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# **Standing Committee on National Defence**

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Chair

The Honourable Maxime Bernier

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**●** (1105)

[Translation]

The Chair (Hon. Maxime Bernier (Beauce, CPC)): Good morning, everyone.

We will now begin the sixth meeting of the Standing Committee on National Defence. Today is Tuesday, March 30, 2010. Pursuant to Standing Order 108(2), we are studying search and rescue response times

[English]

We have the pleasure of having with us as a witness Colonel Paul Drover.

[Translation]

Colonel Drover is director, Air Force Readiness, Chief of Air Staff.

[English]

Merci beaucoup, Colonel Drover, for being with us.

You'll have 10 to 15 minutes to do your presentation. After that, members will ask you questions. Thank you very much. You have the floor.

Colonel Paul Drover (Director, Air Force Readiness, Chief of Air Staff, Department of National Defence): Thank you, Mr. Chairman.

Members of the committee, I do have a short presentation, and I will accompany the presentation with a few charts. I'll refer to the charts when I wish to draw your attention to them.

As was mentioned by the chairman, I was asked to speak today about the aeronautical search and rescue posture. I will start with a brief presentation, as I mentioned.

The Canadian Forces mandate is the provision of aeronautical search and rescue services and the effective operation of a coordinated aeronautical and maritime SAR system, which is a federal responsibility.

I'd draw your attention to slide 2. The national area of responsibility is some 15 million square kilometres, extending east and west, by international convention, to the oceanic boundaries between adjacent nations, south along the recognized border with the U.S., and up to the North Pole. As you can see from the chart, the regions therefore include vast regions of diverse terrain, sparsely settled land mass, and an enormous region of oceanic approach.

As chart 3 shows, the CF operates three joint rescue coordination centres located in Victoria, Trenton, and Halifax. These centres are co-manned by the Canadian Forces and the Canadian Coast Guard. As the name implies, the mission of these centres is to coordinate the SAR response to incidents that entail tasking of the most appropriate resource to provide the best response. Depending on the nature and location of the incident, the task asset may not be a CF aircraft or a coast guard vessel; it may be a vessel of opportunity or a commercial vessel or aircraft.

On slide 4, the primary SAR resources are shown as based in various locations throughout Canada. They are held on an alert status on a continual basis.

The next slide depicts the number of aircraft we use in the SAR system. All of these aircraft are capable of aerial delivery and are crewed with SAR technicians who are medically trained and equipped for such diverse tasks as parachute jumps, mountain climbing, diving, as well as treatment of seriously injured and distressed people.

In the CF readiness posture, we maintain a minimum state of readiness for each rescue squadron. There will be one aircraft of each type on 30 minutes' standby during working hours and two hours during all other times. Commanders of the rescue coordinating centres may realign the SAR standby periods so that they coincide with the periods of greatest SAR activity, particularly during the summer months. When this occurs, units must continue to provide 30-minute SAR standby for each aircraft for a minimum of 40 hours a week

When crews are at the hangar, in normal working hours, there is an expectation that 30 minutes represents the maximum reasonable time to get the aircraft airborne once notified by rescue coordinating centres. This expectation implies a rapid mission analysis of flight planning—normally of less than 10 minutes—and an unimpeded aircraft start, taxi, and takeoff that should be done within 10 minutes.

During quiet hours, crews maintain an alert posture within the local defined area or at home. The reasonable expectation then becomes two hours instead of 30 minutes. It is recognized that it takes longer to respond from home, especially at night, when it becomes necessary to regain the cognitive skills needed to aptly process and digest information after being awakened.

There is an expectation for the CF SAR crews to react with the same high level of urgency in all cases. The only acceptable reasons for delay are those that are not within CF control, such as extreme weather, a mechanical failure, or multiple coincidental occurrences requiring privatization.

CF SAR crew performance regularly exceeds prescribed standards. A study of actual response time revealed that the true difference between the reaction times while on 30-minute posture as distinct from a two-hour posture was approximately 45 minutes. This is because within the 30 minutes, the crews normally get airborne after approximately 20 minutes and in a little over an hour on the two hours' standby, so that the difference really becomes 45 minutes.

The way we are able to function and structure ourselves, with the number of crews we have available, is that we normally select one crew to operate for a 24-hour period. The crew day will start at four o'clock and will be part of the two-hour routine, in which the crew may stay at home or be close to the squadron. For the 16 hours they will maintain that posture, and then they will return to the squadron to hold 30 minutes. So you'll get one crew working a 24-hour period. On the weekends, we actually use the same crew for the whole weekend, period, with the understanding that if it is a very active period of time and the crews are actively involved in a number of operations, we have a provision for backup crew, so we can sustain the standby posture in that regard.

#### **●** (1110)

I'd next draw your attention to chart 6. This is a chart worthy of some focus. It's the distress incident resolution timeline. When an incident occurs, it is imperative to reduce the overall resolution timeline by managing or avoiding delays that are within human control. This ultimately affords victims of SAR distress with the greatest opportunity for survival. The resolution timeline commences when an incident occurs and ends when SAR services are no longer required.

I will walk you through the phases.

The first phase, and probably the most significant, is called the notification phase.

When an incident occurs, it's important that the information of that incident be relayed to the rescue coordinating centre so that some response can be organized. This is sometimes almost in real time. If an aircraft, for instance, were in flight and reported to air traffic services that they had a distress, it would normally be relayed to our rescue coordinating centres. But sometimes there are long delays in notification, maybe because flight plans weren't properly filed or an aircraft is reported overdue long after it's supposed to have arrived. So there are a number of influential aspects in the notification phase.

In recent times, there are a number of methods that have improved notification time, the most significant of which is the introduction of the satellite-aided distress beacon, the 406 beacon. This provides very timely and accurate distress location information, which is fundamental to a speedy incident response.

The next thing you will see on the chart is the decision to act. When it's confirmed that there is a distress, our rescue coordinators make a determination of what the best response is to provide: is it a helicopter, a fixed-wing aircraft, or a local asset? It's usually a short decision cycle to make that happen.

When it is decided that a CF resource shall be used, we're into the reaction time. This is essentially the topic we're going to focus on a little bit today. It speaks to the time it takes from the notification of a search and rescue crew to the time an aircraft is actually airborne.

There are a number of ways to influence this particular period of time, and the readiness posture, whether it's half an hour or two hours, is certainly one of those factors. Another influence is how we prepare our aircraft to be on alert and ensure that they're properly equipped, fueled, and ready to be dispatched.

The transit time is the next thing you see on the chart. Again, this can be time-consuming, and it is of course a function of the location of the incident versus the location of the SAR resource and the speed of that SAR resource in getting there. The overall response time then becomes the summation of the reaction time when the crew were preparing for launch and actually flying to the incident site.

Next we talk about the search prosecution phase. It's not always the case that the information provided by RCCs will give you an exact, precise location of a vessel in distress or an aircraft in distress over land. Often it's required to go to the general area where the last mayday perhaps was reported and from there commence search operations, prior to the precise location of that incident.

This prosecution phase can take a short period of time or a long period of time. I will add again that with the introduction of the 406 beacon, with precise location we have found that our search activity and times have been greatly reduced, for those vessels and aircraft that are equipped with 406 beacons.

The rescue phase really involves the time it takes to get to the victims and retrieve them and get them on the way to a medical facility; this is called a recovery phase. In looking at the two-hour versus the half-hour posture, we did some research and studies of cases to determine what it would cost to move from a two-hour to a half-hour continuous posture, and we also had a look at what effects we would achieve; in other words, what improvements we would see in our overall success.

### **●** (1115)

We'll continue to slide 7, which I think would be of help to you.

Defence Research and Development Canada conducted an analysis of the impact of response posture on SAR incident occurrences over a five-year period. They looked at almost 40,000 incidents to determine the statistical importance. When they went through and eliminated those instances that were not of a critical nature, the ones that had no influence over time, they determined that there were 1,054 critical incidents, with 2,700 lives at risk, that may have had some influence, depending on the posture. When they further analyzed the data, it was determined that there were nine incidents over the study period where CF posture was considered significant, both in the lives saved and when the lives were lost. Of these nine, only three occurred while the two-hour standby posture was held. Case review suggests that of the nine people who died during these three cases, six of them might have had an increased chance of survival if the aircraft was held on a 30-minute standby posture.

Amid the myriad of complex factors that influence the outcome of a SAR incident, it is important to note that the increase in probability of victim survival attributable purely to response posture is rather small. Thus, even in a 30-minute posture, it is highly unlikely that all six individuals in those incidents would have been saved.

The second aspect we looked at is the resource implications of a continuous 30-minute posture. The final chart summarizes what we've discovered there.

In 2008, the air force completed a study conducted to determine the level of effort, in cost and timeline, to achieve a continuous 30-minute posture. The study used the current SAR posture as a baseline. Nationally, we have eight aircraft—four rotary-wing and four fixed-wing—that are held on standby at all times. When tasked, they must be airborne within 30 minutes during normal working hours, and within two hours thereafter. The program, in total, is currently estimated at about \$339 million per year.

Unlike the two-hour SAR posture where crews and technicians hold a recall standby away from the squadron, a 30-minute SAR posture requires the aircrew to remain on the flight line poised for launch. Enabling a consistent reaction capability with crews at the flight line on a 24/7 basis has a human resource bill in terms of additional aircrew, increased numbers of aircraft, maintenance requirements, and infrastructure upgrades. Estimates suggest that approximately 200 additional personnel, \$380 million in capital cost, and an overall annual recurring cost of \$200 million above current funding levels would be required to achieve a standard and sustainable continuous 30-minute readiness posture. The timeline to achieve this enhanced posture is difficult to estimate due to personnel demographics, but it would likely take six to eight years just to be able to train the additional individuals required to perform the SAR.

Our conclusion is that, based on the significant resources required to implement a continuous 30-minute posture that would only marginally improve SAR services, the additional personnel and financial costs outweigh the potential benefits. Statistical analysis demonstrates that an effective SAR posture is in place with the resources currently assigned.

With that, I will terminate my briefing and look forward to some questions.

**●** (1120)

The Chair: Thank you, Colonel Drover.

I will give the floor to Mr. Simms. You have seven minutes.

[Translation]

Mr. Scott Simms (Bonavista—Gander—Grand Falls—Windsor, Lib.): Thank you very much, Mr. Bernier.

[English]

It's a pleasure for me to be here.

I want to start, Colonel Drover, by saying pardon me if I interrupt on occasion. I don't know if this is apropos to say, but time is of the essence and I'd like to get as many answers as I can.

Secondly, I would like to say congratulations and how inspiring the people of search and rescue are. I can't even imagine what these soldiers face, day in and day out, especially people such as search and rescue technicians, when that door is opened and the waves are that high, particularly in my section.

I would humbly suggest that the public affairs department please consider increasing the amount of publicity given to search and rescue and what they do, certainly a full-time public affairs office for each and every base or squadron.

Now, going to the gist of the matter, which is the response time, in a letter to the Town of Gander, which inquired about the 30-minute response time—and Gander, of course, is the home of 103 Search and Rescue Squadron—you say, and I'm paraphrasing you, that it would, at best, yield only marginal improvement to the overall response effectiveness when it comes to reducing those off-hour times from two hours to a 30-minute response time.

I have a very precise question. How much would it cost to go to a 30-minute, 24-hour response?

**Col Paul Drover:** Sir, as I mentioned in our last slide, slide 8, that's essentially answering not just for Gander but for the whole SAR system.

**Mr. Scott Simms:** I agree, but what I'm asking you is how much it costs, period, overall, according to this slide?

**Col Paul Drover:** I'm not sure the slide answers that. I apologize for not following the question.

**Mr. Scott Simms:** That's quite all right. I just think that proper 24-hour alert facilities and six to eight years to implement....

An internal report a few years ago said this, and I quote: "The demands of the fleet's maintenance programmes need to be reduced or the size of the fleet would have to be increased in order to meet the performance measure's target range." If we were to go to a 30-minute response time, do we need a bigger fleet, or do we need better maintenance procedures?

**Col Paul Drover:** That I can answer. We need a bigger fleet, and that's part of these costs. These are summary figures, but to get to those times, if you have more personnel, which is required if you're going to hold that tighter standby, you absolutely need more aircraft.

Mr. Scott Simms: Why is it nine to five?

**Col Paul Drover:** That alignment is the best, the optimum, arrangement. It caters to a large majority of the SAR incidents historically, if you look at the distribution during the hours of the day, but—

**Mr. Scott Simms:** These are the statistics that you touched on. The majority of the incidents take place from 9 a.m. to 5 p.m. I'm beginning to believe that a lot of these incidents take place outside those hours, when it's dark, and I say that from an ocean perspective. Often the downtime for them is the time people are most in danger, so wouldn't that eight-hour period be better...? In other words, should it be done on a base-by-base squadron basis so that they would use that eight hours catering to the incidents by which...?

Col Paul Drover: Actually, there was one reference in the briefing that we actually do that.

**●** (1125)

Mr. Scott Simms: Is that for each base?

**Col Paul Drover:** Yes, we have the latitude to modify it by base to cater to.... For instance, in the case of pleasure boating in Ontario in the summer, we have that latitude, and sometimes we will change our standby posture to take it in the evening hours. Normally, oceangoing disasters really are somewhat random events. I could show you dot plots that I don't have here, but they would show you that they don't respect the time of day.

To answer your question more fully, though, we have a requirement to train our SAR crews during the time that the rest of the base is working, and daylight is the optimum time. While we're doing that, we're able to deliver a half-hour capability at the same time, so we get the benefit of being able to do our training for our SAR crews while holding that tighter standby posture.

To come back to our resource funding slide, if we were to go to half an hour continuously, it could be done, but it would require a tremendous increase in investment.

**Mr. Scott Simms:** I understand that, and we can argue all day about what is marginal and what is not. I just wanted to zero in on some of the issues that have come up, and a lot of people may be misinterpreting.

I want to jump quickly, then, to the next issue, which would be the resources for fixed-wing aircraft. When it comes to the report and a lot of the rumours that are out there—I say rumours because I get them all the time—no decision has been made by the government or by the minister through the process as to which fixed-wing aircraft

you want. What new fixed-wing aircraft do you think is the right one for search and rescue?

**Col Paul Drover:** Because we have such large SAR areas to deal with in Canada, the whole posture of SAR requires both fixed-wing and rotary-wing, and we have them. Right now we have a very capable aircraft in the Hercules, and for the regional application in the mountains, the Buffalo is very capable. We would see a replacement that would replicate at least that level of capability, so I don't think we would want anything less.

That said, though, I can't take the discussion any further, because it's not my program.

**Mr. Scott Simms:** I understand that. I'm just trying to flesh out what kind of aircraft we need, given the areas we are in.

I think there's been some confusion as to their ability. Do you think the current Hercules, which is primarily on the east coast, is still satisfactory?

**Col Paul Drover:** The Hercules is a very capable aircraft as a SAR platform.

Mr. Scott Simms: So it's the Buffalo that's the problem?

**Col Paul Drover:** The Buffalo is also a very capable aircraft in the mountain search regions. It has less range, for sure. The problem with both the Hercules and the Buffalo is that the aircraft are aging and becoming much more expensive to maintain, but in terms of being able to use them for SAR, they are very capable aircraft for sure.

Mr. Scott Simms: Right now, you have about 14 Cormorants.

Col Paul Drover: Correct.

Mr. Scott Simms: In a perfect world, how many do you need?

Col Paul Drover: We'd need at least 14, I'm sure.

Mr. Scott Simms: You'd certainly need more than that.

The Chair: Thank you, Mr. Simms.

[Translation]

Mr. Bachand, please. You have seven minutes.

Mr. Claude Bachand (Saint-Jean, BQ): Thank you, Mr. Chairman.

Welcome, Colonel Drover.

Colonel, in your document, you describe the actual weekly workload in the Canadian Forces. However, why didn't you talk about the National Research Council study, the one that isn't at all consistent with what you're saying?

First of all, have you looked at that study?

[English]

**Col Paul Drover:** I am familiar with the report, sir, but I haven't read it in detail. Again, the fixed-wing replacement is not part of my responsibility, but if there is a pertinent question that I can help you with—

[Translation]

**Mr. Claude Bachand:** In its analysis, which was spread over three years, the National Research Council noted that 17% of incidents occurred between 0800 and 1600 hours on weekdays.

Does that coincide with what you are telling us in your presentation?

[English]

**Col Paul Drover:** Again, I'm not familiar with the years of study that they were using for that.

To be clear, in my statement I didn't say our hours were perfectly aligned with a majority of the cases. I suggested that there are a number of cases that occurred during that period of time, but there are other reasons that we hold that particular standby for those periods of time.

[Translation]

**Mr. Claude Bachand:** Perhaps I expressed myself poorly. I'm going to read you the sentence in English, rather than translate it. That will be easier.

[English]

Based on this analysis, for 1677 of 1775 incidents that occurred in the three year study period for which time information was available, 17% occurred during the period of 0800-1600h on weekdays.

**•** (1130)

[Translation]

Most of your troops are on the job between 0800 and 1600 hours during the week, but only 17% of incidents occurred during those hours.

Shouldn't the schedule be changed, in view of the fact that 83% of incidents do not occur between 0800 and 1600 hours on weekdays?

[English]

**Col Paul Drover:** I fully understand your question, sir. Again, as I said, there are a number of reasons we've chosen those hours to hold our standby. Indeed, if we move them, we may have larger than 17% captured in a given eight-hour period. To go beyond eight hours in a 24-hour day, you're into resource applications.

The other one I would suggest to you is that of the majority that fall outside of that 17%, how many of those incidents would be critical to the standby posture? We go back to our incident time, and I would suggest that in the majority of those, as we described earlier, it doesn't make a difference if you're on a half hour or two hours.

Also, maybe I'll take the opportunity to echo that the normal response reaction time is better than two hours by a substantial amount. So really the difference is 45 minutes.

[Translation]

**Mr. Claude Bachand:** Would you think it would be an advantage to have an additional 17 fixed-wing search and rescue aircraft? Would that be a significant or major asset?

[English]

**Col Paul Drover:** Part of our departmental resource planning is to replace the Buffalo and the Hercules. If we are to maintain the level of service that we provide, which I would argue is a very, very good level of service for the people of Canada, then we would need a number of fixed-wing aircraft, absolutely. I think it is important that we do this.

As I said, right now we are maintaining that level of service with our Hercules and Buffalo aircraft, but in terms of our procurement plans, as with every other piece of equipment, I'll take you back a few years when we replaced the Labrador, which is a very good helicopter, with the Cormorant, which is state-of-the-art and performs the role we require.

[Translation]

**Mr. Claude Bachand:** It's also clear that, with the new fleet, the Buffalo and Hercules aircraft would probably be retired. You mentioned that earlier. The maintenance costs for those aircraft are now extremely high and we have to consider purchasing a new fleet so we can do away with maintenance costs that perhaps even exceed the long-term acquisition costs of a new fleet.

People increasingly talk to me about privatizing or contracting all of search and rescue to the private sector. That's done elsewhere in the world.

What would be the reaction of the armed forces and the air force if the government decided to privatize search and rescue? Is that an option? Do you see any disadvantages to that? I'd like to know your opinion on the privatization of that service.

[English]

**Col Paul Drover:** Sir, the privatization discussion has been with us for a number of years. It's a very complex question: what elements of the search and rescue system would we be discussing? Is it the provision of rotary-wing or the full SAR response capability? Would it include our rescue coordinating centres?

There are a number of advantages, I believe, that the federal government, using military delivery of SAR, gives you in terms of efficiencies, depth of equipment, just the fact that I give you a search and rescue crew for a 24-hour period. These individuals don't get compensating time off to the same extent that anyone would look at in private enterprise.

We have not done, or been asked to do, any extensive studies. Those would be required. There's nothing that I'm aware of that would prevent a private consortium from delivering SAR. I think it would be...at what expense? What would it cost? But certainly it is a question that's deserving of study.

**•** (1135)

The Chair: Thank you.

Now we'll give the floor to Mr. Harris.

Mr. Jack Harris (St. John's East, NDP): Thank you, Mr. Chairman.

Thank you, Colonel Drover, for presenting to us once again.

I'm treating your presentation as background for the commencement of our study.

Forgive me if I don't accept some of the assumptions that are inherent in what you say. When you tell us that, for example, according to an estimate, the total annual cost of the current service is approximately \$339 million per year, that appears to be totally contradictory to the Chief Review Services report dated January 2008, which is an evaluation of the Canadian Forces/DND component of the national search and rescue program, produced by your department.

In that document, on page 3, it says as follows:

Annual forecast spending for FY 2006/07 for the federal component of the NSP has been estimated at \$219 million. The CF/DND share of this forecast is reported as approximately \$102 million or 46.6 percent of total Federal SAR forecasted expenditures. The CCG, a special operating agency reporting to the Minister of Fisheries and Oceans, is a second significant participant in budgetary terms, forecasting \$104 million in expenditures or 47.5 percent of declared expenditures for the federal component of the NSP.

Both of those figures can't be correct. This one is from the Chief Review Services, which I understand is the equivalent of some sort of internal auditor within the department, and your figures are estimates done by somebody else.

I wonder if you could put a copy of that particular report from Defence Research and Development Canada before this committee. Can you get us a copy of that?

Col Paul Drover: I can indeed.

**Mr. Jack Harris:** Do you have any explanation for the discrepancy between what the Chief Review Services says and the estimate you're giving here?

Col Paul Drover: I know the figures I quoted in this briefing came from the study we did. It lists all the elements that we costed: the training, the personnel, the maintenance, the repair and overhaul, the facilities. I would suspect that CRS used different sources to calculate, or different parameters, so you would have to compare what's entailed in their figure and what's entailed in ours.

**Mr. Jack Harris:** I guess we will, but the discrepancies are quite remarkable.

**Col Paul Drover:** They are, but I suspect they're not comparing apples with apples.

Mr. Jack Harris: Well, we'll see. I guess we'll have a look at the report.

I have another question, and this strikes me as odd.

I'll use Gander as an example. In Gander, you have three Cormorant helicopters, and you told the helicopter safety inquiry in St. John's recently that you have between five and six aircrews. I'm wondering why the cost of having crews available on a 24-hour basis would require additional aircraft of any kind or additional crew. Can you explain how? According to your study, or the estimates that were provided here, you say you would need an additional 200

personnel to be able to change the posture and you would also need additional aircraft.

Can you tell us how that is?

Col Paul Drover: Indeed I can, sir.

The report I referred to is available as well to the committee, and it goes into great detail about what's involved in doing those calculations. Essentially, to go to a continuous 30-minute posture we'd have to increase the number of crews from the current five or six to nine crews. This, as you'll recall from when I briefed, is because currently we're able to use one crew for the whole weekend standby routine. If you go to a 24 and 7 posture, every eight hours a new crew will be coming to the base, and at minimum we would need nine crews. If you have more crews, there is a bigger training requirement, and with that training requirement, more aircraft.

The report I referred to is available and really spells this out in great detail. I think it would serve to answer your questions.

**●** (1140)

**Mr. Jack Harris:** Concerning the third point of departure for our study, I'm looking here at a review of SAR response services that was issued by the director of program review of the National Search and Rescue Secretariat and approved by the Interdepartmental Committee on Search and Rescue, to which you referred, on June 30,1999.

That report says on page 7, in a synopsis of the report—and the key recommendation, I think, is under this item.... Item 14 on page 7 says:

The federal readiness-standby posture is determined primarily by resource availability, not by user demand. Additionally, all departments occasionally task resources that do not meet the training or equipment standards set by that department for critical SAR missions.[....]

Given the above findings regarding resources, cutbacks and the documented history of fruitless debate on program management and structure there is now a risk that the SAR program will become a public policy issue.

They also say in one of their key recommendations, recommendation 19:

Given an established policy and planning framework for managing such a program and given a renewed and committed leadership for developing SAR horizontal policy and plans, operational issues such as appropriate training of responders, standby postures, equipment purchases and resources have a far greater chance of being resolved.

That suggests to me, Colonel, that internally at least there is some concern that in fact the standby posture we're talking about is actually based on resources, not on user demand or need. That seems to me to be what they're suggesting here.

It seems to me to be wrong that we should have a posture based on resources as opposed to need. I say that particularly when we look at what other countries do, some with bigger areas than we have and some with less to deal with, in which the common standard seems to be 15 minutes to wheels up during a period from, say, 7 in the morning until 9 or 10 at night, and 45 minutes thereafter.

We have essentially an 8 to 4 operation. Why is that? Can you explain what the problems are here?

The Chair: You have 30 seconds to answer.

**Col Paul Drover:** In Canada, the idea that we have a lot larger area of responsibility requires a different dynamic on the flight line to prepare aircraft for departure for SAR missions, so 15 minutes becomes a challenge. We have to keep our aircraft for a large part of the year inside the hangar so that they don't have to be de-iced, and 15 minutes might be unachievable at the best of times.

In terms of being able to respond to basically the whole array of SAR instances that we're talking about, we're not focused like some countries in just the coastal reaches; we have an overland SAR responsibility that some nations don't have. In terms of optimizing the resources we have available to provide a SAR service, in my opinion—and I will issue this opinion—this is a very capable service and comparable to world-class SAR services anywhere in the world.

The Chair: Thank you very much.

I will give the floor to Mr. Hawn.

**Mr. Laurie Hawn (Edmonton Centre, CPC):** Thank you, Mr. Chair, and thank you, Colonel Drover, for coming.

Here is just one little correction to my colleague Mr. Simms. It's airmen and airwomen, not soldiers, who man the aircraft and do the SAR work. Forgive my air force roots on that point.

Colonel Drover, it was suggested by Mr. Harris that some people might have a bigger SAR area of responsibility than we have. I'm not aware of anybody who does. Does anybody have a larger AOR than Canada?

Mr. Jack Harris: [Inaudible—Editor]...Australia.

Mr. Laurie Hawn: Are you aware of the size of Australia's AOR?

**Col Paul Drover:** I don't know. It would have to include how much it has in ocean reaches, but Australia is an interesting one, because there is no overland SAR equivalent anywhere near comparable to the one we provide in this country.

**Mr. Laurie Hawn:** So we have to be careful to compare apples with apples.

**Col Paul Drover:** Actually, it's a good question, because when you try to align our capability to what else is out there, it's very difficult to compare the exact points from which to get a fair comparison.

I'll leave it at that.

**(1145)** 

Mr. Laurie Hawn: Yes, that's good enough.

Again, there was reference to an 11-year-old Director of Program Review, or DProg, report. So I'll ask you, when was the last time DND reviewed its SAR readiness posture and response time policy, and what was the outcome?

**Col Paul Drover:** Actually, those two reports that I referred to, the work done in 2007 and 2008, formed the basis for evaluating whether or not it was necessary or desirable or affordable to move to a better posture.

I think what the statistical analysis.... When you take over 40,000 incidents and you reduce them to several in which the standby posture may have had an influence.... Every life is significant, and I won't discount that at all. But at some juncture you have to look at the overall statistics and realize that the system we have in place performed very well in dealing with the very large majority of the incidents we're talking about here.

So to move to a different posture was deemed, at least based on that evidence, not to be appropriate at this time. Now, having said that, you could at any time revisit, with reason.

**Mr. Laurie Hawn:** The activity off our coasts, whether in oil and gas or whatever, is constantly changing. Are we reviewing our response times in relation to those activities as well?

**Col Paul Drover:** We do, absolutely. We continue to do trend analysis, and not only for the offshore but certainly in the north as well, where we monitor trends and increase in activity.

I think it was mentioned, but it bears repeating, that the federal SAR resources are just one of many assets that can be brought to bear, depending on the nature of the incident. Not only is it the military aircraft, but it's the coast guard vessels, commercial operators, volunteers—the CASARA organization. It is a system of systems. There are a number of capabilities out there.

**Mr. Laurie Hawn:** Going back to DProg for a second, are you aware of any more recent DProg reports than one that's 11 years old?

Col Paul Drover: No, I'm not.

Mr. Laurie Hawn: Okay.

You talked in your presentation about SARSAT and 406 beacons and so on and the tremendous difference they make. If you look at posture versus technology—and this is probably a difficult question to answer—what would be a bigger improvement, knowing the exact time and location or positioning of airplanes here or there?

**Col Paul Drover:** I would say that the advances we've made in the 406 technology have been a remarkable advantage for our SAR forces' ability to respond in a timely manner. The investment in reducing my standby posture, if we go back to our timeline, is relatively small. It's a wedge in that big timeline dynamic.

The way the 406 really has an impact on the timeline is in the almost real time alerting, which is quite incredible. Vessels are equipped with 406 beacons as well as aircraft. That's one part, on that part of the dynamic. The other part is on the actual location, where because of digital technology, satellite-enabled, the precise location reduces the effort of search. Again, that impacts the timeline.

So between those two time elements, we operate far more advantageously with a 406.

Mr. Laurie Hawn: Now, with respect to quoting statistics and so on—and Mr. Bachand quoted the 17% of events that statistically occur outside 8 to 4—I would suggest to you, and you can agree or not, that this is a simplistic kind of approach; that the more important aspect is the full picture of response time and so on, which you, I believe, presented pretty ably in your presentation.

You're nodding your head. Would you agree with that?

**Col Paul Drover:** If that's the end of your question, yes, I do, absolutely. As we're looking at the big picture and all the statistical data and determining how to make those improvements, by and large our response has been very capable in terms of delivering the SAR service when required and in a timely manner.

**Mr. Laurie Hawn:** I don't want to misquote Mr. Bachand, but I think there was a question of 17 additional fixed-wing SAR aircraft. We're not talking about 17 additional airplanes, but about replacing the Hercules and the Buffalo, aren't we?

**Col Paul Drover:** I believe my answer is that part of our continual support of the search and rescue program is equipment replacement. Essentially the fixed-wing program is a replacement program.

(1150)

**Mr. Laurie Hawn:** With respect to privatizing some or all of our search and rescue system, there are other people who have some experience with that. There are the Brits, the Norwegians, and others. Are you aware of their experience with respect to success? Do you have any kind of statistical analysis?

Col Paul Drover: I haven't had any recent dealings with their successes. I haven't met anybody who has glowing reports, but otherwise I have no.... As I mentioned earlier, I think the whole privatization question is a complex one and deserves a considerable amount of research.

**Mr. Laurie Hawn:** Do we spend time liaising, coordinating, or exchanging information with other people, such as the Brits, the Norwegians, the Aussies, the Americans, or whomever?

Col Paul Drover: In terms of...?

**Mr. Laurie Hawn:** In terms of experience, lessons learned, best practices, and all that.

**Col Paul Drover:** Absolutely. We work with our SAR OPIs in the various committees, and we participate in international committees, such as ICAO, that focus on SAR. We have a number of exchanges in that regard, absolutely.

[Translation]

The Chair: Thank you.

Now I'm going to give Mr. Bagnell the floor.

[English]

**Hon. Larry Bagnell (Yukon, Lib.):** I will make a quick comment as an update of my position, which I've had for a number of years, to make sure nothing has changed. Then I'll have a couple of questions. The first part is not your problem, so you don't have to answer.

Obviously our fleet of search and rescue planes are in dismal condition. For years you've asked for their replacement, and they haven't been replaced yet. The minister has promised it's coming, but they're not there.

As you know, my particular interest, as we've discussed before, is the lack of fixed-wing aircraft—and I believe helicopters, which I'll ask about later—in the northern half of Canada. In fact, since the planes are along the border of the southern half, their range is useless anyway, which is a waste. It is more critical in the north, even though, as we've discussed, there are obviously fewer incidents. It's far more critical because of your short time to die in hypothermic conditions in those temperatures, and there are fewer people around. The Arctic Ocean is cold.

A plane in the north wouldn't have to change its load to be specific to the Arctic. They could make adjustments before they take off. Sometimes I think we should put the people making these decisions in the Arctic Ocean and tell them it's okay, a plane is coming—but it's coming from Winnipeg.

Here is my first question. To deal with this abysmal problem in the north, I understand that you may be coming up with a good solution and negotiating with the private sector and CASARA to do a more comprehensive initial response and maybe deal with that problem in a way other than by putting fixed-wing planes north of 60. Is there any progress on that front?

**Col Paul Drover:** I believe there is, sir. It is very timely that you ask that question.

First of all, although I didn't mention it in my briefing, CASARA is our federally sponsored voluntary organization. They are more prevalent south of 60 by virtue of the number of private operators of aircraft. The problem we face in the north in terms of CASARA is that there are fewer private owners and operators of aircraft that can participate in CASARA activities, so recently we've looked at initiatives to involve in some kind of formal manner some of the commercial operators that operate in the north.

It's interesting. Meetings were held this past weekend in Whitehorse. One of my staff members has not returned yet, but the indicators are that there is a very high level of interest among the commercial operators, so I think this is indeed an incentive that has some traction and I think we'll see some developments in that regard. I can't report any more details at this time, but I'm looking forward to being able to say very shortly that this looks like a successful venture.

**Hon. Larry Bagnell:** Good. It sounds like an excellent initiative to maybe solve this long-standing problem.

Can you tell me about search and rescue helicopters? I assume it's the same as with fixed-wing aircraft, that no helicopters are permanently stationed north of 60.

**Col Paul Drover:** You are correct, sir. With current basing, we do not have any helicopters that far north.

If I may point out, though, the helicopter that we do have, the Cormorant, has a lot better capability to operate in poor weather conditions than the Labrador, the helicopter it replaced. Since we've introduced that helicopter, we've had occasions where we've been able to get it fairly far north in one day's operation. It's not a rapid response, for sure, but at least it's a capability that has improved our SAR forces.

I think it's important to note that during the incidents in the north, our rescue coordinating centres will deal with the incident in terms of what the required response is to the incident, in an appropriate manner. If there's an incident out of Yellowknife, they will probably contract a commercial helicopter operator, if that's the first responder.

So there is capability there, but a dedicated search and rescue aircraft is just not resident in the far north.

• (1155)

**Hon. Larry Bagnell:** Are there plans to put a search and rescue helicopter onboard the patrol boats, or were they downsized so they no longer fit?

Col Paul Drover: I'm unable to speak to that, I'm sorry.

**Hon. Larry Bagnell:** Do you know if there were any plans to talk about helicopters on the coasts?

Col Paul Drover: I really don't. I don't know what the coast guard's...or whether it's a combined ship.

I don't know what the program is, to be honest. My current SAR posture doesn't include that, for sure.

**Hon. Larry Bagnell:** However, I thought you said you'd talked with other agencies and organizations and coordinated things. Would you not have heard of those coordinated meetings?

**Col Paul Drover:** Those comments referred to international cooperation. At least the question I answered was dealing with international cooperation.

**Hon. Larry Bagnell:** So you just cooperate internationally but not with Canadian departments.

**Col Paul Drover:** No, not at all. We have an interdepartmental search and rescue committee that I participated in as well. I'm just not familiar with what was planned or programmed.

Hon. Larry Bagnell: Okay, thank you.

The Chair: Thank you very much.

I will give the floor to Mr. Braid.

Mr. Peter Braid (Kitchener—Waterloo, CPC): Thank you very much, Mr. Chair.

Thank you, Colonel Drover, for being here this morning.

To start off, I'm curious to know if there are any situations where you decide on an ad hoc basis to extend the 8 to 4 time period in which you have a 30-minute response. In what circumstances would that happen?

**Col Paul Drover:** We do cater to special activities, such as the herring roe fishery on the west coast, where there's an opening period of vulnerability for a number of vessels responding. We have changed our posture to accommodate that.

I'm not entirely sure, but I believe that in Ontario in the summer months, we'll modify our standby posture to cater to later times in the day, which speaks to a number of other activities.

That said, we have the flexibility. There are no rules governing when that half hour should be. It's a matter of how we can fit in the training and also provide that additional service in the most beneficial window, I suppose.

Mr. Peter Braid: Sir, in my riding of Kitchener—Waterloo, we had an incident a couple of weeks ago where a SAR aircraft was dispatched from Trenton and the incident ended up being a false alarm. This was publicly reported. I think it was a beacon from an old aircraft in the trunk of somebody's car in a garage.

What processes or procedures do you have in place to help identify potential false alarms like that? What lessons were learned from that incident?

Col Paul Drover: I didn't mention the false alarm in our briefing, but I mentioned the number of SAR incidents. They all start off as an alert, a warning. Until all the information is available, we are not certain whether it's an actual distress signal or a false alarm. Moreover, there are various degrees of false alarms as well, but the most prominent is when these beacons have been inadvertently activated when no distress is involved.

However, we will respond; we don't wait for full information to determine whether or not there's an incident. So if there is a suspicion there may be an incident, we will launch a SAR resource. Again, it may not be from the base in Trenton, but it could be one of our CASARA members who goes out, if they have the homing equipment to locate the beacon.

The RCCs at the same time will also do an extensive or exhaustive search of communications facilities, police facilities, and air traffic control to see if anybody is reporting maydays. Air traffic control will be contacted to see if there are any overdue aircraft. So there's a lot of information being correlated at the same time the aircraft is going out to hunt down the false ELT.

Normally we will put somebody on the ground or communicate with the folks on the ground and ask them to disable their equipment. Beyond that, if it's inadvertent and not criminal in nature, then we take no further action.

Part of aviation and boating education and information concerns the proper maintenance of this type of equipment to ensure it's functional, but also that it is not going to inadvertently activate. There are periods during each hour where you can test the equipment and these sorts of things. That's ongoing, but certainly, some of our resources are used to respond to false alarms.

However, I think the comfort is that we will respond, as opposed to waiting to confirm there is something happening, and that speaks to the timeline as well.

**●** (1200)

**Mr. Peter Braid:** Great. If I have any time remaining, I have just one final question to ask.

I'm looking at the map on page 4 of your presentation. Do you have a breakdown of the percentage of responses by location across the country?

Col Paul Drover: We do, but I just don't have it with me. I'm sorry.

I think the last time I was here I did present a dot plot, and not surprisingly it showed the responses as being predominantly along the southern border. That's where the majority of the population is, so you have more aviation activity and boating there. That's where most of the incidents are.

Statistically, we deal fairly consistently with about 8,000 to 9,000 incidents a year, and they're evenly spread in the three regions, even though the size of the regions is substantially different.

Mr. Peter Braid: Great. Thank you very much.

[Translation]

The Chair: Thank you very much.

Mr. Paillé, go ahead, please.

**Mr. Pascal-Pierre Paillé (Louis-Hébert, BQ):** Mr. Chairman, I'm going to share my time with Mr. Bachand. I may ask one or two questions.

According to your statistics, has there been an increase in the number of incidents? Could we say that the situation is improving today, in 2010? I am thinking perhaps about technology.

Do you have any figures or statistics showing whether there's been an increase or decrease in the number of incidents?

[English]

**Col Paul Drover:** There has not actually been a tremendous change in the number of incidents. In 2004, we recorded 7,500. In 2006, we recorded 8,500, and in 2008-09, we recorded 9,000. So there's been a little bit of growth, but in some years it also fell somewhat.

What we have found with the technology and the 406 beacon in particular is that a number of our operations have been a lot shorter, and therefore the number of people whose lives we have saved has increased, because we've been able to respond with precision and current data by using the technology of the 406 beacon.

So I think overall the technology has driven a more efficient and capable system, but the incidents continue to happen at about the same rate.

[Translation]

**Mr. Pascal-Pierre Paillé:** I have one final question to ask before handing over to my colleague. I believe I previously asked this when you came to meet with us, but I'm going to ask it again all the same.

As we are continuing a study on the Northwest Passage, I would like to know whether the Canadian Forces are equipped well enough for a potential rescue operation. Since the Northwest Passage is increasingly accessible, there are rising numbers of cruise ships going through the Northwest Passage.

Is there an action plan? If not, do we have enough members on strength to conduct a rescue operation involving a large number of individuals? A cruise ship is not an aircraft in which there are 5 or 10 passengers. So I would like to know what the current situation is in the event large numbers of individuals must be saved?

[English]

**Col Paul Drover:** We are indeed. I didn't brief it today, but the last time I was here I talked a little bit about our major air disaster plan. We have the capability of delivering to the site of a ship or an aircraft in distress with a large number of people aboard. We can deliver kits that have tentage, medical supplies, food, and survival equipment. That capability exists, and we maintain that to respond to incidents of the nature you referred to in the north.

The Hercules aircraft is a good example because of its size and range. It has a similar capability, only smaller quantities. So if you're dealing with a small aircraft with 10 or 12 folks aboard, we have the capability in our primary SAR aircraft to dispatch those capabilities and skills to the incident site.

So indeed, to answer your question, we are capable and prepared to respond to those incidents that may happen in the Northwest Passage.

**●** (1205)

[Translation]

**Mr. Claude Bachand:** May I ask the colonel to send me his answer in writing?

Colonel, I'm going to read you another excerpt from the National Research Centre document. You can send me your answer in writing because you won't have time to answer.

[English]

This scenario involves an incident at the North Pole with response from Winnipeg via Resolute Bay for refuelling, landing in Alert after one-hour on-station search time. In order to satisfy the limit of 15 hours on duty, the aircraft would have to cruise at 273 kts throughout the transit portion of the flight if the incident occurred during a two-hour standby posture and 238 kts if it occurred during a 30-minute standby period. The NRC concluded that the minimum cruise speed requirement of 273 kts is indefensible, recommending a look at possibly engaging a mixed fleet of new FWSAR aircraft and H-model Hercules for the extreme long range missions to the North Pole and over the Atlantic.

#### [Translation]

I'm asking you to react to that, to consider the possibility of establishing a base in Iqaluit or Kuujjuaq, which would restrict the time required to go into the High North.

[English]

The Chair: Merci.

I will give the floor to Mr. Boughen.

You have five minutes.

Mr. Ray Boughen (Palliser, CPC): Thank you, Mr. Chair.

It's good to see you again, Colonel.

I have just one question. I'm going to share my time with Mr. Payne.

In looking at the map on page 4 and some of the other illustrations, we see something that we already knew: Canada is a big country. Do we have enough primary and secondary Canadian Forces unit locations ready to assist people in search and rescue, or do we need more? Are they located in the proper places?

I wonder if you could share with us your thoughts on that.

Col Paul Drover: I can indeed, sir.

The locations of the bases have been strategically placed to ensure that the SAR resources we have available can respond to the greatest number of incidents in the shortest amount of time. So there's some logic to where they are. It goes back to a previous question of what the dot plot looks like. So if you line up the two, you'll find that our SAR bases are optimally located.

We have done some studies on the bases. I think I gave the committee a copy of the last report we did. It really reinforces the idea that we have them strategically well placed.

**Mr. Ray Boughen:** What differential is there between primary and secondary?

**Col Paul Drover:** The ones I briefed this morning are actually all primary. They are the ones that are on continuous standby—half-hour or two-hour posture. The secondary ones don't maintain a full standby posture. Their primary duty is in support of military flying operations and military activities, but they have SAR capability and SAR techs to respond, and often we will use those resources.

As you may recall from my previous statements, the first responder, the vehicle, the search craft that is closest to the incident site may be the best choice. And in a lot of cases these aircraft participate as some of the front-running SAR resources.

Mr. Ray Boughen: Thank you.

Thanks, Chair.

Mr. LaVar Payne (Medicine Hat, CPC): Thank you for coming, Colonel. I have a few quick questions.

You talked about the 406 beacon. I'm not very familiar with that. Could you give me a bit of information? Do all aircraft have this, as well as ships, or are there different types of beacons?

**●** (1210)

Col Paul Drover: First of all, Canada was one of the four leading nations in coming up with an international system for satellite-based detection of emergency beacons. Originally it was on frequency 121.5, which is a radio emergency broadcast frequency. All that it provided through satellite was a beacon detection initially, but no location. With subsequent satellite passage you got some location but it was not very localized. There was no information on the nature of the craft or vessel that had this beacon aboard.

The international community has switched to a designated frequency, frequency 406, which is now the emergency frequency. It's digital and it provides capability to encode information. Now if you have an aircraft and that's your distress frequency, it will go through the satellite to our mission control centre, which is located in Trenton, and give the information about the owner and type of craft. In addition, it will give a precise position of where you are. This is a tremendous advance in technology, and it helps search and rescue.

A number of vessels carry them, and they're called EPIRBs. There's a regulation that requires certain sizes of vessels to carry the EPIRB.

In the aviation community, with the 121, there used to be a regulation requiring mandatory carriage. The regulation is no longer in force because the satellites no longer broadcast or receive on 121. There is legislation, through Transport Canada—I think it's entered into the *Gazette*, or it will be soon—that will require the mandatory carriage of 406. While it's not yet mandatory, it will be soon, within the next year or so.

We are encouraging that the operators of private aircraft, and commercial operators, become equipped with 406 without delay. This is certainly the best insurance policy they could possibly purchase.

**Mr. LaVar Payne:** Okay. Colonel, you also talked about the aircraft assets you have, and the ages of those aircraft, which require a lot of maintenance. Could you briefly tell us the ages of each type of aircraft under search and rescue? Do you have any idea what the maintenance costs are on those?

Col Paul Drover: I can't answer on the maintenance costs. Certainly if it's important, I can get some information on that.

In terms of age, I flew the Buffalo when I was fairly young, so that goes back a long time. The aircraft is the sixties vintage. The Hercules, depending on what airframe, because we've had a number of models.... Certainly these aircraft are really old, but they are still very capable, and that's because of that higher maintenance cost to make sure they are safe and effective.

The Chair: Thank you very much.

Now I will give the floor to Mr. Simms.

Mr. Scott Simms: Thank you, Monsieur.

I want to go back to coordination. My colleague from the Yukon touched on this. I want to talk about coordination between the two departments that are involved so heavily here, especially where we are.

One of the added dimensions of Gander 103 Search and Rescue is that unlike other bases—and correct me if I'm wrong, but I believe this to be the case—they also carry out air ambulance service. In doing so, a great amount of coordination has to be attained with the coast guard.

Now through some internal, external reports following catastrophe incidents, there seemed to be, in some cases—I'm not being specific here, and I'm not blaming—a lack of coordination between the two departments, particularly in certain incidents off the coast of Newfoundland. You'll find that when you come upon an incident and someone is in distress, in trying to ascertain how to rescue that person, there are things such as whether it's a vertical lift to a helicopter—a Cormorant—or it's horizontal onto the coast guard ship. That comes down to the joint rescue centre.

When you analyze what may have gone wrong, the level of coordination from the joint rescue centre.... What kind of an analysis, good or bad, do they do after each incident?

**(1215)** 

**Col Paul Drover:** I didn't spend a long time, but obviously you understand that the Joint Rescue Coordination Centres are comanned, so you have the coast guard and CF personnel all working side by side.

With every incident that occurs and is reported to the RCC, there is collaboration. There is a determination of how the incident will be prosecuted. Because it's over the water doesn't necessarily make it a coast guard.... A lot of times you'll use an air resource, but the coast guard will muster those vessels that are available as well and coordinate that activity.

Throughout the whole operation they work as a team, side by side, and the coordination at the scene is conducted by an on-scene commander. That on-scene commander may be one of the crew members of an aircraft or they may be on one of the surface vessels.

You referred to a case, and there was a similar case that you probably have the background on.... But normally it's up to the onscene commander to determine how to execute the rescue operation itself. But that is very coordinated, and they obviously report back to the RCC, which monitors the overall picture.

In SAR cases where there is a reason to believe there are anomalies or something that could have been done differently, if there is a SAR report warranted, it will be conducted. In that case, all the controllers who participated in the exercise will be involved in capturing what took place, and the report is actually built with the understanding that it's designed to look at what the recommendations may be to prevent, or, as you said, sometimes to acknowledge that things actually did work as programmed.

**Mr. Scott Simms:** Let's say that one of these anomalies, as you've put it, takes place within the coordination centre itself. That's kind of divorced from the on-scene commander. Does that get reported as well? How does that work?

**Col Paul Drover:** As I mentioned, we do 8,000 incidents a year, so not every incident is going to drive a report, because a report is obviously sort of like an investigation. If we do a report on a situation like you've just described, then the on-scene commander will participate in the preparation of that report, similar to those

people who were actually in the rescue coordination centre that day. And if there was some misunderstanding or lack of information flow, I would assume that would be part of the findings of that particular report.

**Mr. Scott Simms:** If you need extra resources for JRCC, how do you go about acquiring that, or at least asking for that?

Col Paul Drover: Extra resources in terms of manpower or ...?

**Mr. Scott Simms:** Sure, or equipment. You talked about EPIRBs. I've heard there have been problems detecting some of the EPIRBs. Now that could be the problem with the actual ship; I realize that. But if there are technical problems within the JRCC and you need an upgrading of resources, how does that get addressed?

**Col Paul Drover:** The RCCs don't actually receive direct communication from satellites. That's done on different systems. They rely on reports from various sources—telecommunications—to get their information.

In terms of the facilities themselves, they're the same as any other capability we have in the military. We provide some funding to renew and upgrade. Also the coast guard and the Department of Fisheries do the same thing.

In terms of manning, again, we share responsibility. The CF provides a level of manning, as does the coast guard. If we determine that the manning is insufficient, then we have procedures to try to increase or go for an increase in manning. But currently the manning works. As with our standby squadrons, that's a 24/7 operation.

The Chair: Thank you.

I will give the floor to Mr. Payne.

Mr. LaVar Payne: Thank you, Mr. Chair.

I just have one more question, and I will be sharing my time with Ms. Gallant.

On page 4 of your presentation, in the first paragraph, you noted that even with a 30-minute posture, it is highly unlikely that all six lives in the incidents studied would have been saved.

I wonder if you could provide us with a little more information as to why you think, in that situation, those lives could not have been saved.

#### **●** (1220)

Col Paul Drover: It's very difficult to determine that the time the SARs resources came on scene was the difference between life and death. The assumption is that if they had been there a little earlier, the individual might still have been alive, but whether or not that individual could have been kept alive...maybe there were serious injuries and it was just a matter of time. There is a statement in my brief on this. Sometimes no human intervention can change the outcome. There may be a case where we know the individual succumbed to his injuries within a half hour of the SAR reporting, but whether or not, if they got there half an hour sooner...and that's why there is an uncertainty, there is no question.

Mr. LaVar Payne: Thank you.

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

I'm wondering why there are so few stations across Canada. The brochure you gave us showed the Griffin helicopter is used in some circumstances. We know there are bases throughout Canada that house Griffins. Is it that the frequency of the need isn't high enough to equip these different bases with a SAR team, or is it totally the initial cost?

**Col Paul Drover:** There are a number of elements, but I think by and large, the posture we have in place on the bases and the dedicated SAR squadron, both the rotary-wing and our fixed-wing aircraft provide that SAR capability we are looking for, so to take other resources and to increase their mandate, if you will, to do some SAR services, which will include a number of other personnel, training, and all that sort of thing....

I may say, though, aside from our primary aircraft, any aircraft in the military inventory can be used for search and rescue, and we call it secondary. It is not only the three I've identified as support squadrons, but other aircraft. Often we will use Sea Kings for the east coast and sometimes for the west coast. They're always available, but if we were to commit them to some kind of SAR posture that removes them from their primary role when all our equipment basically has a fully committed role, it's a challenge.

Our balance for the dedicated—all they do is search and rescue 100% of the time—is about right.

Mrs. Cheryl Gallant: There was mention of a cruise ship possibly going through the Canadian Northwest Passage. Is there any form of cost recovery? It may not be the CF or the air force that does the billing, but the idea of a cruise ship sinking and the resources that would be necessary to go there, it being such a risky venture in the first place for a cruise ship to go through there, I was wondering about liability. Yes, it's great that we're Canadians and we're willing to step up in a crisis, but given the possible foolhardiness of cruise ships, what is the practice?

Col Paul Drover: Currently there is no cost recovery for the provision of SAR services. I guess it's a federal commitment to the population. It is not only the large cruise ship that is operating in a potentially dangerous environment, but we have a number of adventurers and risk-takers who are the subject of our SAR response capability as well. There is currently no need or requirement or desire to have any cost recovery for any of those situations.

As it turns out, it is being discussed internationally in some of the forums whether or not there is some requirement, a requirement to post a bond, for instance, to cover such costs, but currently, if there were a situation in the north, we would respond the same as we respond to any other SAR incident.

The Chair: Thank you very much.

I will give the floor to Mr. Hawn.

Mr. Laurie Hawn: Thank you, Mr. Chair.

I have a number of quick points, Colonel, so I'd appreciate quick answers.

In your statistics with respect to response times—it came down to six people who might have been saved and so on—do those statistics include what's happened in the north?

(1225)

Col Paul Drover: Yes, they do.

**Mr. Laurie Hawn:** Mr. Bagnell's point about it being a disaster in the north because we don't have bases up there is covered in those statistics, and it's not the case.

Col Paul Drover: That's correct.

Mr. Laurie Hawn: Thank you.

I don't know of any ships—and there are lot of ships with helicopters on them—with specifically SAR helicopters on them. Are you aware of any?

**Col Paul Drover:** No. I'm not sure what the coast guard posture is, because they do have helicopters.

Actually, if I may, I would take a bit of your time to say that for the Northwest Passage and the north itself the coast guard has a vested interest and responsibility. So it's not just a response by the aircraft; it's a response by the coast guard as well.

**Mr. Laurie Hawn:** Mr. Bagnell may have accidently left the impression that there is a lack of coordination between the Canadian Forces and other departments. How would you rate the coordination among the CF, the coast guard, CASARA, and international organizations?

**Col Paul Drover:** First of all, we are an active participant in the interdepartmental committee on search and rescue, and it's basically a policy group. One of the things that group is tackling is the Arctic, so that's fairly relevant.

We work very closely with the coast guard. I work with my colleagues at coast guard because of the joint nature of our responsibilities, if you will. It's a very good bond. International committees, as I mentioned, such as ICAO.... Even NATO has a SAR committee, and a lot of SAR is driven by international convention, the responsibilities that extend beyond our borders, and we participate in all of the forums that deal with it.

**Mr. Laurie Hawn:** So there's a lot of effective coordination at all levels and among all agencies?

Col Paul Drover: That's correct. Most recently, the Arctic Council struck a task force for eight nations to come up with an agreement or an MOU for SAR cooperation in the north. Our department and the coast guard, along with DFAIT, are active participants in that task force.

**Mr. Laurie Hawn:** Mr. Bachand pulled a quote out of an NRC assessment of the fixed-wing SAR for a statement of requirement and suggested that we perhaps should have a base in Iqaluit. I know you can't give a number, but in the range of small, medium or large, what would be the cost of that, and what would be the likelihood of there being an incident for which that resource would be required?

**Col Paul Drover:** There would be a very substantial cost to set up some kind of an operation in the north that required a 24/7 operation, if that's what you're talking about. Statistically, so far, again, things could change over time.

There is no logical place in the north that would cater to the north. The north is a really large place, and sometimes the consolidated resource bases that we have make sense, given the number of incidents we have to respond to.

**Mr. Laurie Hawn:** In terms of MAJAID, we talked about cruise ships and so on. Obviously if there is a ship there with 3,000 to 5,000 people on it...how would you rate the challenge of doing anything to save or rescue 3,000 to 5,000 people? Is it practical to have a resource in Iqaluit or somewhere else that would cater to that?

**Col Paul Drover:** Certainly especially the MAJAID requires a lot of overhaul and maintenance of medical supplies, swapping out and things, and it requires a platform to deliver it. If you consolidate that, when you have all those things together, you end up with a faster response than you would have if you sort of cached it someplace in the north and then had to fly to it to pick it up.

Again, the probability of occurrence, the results, and the catastrophe are all being actively discussed. There is no question about it, and that's what we're looking at for the north.

**Mr. Laurie Hawn:** We will continue to adapt our procedures and basing, and so on, based on current and forecast situations.

Col Paul Drover: Absolutely, sir.

**Mr. Laurie Hawn:** Do we do our ambulance service from bases other than Gander with the SAR airplanes?

**Col Paul Drover:** I would like to speak a little bit about the air ambulance.

The mandate for the federal SAR does not include air ambulance. Our responsibility is for aviation and marine incidents offshore. The Great Lakes are also included in that marine responsibility. What takes place, though, is that provinces and territories have the responsibility for air evacuation, and when they do not have the capacity, they call upon the military, the CF, to perform during those incidents.

Newfoundland is a good example. They have an air ambulance capability, but we do a fair number of air medevacs, and those are not our principal responsibility.

Mr. Laurie Hawn: Thank you.

The Chair: Thank you very much.

I give the floor to Mr. Wilfert.

(1230)

Hon. Bryon Wilfert (Richmond Hill, Lib.): Thank you, Mr. Chair

Colonel, besides the 45-year-old SAR capability, what roles do UAVs or satellite imaging play in your work, and even the issue of jets versus turboprops?

**Col Paul Drover:** Currently, we do not have any UAV capability resident in Canada. We have UAV capability elsewhere. There's no application for search and rescue at this time. I think there's tremendous potential, but it's one we have not tapped into at this time. Similarly, for satellite imagery, the principal use of satellites is currently in the detection of the beacons, which is the signal, but we have no optical capability in terms of satellite capability.

I can't really speak to your third question about jet versus turboprop in terms of the fixed-wing SAR. There's nothing wrong with the turboprop, which is what the Hercules is, I guess, if you're looking for speed and range. I don't know where a jet aircraft would fit in, so I really can't respond to that.

Hon. Bryon Wilfert: Thank you.

There have been recent incidents, such as that Inuit teenager on the ice floe in the north, and so on. Our study is on issues of climate change. I asked about imaging and I asked about UAV. Given the changing nature of the north, what kind of long-term planning is being done to look at those options? With these changes, and maybe with the opening of the Northwest Passage in say seven to 10 years, on a summer basis, and with increased activity, these other options may need to come more to the fore. How is this being responded to so that we can be as proactive as we can be?

Col Paul Drover: Currently, all those discussions are taking place. There are no programs I am aware of that actually speak to the specifics of finding that capability. It goes to our continual internal sort of review and evaluation of our capabilities. Obviously, there's no question that the most current acquisition capability issue is the fixed-wing search and rescue aircraft. That doesn't discount our interest in other technologies as they evolve, especially in the north. I think we share those challenges with other departments that have other responsibilities as well.

Hon. Bryon Wilfert: Thank you.

Mr. Chairman, if I may, I'll turn it back to my colleague, Mr. Simms.

Mr. Scott Simms: Thank you.

I have just a quick comment off the top. I know that Mr. Hawn has said a few things regarding comments we have made here. Respectfully, I would like to make a few comments about what has been said here, in essence, about where we are going with this particular situation. As I said, I have a great deal of respect for you as an airman. I want to make this one comment about the north.

We—your colleague, Mr. Mills, from Alberta, and I—were in Reykjavik at the genesis of this talk on the MOU on search and rescue. A gentleman was there who did a presentation on the circumpolar activity of the eight nations involved. He said that because of the lack of ice cover, the trip to ship goods and resources and the like from the nations across the north can now be reduced by 40% to 60% just by going over the pole alone, which now they can do. With global warming—climate change, if that's what it is—ice is being reduced. I'm loath to use hockey analogies, but I'll use one here. I think it's a question of being where the puck is going to be as opposed to being where it has been. I don't think we fully grasp how much activity is going to be circumpolar. Given the MOU he talked about, it's one thing to declare a sovereignty that is ours, but we have to walk the walk as well.

In your deliberations on the MOU, how far advanced are you within the Canadian perspective?

Col Paul Drover: This is the MOU about the Arctic-

**Mr. Scott Simms:** It is between the Arctic parliamentarians of the eight nations, yes.

**Col Paul Drover:** I'm not a member of that. I started, but I'm not a member any longer of that committee.

I understand that the target date to have an agreement in place is the next council meeting in the September 11 timeframe, I believe. I think it's developing very well, from what my colleagues report. There's a shared interest in that region of the world, and the MOU speaks to cooperation, which is certainly an honourable thing to be seeking.

• (1235)

The Chair: Thank you very much.

Now I will give the floor to Monsieur Bachand.

[Translation]

**Mr. Claude Bachand:** I would like to keep talking about the international agreements, particularly concerning the Circumpolar Forum. Mr. Drover, as we speak, let us imagine that a disaster occurs within our borders, but near Alaska. I imagine the Americans have search and rescue capabilities.

Is it an option to ask them to come and help us? Can that happen? Is that possible?

[English]

**Col Paul Drover:** Yes, sir. As a matter of fact, the cooperation between the U.S. and Canada is in place, and we see it frequently, especially if you look at the Great Lakes. The prosecution of SAR incidents will take place using Canadian assets on the American side of the border, and vice versa. In Alaska there is a rescue coordinating centre in Anchorage and they coordinate with our rescue coordinating centres to prosecute cases. They have a SAR capability in their national guard and their coast guard and they would be able to

respond to any incident that occurred in Canada. We have, through the same arrangements, the ability to very quickly go across the border and work in Alaska. That happens pretty frequently as well. So there is a good, high level of cooperation between the U.S. and Canada.

For a number of years we've also had Russia involved in a threenation Arctic SAR program. We did an annual search and rescue exercise. Again, it's all about the agreement and cooperation, so we have the ability to speak with the Russian RCCs, from our RCCs, and to be able to communicate and pass data.

So there's an international capability resident out there, and that happens at the rescue coordinating centres of the various nations. There are a lot of common procedures, so it facilitates our ability to be able to operate internationally.

[Translation]

**Mr. Claude Bachand:** Are other nations included? You're talking about memoranda of understanding. Do you mean that all the Arctic nations want to reach a cooperation agreement?

[English]

**Col Paul Drover:** Yes, the current Arctic Council stood up the SAR task force. Eight nations are, indeed, Arctic nations with interests in the Arctic. They are endeavouring to come up with a common document that would provide cooperation in the provision of SAR services.

[Translation]

Mr. Claude Bachand: Thank you.

When you were last here, I asked you to tell us about the Civil Air Search and Rescue Association, CASARA. I mistakenly compared those people with the Minutemen, who take justice into their own hands near the American and Mexican borders. This seems to be more serious. These are volunteers who put their aircraft and volunteer efforts in the service of search and rescue efforts. I would like you to tell us a little about that.

Are these people qualified to locate disasters? Are they qualified to conduct rescues? I suppose you have to compensate them financially for using their aircraft, and so on. Can you reassure us as to the soundness of this kind of arrangement? They are virtually integrated into every aspect of search and rescue.

[English]

**Col Paul Drover:** Yes, sir, I can speak on behalf of CASARA. As a matter of fact, the last time I was here I did have the president of CASARA as a witness with me.

It's a very mature program. We have organizations represented in all the provinces of Canada and in the territories as well. And it is, as you spoke, a volunteer organization. We provide some funding for training of the individuals who are part of the organization. Their time, essentially, is on a voluntary basis, so there's no wage, remuneration, or pay.

There are two elements to the CASARA organization. There are those who are spotters, and these individuals are trained by our own military SAR crews. And that's part of the training. It's an ongoing requirement that they go to the various units, flying clubs, whatever, and train as professional spotters. There are some skills involved in being able to fly a route and determine, through some trees, where the crash may be, as it's almost obscure or hidden. So there's that element.

The other element is that the individuals have their aircraft and they're flying, they're operating. We again assist in the training to give them some SAR skills in the training. They are essentially used to search for those ELTs that we spoke to. They have equipment, the homing equipment, the same as our SAR aircraft, and depending on the weather conditions, they can do some search operations but no rescue and no aerial delivery of any capacity. They're essentially a resource, and they're very capable in performing those functions, but we don't take them beyond that.

When we do have a search and rescue operation, we actually compensate for their fuel and gas, but not salary.

**(1240)** 

The Chair: Thank you very much, Colonel.

Now I will give the floor to Mr. Harris. **Mr. Jack Harris:** Thank you, Chair.

Colonel Drover, I'm looking at map 2 in your category there. I know it's not totally accurate, because it has St. John's at around the 55th parallel, when it's actually below the 49th. But just using the map as a guide, in the Halifax region the south-east line seems to be pretty close to the land mass of Newfoundland and Nova Scotia. Below that line, who's responsible for search and rescue?

**Col Paul Drover:** I'm not sure it actually depicts it accurately, but it's fairly close to where it is. The United States are responsible south of our line.

**Mr. Jack Harris:** So much of that, even part of the Grand Banks, is in the U.S. jurisdiction and not in Canada's.

Col Paul Drover: That's correct.

**Mr. Jack Harris:** On the west coast the Victoria SRR covers some of that, but the Alaska panhandle is in there. So between those two lines, the U.S. is responsible and not Canada.

**Col Paul Drover:** That's correct. A lot of times—south of Newfoundland is a good example—our SAR forces will go into the American area of responsibility in pursuit of SAR operations. That's always coordinated.

Mr. Jack Harris: From the backgrounder provided to us by our research people, and my own previous research, the United States seems to have a standard for a mission response. It's no greater than two hours of total response time for any one response unit within the sector or the AOR to arrive on location. So they have two hours, including a 30-minute wheels-up time and 90 minutes to get there. But they have an overall two-hour standard from call notification to being on site.

Do we have any such standard in our search and rescue operation?

Col Paul Drover: As far as the level of service we advertise, 90% of the time we make it to the incident site within four hours. I think

when you look at the U.S. statistics it's important to note that's not overland SAR. In fact, the federal government does not provide overland SAR. Our system provides overland SAR and over-the-ocean SAR; therefore, on average, we have to go longer distances.

When you look at their coastal response, which is a coast guard responsibility in the U.S., if they have more shore stations they have less territory to cover; therefore, it's logical that they can get there within this prescribed period. To be able to provide a two-hour response time anywhere the incident happens in Canada, you'd need a tremendous number of bases, in addition to the ones you have.

**Mr. Jack Harris:** I don't think we're achieving that, for example, out of Gander for east coast responses either.

● (1245)

Col Paul Drover: Achieving what, sir?

Mr. Jack Harris: The two hours.

**Col Paul Drover:** To go out to anywhere in the region?

Mr. Jack Harris: To be there, yes.

**Col Paul Drover:** No, and I don't think we can guarantee a two-hour response by aircraft to anywhere in the region. There's not an aircraft that can go fast enough.

Mr. Jack Harris: So we don't have any standard of that nature.

In fact, the Chief Review Staff report of 2008 I referred to complains, in a summary of the main findings:

The CF does not have operational-level doctrine for SAR in place; however, development of Air Force operational SAR doctrine is planned for 2008. In lieu, the National SAR Manual (NSM) is being used as guidance until it will be replaced by the International Aeronautical and Maritime Search and Rescue Manual Volume IV.

Can you tell me whether we now have doctrine in place for SAR?

**Col Paul Drover:** We are currently still using the national search and rescue manual. It is in a different format from the volume 4 supplementary Canadian one referred to, which I understand is being developed. It's not something I'm particularly involved in. It really speaks to the same elements that are in the search and rescue manual.

So if you take the search and rescue manual—I believe you have a copy from our previous occasion—it is basically doctrinal in nature, because it describes from the policy to the tactical.

**Mr. Jack Harris:** So even though this report is two years old, it's still current. In other words, we don't have one yet. Am I right?

Col Paul Drover: Yes, sir.

**Mr. Jack Harris:** It also complains that there's a difficulty in analyzing a performance because the data is not available for two or three years. On page 11, for example, it talks about readiness and response. It says:

Aside from the preparation of forces and the immediate response there has been little focus on performance measurement beyond annual business plans. This has been hindered by the lack of the Air Force's identification of strategic-level performance measurement information requirements and the absence of a highlevel National Standard of Service for SAR. While there are periodic reviews of a specific topic, such as the 2005 Operational Research Division (ORD) basing study, these studies cannot rely on the support of current SISAR data for their analysis as it is normally two to three years out of date.

In fact, in this report they complained that no information was available beyond 2004, and this was January 2008. Has that been fixed?

The Chair: You have 30 seconds, Colonel.

Col Paul Drover: Sir, I'd like to report it has. We're working toward a solution. The difficulty is that we've been using two different databases, and we haven't been rigorous enough in terms of what we're trying to capture. The databases that are currently out there are incomplete in terms of doing the proper performance analysis, and that's an ongoing project right now.

The Chair: Thank you.

Now we'll give our last member, Mr. Hawn, five minutes.

Mr. Laurie Hawn: Thank you, Mr. Chair.

Again, I have a number of fairly short things.

To refer to some things that were said before, I would like to refer Mr. Simms to a question I asked the last time we spoke. Are we continuing to adapt to changes in traffic as they occur and as we expect them to be in the future? At the risk of using a hockey analogy, to be where the puck is going....

Col Paul Drover: We are indeed. Again, every time we have year review we look at the program and the past review, and we do our SAR reporting figuring out if there's a need for improvements and change. I would say we were very responsive to ongoing things. Again, I think participation in the Arctic SAR task force is a good example. We're looking in the Arctic in this case where internationally there is need, or certainly the discussion needs to take place.

**Mr. Laurie Hawn:** So we're looking at where the puck is going to be.

In your professional opinion, and I know you have decades of experience in SAR, is the SAR manual adequate and effective as a doctrinal manual?

Col Paul Drover: In my estimation, what we'll see in the next version is very little change. The format will be changed, but the content won't because basically it's been developed over many years; it's a reflection of what we were dealing with as a very mature program that's been put in place and created to provide that sort of service to the population of Canada. I think it does it very well.

**Mr. Laurie Hawn:** With your experience with organizations in the military, like the Chief Review Services, are we really just talking about renumbering the paragraphs and putting a different cover on the book?

Col Paul Drover: It may be down to that.

If I may take this opportunity, that same report that made those observations made another observation. It said that:

The management and delivery of search and rescue (SAR) services by the Department of National Defence (DND) and the Canadian Forces (CF) is effective and, overall, the Canadian structure and capability are considered as a model internationally.

(1250)

Mr. Laurie Hawn: Thank you.

We talk about lessons learned, data and so on. You addressed that a little bit, but any time there's any kind of an indication that something may have not worked 100%, do we sit down with everybody involved and do a lessons learned? Has that been injected into the process for improvement?

Col Paul Drover: Yes, absolutely that takes place. That's one of the responsibilities. Again, the focal point of SAR response really is the rescue coordinating centres. The OIC of that centre, the officer in charge, has a daily review of all case activity. There may be a number going on at any particular time, but if any have special interest it's up to him or her to take those next steps to be able to capture what took place. If need be, as we mentioned earlier, the SAR report, which is a more formal investigation, may be warranted, in which case it will take place. If not, for each SAR aircraft, at the completion of a mission, the aircraft commander will write a SAR report, a trip report. There's documentation throughout the incident from various perspectives, and that's all put together, as required, when warranted.

**Mr. Laurie Hawn:** In your professional experience, is that an effective process?

Col Paul Drover: It is, and it is a trigger as well—an alarm, if you will—to situations that may be deemed unsafe or ineffective for other reasons. At the same time, it serves to highlight some of the finer moments. As you know, our SAR techs in particular do some incredible work, often at great risk to their own lives, and they get recognition through awards for bravery and the like. It is that reporting mechanism and review of cases that bring those forward. That is important to note as well.

**Mr. Laurie Hawn:** Maybe that's a good thing to end with. The SAR techs and people involved in search and rescue get more recognition per person than anybody else in the Canadian Forces. I know everybody would speak with the same voice to thank you and to thank those men and women who do such absolutely incredible work.

I will just point out that we talked about all our aircraft being used from time to time. You may not recall, but we have even used CF-18s out of Bagotville in SAR from time to time. It is a total team.

Col Paul Drover: Perhaps that answers the jet versus turbo question—

**Mr. Laurie Hawn:** They are fast, but they couldn't do a hell of a lot when they got there.

**Col Paul Drover:** But it does one thing. To have somebody on the scene to report the situation is important, because then you have a full picture. Yes, that is absolutely correct.

The Chair: Thank you very much.

Thank you very much, Colonel Drover. We appreciate your testimony. It will be useful for the members.

[Translation]

This concludes our sixth meeting.

[English]

**Mr. Jack Harris:** I didn't want to use the question time for this, but a number of reports were referred to. I wonder if we, through the clerk, could ask the witness to provide them. They referred to these studies that were done—the basing reports and what not—and also SAR reports.

I have a question on the order paper. We talked to the deputy minister when he was here last week, and he offered full cooperation. Perhaps we can do this through the analysts as well and get some SAR reports or operations reports and things of that nature. How would you recommend, Chair, that we do that? Could we ask the clerk or the analyst, through you?

The Chair: Paul, can we ask the department?

Okay, we'll have that.

[Translation]

Thank you very much.

Thank you very much, Colonel Drover.

[English]

**Hon. Bryon Wilfert:** Can I ask a question, Mr. Chairman? Approximately when will we receive more detailed information regarding the trip to the Arctic?

**The Chair:** That will be at the next session, I think.

Go ahead, Mr. Hawn.

**Mr. Laurie Hawn:** There is a challenge with Yellowknife. They have a major exercise going on at the time we notionally thought we would go, so we're trying to work out whether we can impose on the exercise or whether we have to shift the date. We should have some indication by Thursday, hopefully.

**The Chair:** Thank you very much. I'll get back to you at our next meeting.

[Translation]

Thank you very much. This concludes our sixth meeting.

Good day.



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