same challenges that anyone within their communities will have. We do not see any specific activities or issues different to the Rangers as we would, say, with the normal primary reservists, unless he or she has been put on operations. It's not to say that there's an event or something that would occur to a ranger that would require additional assistance or help. I can tell you that from a ranger perspective, if there is an incident or a case where a ranger is injured and they're on duty, then they will get the appropriate care that's allocated to them as a function of being on duty at the time.

Ms. Joyce Murray: Are there any particular protocols that their leaders or commanders have to address the fact that they are isolated and they may be at a distance from military, family, or installations?

BGen Kelly Woiden: Part of that is as a result of the visits that the ranger instructors do. We try to do a minimum of two visits per patrol. As you can imagine, the AOR, the area of responsibility, is extremely large, especially in the north, so in order to get out there we try to mandate at least two visits a year. Then that ranger instructor has the ability to get a sense of where the issues and the problems are, and they will identify any particular issues or problems. If it's something that the local government agencies are unable to handle, and it's deemed to be something specifically as a result of their service, then we do have that ability to identify that as a problem, and then look at that to see what is available for the care of the Canadian ranger.

Ms. Joyce Murray: Is there a recruiting path from being a ranger to becoming a regular reservist or a full-time military member?

BGen Kelly Woiden: Absolutely, as long as the requirements for service are met. You have basic recruiting criteria that are deemed as physical fitness and educational requirements. All of the basic recruiting criteria that are required for the regular force and/or the primary reserves would have to be met.

When we talk about a ranger, I would like to clarify that the Rangers have a requirement of service that allows them to not be retired. There's no age restriction other than having to be a minimum 18 years of age when they join. There are no physical or hard medical requirements that prevent them from either joining or being released. That component of it means that, again, they bring unique skill sets. As long as they're contributing towards the ranger patrol, they can in fact stay in.

In order to transfer or go on to the primary reserves or regular forces, they would still have to meet those basic entry requirements.

The Chair: Thank you. That is your time, Ms. Murray.

We'll move now to the second round of questioning in five-minute segments.

Ms. Gallant, please.

Mrs. Cheryl Gallant (Renfrew—Nipissing—Pembroke, CPC): Mr. Chairman, I will stick to the study we're doing: the defence of North America.

My first question refers to connectivity, to communications abilities in the far north among the Rangers. What type of connectivity do they have? Do they have to use satellite phones? Do they have some sort of Internet? Is it radio frequency? How do they communicate with one another?

• (1610)

BGen Kelly Woiden: I'll clarify. When we're on patrol, when they're actually conducting a patrol, they have a satphone capability at the patrol level, which the ranger patrol instructor will bring. Internal to the patrol itself, they have a hand-held Motorola radio. Quite a few of the individuals will have their own satphones because of where they're operating, just existing on land and where they're located. Again, that depends on where they are located across the country, but typically they are self-equipped for the most part.

Mrs. Cheryl Gallant: When they're operating among themselves, not jointly with any of our national forces, in what language do they communicate with one another?

BGen Kelly Woiden: That will depend on where they're from. We have French Canadian members; we have folks from Labrador and Newfoundland who speak different dialects, and we have Inuit. We have members from all over the country whose language will be local to that region. I'll just go back to my comment from before. They're representative of their local community, so they will speak that local language. We don't have any mandated language, although English is predominantly the language we use to communicate with them.

Mrs. Cheryl Gallant: There is a summer Rangers program that includes participation by first nation teenagers. What proportion—if you track such data—of those young people go on to be long-term members of the Rangers?

BGen Kelly Woiden: Since the program came into being in the early 2000s, we're now seeing that the junior Canadian ranger program has been extremely effective at being a catalyst within the community.

I'm not sure of how much you're aware of it, and I'm not the expert on the JCR program, but the Canadian Rangers provide the program on behalf of the chief of reserves and cadets and the junior Canadian Rangers program. We provide instructors, and the local elders and the community from that area sponsor it. It's like a parent-sponsored committee or a locally sponsored committee that does the majority of the cultural training, etc., for those junior Canadian ranger patrol groups.

We do a summer training camp where they do their initial summer camp. It's typically a two-week camp. Sometimes there will be a three-week leadership piece. That is done across all five ranger patrol groups across the country. Mrs. Cheryl Gallant: What portion of the Rangers are female?

BGen Kelly Woiden: I honestly don't know that number off the top of my head. I'll refer that and get it back to you.

Mrs. Cheryl Gallant: Is there any difference in the attrition between males and females?

BGen Kelly Woiden: Typically we don't see a lot of attrition out of our Rangers. They could literally be in there for.... A ranger named Alex Van Bibber in British Columbia was 98 years old. He died and was buried just before Christmas. He was one of the original founding Rangers.

There is no age restriction. We don't release them just because they don't parade. Again, they're out there all the time. I don't see a large attrition with respect to women. I will tell you that there are a lot of women who are patrol commanders, and they're elected.

Mrs. Cheryl Gallant: Excellent. Are the search and rescue responsibilities ever part of the duties, and if they are, is each person equipped with a personal transponder?

BGen Kelly Woiden: To answer your question first, we will do that in support of the local first responders. If the first responders who are tasked in support of that utilize a transponder or other mechanisms to track, then that will be with that team. It's no different from a volunteer search and rescue within many communities. Our Rangers in many cases are volunteers for the local search and rescue organizations as well, but weren't always in support of a lead agency.

Mrs. Cheryl Gallant: Do they have personal transponders?

BGen Kelly Woiden: To the best of my knowledge, unless it's being supported by that agency, we would not provide that as part of our equipment because they do this in support of the ground search agency that has been tasked to do it.

Mrs. Cheryl Gallant: Thank you.

Do I have more time?

The Chair: No, your time is close to out, but thank you, Ms. Gallant.

[Translation]

Ms. Michaud, you have five minutes.

Ms. Élaine Michaud (Portneuf—Jacques-Cartier, NDP): Thank you, Mr. Chair.

I would like to thank Brigadier-General Woiden for his testimony.

I would first like to talk about the reserve forces more generally.

For several months, if not years, we have been anticipating a review and a restructuring of the reserve forces. This seemed to us to be a priority that would at least guarantee the effectiveness of the reserves. The latest news is that the review of the reserves structure was to be completed in March 2014, and a new funding model was to be implemented for April 1, 2015.

However, we recently learned that this review had not yet been completed and that the April 1 deadline for the restructured funding model would not be met. It seems to me that this is having a major impact on the reserve forces.

Do you know when the review and restructuring process will be finished?

• (1615)

[English]

BGen Kelly Woiden: What I will respond to is what I'm aware of as a function of that particular view. I believe the activity you talk about is the comprehensive review that was launched in 2013 by the VCDS, the Vice Chief of the Defence Staff. That particular document and that activity was superseded, which is the original timelines and stuff were superseded by another document that clearly articulated it was to be a full-time reserve study or review that replaced the previous document and previous study. That is ongoing now.

The timelines have been extended from that original activity, and it is ongoing. It's going to be at least another 24 months as they go through a variety of different analyses. It has to do primarily with the allocation of funding for part-time and full-time reservists. So it's not necessarily a structural review, but is particularly a funding model review, and that superseded the previous comprehensive review, which was the one, I believe, you talked about.

[Translation]

Ms. Élaine Michaud: Thank you very much.

Are the timelines for this study creating any particular challenges for you and your activities?

[English]

BGen Kelly Woiden: Not necessarily, no. Certainly in my perspective and the army reserves' perspective, all that does is it allows us to carry on with the existing funding models and activities that we have now.

What it particularly was focusing on was a holistic review of the reserves as a function of the original PRECS, primary reserve employment capacity study, that was done a couple of years ago, and that has now been superseded by this change in focus, if you will, as to part-time and full-time reserve pay allocation infrastructure.

[Translation]

Ms. Élaine Michaud: Thank you.

A little earlier, my colleague, Mr. Harris, spoke about the delays in getting pensions to reservists. You yourself mentioned the delays in paying out severance pay. It seems that reservists may wait up to 21 months to receive their severance pay, when it takes 18 weeks for members of the regular forces. I find it unacceptable that the reservists have to wait so long to receive the amounts owed to them.

Do you have any suggestions for improving this situation? We need to try to eliminate these delays and ensure that our reservists have access to services of the same quality and efficiency as members of the regular forces. **BGen Kelly Woiden:** We do recognize that there's an issue. We're aware that many reservists who are getting out now are waiting in significant timeframes for that, as was identified by the ombudsman I think a year ago. I know that a variety of different efforts have been put forward in trying to resolve that issue. I am not involved in that at all. This is more the pension and the severance package piece.

Again, I don't want to deflect this, but Admiral Bennett might be in a better position to explain what is being done to try to resolve that specific bubble, if you will. There is a bubble that has grown because of payment in lieu and other activities that have occurred. But I'm not really privy to any other initiatives being done at this time.

[Translation]

Ms. Élaine Michaud: So you do not have your own recommendations to make about improving the process?

[English]

BGen Kelly Woiden: Oh, I probably have lots, but as to whether they would be appropriate or not....

Voices: Oh, oh!

BGen Kelly Woiden: The bottom line is just putting the resources in place to address the issue. I'm sure there's a variety of different challenges in making that happen.

• (1620)

The Chair: Mr. Bezan, for five minutes, please.

Mr. James Bezan: I want to thank General Woiden for coming in to talk about the reserves.

I had the opportunity, as I was telling you earlier, General, on Sunday to spend some time with the 38th Brigade. Reserve units from Thunder Bay, throughout Manitoba, and all of Saskatchewan are participating in Exercise Arctic Bison 2015 on Lake Winnipeg, simulating a plane crash. They'll be spending nine days out on the ice. They won't be going into the bush to camp; they'll be sleeping out on the lake. They're working with a platoon from the 2nd Battalion of PPCLI, out of Shilo. The 440 Squadron from Yellowknife is down with a Twin Otter. They're coordinating with the RCMP and Transport Canada as they simulate a plane crash on the north basin. There are even U.S. Army reserves from Oklahoma participating in the mission so that they can get some exposure.

Can you talk about the importance of having these types of exercises? I don't mean just from the standpoint of training and maintaining capabilities within the Canadian Armed Forces reserve units. I should also mention that the 4th Ranger company is participating, which I believe is out of Thompson. We're talking about interoperability here. We're talking about ongoing training and coordination between all segments of a whole government approach, and also really looking at a NORAD model on northern sovereignty and protection.

I wonder if you could talk a bit about that, about how important this is.

BGen Kelly Woiden: I think you hit the nail on the head in trying to say this is a whole defence team approach. You talked about all the constituent parts. This has been an ongoing increasing level of

activity, both from a training...and not just in the winter; it's in the summer as well, in austere, isolated regions across the country, in both the north and the northern portions of our provinces.

In terms of the interoperability piece, we've talked about having the Americans, and more importantly being able to operate within all the other government departments. We do have a great opportunity when we start to do more and more northern exercises. The planned level of training normally includes every ARCG, Arctic response company group. You'll also notice that elements of the immediate response unit from 2 PPCLI are involved. You can see that combined response capability, both the regular and the reserve component, being facilitated or enabled by our Canadian Rangers. So being able to operate, to travel, to be able to ensure, from an environmental and a social perspective within the region they're operating in, in very isolated conditions...allows that whole entity to go out and conduct operations in austere conditions.

The bottom line is that we are doing more and more northern exercises, normally one per division per annual training year. We then participate and rotate all the operational exercises, the sovereignty exercises in the north, which are Operation Nunalivut and Operation Nanook. That gets rotated by division. So we get the Arctic response company groups, and in some cases our territorial battalion groups will also participate in those exercises, primarily a reserve component.

So yes, we're doing more and more training every year. As we transition to a domestic focus on some of our reserve activities— LOO 1 and 2 I've talked about—I think you'll see a consistent presence. It allows us to take the basic winter warfare training we have and ensure that we do the next level of training and operations.

Mr. James Bezan: The reserves are our citizen soldiers. They live among the civilian population, and during the week they all have their jobs.

Can you talk about the importance of having them as ambassadors within our communities and that liaison between communities and the Canadian Armed Forces, and how, because of their locations across the country, they are the front line in response to things like natural disasters?

BGen Kelly Woiden: Absolutely. I think our citizen soldiers, being that primary reservist—and that could be the naval reservist as well, or the air force, but predominantly our army reservists are that footprint in the community. They are located in 127 units across 117 communities across the country. When you start looking at the ability to reach out and in many cases being the only...being able to respond not only through a domestic response, but also being able to handle that day-to-day interaction with the community and provide that military presence, if you will....

They are the citizen soldiers. They are teachers. They are lawyers. There are doctors. They are engineers. They are plumbers. They are representative of the community. And I think more importantly, they are no different from our Canadian Rangers, who come from the community; the citizen soldier is that footprint, that connection.

• (1625)

The Chair: Thank you, General. That's time.

Monsieur Brahmi, cinq minutes.

[Translation]

Mr. Tarik Brahmi (Saint-Jean, NDP): Thank you, Mr. Chair.

Thank you for your testimony, Brigadier-General Woiden.

In your opening remarks, you said that one thing the Rangers are responsible for is collecting data of significance and conducting surveillance patrols as required. During a previous meeting of this committee, we were told about the advantages and capacities of drones, particularly small ones.

Are you considering using drones in areas that are difficult to access in order to improve the coverage that the Rangers provide?

[English]

BGen Kelly Woiden: The operations providing surveillance and sovereignty come under the over-watch, if you will, of the Canadian Joint Operations Command. I would defer to General Coates, who I think may, in fact, be talking about surveillance and ground search and rescue.

From the overall perspective of giving capabilities to the Rangers, I would go back to my initial statement about their capabilities. They are already trained when they come in. To go and have the enhanced additional training would have to be seen as an additional capability that we would have to provide them, and it would determine if they were, in fact, the right ones to carry on and/or conduct that type of operation, whether it's with drones or with other systems that would be made available to them.

The bottom line is that it would have to be looked at as a demand and a capability, and I would put to you that the Canadian Forces as a whole would determine where best to come up with that capability. I don't believe that's necessarily being looked at as a ranger responsibility.

[Translation]

Mr. Tarik Brahmi: Thank you.

In the same paragraph of your opening remarks, you basically say that the Rangers also help with community evacuations and flood watches.

I represent a riding that was seriously affected by flooding in 2011, and the Canadian armed forces had to step in. I'm talking about Saint-Jean-sur-Richelieu. There was some hesitation initially about the intervention. I don't think it had to do with the ability to intervene, but rather it had more to do with the uncertainty about the political decision, whether it came under provincial or federal jurisdiction.

You commented that the reserve forces has gone from a strategic force to an operational one. What is your vision in that respect? Might this change in the reserve forces's responsibility have consequences on the operational side and on how quickly it can intervene when the army is asked to help out with operations like community evacuations and flood watches?

I know your testimony focuses on the Rangers, but it can probably also apply more broadly to other units of the reserve forces that are called on to provide additional assistance in extreme situations like natural disasters.

[English]

BGen Kelly Woiden: Absolutely.

Sir, with regard to the overall role for any federal government presence within a community, and in this case a reserve or even a ranger presence, the commanding officer of a reserve unit, or in the case of the Rangers, has the ability to provide life-or-limb assistance if it's within their capacity to do so. They must immediately follow that up with a formal request for support and authority to carry that on.

They have a life-or-limb capability. That goes with any reservist. We've seen that in northern Alberta. We've seen that in the floods. We've seen it in Saskatchewan. We've seen that across the country in Newfoundland not that long ago.

There is an immediate capability. If there is a ranger patrol, or even a reserve unit in an isolated region, that commanding officer can provide that in a life-and-limb situation, but then has to ask and get authority for continued support once it carries on.

• (1630)

[Translation]

Mr. Tarik Brahmi: Is there an organizational model that is more effective in terms of the separation or integration of the reserve forces and the regular forces?

[English]

BGen Kelly Woiden: The reserves are part of the defence team and are a federal response, not a provincial response capability. They're a layering of capability.

In many cases, where there's an immediate federal response unit from the regular force and/or the reserve Arctic response company group, or the TBG, that is a measured layer of response. It is the local first responders, municipal, provincial, and then federal, and that's typically the way we have that response layered.

I'm not aware of any proposed changes at this time that would change that.

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

Mr. Williamson, for our final round of questions.

Mr. John Williamson (New Brunswick Southwest, CPC): General, thank you for coming today. It's been very, very informative.

A previous witness suggested that Canadian Rangers be given the capacity to operate UAVs from their communities to enhance surveillance in the north.

From your perspective, is this a valid suggestion?

BGen Kelly Woiden: I'm not in a position to say whether it would be valid or not; it would all be part of what we really want the Rangers to conduct.

I would go back to my comment that we consider them already trained and capable to operate. The basic tenet of a Canadian ranger is to observe and provide overall presence. To do what I consider more advanced tasks would have to be considered from the whole of government and, most important, the whole of defence team, to determine if that was the best way to provide it. I can't say one way or another; we haven't considered that.

Mr. John Williamson: Sure.

Can you tell us the roles and responsibilities of the Arctic response company group?

BGen Kelly Woiden: The Arctic response company group provides what we call the sustainment capability for the immediate response unit, which is a regular force tasking for each of our joint task forces across the country, the regional task forces. For example, there's normally a battalion that's on call in the country at any given time within each of our regional locations.

When it comes specifically to the north and in the Arctic, the Arctic response company group has the ability to come in at full operating capacity, and with 15 days' notice, the main body would be on the ground to provide support and/or relief in place for an immediate response unit that had been already called out. It's next level of support once the immediate response unit has been deployed.

Mr. John Williamson: Do they work with the Canadian Rangers, and do they work well with the Rangers?

BGen Kelly Woiden: Absolutely. As I indicated before, we very rarely ever go to northern or isolated regions without utilizing the Rangers for training and/or conduct of operations.

Mr. John Williamson: Do you feel the Rangers are adequately trained and equipped to deal with security situations in the north?

BGen Kelly Woiden: We do not utilize the Rangers in a tactical scenario. We use the whole of defence team approach, providing the actual tactical capability. They are not trained, nor are they equipped. The ranger rifle is not for use as a tactical weapon; it is for predator control and self-protection.

Mr. John Williamson: What future do you foresee for the Canadian Rangers?

BGen Kelly Woiden: I see us probably utilizing them in a more continued manner, similar to what we're doing now, to help enable the existing defence team to go into the north.

We've continued to increase our presence over the last three to five years. As I said, we don't go into isolated regions without typically bringing the Rangers, because they're from the community. I'll stress that they're from the community. They know the community. They know the environment, and they understand the impact of having a military presence within that community.

• (1635)

Mr. John Williamson: Is it safe to say they are an integral part of the security of Canada's Arctic in terms of patrolling it, as our eyes and ears on the ground, so to speak?

BGen Kelly Woiden: They are a part of the whole system. I don't want to stray away from that kind of response, but they are not the only component—

Mr. John Williamson: Of course, yes.

BGen Kelly Woiden: —to that particular capability, but they certainly help enable us to do that.

Mr. John Williamson: I have two very short questions.

You mentioned Labrador, of course. Are there any Rangers in the Maritimes? I suspect probably not in New Brunswick, Nova Scotia, or P.E.I.

BGen Kelly Woiden: There are a couple in the northern portions of that, all the way through.

Mr. John Williamson: Are there?

BGen Kelly Woiden: Absolutely.

Mr. John Williamson: I did not know that.

In terms of equipment, when they're on patrol, I assume they carry some sort of long gun, typically.

BGen Kelly Woiden: Right now they have the .303 Enfield. That is the rifle they carry primarily for predator control. They provide that predator control response role whenever our other defence team members, whether it's the Canadian army, air force, or whoever, are on the ground.

Mr. John Williamson: I'm sorry if you already answered this, but did you say that they provide that kind of equipment themselves, or is that provided to them from the—

BGen Kelly Woiden: No, that's provided. The .303 rifle is issued to the individual ranger.

Mr. John Williamson: Thank you, Chair.

The Chair: Thank you, Mr. Williamson.

Thank you very much, General Woiden, for your time with us this afternoon.

We will now suspend, colleagues, very briefly, as our next witness takes the table.

• (1635) (Pause) _____

• (1640)

The Chair: Colleagues, in the interest of time I will introduce our second witness of the afternoon, Colonel Moritsugu, commander, Canadian Forces information operations group, Canadian Forces Station Alert.

Thank you very much for being with us this afternoon, Colonel. Your opening statement, please.

Colonel S.M. Moritsugu (Commander, Canadian Forces Information Operations Group, CFS Alert, Department of National Defence): Thanks, sir.

As the commander of Canadian Forces information operations group, I'm responsible for operating the foreign signals intelligence program in the Canadian Armed Forces.

I'll give you a bit of background.

Signals intelligence includes the technical intelligence or information we get from communication systems, information technology systems, networks, and the data therein. It includes electronic intelligence from electromagnetic non-communications emissions such as those from radars, for example, and it includes what we call foreign instrumentation signals intelligence from machine-to-machine communications, like telemetry from a missile to its ground station, or from a drone to its controller. Why is that important? Canadian Forces Station Alert is at the far northeastern tip of Ellesmere Island in Nunavut. In latitude and longitude it is $82^{\circ} 30' \text{ N} / 62^{\circ} 19' \text{ W}$, or in distance only 817 kilometres from the North Pole. To give you another reference, from here it's twice as far to Alert at 4,151 kilometres as it is to Iqaluit, which is only 2,090 kilometres away. So Alert is way up there.

Alert is a site from which we collect foreign signals intelligence, foreign signals of interest, in support of Canadian military operations.

For over 40 years, beginning in 1956, we had service personnel who collected these signals, processed and exploited them there on the site, and then disseminated that intelligence back to the Canadian Forces from there.

We still must collect foreign signals of interest at Canadian Forces Station Alert because of its unique geographic location, but with improvements in electronic signal processing and communication technology, we can send the raw signals back to southern Canada now for processing and analysis.

As a result, in 1997 we reduced the number of signals intelligence personnel permanently on station at Alert from over 250 to now fewer than 10 technicians. As the majority of issues at Canadian Forces Station Alert now relate to logistical support, in 2009 the Royal Canadian Air Force took over command of the station. I believe a witness from the air force at Alert will be here in a couple of weeks.

The signals intelligence capability, which is provided by what we call our uniquely advantageous location at Canadian Forces Station Alert, contributes to the defence of North America by providing an important intelligence input to the Canadian Armed Forces and to our binational North American Aerospace Defense Command, or NORAD.

Our signals intelligence systems at Canadian Forces Station Alert, along with similar systems at Gander in Newfoundland and Masset in British Columbia, can also contribute to search and rescue and other domestic operations by effectively looking backwards into Canada to help locate radio signals from ships or aircraft in distress.

When tasked for search and rescue, the three stations can search for high-frequency radio signals, which come from the types of equipment that airplanes and ships normally use for long-range communications, and determine their direction of origin. The intersection of the three lines of bearing from the three stations will give you a good idea of the location of that transmission.

The three roles of Canadian Forces Station Alert are signals intelligence; sovereignty, because we're there; and science, because Environment Canada is there. We also support scientific experiments. These roles are complementary and with goodwill and cooperation by all the parties involved, are mutually supportive.

From the signals intelligence perspective, from my perspective, Canadian Forces Station Alert is a vital asset and will continue to be so for the long term.

• (1645)

The Chair: Thank you very much, Colonel.

Colleagues, before we begin the first round of questions, I would caution you that the colonel is unable to answer detailed questions regarding the specific signals intelligence collected at Alert, the equipment used in collecting that intelligence, or the operational impact of intelligence derived from Canadian Forces Station Alert.

Our first questions are from Mr. Chisu, for seven minutes.

Mr. Corneliu Chisu: Thank you very much, Colonel, for your presentation. It was very interesting.

You mentioned the three basic areas you are looking at with regard to signals intelligence.

You spoke about communications intelligence. It is quite selfexplanatory.

When you were speaking about the electronic intelligence derived from electromagnetic non-communications emissions, I think you were referring to radars and also other systems, such as side-looking radars, synthetic aperture radars, as well as probably infrared devices.

Of course there are some restrictions on what you can say, but I am asking about the coverage of Canadian airspace.

As you know, you have the long-range radars, the middle-range radars, and the short-range radars. You probably have an important role in this one.

Can you elaborate on these things as much as you can, without disclosing any secrets?

Col S.M. Moritsugu: You're asking about coverage that we can provide. From Alert, we're doing signals intelligence rather than actual radars. The radars are the responsibility of the air force. For signals intelligence, once you send a message, it travels freely through the ether, right? So we're trying to intercept signals that may be even beyond our national borders.

We're looking at foreign signals intelligence that are well beyond the range of where our radar could actually see, given that the earth is curved and our radars go in straight lines from the ground. We're looking at covering and getting warning even before the radars can see things, if possible.

Mr. Corneliu Chisu: Are you also involved in underwater communications, or can you not elaborate on that?

Col S.M. Moritsugu: I'd really prefer not to elaborate on that one.

Mr. Corneliu Chisu: Thank you, no problem about that.

When you talk about machine-to-machine communications, when you are explaining these things, you say that you have the capability to intercept signals between two communications.

Can you elaborate a little bit more, as much as you can?

Col S.M. Moritsugu: I was trying to give the three examples of what we do for signals intelligence to give you an idea, because it just sounds like science fiction when you say signals intelligence. The machine-to-machine communications examples would be if another country launches a rocket, often they have a datalink to the ground to another machine, so it's not a human being talking. That would be a type of signal. Or, if you're flying a drone aircraft and you're controlling it, then there's a signal from your controller to that aircraft.

Those are the types of signals that we'd be interested in intercepting, obviously, and then perhaps analyzing them.

Mr. Corneliu Chisu: Just answer this questions as much as you can. If you are detecting, for example, an intent from a foreign country, especially speaking about Russia, how quickly can this information be transmitted and how quick is the reaction, let's say, on the intrusion?

You don't need to tell us everything, but do you have a mechanism in place? Can you elaborate as much as you can about this mechanism?

Col S.M. Moritsugu: What we're trying to produce with intelligence in general, whether it's signals intelligence or any other kind, obviously, are intentions and capabilities at the sort of strategic level and actual actions that people are taking that we care about and that are very interesting to us.

As you said, if somebody was hypothetically attacking us, we'd care, obviously. The communications part of it is as fast as the speed of light. It's really the amount of time it takes a human being to look at what they have and realize what it signifies.

It's very much how fast our analysts can figure out what's going on from the multitude of signals they receive and what it means. Regarding the reaction time, I think the air force is better able to answer that, but so far we haven't missed anybody approaching our borders.

• (1650)

Mr. Corneliu Chisu: I was asking about the timing. I will use the example of somebody approaching our borders and you are detecting them, and you are quite sure that this object or this enemy aircraft will intrude our airspace, or have the intention to intrude our airspace. You are getting this information. You are sending it down to the operation in the south to process it, and then you are sending it to the air force in order to deploy.

Unfortunately, we don't have a missile system to lock in, but somebody else does, so it is a question of timing. You don't need to tell us about the timing, but is there a system of reaction in place?

Col S.M. Moritsugu: Absolutely, there's a system of reaction in place. The deputy commander of NORAD would be the best one to talk to about how that works. Although it sounds kind of callous, but my part's done once I've told them what's going to happen. It is then up to the air force guys to take care of that.

Mr. Corneliu Chisu: I would like to ask you about the importance of Alert. It is one of the most Nordic locations in the world that is populated. What is the role of Alert in the defence of North America?

Col S.M. Moritsugu: From my perspective, the primary mission of Alert is signals intelligence collection. As I said, it is vital because of where it is. It's a unique geographic advantage that we have. The connection still has to happen far forward and far north, so that it will have a continuing vital role.

Mr. Corneliu Chisu: Thank you.

The Chair: Thank you.

Mr. Harris.

Mr. Jack Harris: Thank you, Colonel, for joining us.

I gather from the location of the signals intelligence stations—one in Gander on the far east coast, one in British Columbia, and one in the north—that it tries to cover all the bases in terms of what we can assess.

You said that the air force took over the operation of Alert. From whom?

Col S.M. Moritsugu: It was with my organization up until 2009, sir.

Mr. Jack Harris: You did all the supplying and all the work back and forth.

How is that different from CSE, the Communications Security Establishment? They're engaged in foreign intelligence as well, but not signals intelligence. Is that the difference?

Col S.M. Moritsugu: I think if you look at their website, sir, CSE does signals intelligence, but I do military signals intelligence.

Mr. Jack Harris: So are you only interested in military objects?

Col S.M. Moritsugu: Yes, sir, foreign military objects.

Mr. Jack Harris: Foreign military objects. Okay, that's good.

I didn't get a chance to look at your website before you came. I heard about it earlier today.

The essence is, do you use satellites as part of your array of intelligence gathering, or is that simply the means of communications to the south, as you pointed out?

Col S.M. Moritsugu: We do use satellites to communicate to the south, but we can't do that from Alert because Alert is so far north. It's around the curvature of the earth from where any geospatial satellites are, so we have a series of microwave radio towers that go down the spine of Ellesmere Island to Eureka, where we can just see the global geostationary satellites.

Mr. Jack Harris: So you are too far north. You're farther north than the satellite path.

Col S.M. Moritsugu: That's right, sir. At Eureka the satellite dishes are essentially pointing horizontally to point towards the equator.

Mr. Jack Harris: I did consult a map since I spoke to you. Are there parts of Greenland that are farther north than Alert?

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Col S.M. Moritsugu: I believe there are parts of Greenland that are farther north, and when you're in an aircraft a few hundred feet up you can see Greenland off to the east. It's very good. There are cliffs over there. It's very close. Alert is the most northern permanently inhabited, or year-round inhabited, place in the world. • (1655)

Mr. Jack Harris: You have 10 people there. Does Environment Canada have people there year-round?

Col S.M. Moritsugu: When I was there last, Environment Canada had at least four people there permanently.

Mr. Jack Harris: You have year-round occupation with at least 10 people there and Environment Canada has people. Is there anybody else?

Col S.M. Moritsugu: Yes, sir. There are a number of support people who the air force counts, but I don't. Colonel Lowthian should be able to talk about that in a couple of weeks, but we're talking about between 50 and 100 people in total.

Mr. Jack Harris: It's essentially a permanent operation there with between 50 and 100 people year-round supported by the air force.

Col S.M. Moritsugu: Yes, sir.

Mr. Jack Harris: You're basically-

Col S.M. Moritsugu: I'm basically now their lodger or their client.

Mr. Jack Harris: You're their client.

That's been operating since when, sir?

Col S.M. Moritsugu: In 1956 we started signals intelligence, and it was a couple of years before that the station was constructed.

Mr. Jack Harris: Your mandate is to supply that information to central command here in Ottawa or wherever?

Col S.M. Moritsugu: Right, and to NORAD as well, sir.

Mr. Jack Harris: You communicate directly to NORAD as well, do you?

Col S.M. Moritsugu: Yes, sir.

Mr. Jack Harris: The signals intelligence could be any kind of signals. They could be voice communications. They could be any electronic communications, electromagnetic communications, or electromagnetic signals of any sort.

Col S.M. Moritsugu: That's correct, yes.

Mr. Jack Harris: You could potentially detect engines even if they weren't communicating.

Col S.M. Moritsugu: Potentially, sir, yes.

Mr. Jack Harris: All right. I'm not sure where else we can go with this, sir, except to say that we're glad you're there keeping an eye on things. It's obviously a very important part of the system, especially when, as you say, we can't communicate with satellites. Satellites can't really see what's going on either.

Col S.M. Moritsugu: Sir, polar orbiting satellites can.

Mr. Jack Harris: Polar orbiting, yes, but only on the way around.

Col S.M. Moritsugu: Only every once in a while, yes, sir.

Mr. Jack Harris: That's all I have, sir.

The Chair: Thank you, Mr. Harris.

Ms. Gallant, please.

Mrs. Cheryl Gallant: In terms of technology, aside from being reduced from 200 to 10 people, how is the emergence of new technology enabling you to do more comprehensive work?

Col S.M. Moritsugu: In 1956 when those things went up there, we had to do all the work forward because it was impossible to send the signals back. The ability did not exist. The number of people you could consult was smaller because there were 250 people there and that was it. Now that we're doing it back here, we can draw on everybody in the Canadian Forces intelligence community. The human interface is not the same as talking on the phone, so the ability to analyze is better.

Technology was valves and vacuum tubes and stuff back in the fifties, and it has obviously advanced considerably since then. Our ability to collect and process signals and figure out what they are is much better.

Conversely, the ability of any target to hide its signals and make them difficult to understand is much better as well, so it's a continuing.... Communications information technology advances by leaps and bounds, and it has advantages and disadvantages for both sides when it does that.

Mrs. Cheryl Gallant: Highly electronic technology is really sensitive to the deep cold. How do you overcome challenges with this new technology as it pertains to temperature and the availability of electricity?

Col S.M. Moritsugu: Station Alert, because it's permanent, has constructed buildings up there. So we've obviously got power—not Ontario Hydro, but local generators and stuff—and backup power, and backup to the backup power, because if it goes down, when you're that far north and hours away from the nearest help, it has to be continuous. We have that. Some of our systems actually require air conditioning, even though it might be minus 50.

Mrs. Cheryl Gallant: With respect to the sharing of information, the connectivity, and the seamless picture of what is coming in, to what extent are we sharing some sort of communication system with our Nordic neighbours?

Col S.M. Moritsugu: Our main reason for having the station there would be the defence of Canada, the defence of the homeland, and the defence of North America.

Our primary sharing is with NORAD. From my perspective, we figure out what's going on. We produce that intelligence. How our national command might then decide to share that or any other source of intelligence with somebody else, because we have a common problem we're dealing with, on a case-by-case basis, is echelons above me. Here's the information into the hopper, and somebody else decides whether my information or some other bit of information needs to be shared with somebody other than the people we regularly share with, and that is ourselves and NORAD.

• (1700)

Mrs. Cheryl Gallant: If another country had signals intelligence, they wouldn't push it to your station. For example, let's say the Danes or the Swedes had some sort of intelligence. Instead of pushing it to you, they would push it directly to our head command or to NORAD.

Col S.M. Moritsugu: Yes. The processed intelligence would come directly to our headquarters here in Ottawa basically. Then how it would be used is up to us.

One of the reasons you do this is that you want to tell people what's going on, but you don't want to necessarily tell them how good your equipment is, which you would be doing by giving them your exact raw intelligence.

Mrs. Cheryl Gallant: There is a finite ability for satellites to give you a full picture all the time. In the course of what you do, would it make sense to be connected with assets from other allied countries in that region?

Col S.M. Moritsugu: I don't think we would necessarily want to connect our communication means to other allies, certainly not as a primary. We have our primary means.

If I had a wish, it would be to have at least one other completely Canadian way to get information back in case of a problem with that primary means. But for this type and sensitivity of information, it's unlikely we would depend upon even a close ally to do that for us.

Mrs. Cheryl Gallant: So we have enough sensors to detect far in advance whether anything is a threat to North America.

Col S.M. Moritsugu: That's certainly our intent, yes.

Mrs. Cheryl Gallant: Is there anything, any type of technology or any type of additional help your organization needs that the government could be looking at providing?

Col S.M. Moritsugu: I guess it's a question of defining what's a need and what's a want, right? What I say I need, my boss might say that's what I want.

The fact is that information and communications technology leapfrogs so quickly. You didn't have an iPad 10 years ago. Because that kind of stuff happens, we need to keep refreshing our own equipment all the time. We have a well-defined process in the forces to put our requirements forward, and then they have to be matched up against every other requirement in the armed forces as well. That's one, just to continue to keep refreshing.

The second one, as I mentioned before, is that we are dependent on a communication link that is very robust. We have all systems in place, but in a perfect world, I would have two that went different ways that were both Canadian. Mrs. Cheryl Gallant: Thank you very much.

The Chair: Thank you very much, Ms. Gallant.

Ms. Murray, please.

Ms. Joyce Murray: Perhaps you could clarify something. You're the forces commander for information operations group. That would include the east coast signals facility and Masset. Is there one in Winnipeg, as well?

Col S.M. Moritsugu: In terms of the collection facilities that are similar to Alert, there are only three in Canada. The majority of my people, though, are actually here just outside of Ottawa.

Ms. Joyce Murray: What's the difference between how Masset serves signals intelligence needs compared with Alert?

Col S.M. Moritsugu: Physically they're the same, but the fact that they're in different locations enables them to pick up different signals, because the signals propagate to the atmosphere, and the ones that come from the west are stronger in the west than they are in the east. Also, if more than one station picks them up, which we hope they would, then it gives us the ability to direction-find them as well and find exactly where they came from: I know in which direction from me they came from, and you know in which direction from you they came from, and it's where they cross.

Ms. Joyce Murray: Yes, you triangulate.

Col S.M. Moritsugu: Yes, to triangulate means three, right?

Ms. Joyce Murray: So Masset has the same kind of equipment and they also are no longer doing the analysis there. It's happening centrally here—

Col S.M. Moritsugu: That's correct.

Ms. Joyce Murray: —but they still have a small group that maintains the facility, and so on.

What's happened with your budget since the deficit reductions and budget freezes and so on? I know that the CSE's has gone up. Has yours gone down, or remained the same, or gone up since 2010, when these freezes and cuts started to affect the Canadian Armed Forces?

Col S.M. Moritsugu: The budget allocated towards my part of the operation of signals intelligence, to my knowledge—I've only been in command of this organization for a year—has not significantly varied, because our tasks have not significantly varied.

• (1705)

Ms. Joyce Murray: So your task, then, includes the analysis group? They're just somewhere else.

Col S.M. Moritsugu: That's correct.

Ms. Joyce Murray: Okay, but theirs hasn't gone up significantly either, as far as you know?

Col S.M. Moritsugu: No, but the fact that we've taken them out of Alert, out of Masset, and out of Gander and centralized them in Ottawa means that we don't have to pay them extra money to be in those isolated places. There's a whole bunch of savings that we can turn into operational—

Ms. Joyce Murray: So you have more capacity because of those savings, from a logistical perspective.

Col S.M. Moritsugu: Yes.

Ms. Joyce Murray: Okay.

You were saying in answer to Mr. Harris' question that you do foreign military intelligence and the CSE does foreign intelligence. Does the CSE have these same collection facilities, or does your collection then send signals to them for their analysis of the foreign intelligence and your analysis group does the military? Or do you do all of the analysis and then pass over to the CSE the kinds of information they need and keep for the central command the information you need?

Col S.M. Moritsugu: That's a difficult question to answer. I'd say that when the raw information comes in, it's not really of much use to anybody. It requires the analysis. It's only the people who are analyzing who are able to determine what they need to get the full picture that they're trying to develop of whatever it is. In a perfect world, we would share the raw information and let the analysts draw out the parts they need. Two people might look at the same thing and draw different conclusions because they're going after different problems.

Ms. Joyce Murray: Okay. So it goes to the CSE as raw data, but you have the devices that collect the signals in the first place.

Col S.M. Moritsugu: That's right. We have the people in Alert and those places, and the equipment.

Ms. Joyce Murray: That's the source of the signals for the CSE as well.

Col S.M. Moritsugu: I wouldn't presume to know what the CSE has. I would certainly hope that they have a lot more than just that, but yes, that would be part of their sources.

Ms. Joyce Murray: That's part of their sources.

One thing that's been in the news concerning Canadians is the tracking of the free downloading of web apps now. Is that the kind of thing that can be tracked by the equipment in Alert and Masset, for example, in terms of who's doing what with what websites?

Col S.M. Moritsugu: No. If you think of where Alert and Masset are, the only people out there are us, so it's very much focused more on the type of signals that come through the air, such as radio signals, radio frequency signals. Tracking what's happening on the Internet is not at all a function of those three locations.

Ms. Joyce Murray: Are there special human resources support requirements that you have in place for people who live as far away as Alert? Is it working? Do you have different levels of stress and so on from people who are up there compared to somewhere else?

Col S.M. Moritsugu: Being posted to Alert is considered a deployment conceptually the same—obviously not exactly the same —as being deployed to Afghanistan, Kuwait, or wherever. We rotate people in and out of there not on three-year terms but on three-month or six-month terms, depending on what their job is. While they're

there, we try to give them the same type of communications to back home that they would get if they were deployed overseas somewhere. It's deployment, but within our own country, because they're as far away there as they are in Europe, or farther, actually.

Ms. Joyce Murray: Are there risks with a deployment to Alert that you have to manage for that wouldn't exist with a deployment somewhere or, say, living in Ottawa?

Col S.M. Moritsugu: I think the biggest risks are the fact that any support beyond what's right there is really far away both in time and distance. If there's a first aid emergency here in Ottawa, I can call 911 and somebody would be there in minutes. If you call the equivalent of 911 in Alert, it's hours to potentially half a day before the closest person is going to get there, just because of how far it is. It's 4,000 kilometres from here to fly there. With the station, then, even though I only have fewer than 10 people, the whole conglomeration of them provides all that support. It's a mini self-contained village with all the functions that you would have, which is what the air force provides for us.

Ms. Joyce Murray: Can you tell us the total force number that you're responsible for as a commander of information operations groups?

Col S.M. Moritsugu: The information operations group which includes the signals intelligence function has approximately 900 people in it.

• (1710)

The Chair: End of time. Thank you very much, Ms. Murray.

Mr. Williamson, please.

Mr. John Williamson: Thank you, Colonel. It's very interesting. I appreciate both introductions. Your initial comments were a good introduction for all of us, I think. They were to the point. I will just make a brief comment. It's unfortunate we were planning to visit Alert, but we were not able to receive full cooperation from all of the political parties. I think some of the questions here today might have been answered if we had made that voyage up north to better understand what it is you do in terms of operations and the living conditions of the men and women who are stationed up north.

You had mentioned twice the primary communications. I don't know if you can go much further. You mentioned you have one communication link and you would like a secondary one in an ideal world, whether it's a want or a desire. Could you provide a little more information about that? I just noticed that you raised it twice actually. It's an issue on our side. **Col S.M. Moritsugu:** We have one path that our communication goes which is from Alert over the spine of Ellesmere Island, which is covered in glaciers. It's a beautiful country, but it's very rugged, and glaciers also move. We have the one path. We have multiple means of communication down that path through these towers, mountain top to mountain top, until we get to Eureka, and it goes to the sky to more than one satellite. We have redundant communications but it's only on one path. As a signaller by trade, having a diversity of paths gives you redundancy and flexibility beyond just the fact that you have more than one system going down the same route, but that's quite expensive. Building towers across the top of Alert off Ellesmere Island is not a trivial exercise, and maintaining them is a big deal as well. Where else would you go off Alert because it's very far north?

In a perfect, resourced, unconstrained environment I would agitate for a separate physical path as well, but we've got redundant paths.

Mr. John Williamson: I'm curious, with the volume of data I assume you have some sort of airlift capacity at Alert. Is it open all year, or are there periods of the year where it is virtually impossible to get in and out?

Col S.M. Moritsugu: There are flights that are scheduled to go there year-round. Again, the air force can talk about it but there are certainly days when you can't go.

Mr. John Williamson: I'm just curious, with the volume of data you're talking about, if the primary communications network was down, could it be flown in and out on some sort of—

Col S.M. Moritsugu: If the primary communications went down, we could essentially reconstitute 250 people back up there and then process there and send less information back here.

Mr. John Williamson: Right, but could the data be transported another way as well?

Col S.M. Moritsugu: Certainly it could, but it wouldn't be as timely, obviously.

Mr. John Williamson: I realize that. Fair enough.

In terms of Ms. Murray's comments, she usually asks witnesses if the budget's been cut, and then is disappointed if it's not been increased. It sounds like when you were commenting about the change in operations there was a refocus and dollars were being spent differently. You don't have to comment on this, but that's what it sounded like to me. There was a reorganization within your unit to save dollars. I'm pleased the NDP occasionally is concerned about the bottom line. Does it happen often—

An hon. member: Always.

Mr. John Williamson: Always, yes, except when you're howling on the House of Commons floor.

It sounds like there has been a change within the operation to consolidate assets in the south where it's perhaps more cost-effective and pulling some resources back, but making better use of technology, information technology, in particular.

Col S.M. Moritsugu: Mr. Chairman, as well as being more costeffective, it's easier on the human beings as well. If you can go home to your family every night, it's a good thing. Mr. John Williamson: That sounds like the government has made some good moves.

Thank you.

The Chair: Thank you, Mr. Williamson.

Madam Michaud.

[Translation]

Ms. Élaine Michaud: Thank you, Mr. Chair.

I would first like to thank Colonel Moritsugu for his presentation.

I must admit that signals intelligence is not an area I am particularly familiar with. Could you tell me exactly what you mean by electronic intelligence obtained by electromagnetic non-communications emissions?

[English]

Col S.M. Moritsugu: Our purpose in intercepting the signals is to glean whatever information we can from them. The reason that people would send the signals is normally primarily for communications. When I say "signals", I mean radio waves. If somebody is talking on the radio or sending a radio transmission, their purpose is to communicate with somebody else. Because of where Alert is, it is often possible to receive the same signal and hopefully gather something useful out of it, which would be our job.

• (1715)

[Translation]

Ms. Élaine Michaud: That wasn't exactly what I was asking about. I want to know what you mean by electromagnetic non-communications emissions.

[English]

Col S.M. Moritsugu: Non-communication emissions would be where somebody sends a signal out, but they don't mean it as a message. The best example would be a radar signal, where your plane sends it. It's not a message; it's just to send a beep and get it back.

[Translation]

Ms. Élaine Michaud: Thank you very much. That's exactly what I wanted to know.

You spoke briefly about the physical constraints of your working environment. They are certainly quite impressive.

Have you found that the impacts of climate change might make your work a little harder? Could changes in how you work in the Arctic environment be due to climate change?

[English]

Col S.M. Moritsugu: With respect to climate change in particular, Alert is so far north that it hasn't yet had the.... Changes in the edge of the ice pack, for example, have had no effect upon it.

It's still really cold up there.

[Translation]

Ms. Élaine Michaud: I imagine that, in your case, we can say that you're lucky.

You spoke briefly in your presentation about your organization's direct contributions to NORAD. Could you expand on that a little? [*English*]

Col S.M. Moritsugu: In this forum it's difficult for me to be more specific, but what we're trying to give is, again, warning of other people's intentions and capabilities.

[Translation]

Ms. Élaine Michaud: If I may summarize it this way, the role is mainly to share information.

You mentioned that you sometimes take part in search and rescue operations in Canada. I understood that it mainly involved trying to triangulate signals, but I would like to know how and when your services are requested.

[English]

Col S.M. Moritsugu: Other services or the joint rescue coordination centre would call upon us when they know there's a ship or an airplane out there that somebody has lost contact with and has reported as potentially being lost. Our role then is to locate their radio signal and attempt to triangulate it so that we have an idea of where they are. Sometimes, because of the fact that we have very good radio receivers, it's possible for us to hear signals that other people cannot hear. For example, a normal base station or airport has lost contact with some airplane or some ship. They're still talking, but nobody is hearing them. They ask us to listen, and when we turn and look in that direction it is often possible to pick up signals and determine that they're actually not lost, that they're just out of communications.

In 2014, for example, there were only five instances where we were asked to do so. In three of them there was no actual emergency, but we were able to determine that this person was talking, but they weren't answering because they couldn't hear them. We could hear them, and it wasn't an emergency. On two of them, we did help to locate that the person was declaring an emergency, and we were able to say "they're about here", which makes it easier for search and rescue to go find them.

[Translation]

Ms. Élaine Michaud: Since you have several stations, can you take part in operations all over Canada?

On the ground, do you interact with local stakeholders who manage the search and rescue operations or with other Canadian Forces services?

[English]

Col S.M. Moritsugu: Right. Our requests for that, and our answers to that, go back to the central Canadian Forces joint rescue coordination centres, so that we don't work directly with the people on the ground.

The Chair: Thank you.

Mr. Norlock, please.

Mr. Rick Norlock: Do you care about your men, sir?

Col S.M. Moritsugu: Absolutely, sir.

Mr. Rick Norlock: Do you make sure they have the things they need to keep their morale up, to make sure that they contact their

families, and to relieve as much stress as humanly possible, especially when they're stationed in Alert and other places like that?

Col S.M. Moritsugu: Absolutely, sir.

Station Alert, because it used to be so large and the complement is so much smaller, and because it's been going for more than 50 years now, actually is fairly well equipped for amenities. There are actually still records there, too, from the old days, but there's the ability to have a broadcast station and there are TVs. There's actually Internet access and stuff like that. There's the ability to communicate with your families. Everybody now, because there are few people, has a single room, which is a big deal if you're deployed.

• (1720)

Mr. Rick Norlock: Because of that they're able to function properly, and therefore you can reassure Canadians that they're healthy and their emotional state is being cared for, and therefore, they're in their top operational mode.

Col S.M. Moritsugu: Actually, sir, I have two reasons for caring for my people: one, because I'm a human being and care for them, and two, because, as you said, I need them to be operationally fit.

Mr. Rick Norlock: I just wanted to connect the dots, because we were going off on tangents there. But there are reasons that we need to know those things.

Somebody like myself who doesn't know anything about electronics but who watches a lot of sci-fi, I'm just wondering.... Again, all these things are very expensive. For the average Canadian, who we hope will not be too bored by reading this study, but it shows that all around this table we care about the defence not only of their country but of their continent.... Do we enter into partnerships with, let's say, NORAD? We're so intrinsically aligned with NORAD. Are you aware of any communications—since you're in communications and I'm talking about talks—that would pool resources and look at perhaps some satellites, that, instead of going around the earth this way, go around the earth that way, or are stationary over the top of the earth? Or is that totally not an option?

Col S.M. Moritsugu: Stationary over the top of the earth physically isn't possible. There are circumpolar satellites that exist now. For your GPS satellite, for example, the constellation is circumpolar. I believe, but I am not the expert, that the Canadian Forces and the Government of Canada would wish in the future to have those kinds of things for ourselves as well.

Mr. Rick Norlock: I've heard contemplation of an additional satellite to assist in those types of communications.

Col S.M. Moritsugu: That's pretty far out of my current knowledge there, sir.

Mr. Rick Norlock: Okay.

One of the things that was also asked that does connect.... Am I correct in saying you would be the first eyes and ears, as it were, with regard to the defence of North America vis-à-vis someone's going to do something over the polar ice cap that might endanger Canada? Would you be the first to pick that up?

Col S.M. Moritsugu: I think if they talked about it on the radio, we would hope to be the first to pick it up. There are other intelligence means that, again, I'm not expert on.

Mr. Rick Norlock: In other words, they're launching a missile and they have to send signals, and you'd be picking up something that says there's something going on here that's not normal or that we don't usually see.

Col S.M. Moritsugu: Our objective would be to never be surprised. That's correct, sir.

Mr. Rick Norlock: Okay.

When it comes to aircraft, I know we're talking about replacing our fleet. In terms of communication availability in the aircraft, are you familiar with the aircraft's ability to connect with you?

Col S.M. Moritsugu: No, sir, other than for the aircraft that are in distress, we're not. It's not really my field.

Mr. Rick Norlock: In other words, we've heard from different companies that want to produce fighter jets, and their ability to communicate with each other, and at that time instantaneously communicate with other facilities that receive signals. That's why I asked that question.

Col S.M. Moritsugu: Roger, sir. Right now, it's not part of my mandate, so, no, I don't know anything about that.

Mr. Rick Norlock: From the standpoint of NORAD—understanding some of the things, because in this job we have here we understand a little bit about a lot of things, but not a lot about anything—what's the connectivity with the northern United States, let's say Alaska? I understand they have facilities similar to Alert. Is there an interoperability between the two, between you and them?

Col S.M. Moritsugu: There absolutely is interoperability because we're cooperatively defending the continent. However, it wouldn't be from Alaska to Alert. It would be back from both to our central organizations and then we're interconnected.

The Chair: Thank you. Your time is up, Mr. Norlock.

Mr. Harris.

Mr. Jack Harris: Since you're dealing with electronic information, one of the questions I have is whether or not you have constant access to information. Do atmospherics interfere with the consistency or the quality of your signals intelligence? For example, would you be shut down by the northern lights as electronic noise of some sort?

• (1725)

Col S.M. Moritsugu: Yes, sir. The high frequency, which is the long-range radio type that people use in ham radios and up, is strongly affected by atmospheric conditions. It's a physical thing, because a lot of the signals bounce off the atmosphere, and the layers at which they bounce change with things like solar flares. Everybody, not just us, is affected by that, which is why sometimes you can pick up a skipped signal, from AM radio in particular, from central United States as you're driving to Toronto, and other times you can barely pick up Kingston as you drive by it. The same principle applies to us, except we're talking about longer distances.

Mr. Jack Harris: Because you're looking at foreign signals, you're not looking back in Canada but looking out to the whole array. You indicated there was no cooperation with other allies, so NATO is not involved in any of this at all and it doesn't get any access to your signals or information—

Col S.M. Moritsugu: Sorry, I said there is no direct cooperation from me to them. There's me back to Ottawa and—

Mr. Jack Harris: ---to Ottawa and whatever.

Okay.

The Chair: Mr. Brahmi.

[Translation]

Mr. Tarik Brahmi: Thank you, Mr. Chair.

To follow on the question my colleague Ms. Michaud asked about electronic non-communications intelligence, do you also include all the scrambling and warfare operations that an enemy might carry out? Does that come under what you exclude from communications? Is it just scrambling?

[English]

Col S.M. Moritsugu: Scrambling or encryption of communications is extremely common in military communications because all of us, no matter who we are, want to keep what we're doing hidden from anybody who, like us, might want to know what we're doing. So—

[Translation]

Mr. Tarik Brahmi: I'm also talking about aggressive scrambling where the goal really is to interrupt communications between enemy forces.

[English]

Col S.M. Moritsugu: The term we would use for that in English is "jamming", which means that somebody sends a signal to interfere with ours.

[Translation]

Mr. Tarik Brahmi: That's it, jamming.

[English]

Col S.M. Moritsugu: That is a tactic, but it's so aggressive that it's the type of thing that's getting close to being a conflict, if people are doing things like that to each other.

[Translation]

Mr. Tarik Brahmi: Actually, my question is this.

In electromagnetic non-communications emissions, do you include jamming from sources outside Canadian facilities? I don't think my question was clear.

[English]

Col S.M. Moritsugu: Yes, sir. Jamming would be included in our electronic intelligence. If we think of pursuing that, it would be very important and indicative of something to us.

Mr. Tarik Brahmi: And it would be defined as non-communication.

Col S.M. Moritsugu: That's correct.

Mr. Tarik Brahmi: Right, okay. Thank you.

[Translation]

The Chair: Thank you, Mr. Brahmi.

[English]

Mr. Bezan, I understand you have just one minute here.

Mr. James Bezan: Yes, before you adjourn I have one last question for the colonel.

I appreciate your taking time to be here, especially on short notice, and giving us this background information that is important to us in forming our position in our report on the defence of North America.

You do talk about your responsibilities within Canada and relationship to NORAD, and the binational relationship that we have with the United States. You talk about three facilities, one in Alert, one in Gander, Newfoundland, and one in Masset, British Columbia. Do the capabilities exist there to patrol all the airwaves that you're monitoring and to do signals gathering, or do we rely on the Americans to help fill that gap in Alaska?

Col S.M. Moritsugu: Our own sovereign sites allow us to cover our borders and those approaches to North America. Basically, I would say we're good with the three that we have.

Mr. James Bezan: So, everything you're looking for, of course, is in the three main areas.

I know there are some things you can't comment on, but if you have submarines under the ice, the only time you can ever really see

them or hear them is when they're trying to communicate back to their home base.

Col S.M. Moritsugu: That's right. If they stick an antenna up and talk and they're making an emission of some sort, the intent would be that we would hopefully be able to pick that up.

• (1730)

The Chair: Thank you very much, Colonel, for your time with us today and for operating within the constraints of which we are well aware.

Colleagues, just to give you a heads-up, I've been requested to identify the witnesses for next week's meetings.

On Monday, we're scheduled to have Major-General Coates, the deputy commander of CJOC, continental operations; and Brigadier-General Loos, commander of Joint Task Force North.

At our Wednesday meeting, we're scheduled to have Rear-Admiral Newton, commander of Joint Task Force Atlantic and commander of Maritime Forces Atlantic.

Mr. Rick Norlock: We could always put reductions into their statements, so that Joyce could have other questions.

The Chair: The meeting is adjourned.

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