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Chair

The Honourable Maxime Bernier

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● (1530)

[*Translation*]

The Chair (Hon. Maxime Bernier (Beauce, CPC)): Welcome to the 35th meeting of the Standing Committee on National Defence. We have already met 35 times! Today is Tuesday, November 23. On today's agenda, pursuant to Standing Order 108(2), we continue our study of search and rescue aircraft acquisition.

One of our scheduled witnesses from 3:30 p.m. to 4:30 p.m. is Mr. Hervé Garnier, Chairman, European Aeronautic Defence and Space Company. Thank you for joining us today.

We will also be hearing from Mr. Antonio Rodriguez Barberan, Vice-President of Airbus Military. Thank you.

You will each have 5 to 6 minutes to make your presentations, for a total of about 10 minutes. We will then go to questions from members until 4:30 p.m.

Mr. Garnier, if you would like to begin, the floor is yours.

Mr. Hervé Garnier (Chairman, European Aeronautic Defence and Space Company Inc.): Thank you, Mr. Chair.

Good afternoon, Mr. Chair, members of the committee.

[*English*]

Let me first introduce the two speakers representing EADS and Airbus Military at this meeting. My name is Hervé Garnier and my responsibilities are senior vice-president of EADS, including regular strategy and marketing for Europe and Canada at the corporate level. I am also chairman of EADS Canada, our Ottawa-based subsidiary. My colleague, Antonio Rodriguez Barberan, is senior vice-president, commercial, and member of the board of Airbus Military, one of EADS's main business units.

It's an honour for us to be here today and to address and highlight to such a distinguished audience the special relationship between EADS and Canada. We will present an overview about EADS and Airbus Military credentials, C-295 military aircraft highlights, C-295's compelling solution for Canada's fixed-wing SAR program, and finally the IRB strategy.

EADS is a global leader in aeronautical defence, space, and related services. The company is divided into four main divisions: Airbus, Eurocopter, Cassidian, and Astrium. EADS's latest programs include Tiger and LH90 helicopters, M400 military transport aircraft, Airbus A380, Eurofighter, and the European Galileo navigation satellite system, to name a few.

Over the years we have built a strong customer base, generating an annual turnover of 43 billion euros and an order backlog of more than 400 billion euros. Our global staff include over 120,000 employees in more than 50 countries worldwide.

EADS and its predecessor have been steadily committed to and present in Canada during the last two decades. This is through direct subsidiaries, EADS Canada in Ottawa, Eurocopter Canada in Ontario, Composites Atlantic in Nova Scotia, and PlantCML in Quebec. All together, they provide 700 direct jobs.

In addition to that, the programs of EADS divisions, including the procurement from more than 460 Canadian companies, generate more than $800 million Canadian a year. They also support more than 4,000 Canadian jobs. This allows the sustainable participation of Canadian companies coast to coast, small and large, in the global supply chain of EADS.

Let me now give the floor to Antonio Rodriguez Barberan.

Thank you.

● (1535)

Mr. Antonio Rodriguez Barberan (Senior Vice-President, Commercial, Military Transport Aircraft, Airbus Military): Thank you.

Mr. Chairman, members of the committee, Airbus Military is a business unit integrated within the Airbus division. Airbus Military today is the only company worldwide offering a full range of transport surveillance and SAR aircraft, including military derivatives of the successful Airbus commercial platform.

Airbus Military has sold worldwide more than 1,000 aircraft to 61 countries. Twelve of them are NATO countries, including Canada. The total fleet has accumulated over 4.2 million flight hours.

Recognizing the critical importance of developing a fixed-wing search and rescue and related mission aircraft, Airbus Military and its partners have developed a multi-role aircraft powered by Pratt & Whitney Canada engines, guided by Thales Canada avionics, and with training and simulation offered by CAE, from Canada. The C-295 has been developed to offer a premier fixed-wing search and rescue solution.

The family of CN-235 and C-295 has sold more than 350 units and has earned a worldwide reputation for reliability and supportability in operations with the armed forces of more than 25 countries, with very important repeat orders. The family has accumulated over 1.2 million flight hours.

The C-295 is a solid, proven aircraft with robust landing gear to operate on soft and unpaved terrain. It is the only ramp- and sensor-equipped SAR aircraft in its class currently operating around the world. It has the highest reliability and lowest maintenance and operating costs.

We conducted, as part of the letters of intent process, a review of Canadian SAR. Drawing from the experience of current and past Canadian SAR personnel, we recognize the unique challenges of terrain, environment, and geography that face your SAR crews.

As stated in our response to the letter of intent, Airbus Military is confident that our C-295 can excel in the SAR missions in Canada. Proven and flown daily in charting the most challenging environments worldwide, the C-295 allows operation in high winds and extreme cold. It is capable of supporting itself in austere airfields. It is operated today in mountainous terrain under adverse conditions, and operates over the world's oceans, from the tropics to the polar regions.

We take pride in the fact that the C-295 family is one of the very few medium twin-engine aircraft capable of operating in winds experienced in the North Atlantic. Today, the U.S. Coast Guard, Ireland, and Portugal operate maritime surveillance in that environment.

Furthermore, the aircraft family conducted cold weather certification for the CN-235 in Resolute Bay, and the C-295 was tested in Finland, where it operates today north of the Arctic Circle on a daily basis.

Brazil replaced their Buffalo family with our SAR aircraft overland as well as halfway across the South Atlantic. Similarly, Chile and Colombia operate our aircraft. These nations serve terrain that is as mountainous and desolate as anything in Canada. The C-295 has gained high praise in South America.

Mountain nations require search speed below 150 knots to ensure area coverage, to reduce the impact of mountain turbulence, and to safely manoeuvre in narrow mountain valleys. The C-295 displays excellent handling, rapid engine response, an outstanding lowest speed manoeuvrability, which allows the safe operation at very low levels close to terrain.

Our cabin, with the largest floor space in its class, is three inches longer than the C-130s, which provides tremendous capability in multi-role missions, allowing considerable room for equipment and personnel while still allowing a dedicated space for parachute rescue personnel.

Our tactical aircraft operate today in special operations where soldiers must parachute into hostile territory and unforgiving weather and terrain, safely carrying equipment loads that equal and in some cases exceed those of Canadian SAR personnel.

We can offer a standard certified version, which is currently in operation in Portugal, which allows the use of four battle windows offering full coverage during visual searches. This is extremely useful in searching confined mountain valleys where terrain masking complicates operations.

● (1540)

These capabilities are all proven and operating in SAR around the world today. But it is our state-of-the-art electronic search that differentiates us from the competition. For instance, the U.S. Coast Guard version uses forward-looking infrared electro-optic sensors integrated with a multi-mode search radar and direction finder to provide exceptional detection capability over water and snow.

The integration is provided by a data management system that interfaces with the communication and navigation systems, multiplies the efficiency of its stand-alone search sensor by a factor of 500, provides better search capability, and reduces response time.

Our maintenance program allows us to deploy the C-295 aircraft for up to 800 flight hours in remote areas, as proven in humanitarian missions in several African and central Asian countries. We understand that SAR is considered a non-fail mission and would therefore not propose developmental or unproven solutions, with associated risk, delay, and cost elements.

We note that the NRC report has provided recommendations that will improve the level of services in Canada regardless of the aircraft chosen, such as forward deployments and the review of basic options. We offer ourselves to collaborate in the process of optimization of SAR capabilities in Canada.

Finally, regarding the industrial regional benefits, let me start by saying that with the C-295 we have close to 20% direct Canadian content, and potentially more, depending on the configuration, bringing business to Canada through every single aircraft that is sold worldwide. Engines from Pratt & Whitney, simulation devices from CAE, and avionics from Thales Canada are a part today of the whole global supply chain of the C-295. So far we have sold 83 units, and we are consolidating our leadership position in the market.

Apart from this high direct Canadian content, should Airbus Military be successful in the fixed-wing SAR, we will be compliant, of course, with industrial and regional benefits principles. We have already identified some programs fulfilling the three main IRB objectives: high technology; long-term business for export for Canada; funds to the global supply chain of the EADS, including Airbus. We would like to confirm our commitment to perform all the interservice support in Canada. We have already discussed cooperation with potential partners coast to coast, large and small, in Canada.

In all the previous EADS programs in Canada, we have an outstanding record of fulfillment of IRB commitments. Maximizing the Canadian content is an Airbus Military priority.

In summary, we look forward to a competition that will allow us to provide a program of professional solutions with a high level of Canadian content and with a very low life-saving cost.

That concludes my remarks, Mr. Chairman.

Merci beaucoup.

● (1545)

[*Translation*]

The Chair: Thank you, gentlemen. I will now turn the floor over to Mr. Simms.

You have the floor for seven minutes.

[*English*]

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

And thank you to our guests who are here regarding the C-295, the EADS group.

I like what you said when you said SAR is a "non-failing mission". Is that correct? Am I quoting you correctly, Mr. Rodriguez Barberan?

Mr. Antonio Rodriguez Barberan: I guess so, yes.

Mr. Scott Simms: That's a very good point.

In your speech you were talking about your aircraft being able to survive harsh climate, the North Atlantic, for example. You said Finland, for example, Colombia, Chile, the mountainous regions, with mountain turbulence. Those are great points, given the situation we have in Canada.

What makes Canada unique, I think, in my own opinion, from these countries is that we have a vast area of land, so obviously you have to fly a greater distance. For example, I'll take one of the bases, maybe the one in my riding—why not? Gander. It's on the east coast. It's the farthest point east, or close to it, compared to the rest of the country. When you talk about Gander and you talk about the west coast at Comox, do you have an example of where your aircraft is able to cover that vast area of land and endure the conditions that you describe?

Mr. Antonio Rodriguez Barberan: Thank you very much for your question.

You have to know that today our aircraft has been selected and is operating, for instance, in Brazil, where the weather is not cold, but the country is vast, and it is performing search and rescue. In fact, I don't think I'm disclosing something I shouldn't, because it is in the press: we are negotiating with the Brazilian air force for a second batch of planes for their requirements.

So yes, the Canadian requirement is unique, but I think we can offer, from our experience in many countries, safe and non-risky solutions that cover all the requirements. In terms of distance, Brazil is a country with very similar requirements to the ones you have in Canada.

Mr. Scott Simms: The NRC in their report are looking at plotting all the search and rescue bases and analyzing this information. Do you see it as an issue that these bases are so far apart? You wouldn't be in favour of centralizing the bases to favour your aircraft, would you?

Mr. Antonio Rodriguez Barberan: I would never analyze this in favour of one or another. It is physics. When you want to decrease the rescue time, you have to analyze blocking responses. When you analyze rescue time, you basically have three areas to analyze—readiness time, transit time, and search time. Our approach is that during the search time we use high technology, so that we reduce the time in which you are searching. Readiness is very much a policy of the operation. Regarding transit, the only way is to drastically reduce the transit time.

Mr. Scott Simms: Do you think your aircraft has an advantage in being more capable and ready?

Mr. Antonio Rodriguez Barberan: Because of its high technology, including the Canadian engines, readiness time is extremely long.

Mr. Scott Simms: The parts for the CH-101 helicopter, the Cormorant, had been a significant issue and had major consequences. There was a major issue in operational availability. What are your current serviceability rates, and are your parts readily available in North America? You mentioned the 20% content issue.

Mr. Antonio Rodriguez Barberan: We have contracts with some of our customers in which we secure availability of over 90%. That's contracted, so we can do the same here with our ISS local partners, our interservice support. We are using equipment that is easy to maintain and repair. This implies a low life-cycle cost, maintenance cost. Our strong point is our availability.

● (1550)

Mr. Scott Simms: I understand the cost point. Are they available to North America?

Mr. Antonio Rodriguez Barberan: We have the CN-235. In the U.S. Coast Guard, they are starting operational deployment in the Miami Naval Base, and we have a very good record. Don't listen to me, listen to our customers. We have an unbelievable record of repeat orders.

Mr. Scott Simms: This aircraft is used all over the world. You have your picture with the U.S. Coast Guard. There seems to be quite a bit of room within the plane for the SAR techs to do their mission. One of the problems with search and rescue technicians is that they need not only the equipment but also sufficient space. Is that a competitive advantage? I guess that is one of the major reasons you've been successful with the U.S. Coast Guard.

Mr. Antonio Rodriguez Barberan: That's true in the U.S. Coast Guard and in other coast guards. The aircraft has a long cabin that allows for small details. It's not only the comfort of the crews that is important. For instance, we can have four bubble windows in our planes. Something as simple as that can make a difference when you are searching in mountainous terrain. These small details are extremely important for SAR technicians. In addition, we have a resting area in our cabin besides all this space for equipment.

Mr. Scott Simms: What does that do exactly?

Mr. Antonio Rodriguez Barberan: If your SAR technicians are working 10, 12, 15 hours on a search mission, it's nice to have a place to lie down and rest for 20 minutes.

[*Translation*]

The Chair: Thank you very much.

You have the floor, Mr. Bachand.

Mr. Claude Bachand (Saint-Jean, BQ): Thank you, Mr. Chair. I want to welcome all of my friends, not only those seated here at this table, but the ones who are also in attendance. It's important not to play favourites.

I want to begin by saying that I am deeply disappointed that while the acquisition of these aircraft was announced five or six years ago, we are still, unfortunately, only at the starting point in the process, in my opinion, because we don't exactly know what is happening. The goal of today's meeting is to ask industry how it can help Canadians and Quebeckers who are in need of its services.

Major acquisitions in the aeronautics field have been made, but the aircraft that can really help Canadians and Quebeckers who are in distress is the search and rescue aircraft. The objective here is to begin and complete the acquisition process. To my way of thinking, things are not moving along quickly enough.

Are you familiar with the National Research Council of Canada's report? Can you give me your opinion of this report? Are you in a position to carry out all of the recommendations made by NRC?

[*English*]

Mr. Antonio Rodriguez Barberan: The recommendations are quite sound. We share most of them, and we read most of them in a positive manner.

[*Translation*]

Mr. Claude Bachand: Most of them. Okay.

The report recommends, among other things, that several of the requirements presently listed as “Tier 1 rated” be upgraded to “High Level Mandatory Capabilities” or “HLMC”. I would like to discuss some of these requirements with you. NRC recommends the “ [...] integration of SAR sensors such as electro-optical and infrared (EO/IR), search radar and night vision imaging systems (NVIS); [...]”

Is your company in a position to carry out this recommendation?

● (1555)

[*English*]

Mr. Antonio Rodriguez Barberan: First of all, I have to apologize. All the Spaniards of my generation speak some French, but I have to answer you back in English. I hope you don't mind. I don't feel comfortable answering you in French.

That's absolutely necessary. It is as if you want to look for something in your basement, you have no light, and you don't carry a torch. You may know the place, but it takes some time.

It is absolutely necessary in today's world, in carrying out search and rescue missions, to have search and rescue radar and electro-optical and infrared devices, as a minimum. We are in a position to not only propose, but to deliver. You need to have an AIS system as a minimum. We have this system already integrated and operational in our aircraft, and we strongly recommend you follow in that way.

[*Translation*]

Mr. Claude Bachand: Here is something extremely important, as I see it, given Canada's geography and climate. NRC is recommending acquiring the “ability to: operate from short gravel runways and austere airfields.”

In the case of operations carried out in the Far North, among other places, it is extremely important for your aircraft to “perform“ under these conditions. According to the report, it is important for the aircraft to have the capability to “fly in icy conditions”, something which we often experience in Canada, and “to operate in ground icing conditions where facilities exist.”

Your aircraft might have to land on short gravel icy runways. We need to know if you feel your aircraft can perform under these conditions.

[*English*]

Mr. Antonio Rodriguez Barberan: Yes, if you look at the countries who are operating our planes and the usage these planes are providing, you will see that our planes are landing on a daily basis on unpaved and extremely short runways from the jungles, to Finland, to the middle of Asia. By design, our planes have to operate like this.

But not only that, it is also extremely important, I would underline for a plane like ours, to recognize that not only can it land and take off from that runway but also that it can operate from that runway. Allow me to use as a reference my own air force. The Spanish air force has detachments in countries in Africa, like Somali, where they have to operate the aircraft in areas where maintenance is almost non-existent. So our aircraft today is ready to be deployed to a place where there is no base, where there is no airport, and to operate for 800 flight hours without any specific maintenance. So it is self-reliable in those remote areas. Not only can it land there, but it can also operate there on a regular basis.

[*Translation*]

Mr. Claude Bachand: How many C-295 aircraft have you delivered throughout the world? As we speak, how many such aircraft have been delivered?

[*English*]

Mr. Antonio Rodriguez Barberan: We are delivering one aircraft every two weeks. Maybe I made a mistake, but of the combined fleet of C-235 and C-295 last week I think it was 67, if I'm not wrong.

But we keep delivering planes, and we got a contract last week from the Egyptian air force for three planes for cargo, not for SAR.

But if I'm not wrong, it is 67 that we have delivered.

● (1600)

[*Translation*]

Mr. Claude Bachand: My time is just about up. Isn't that right?

[*English*]

Mr. Antonio Rodriguez Barberan: And there are 83 orders.

[*Translation*]

The Chair: Thank you.

I will now yield the floor to Mr. Harris for seven minutes.

Mr. Harris, you have the floor for seven minutes.

[*English*]

Mr. Jack Harris (St. John's East, NDP): Thank you very much for joining us.

I missed your initial presentation, but please be assured that I will read the minutes of today's meeting to hear what you had to say, because I'm very interested in this project.

Of course, as you know, we're not making any decisions at this committee about what product is best, but I certainly am glad for your interest in this project and your presentation on your aircraft.

I need to ask a couple of questions in terms of some of the other programs that we've had, which the member for Gander alluded to.

In terms of your particular aircraft, you talked about its maintenance being easy, etc. But do you have a number or percentage for its availability? If you had a fleet of aircraft available for search and rescue, what percentage of the time would they be available for use, as I think the term is used by the industry?

Mr. Antonio Rodriguez Barberan: I don't mean to escape your question, but it's a difficult question, because it depends on the level of investment you are ready to make in spare parts. This is a discussion that takes place technician to technician. Allow me to underline that—

Mr. Jack Harris: What's the range, then?

Mr. Antonio Rodriguez Barberan: We have contracted availabilities in the range of 85% to 90%, and even higher for some of our customers, to whom we are responsible for providing such availability. So that level is absolutely possible.

Mr. Jack Harris: Perhaps you have read the National Research Council report. I'm very interested in it, because our committee is doing another study on search and rescue response times. I'm sure you'll see throughout this particular report a lot of references made to differences in terms of requirements, if the response time were 30 minutes around-the-clock, or only for the 17% of usages during the three-year study period mentioned here.

Is there a difference, from your point of view, in terms of what the aircraft would be if you had to have a 30-minute response time, 24/7, year-round? Would that, in your view, affect the choice of airplane? In terms of the choice the government might make, would they get a different type of airplane or would they have different needs as a result of that?

Also, availability is an issue.

Mr. Antonio Rodriguez Barberan: I understand the difference. It's difficult to answer. When you speak about response time, you need to know the evidence in the details. It takes a technician to really understand what you mean by a certain figure in response time.

Mr. Jack Harris: In the air by 30 minutes is—

Mr. Antonio Rodriguez Barberan: The engines that our planes are using are Canadian; they are the same you are using in a Dash 8. And the avionics are also commercial. This allows you to have availability and readiness rates equivalent to those of a commercial plane, which are extremely high.

If you allow me to act a little as a salesman, I will tell you that the stronger the demand on those parameters, the better for us.

Mr. Jack Harris: The technical report mentions air speed as a factor, depending on the location of your fixed-wing aircraft. The demands seem to be rather strenuous for a certain small number of rescue missions that would extend out to the middle of the North Atlantic or to the North Pole. Would it make a difference in a choice of aircraft, in the kind of bid you would make, if the air speed were lowered?

● (1605)

Mr. Antonio Rodriguez Barberan: This document is not public; it is our response to your LOI as being ostensibly distributive. We have made a detailed analysis on the SAR requirements of the Canadian nation. We discovered that there are three different requirements. We are speaking about fixed-wing SAR as a monolithic requirement, but that is not the situation. You have three different requirements: search over water, search over mountains, and long-distance missions.

For search over mountains, you need to have low-speed capability. You design the wings to be lower-speed or higher-speed. You design for the capability of being able to fly under 150 knots, which is extremely good when you are flying the missions you are doing today with the Buffalo aircraft.

For searching over the seas, the key factor is the mission system, the electronics you have on board. When you are searching over waters, you need strong radar and strong electricals.

When you are traveling long distance, speed could be very important, to have higher-speed instead of lower-speed capabilities. But by being 20 knots faster you gain only minutes. So really, if you want to drastically improve your capabilities in rescue time, you should be thinking of proximity more than speed.

Mr. Jack Harris: As I understand it, the U.S. Coast Guard has a standard of 90 minutes from call-out to arrival on the scene within their search and rescue area. Do you contract airplanes from your system to engage in that activity within that timeframe?

Mr. Antonio Rodriguez Barberan: I cannot recall the U.S. Coast Guard requirement, but we have not contracted anything like what you mentioned. I can tell you that one of our recent awards was because of our readiness to fly.

The Chair: Thank you very much.

Now I will give the floor to Mr. Braid.

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

Thank you to our company representatives for being here this afternoon.

Mr. Garnier and Mr. Rodriguez, you've indicated that you sold 83 units of the C-295 internationally. Over what period of time have those 83 units been sold, approximately?

Mr. Antonio Rodriguez Barberan: If you will allow me, the CN-235 and the C-295 are the same family of planes. It's like the Dash 8, if you have seen the commercial. We started to produce the 235, if I am not wrong, in the late 1980s—I think it was 1987 or 1989. Basically, we are producing close to 20 planes per year. We have sold 350. The first 295 was delivered, if I am not wrong, in 2003, so we are talking about 83 planes since 2003.

Mr. Peter Braid: Thank you.

I'm looking at your country client list here. As we've touched on, from a weather or a climate perspective, the two similar countries to Canada would be Finland and Chile, to some extent. In both of those cases, each country has three planes each. In the case of those two countries, is this plane their only search and rescue vehicle, or does it complement other planes or aircraft?

Mr. Antonio Rodriguez Barberan: In the case of Chile, it is basically maritime patrol. It's a very specific maritime patrol. You could read it in the press, but I wouldn't like to disclose the type of activity they have. There you see some other planes—by the way, manufactured by us—which are the C-212, a very small plane that we also have in our inventory.

In the case of the Finns, it is basically transport planes, but they are using one they have acquired this year, 2010, for a very specific mission. Our plane is a multi-role plane.

If you will allow me to recall, you also have Portugal. Of course Portugal is not a place where you have cold weather. However, this is a plane they are using very much to deploy to the middle of the Atlantic with search and rescue. They have to go through the same types of storms that you have in the Atlantic.

● (1610)

Mr. Peter Braid: How would you describe the capabilities of your plane as compared to either the Buffalo or the Hercules we're using in Canada today?

Mr. Antonio Rodriguez Barberan: Regarding the Buffalo specifically, when I was a boy the Spanish air force used to have Caribous, which were the predecessor of the Buffalo. Our planes have been following the doctrine of the Caribous and the Buffaloes. They are very similar, except they have been designed 40 years later.

Basically it's a plane with stall characteristics, capable of landing on unpaved runways with very low stall speed. They're a little bit bigger. They're pressurized and they have a higher speed than the Buffalo, but basically the philosophy and the concept of the Buffalo is inherited by our planes.

Regarding the C-130 Hercules, we like to say they are complementary. The U.S. Coast Guard is using the Hercules and CN-235 for different missions.

Mr. Peter Braid: From a training perspective, then, how would the transition work to the use of your plane, and what benefits and challenges would there be from a training perspective?

Mr. Antonio Rodriguez Barberan: They will need to get the right certificate. The Hercules and the CN-235 or the C-295 have basic types of certificates, but any Hercules pilot will be able to fly any of our planes. They will get the type of certificate after training at our facilities with our simulators in Seville—or it could be somewhere else—in a question of weeks. It is not a major challenge.

Mr. Peter Braid: Thank you.

Changing gears somewhat to industrial benefits, you mentioned in your presentation that you would endeavour to maximize industrial benefits in Canada. Generally, how would you do that, and specifically, how would high-tech companies in Canada benefit?

Mr. Antonio Rodriguez Barberan: First of all, let me underline once more that we have a unique characteristic in our engines, our avionics, and our training centre. This is something that goes to any of the 83 planes we have sold and to the hundreds we are planning to sell. The second thing is that we are part of Airbus. Airbus already has certain plans for growth. Mr. Garnier can speak further on this. We have some plans to increase our supply chain in Canada. We are discussing that with several companies.

For instance, we talked about mission systems. We need to find a local company that would help us to Canadianize and for maintenance of the software. Also, on the sensor side, there is a Canadian company that is very well known that today is, by chance, a second choice when we are selling overseas. It's obvious that the decision in favour of the C-295 will place us in a much better position in our exports worldwide.

Mr. Peter Braid: Thank you.

Mr. Antonio Rodriguez Barberan: And of course in-service support is planned to be done with a local company, and we are having already some discussions in that regard.

● (1615)

[*Translation*]

The Chair: Thank you.

[*English*]

Now I will give the floor to the Liberal Party of Canada.

Mr. Scott Simms, you have the floor.

[*Translation*]

Mr. Scott Simms: Thank you, Mr. Chair.

[*English*]

I want to read you a story from *Defence Watch*, a publication here in this country. This was written about a year and a half ago. It says this:

> At a meeting with Air Force officers and defence industry representatives in Ottawa last week

—that was then July 2009—

> the extent of the paralysis that plagues a $3 billion Fixed Wing Search and Rescue project was front and centre.
>
> An Air Force officer was running through the various equipment projects on the go while images were projected on to a screen.

When the slide came for FWSAR, the screen was filled with a giant question mark.

That was according to the publication.

The gist of the story is that the day did not go well. There was an air of confusion about it. There were people, from the industry's perspective, coming out saying that they weren't sure what it was and what the timing would be.

What have your dealings been thus far in the communication between you and the government on how you go about this procurement?

Mr. Antonio Rodriguez Barberan: If I understood your question, basically, we have officially answered the letter of intent, which we are presenting to you. It is quite a detailed view on the perspective from the fixed-wing SAR. But you have to understand that it is with full respect of decisions you are taking on the procurement. The only thing we can do is try to be as good as we can be to convince the Canadian officials that it is worth proceeding with this project. I cannot elaborate further on that.

Mr. Scott Simms: Under traditional methods, one of the ways of procurement we enjoy so much is the dollar-for-dollar requirement: we would spend $3 billion on your plane, and you'd be willing to spend $3 billion in this country. How do you feel about that?

Mr. Antonio Rodriguez Barberan: First of all, we like very much the value-for-money approach. I think we are very good when you analyze our products from a value standpoint—value for money. Regarding what you have, you leave in the country. I think that we will be second to none in IRBs and benefits for the country. Being Airbus, being EADS, we are extremely well placed to leave....

Mr. Scott Simms: You already have 20%, you said.

Mr. Antonio Rodriguez Barberan: It's not only that. We have a huge supply chain. We are in a position to be extremely attractive for the industry.

Mr. Scott Simms: Mr. Chair, I'd like to pass my question to Mr. Bagnell.

Hon. Larry Bagnell (Yukon, Lib.): I've been pushing this for five years, but I missed the first part, so I might ask something you've already been asked.

Do you think the competition is fair? What has taken so long? This should have been done five years ago. Are you convinced that this will be completed in the near future so that we can have some search and rescue planes?

Mr. Antonio Rodriguez Barberan: As I said, I am a pure foreign industrialist, so the only thing I can do is to make my proposal as good as I can in order to convince you, Canadian officers, that my proposal is good for your country. I am not in a position to comment further.

Hon. Larry Bagnell: What's the farthest north that you have a plane stationed permanently?

Mr. Antonio Rodriguez Barberan: It is in Finland. There is a permanent base in the southern part of Finland, but there are some deployments of planes in the northern part of Finland, north of the Arctic Circle.

[*Translation*]

The Chair: Thank you very much.

[*English*]

Now I will give the floor to Mr. Boughen.

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

Let me add my voice of welcome to the panel.

In your brochure you talk about the C-295. I'm wondering what kinds of limitations the lack of pressurization in the cabin on the C-295 imposes upon its flight.

● (1620)

Mr. Antonio Rodriguez Barberan: The pressurization in the cabin is limited by definition. You cannot have infinite. It is fully certified for passenger transportation. So there is no limitation whatsoever for normal fixed-wing SAR procedures.

Simply take into consideration, for instance, that the Buffalo that you are using today with such great success is an unpressurized plane. We are offering a fully pressurized cabin, compatible with all the civil standards. In fact, the plane is civil-certified.

Mr. Ray Boughen: I have some questions about the manufacturing of the aircraft. Does your company have any manufacturing capabilities in Canada?

Mr. Hervé Garnier: Yes, we have some. We have a helicopter assembly factory in Fort Erie, Ontario. We have a composite factory in Lunenburg, Nova Scotia. We have Plant CML, which is a company involved in secure communications and 9/11-like control rooms. We have 700 employees today in Canada.

It's clear that if the fixed-wing SAR project is allocated to Airbus Military, we may want to expand, as appropriate, this industrial baseline here in Canada, where there are different options that we will consider. This is on top of cooperation with our Canadian partners. In addition to those mentioned, we have Pratt & Whitney, CAE, Telus Canada, but also others, like the ISS support and maybe some manufacturing with specific companies, large or small, east or west. It depends on what we will be able to find in our study.

Basically, we are totally committed to comply with the IRB rules. We know them. We are ready to be totally compliant with the rules edicted by Industry Canada.

Mr. Ray Boughen: One last question for you gentlemen. Can you provide us some specific examples of where your SAR plane is being used today around the world?

Mr. Antonio Rodriguez Barberan: Portugal, for instance. We have it in Brazil. This is the C-295. If you consider the family of products, they are in Chile, Ecuador, Colombia, Mexico, the United States, Ireland, Turkey, of course Spain, United Arab Emirates, Indonesia, Malaysia, and Korea. So we have a very, very broad.... More than 100 planes.

The Chair: We have some time. I will give the floor to Monsieur Blais.

[*Translation*]

Mr. Raynald Blais (Gaspésie—Îles-de-la-Madeleine, BQ): Thank you, Mr. Chair.

Good afternoon.

I just want to point out that as a rule, I sit on the Standing Committee on Fisheries and Oceans. So then, you can easily understand why I'm very interested in the fishery and in search and rescue operations.

I was invited to work with Mr. Bachand on this issue on the national defence committee. I am pleased to be here and interested in hearing what you have to say.

First, I have a question of a technical nature. I will follow that up with a more general one.

You mention in your submissions that your aircraft can land on short runways. In concrete terms, what exactly does that mean? How many hundreds of feet of runway are we talking about? And under what types of conditions can they land? That is my technical question.

As for my general question, compared to existing models, how does your aircraft, the C-295, work better, regardless of the situation? It really doesn't matter what type of situation exists, since search and rescue aircraft always respond to extremely urgent situations where time is of the essence and where temperature and the elements can affect the success, or failure, of an operation.

What can you say to convince me that compared to existing models, your aircraft will ensure a better outcome? How will it make things better?

● (1625)

[*English*]

Mr. Antonio Rodriguez Barberan: First, typically you can talk about runways as being less than one kilometre long. You could land on much shorter than that, but typically an unpaved runway of one kilometre is something that we can use. If you want to have additional information, you know that it depends on the maximum takeoff weight of the aircraft. There are some charts that give you the distance of the runway, but typically as a general statement something in the ratio of one kilometre is good for the normal operation of the plane.

How can we ameliorate the present fixed-wing SAR? Dramatically, I would say. First of all, in areas like availability of the plane, with full respect to the Buffaloes, you are talking about engines and systems that were designed 40 or 50 years ago, compared with state-of-the-art engines and systems that would give you an unbelievable readiness, which is not available today.

The second thing is the mission system. You can imagine that the search using a mission system would be 500 times as effective as the typical visual search that you are using today. I repeat, 500 is the factor that the technicians are using. You are jumping ahead with the technology by 50 years, and of course in terms of life cycle, first because physically what you are doing, with full respect, is sometimes using planes not adapted for search and rescue, with maintenance and operation costs that are three times those for the C-295. So you have flexibility, 500 times greater effectiveness, and life-cycle costs.

[*Translation*]

Mr. Raynald Blais: I now have a somewhat more difficult question for you.

The Chair: Your time is up. You will have to wait until the next round.

Thank you very much, Mr. Blais.

I will now give the floor to Mr. Hawn.

[*English*]

Hon. Laurie Hawn (Edmonton Centre, CPC): Thank you, Chair.

Thank you, gentlemen.

I have a couple of quick questions. I don't have a whole bunch of time.

Talk about your cargo compartment a little bit. Can you handle NATO-standard pallets, the 88-inch by 88-inch by 108-inch pallets? Can you handle those?

Mr. Antonio Rodriguez Barberan: Yes.

Hon. Laurie Hawn: Can you talk about any of your potential ISS—integrated service support—partners, or is that proprietary at this point?

Mr. Antonio Rodriguez Barberan: It's too early. We are discussing with several. It would be extremely impolite from my side if—

Hon. Laurie Hawn: I understand.

How confident are you—and I think I know the answer—for a similar fleet size, about being able to deliver the same kind of service that we have today with our combination of Buffaloes and Hercules?

Mr. Antonio Rodriguez Barberan: We are very confident. First of all, as we were mentioning, the first thing is the availabilty of the planes. You will be having availability in the range of 90%. I want to be humble in my answer, but today adapting a modern search and rescue system will multiply readiness, it will be 500 times as effective, and it will drastically decrease the life-cycle costs. There is the matter of the number of planes, for sure, but I'm sure you want to cover the whole of Canada, and we need to determine the number of planes with care.

Hon. Laurie Hawn: This is hypothetical, but how would you compare the C-295 to a brand-new Buffalo—never mind that they're 40 years old?

Mr. Antonio Rodriguez Barberan: In the hypothetical case that there will be a brand-new Buffalo, one of your colleagues was asking me if the pressurization of my plane is.... The Buffalo is an unpressurized plane, to start with, which means you cannot fly above 18,000 feet, if I'm not wrong. So you would have a huge problem to fly a long distance or over mountains. Airspeed is higher, and the jump in capabilities.... It is a new world. Even in the hypothetical case that at the end you can bring an old platform to new, with full respect to the Buffalo, which is a plane that aeronautical engineers love, and is close to our hearts, it's an old lady.

● (1630)

Hon. Laurie Hawn: If somebody were to purchase your aircraft off the shelf, what's your general timeframe from contract signing to delivery?

Mr. Antonio Rodriguez Barberan: Since we launched the CN-235—and the CN-235 at that time was series 10, and now it's series 300, and we are in the C-295 now—we have never discontinued the production line. So we have a production line in the range of 20 planes per year. Having a production line available, typically for a transport plane you are talking about one year. If you are talking about search and rescue, typically you are talking about 18 months. The factor to take into consideration is the lead time for the sensors. Sometimes producing radar takes longer than producing a plane. But typically, it's between a year and a year and a half.

Hon. Laurie Hawn: You mentioned it, but could you just expand a little bit on your bad weather SAR capability, as opposed to the strictly visual?

Mr. Antonio Rodriguez Barberan: First of all, our aircraft is certified under civilian rules. The CN-235 was certified in Canada for all weather types of operations. So at the end, at issue was really to have a stamp. You don't need to believe me; believe the authorities. For the rest, at the end, this is why a visual search.... You mentioned the Buffaloes. In a visual search in bad weather in the Buffalos you are simply lost. It's not the people on the ground who are lost; you are lost. So in bad weather you need to have search radar or infrared. It's the only way. This is the reason you need to have this type of new generation of equipment, to set it for bad weather types of applications.

Hon. Laurie Hawn: Thank you.

[*Translation*]

The Chair: Thank you very much.

Thank you for joining us today, Mr. Garnier and Mr. Rodriguez.

I will now suspend the proceedings for three minutes, to allow the next witnesses time to take their place. Thank you.

● _____ (Pause) _____ ●

● (1635)

The Chair: The 35th meeting of the committee is now back in session. We are honoured to welcome Mr. Massimo Tarantola, Chief Operating Officer, Alenia North America, along with Mr. Marcelo Cianciaruso, Senior Vice-President, Alenia North America Canada Co. Lastly, from Bell Helicopter Textron, we have with us Mr. Bob Carrese, Executive Director, and Mr. Benoît Arcand, Director, Canadian Government Programs.

Each company will have 10 minutes for their presentation. We will hear first from the representatives of Alenia North America, and then from the Bell Helicopter Textron officials.

[*English*]

Mr. Tarantola, you have ten minutes.

Mr. Massimo Tarantola (Chief Operating Officer, Alenia North America Inc.): Thank you.

Mr. Chairman, members of the committee, I am Massimo Tarantola, chief operating officer of Alenia North America. I would like to thank you for giving us the opportunity to discuss the fixed-wing SAR program, and Alenia's C-27J Spartan solution.

I will first introduce my colleagues. Marcello Cianciaruso is the senior vice-president of Alenia North America Canada. Mr. Christopher Schreiber is vice-president of business development.

I will begin by giving you some information about our company. Alenia North America was established by Alenia Aeronautica to further expand the industrial and commercial presence of the group in Canada and the United States. Alenia Aeronautica is a European leader in aeronautics and a trusted partner to the world's leading aerospace companies.

Our shareholder Finmeccanica, one of the world's leaders in the defence industry, provides industrial and strategic control over more than 200 subsidiaries in aeronautics, helicopters, defence electronics, defence systems, space, transport, and energy. We employ more than 73,000 people around the world, with over 12,000 in North America, and had revenues of $25 billion U.S. in 2009.

Alenia understands the requirement to provide search and rescue services for the vast area that extends from the North Pole to the Canada-U.S. border, and from the Atlantic Ocean to the Pacific Ocean. This large area, with very diverse geography and severe climate, makes this a challenging mission to perform. As such, Canada's SAR requirements form a unique set of demands for fixed-wing aircraft. Alenia also understands, from the 2009 industry day and previous government statements, that the fixed-wing aircraft currently used in Canada for SAR are reaching the end of their useful lives, and we are ready to satisfy your requirements.

Alenia firmly believes that the C-27J Spartan is the platform that best meets Canada's FWSAR needs. It is a versatile, multi-mission, twin-engine turboprop aircraft that, thanks to a true military design, offers a unique blend of SAR capabilities.

The C-27J is in full production and is in use by the air forces in the United States, Greece, Lithuania, Italy, Bulgaria, Romania, and Morocco. There have been 81 aircraft ordered, and 35 have been delivered. The aircraft has both civil and military certifications.

Alenia has vast experience in the development and fielding of search and rescue platforms. It has missionized aircraft for special operations, including maritime patrol, coastal surveillance, and anti-submarine warfare using the platform of another one of our products, the ATR. We have customers in Libya, Nigeria, and Turkey, and it is used by the Italian coast guard, customs, and navy.

However, in the case of Canada we have elected to propose the C-27J over the ATR due to its unique military and operational requirements. The C-27J is an aircraft designed from the beginning for military operations. It is robust and reliable, with redundant safety features and low workload for the crew. The reliability and maintainability of the C-27J have been proven in tough and difficult operations in Afghanistan and various northern European countries. According to the Italian air force, the C-27J has demonstrated an aircraft availability and mission capability in Afghanistan that have met or exceeded its design targets.

Alenia's core capabilities and competencies, along with the C-27J's key features, enable Alenia Aeronautica to participate in any type of competition around the world. In fact, the C-27J has been selected over all other competitors as the superior product in the most demanding competitions with the most rigorous requirements. One example is the U.S. joint cargo aircraft program.

I will quickly summarize the main characteristics of the C-27J. It can achieve high speed during transition to search the search area, which is a valuable asset that enhances rescue possibilities. Its cruising speed is similar to that of the C-130J, higher than the old C-130 fleet currently used in the eastern SAR regions, and at least 50 knots higher than any other two-engine potential competitors. At the same time, the C-27J's low-speed handling allows patrolling at optimum search and rescue speeds with confidence and safety, particularly in the mountains of western Canada.

The cockpit has 16 windows, so outside viewing is excellent and the pilots can effectively contribute during the search, helping the operators who are scanning parallel to and directly behind the aircraft using two wide bubble windows mounted on the fuselage.

The cargo compartment is extremely wide—the best in its category—so that consoles, emergency kits, rescue crew, paratroops, rubber boats, and whatever is needed can be accommodated easily, leaving extra room to also move and rest during the long flight time required by the search and rescue mission.

● (1640)

The well-proven Rolls-Royce engine has enough power, even in the remote event that one engine fails, to safely recover the aircraft without endangering the crew or aircraft survivability. Handling with one engine in operation is extremely easy and safe, and has been proven in the past to Canadian air force pilots who flew the C-27J during our demo tour in Canada in 2004.

The aircraft is fully certified to operate under icy conditions, fulfilling the most updated and demanding requirements. In addition, military certification validated the C-27J operation on the ground and in the air, in severe weather conditions common to northern Canada. Furthermore, the fuel availability and the engine fuel consumption allow for long patrolling, making the C-27J a very efficient and cost-effective platform. The avionic suite of modern technology is comprehensive, redundant, and exceptionally accurate.

To further improve the aircraft's capability and effectiveness, especially in bad weather, the C-27J uses the same high-performance radar as the C-130J. The auxilliary power unit, APU, enables the C-27J to effectively operate autonomously in remote areas. Semi-prepared and unprepared short runways can be utilized for takeoff and landing, further supporting rescue efforts, and includes medical evacuation of up to 36 patients. As such, the C-27J would be an excellent choice for accommodating SAR missions, as well as performing operations in the north—for example, in Yellowknife, Iqaluit, and areas where external support is not available.

The C-27J's unique fuel system enables helicopters to be refueled on the ground, further supporting search and rescue operations and interoperability among Canadian search and rescue components.

The C-27J is a modern aircraft design, utilizing modern technologies and processes that significantly lower the cost of ownership. The aircraft is supported through an on-commission maintenance that requires no depot-level maintenance. Its excellent maintainability and reliability, built-in test capability, and ground-based data systems reduce aircraft downtime, spare parts, and support requirement needs, lowering rating costs and increasing aircraft availability. The commonality with the Canadian C-130J—engines, propellers, avionics—in spares, ground support equipment, training, and maintenance further contribute to reduction in support calls for your nation.

An important part of any procurement program is the industrial regional benefits, the IRB plan. Alenia is committed to implementing a robust IRB plan that is fully compliant with Canadian law and regulations. We understand the rules and we are ready and eagerly waiting to launch the program. The launch of the fixed-wing SAR program in Canada would provide work that would support thousands of high-quality jobs with direct industrial regional benefits, an outstanding stimulus for Canada's aerospace and defence sector. Alenia's IRB plan will equal or exceed 100% of the value of the project contract through direct or indirect benefits.

Our approach will include dollar-for-dollar high-value engineering and technical opportunities for Canadian companies in every region. Alenia has already satisfied major work packages with Canadian industry for the fixed-wing SAR program. These packages include air crew training, 20-plus years of in-service support, the missionization of the aircraft that includes the SAR mission kit, software integration, sensors, communication, mission systems. Additionally, direct benefits may come from further integration of Canadian companies into the C-27J or other Finmeccanica supply chain systems. These are significant areas of involvement in the program that are high-tech and long-term.

Alenia is also focused on establishing long-term collaboration and partnerships. In the arena of indirect benefits, these collaborations can involve Canadian research centres and universities and include technology transfer to Canadian industry for future programs.

We also have a proven track record of collaboration with Canadian companies. Alenia is a risk-sharing partner with Bombardier on the CSeries jet. Finmeccanica, through AgustaWestland, produced industrial regional benefits of approximately $1 billion Canadian, satisfying the SAR requirement two years before it was required.

Alenia and AgustaWestland have procured over $3 billion in engines from Pratt & Whitney of Canada. In the transportation arena, Ansaldo, we build trains. Another company within the Finmeccanica group is partnered with Bombardier for high-speed trains, with which we just won a competition in Italy.

● (1645)

Other examples include cooperation with MacDonald, Dettwiler and Associates for Radarsat-2 and with CAE for helicopter flight training, the M-346, and the C-27J Italian air force simulator.

In summary, Alenia believes that the C-27J Spartan is the best valid solution for the Canadian fixed-wing program. No other aircraft in its class can produce such a unique combination of speed, manoeuvrability, operations, and flexibility, and no other potential competitor can provide the wide range of excellent industrial benefits that it can.

Thank you.

The Chair: Thank you very much.

I will now give the floor to Bell Helicopter. Monsieur Arcand, you have the floor for ten minutes.

[*Translation*]

Mr. Benoît Arcand (Director, Canadian Government Programs, Bell Helicopter Textron Inc.): Thank you, Mr. Chair.

Mr. Chair, honourable members of the committee, my name is Benoît Arcand and I am the director responsible for Canadian Government Programs at Bell Helicopter Textron Canada, the only Canadian helicopter manufacturer located in Mirabel, Quebec. On behalf of Bell Helicopter and its 175 suppliers across every region of Canada, I thank you for the opportunity to be here today.

[*English*]

This afternoon I'm accompanied by Mr. Pete Peterson, vice-president of Boeing Canada Operations Limited. In addition, I'm accompanied by Mr. Bob Carrese, executive director of business development for the Bell Boeing V-22 program.

Mr. Carrese will be proceeding with the actual presentation of what we believe is the best fixed-wing search and rescue solution for the Canadian government and for the citizens of this great country: the V-22 Osprey.

[*Translation*]

Without further ado, I will turn the floor over to Mr. Carrese.

● (1650)

[*English*]

Mr. Bob Carrese (Executive Director, V-22 Business Development, Bell Helicopter Textron Inc.): Thank you.

Mr. Chairman and honourable members, it's a pleasure to be here today and present to you what we believe to be a compelling solution to the Canadian government's fixed-wing search and rescue program, the V-22 Osprey.

The V-22 successfully blends, in one platform, the high-speed, long-range, long-endurance search and assist capability of fixed-wing transports with the manoeuvrability and vertical flight rescue capabilities of SAR helicopters. Integrating an appropriate number of these exceptional and proven aircraft into the Canadian Forces rescue community maximizes the level of SAR service by dramatically reducing time to rescue while reducing total mission costs.

The V-22 is a fixed-wing aircraft with prop rotors at each wing tip that function as both propellers and rotors. The prop rotors, along with our engines and gear boxes, are mounted in nacelles that rotate from a vertical position in the hovering mode to a horizontal position in the airplane mode. We can also operate routinely at intermediate and nacelle angles to optimize the aircraft's performance. There's a graphic of the three different configurations there in your package.

An interconnect driveshaft between the nacelles allows one engine inoperative performance. Because the blades are counter-rotating, you do not have an adverse yaw situation with one engine. Other key features include a fully marinized structure and engines for continuous corrosion resistant operations in a maritime environment; extensive use of composites to increase resistance to corrosion fatigue; state-of-the-art crash-worthiness features in the areas of structural design, load attenuation, passenger safety, payload retention, fire suppression, and emergency escape; triple redundant digital fly-by-wire flight controls and hydraulic systems; Rolls-Royce AE 1107C engines, which share the same engine core as found on the CC-130J; modern avionics with glass cockpit displays; a number of radar options to include weather, maritime search, or terrain-following and terrain avoidance; an ice protection system, which includes both anti-ice and de-ice capabilities certified into known moderate icing—and most of our testing of that system was actually performed in Shearwater; and an open passenger and cargo cabin with roller rails, winch, hoist, and a rear loading ramp to provide the SAR techs with the clearance required to safely perform all necessary ground and airborne tasks.

The V-22 program is in full production. We're delivering over 400 aircraft to the U.S. military and concurrently executing a five-year comprehensive fleet support sustainment package. The fleet has logged over 95,000 flight hours, with approximately 80% of those in the last five years. The aircraft has been globally deployed performing humanitarian relief, governance, and combat missions in Honduras, Haiti, Pakistan, North Africa, Iraq, and Afghanistan.

Why are we different? While many aircraft are capable of long-range, high-speed, fixed-wing search and assist, only the V-22 has the ability to hover or land vertically to complete the rescue in extremely austere environments and then transfer the rescuee directly to a care facility.

The V-22's ability to operate independent of runways also allows forward basing with minimal infrastructure.

Additional inherent capabilities that facilitate SAR missions include a ground-based mission planning system that overlays map data with weather, navigation, and mission scenario information to determine mission feasibility and safety. It also generates primary and alternate flight plans and is used for post-flight debriefing functions. It includes a flight director that provides uncoupled guidance commands as well as coupled or autopilot engagements for several flight path, inertial navigation, and electronic navigation modes, including discrete search patterns.

The V-22 cabin concept addresses the most critical rescue and system operator needs, with ample communications, sensor integration, equipment stowage, litter capacity, seating, medical services equipment to include 100% oxygen, and external cargo capability. If required, SAR techs may parachute to a rescue site or packages may be dropped using the proven joint precision air drop system.

● (1655)

The V-22 can also be aerial-refueled—there's a picture of this at the bottom of page four—providing virtually unlimited range or endurance. The Osprey is compatible with existing Canadian refueling fleet aircraft.

In addition to its unique performance attributes, the V-22 provides a cost-efficient solution in a time of financial constraints. Total mission costs include the allocated costs of many complementary elements in addition to direct operating costs of the platform itself. Tiltrotor technology greatly reduces the need for many of the support structures and systems, providing a substantially lower mission cost when compared with legacy partnerships of today.

The V-22 also brings a number of support-type improvements to the solution, particularly in the area of training. Training approach emphasizes the use of high-quality simulators, which reduce by approximately 70% the need for live aircraft training flights. Missions can be flown typically in much less total time utilizing fewer assets, resulting in lower requirements for fuel, oil, and the like and subsequently lowering total emissions and noise pollution.

In conclusion, we believe that the Osprey's unique capabilities offer the opportunity to greatly enhance the mission effectiveness of the Canadian search and rescue community. By rapidly providing immediate assistance and rescue with one platform, the V-22 complements a world-class community of professionals that will save more lives and utilize fewer assets.

Thank you, Mr. Chairman and honourable members.

The Chair: Thank you very much.

Now I will give the floor to Mr. Simms for seven minutes.

Mr. Scott Simms: Merci, monsieur.

I don't want to start a whole new line of questioning as we did with the prior witnesses, but I would like you very briefly, because time is of the essence, to give me an example, for both the C-27 and the V-22, of where you're utilized right now in a search and rescue capacity.

Let's start with the C-27.

Mr. Marcello Cianciaruso (Senior Vice-President, Canadian Programs, Alenia North America Canada Co.): Alenia has vast experience modifying aircraft in order to install search and rescue maritime patrol sensors and anti-submarine warfare equipment. We have also developed, with another product, which is the ATR, a series of different configurations with the latest technology for search and rescue. We have long experience in installing those and basically creating a search and rescue aircraft.

Mr. Scott Simms: Can you give me an example of where that is taking place?

Mr. Marcello Cianciaruso: Yes, it's particularly for Libya, Nigeria, Turkey, for the Italian navy—

Mr. Scott Simms: Okay. I don't mean to cut you off, but I'm short on time.

Could I just go over to the V-22?

Mr. Bob Carrese: Yes, sir.

The search and rescue opportunities have been primarily in the United States. They've supported search and rescue missions in the mountains in Colorado and also in the Gulf of Mexico when the hurricane was present.

More operationally focused right now, two weeks ago it flew a medical patient from a ship in the middle of the Indian Ocean 570 miles to a hospital in Kenya.

Mr. Scott Simms: Okay. Thank you.

Let me return to my previous line of questioning, which is to say that in this country, the unique circumstance we have is a harsh climate; it's cold weather, without doubt. You have touched upon this. But the second element is that it's a vast area of land.

What competitive advantage can you bring to this for someone who...? Let's say you have an aircraft that has been told to go to the offshore of Newfoundland and Labrador and at the same time to the southern Arctic and then back towards eastern Quebec. This is a vast area of land.

What does your aircraft, the C-27, bring to the table to alleviate or improve the situation, if necessary?

● (1700)

Mr. Marcello Cianciaruso: One of the key points of our airplane is that basically it flies at the same speed as the C-130 that is currently performing the search and rescue in the western area, where you need speed and range. Then, on the west coast, as you say, you need a very manoeuvrable aircraft. Our aircraft has great performance at low speed, as we said earlier. Basically, with one platform you can do the job that's currently being done by two platforms.

In terms of the vast territory, we can leave from Trenton, go to the North Pole with one stop in ten hours, do a search at the North Pole of about three hours, then go to Alert as a usable airfield, basically doing everything in 15 hours, which is one of the key points that DND specified: to have one mission within the search and rescue time for a crew, which is 15 hours.

Mr. Scott Simms: Okay. I don't mean to cut you off, but I want to give ample time to....

Mr. Bob Carrese: Essentially we can do a lot of the same things, but in addition we do not have the requirement for a runway. We can operate from any place that's large enough to hold us and that has some fuel available. The infrastructure requirements are minimal; the crew can do whatever maintenance they need to do on the aircraft. If there were a tanker available, you could literally stay in the air for as long as you can stand it.

The aircraft has been tested to 120 degrees Fahrenheit; operationally it's been tested down to minus 69 degrees. It has already proven that it can operate in the extremes.

Mr. Scott Simms: What about wind speeds, which are always of course a factor in takeoff, landing, and taxiing especially? What are your certification limits for safe taxiing? Are you able to handle it, given the strong winds we have off either coast—or even mountain turbulence, for that matter?

Mr. Marcello Cianciaruso: Basically those limits are related to the propeller limits. We have the same propulsion system as the C-130J, specifically the same propeller, so we have basically the same capability in terms of wind speed as the C-130J that you recently procured.

I didn't mention it before, but our aircraft is fully civil-certified and fully military-certified in extreme conditions, and especially for ice. Related to the previous question, we did additional tests in very demanding ice conditions.

Mr. Bob Carrese: As a vertical takeoff aircraft, the V-22 has a rotor system that is very stiff; there's not a lot of flapping, as in regular helicopters. The specification we were designed to is 45 knots in any direction when operating off a ship. We can also roll off a runway at a number of intermediate nacelle angles to mitigate winds.

Mr. Scott Simms: This is a problem that I've been hearing on the ground, since I live close to one of the search and rescue bases: “Parts for the CH-101 helicopter have been a significant issue and have major consequences on operational availability.” I'm quoting someone, but I won't mention his name.

What are your current serviceability rates, and are parts readily available in North America?

This is for the C-27.

Mr. Massimo Tarantola: I'll start with the last one, which is easier. Our airplane is 60% American content, so the parts are readily available. We are already servicing a fleet that goes up to 38 joint cargo aircraft, and we have a maintenance centre, maintenance organization, training, and we're fielding aircraft on the ground.

So the parts are available, because we buy American. It's more a problem to transport them to Italy and other regions.

As far as serviceability goes, it really depends on the contract you make with us. There are cases, such as with the U.S. air force, in which we have a contract that is hands off. We basically provide the maintainers; we provide the spares; we provide training. All the air —it was the army, though now it has transitioned to the air force.... Just the pilot arrives, for flying.

In that case, we've been contracted for 80-plus percent. But this is what you're contracted for: you can get 85%; you can go to 70%. The level depends on the investment you want to make. Normally we go for 80% or 85% availability rates in contracts, when it's all in our hands.

Clearly, if you want to do it on your own, as many clients do, such as the Italians, we are contracted for an availability rate. So if the part is available to you, that percentage...which is another way to say 80% to 85% availability.

● (1705)

The Chair: Bell, do you have a comment?

Mr. Bob Carrese: The specification rate is 82% for the V-22. Currently, with the operations in Afghanistan, we're not seeing that percentage, but we are putting a disciplined approach to it to address that extreme environment and are seeing the trends in percentages going up every month. There are additional spares being put on the shelves now, and by the time this program were to be enacted, there should be ample spares in place to support the aircraft.

We're also standing up a depot at the same time. That's another option, something to look at in the execution of this program.

The Chair: Thank you very much.

I will give the floor to Mr. Bachand.

[*Translation*]

Mr. Claude Bachand: Thank you, Mr. Chair. I'd like to welcome my friends seated at the table. I'd like to start by repeating what I said earlier. The Bloc Québécois considers it a shame that the search and rescue program no longer appears to be one of the government's priorities. This program was announced six years ago. We've already seen all kinds of developments. It is the only program for civilians in distress. For my political party, it is very important that the program move forward. The first step is being taken today. You are part of industry and you're here to explain to us your platform and its capabilities.

Obviously, we will need to continue putting pressure on the government, to give private industry as clear a picture as possible of the program's future. We cannot leave matters hanging like this for long.

Earlier, I asked one of the previous witnesses some questions about the National Research Council. On reading up on the subject, I discovered something important about the so-called Statement of Operational Requirement. I'd like to quote three excerpts from NRC's review:

“The SOR as written is over-constrained.” That is one of the conclusions reached. The review goes on to say this: “A principal recommendation is that the SOR be amended to better reflect a capability-based requirements rationale rather than a platform-centric approach.”

And finally: “NRC recommends that the FWSAR SOR be amended in light of the review documented here.”

I don't know if SORs are often amended. When the government announces, as it did in 2004 and 2006, that it is planning to develop new fixed wing search and rescue capability, your company usually gets down to work and examines the government's requirements. The process is launched. The SOR is published and all companies endeavour to comply with the terms of the Statement of Operational Requirement.

How do you feel about the proposed amendments? I find it odd that DND would release an SOR and, to save time, would then ask NRC to conduct its own review. Ultimately, NRC concludes that the SOR should be amended. Isn't that a problem for some of you? If the government follows through on NRC's recommendation, wouldn't it be unfair to those companies that have already made an effort to comply with the terms of the initial SOR?

● (1710)

[*English*]

Mr. Marcello Cianciaruso: Of course the requirements are in the hands of the government. The government debates on the needs and decides which way they want to go. We cannot comment on the requirements because they are coming from the government based on the needs.

What we can say for sure is that we have a good solution, as we explained at the beginning. In terms of the platform, we know we have the range, the speed, the visibility, and the right sensors, and the certification that allows us to go in all these very demanding geographic areas and also in these very rough climates. Basically what I can tell you is that we have put together a good solution on the technical side and on the industrial side. We are waiting for the government to make a decision.

I think we are ready. We hope the government will release the official bid as soon as possible. It's up to them to decide the requirements.

Mr. Bob Carrese: I would say that for the Bell-Boeing team, it's not very difficult. I say this because we're already challenged every time we propose our solution, because all of the requirements writers write what they know. So they ask for a plane that goes 10% faster. They ask for a helicopter that goes 20 more miles. I'm trying to change the CONOPS, the concept of operations, for your mission. In a way, a paradigm shift is needed to accept that. So are we a helicopter? Are we a fixed wing? Yes.

To me, most of the requirements I see are not written for a tilt rotor anyway. So you can change them again, and my value proposition will remain the same. I am providing you search and rescue, long range, with one platform.

[*Translation*]

Mr. Claude Bachand: Earlier, I discussed HLMC, or High Level Mandatory Capability, with one of the previous witnesses. It is recommended in the report that requirements presently listed as “Tier 1 rated” be upgraded to HLMC. We talked about a few requirements, and I'd like to discuss a few more with you, as I didn't have time earlier to do so.

Do you have a problem with, among other things, the life-expectancy requirement? I believe NRC is recommending a 30-year life-expectancy. Do your respective platforms satisfy the 30-year life-expectancy requirement recommended by NRC?

[*English*]

Mr. Massimo Tarantola: I'll start.

If I understood the question correctly, the answer is simply no, in the sense that our product is designed for a life cycle of 30 years, and therefore all our air forces.... And even when we get to the limit, as aircraft now tend to become older and older, there are always ways to look at the cycles that have been utilized and extend their life. We've been used to doing that. We have F-104s that just retired in Italy that flew for 50 years. So we've been very good with life extension programs like that. The predecessor of the C-27J and C-27A, which is the G.222, we just bought back from the Italian air force. We are reconditioning them and restoring and selling them as brand new, with zero hours, to the U.S. air force for Afghanistan.

So we have vast experience in reconditioning and extending life. So it's already designed for it, but we can even go further.

● (1715)

[*Translation*]

The Chair: And Boeing?

[*English*]

Mr. Bob Carrese: Sir, I do not know the specifics of the V-22, because the aircraft was designed to meet a flight-hour life as opposed to a calendar-year life specification. The specification is 10,000 flight hours. We've already tested it to 20,000 flight hours. It's a composite airframe. There is no scheduled depot-level maintenance on the aircraft. So I would not think there would be an issue with 30 years, but I don't have the information, to give you an honest answer on that.

[*Translation*]

The Chair: Thank you very much.

[*English*]

I will give the floor to Mr. Harris.

Mr. Jack Harris: Thank you all for coming here today. It's an extremely interesting proposition, and of course we're looking at this statement of requirements and also the critique of it, which I'm sure you're aware of.

Can I ask one question, Mr. Tarantola, regarding your availability numbers? I think you made a distinction between your company providing the servicing and the military doing so, in this case the Canadian Forces, who would likely be doing their own servicing. What is the essential difference? You can still provide parts to allow availability at a higher rate, but the maintenance itself would obviously depend on the availability of maintenance crew.

Mr. Massimo Tarantola: I hope I haven't confused you, but I'll try to answer.

Mr. Jack Harris: I want to give you an opportunity to explain it a little more.

Mr. Massimo Tarantola: Basically, if I have the whole contract, I can go for a certain availability rate. If instead there's a situation, like with the Italian air force, where they do most of the hands-on work, we are required to provide them with spares in order to allow them to get to that availability rate.

So it's just a technicality. I can't control availability, because that is the end of the process. They request of me a level of "demand satisfaction rate", which is the term that we use, in order to support an 80% or 85% availability rate, or whatever it is. The end result is the availability rate that the air force requires.

It's the way the company is contracted that is different.

Mr. Jack Harris: Yes, I understand that, but sometimes the availability issues are related to the number of times of maintenance or the level of maintenance that is required to keep the plane available. So it may be the availability of spares. Obviously that's a constraint, but if you have an aircraft that needs 10 or 20 hours of maintenance for every hour in the air, obviously the availability is constrained.

Mr. Massimo Tarantola: In that case, what I was saying is that we have an aircraft that is very reliable and maintainable. It doesn't break often. And therefore that is a standard across the situation. And we guarantee. Overall—and let's go to the American contract—we guarantee availability. We contract for 80% plus availability. We achieve more.

In Afghanistan our air force is using them more because in those conditions they tend to work. So that includes everything, the maintenance, the availability of the aircraft, and all the other aspects.

I don't know if I answered that.

Mr. Jack Harris: That's fine. That satisfies what I was asking.

Your aircraft has some difficulties in Afghanistan, and I won't ask you what they are. But I would ask you whether or not you see that as an issue for an operation within Canada in terms of availability... the same kind of question. Is that dependent on your providing the availability numbers, or the availability of parts to make it happen?

Mr. Bob Carrese: The performance-based logistics approach that we are currently under contract with for the U.S. government provides us with a number of metrics, similar to what he was describing. And we provide services to those metrics.

The aircraft was also designed to support a standard—what they call a three-level maintenance, or a two-level maintenance—which is organizational, intermediate, and depot-level, all done by the operators. So you can have a mix of contractor-provided, or if you choose to do it completely on your own, you can do that as well.

As you mentioned, right now we're operating out of talcum powder bowls. We're not running from runways, so the numbers are different from if we were operating here in Canada.

Mr. Jack Harris: Can I ask you both a question, then? I know the C-27J is relatively new. How many C-27Js in your case, or the V-22s, are currently operating in dedicated search and rescue assignments? Can each of you tell us?

● (1720)

Mr. Massimo Tarantola: Yes, it was the same question I think you—

Mr. Jack Harris: How many aircraft? I don't think that was—

Mr. Marcello Cianciaruso: The Italian air force and the Greeks also use the aircraft for search and rescue. In fact, the Italian air force has two observer seats with large windows in the back of the airplanes, so they can look outside. And one of the features we have on our airplane is that you can choose your search pattern, so you can input the data of your search pattern and—

Mr. Jack Harris: That's not my question. My question is how many aircraft do you have in dedicated search and rescue—not multi-use, but how many—

Mr. Marcello Cianciaruso: That's basically the good of our airplanes, that it is a multi-role aircraft that is used also on search and rescue missions. Italy has 12 and Greece has another 12.

Mr. Jack Harris: But their primary function is something other than search and rescue.

Mr. Marcello Cianciaruso: It's multi-role. They're used as a multi-role, so it has a second role.

Mr. Jack Harris: Okay, what about...?

Mr. Bob Carrese: And I have a similar answer. We don't have any aircraft that are solely doing search and rescue. That's not a mission the plane was designed to do—just that. And our customers don't think they can afford an aircraft that can only do one mission. All our customers do search and rescue with this aircraft, but it's just one of the many capabilities the aircraft brings.

Mr. Jack Harris: And in your case, since you're offering some sort of a paradigm shift, I suppose, would you anticipate, if your aircraft were a part of a Canadian search and rescue operation, that it would displace helicopters in some circumstances, or reduce the number of helicopter requirements?

Mr. Bob Carrese: Yes, sir. I do believe Tiltrotor is now a proven additional community within aerospace. And the entire search and rescue solution set for Canada takes in ships and small planes and helicopters and a lot of very dedicated people. What we're saying is that a Tiltrotor can complement that team a lot more effectively than just getting another airplane.

Mr. Jack Harris: Assuming the complexities, a tilt rotor would imply a little bit more of an expensive piece of machinery than something that's configured for the normal configuration. Am I right about that?

Mr. Bob Carrese: I would say, probably, just off the top of my head, that's an accurate statement. But I think value, proposition-wise—

Mr. Jack Harris: I appreciate that.

Mr. Bob Carrese: Yes.

[*Translation*]

The Chair: Thank you, Mr. Harris.

[*English*]

I will give the floor to Ms. Gallant.

Mrs. Cheryl Gallant (Renfrew—Nipissing—Pembroke, CPC): Thank you, Mr. Chairman, and thank you to our Bell witnesses.

First of all, would you please describe a unique SAR situation where only a V-22 could be used, and where it has been used?

Mr. Bob Carrese: First of all, we haven't been used a lot in search and rescue because that's not what we've been tasked with doing. The aircraft is being provided to special operators and marines. I would say that in rescue delivery medevac, probably the closest thing we've done recently was a sailor who had a ruptured spleen in the middle of the Indian Ocean. You may be able to draw a parallel to someone in the Arctic on a cruise ship or whatever. There was literally no other way to get him to a hospital in the time that we did—with an aircraft that can hover up over a ship or land on a ship and fly over 500 miles to a hospital and land at the hospital and deliver the patient in that same amount of time.

We understand the concept of response time and time on station. Our value proposition focuses on time to rescue. Are there other ways the sailor could have gotten to the hospital eventually? Yes, probably. Would he still have been alive? Maybe. So there's an intangible element to our value proposition. What is the value of getting a guy to a hospital in a third of the time it takes us to do it now?

● (1725)

Mrs. Cheryl Gallant: Speaking of value, what would be the approximate cost of the V-22?

Mr. Bob Carrese: That's a good question. We're a foreign military sales aircraft now, so that price comes from the U.S. government. Whatever I tell you is going to be a ballpark. We're in a multi-year. That multi-year was a five-year program, and it was $10.4 billion U. S. for 167 aircraft, so with rough math you could kind of figure out what the fly-away cost is of that aircraft. That would be something comparably equipped to what we would be offering Canada, because the aircraft pretty much does everything that you're looking for right now.

Mrs. Cheryl Gallant: Did that include pilot training—or crew training, I should say, as well as the lifetime maintenance contract?

Mr. Bob Carrese: No. That is what they call a fly-away cost. That's basically an aircraft with gas sitting on the ramp.

Mrs. Cheryl Gallant: Okay.

I'll just go over to the C-27J for a moment. Did I hear you correctly that the C-27J and the C-130J have shared parts?

Mr. Massimo Tarantola: The C-27J we developed with Lockheed Martin because we were going to propose a family of airplanes. What we did is we had the airframe of the well-proven G.222, which was an older aircraft—and we sold 120 of them around the world before that was militarized—and we put in the same engine, the same propeller, and the same avionics suite that the C-130J has. So we have experience in this. The Italian air force has C-130Js and C-27Js. They're called Js for that reason, by the way. What they do is they have a big percentage of shared logistics, but also it's very useful because the training is similar, so the pilot, who is a trained C-130 pilot, can the day after, if needed, operate on a C-27J. When you have the two airplanes it's an advantage, because you have a commonality in logistics and training.

Mrs. Cheryl Gallant: I'd like to ask a series of questions now to both of you. If we could, let's go quickly just so that we ensure that both people get to answer.

Does your plane have a rear ramp?

Mr. Bob Carrese: Yes.

Mr. Massimo Tarantola: Yes.

Mrs. Cheryl Gallant: Both do. Okay.

Is your plane equipped with a cabin floor roller and securing system or cargo handling system for loading, securing, transporting, and off-loading of NATO-standard 88 inches by 108 inches pallets?

Mr. Bob Carrese: Yes.

Mrs. Cheryl Gallant: Both?

Mr. Massimo Tarantola: Yes.

Mrs. Cheryl Gallant: Hypothetically, if we purchase your plane off the shelf, what would be the timeframe for the time of the contract, when it's signed, to the delivery of the entire fleet?

Mr. Massimo Tarantola: I'll give you a range, because it really depends. Sometimes we have an acceleration, if you need it, of the first aircraft. But normally speaking, we're talking about between 12 months and 18 months. That's the answer I could give you now, given the configuration that I imagine is going to happen.

Bob, go ahead. I was finished.

Mr. Bob Carrese: Typically, the way we contract right now, we get advanced acquisition money one year prior to production money, and it takes a little less than 24 months to build an aircraft.

Mrs. Cheryl Gallant: That's when you're building it for the U.S. military. But we would have to wait in line, so how long would it take?

Mr. Bob Carrese: No, I don't think that's true, because the next multi-year, which would finish this program of record, actually has excess capacity in it right now.

Mrs. Cheryl Gallant: Very good.

Are you confident that with a similar size of fleet your plane would cover the Canadian SAR sector with approximately the same level of service as our Hercules and Buffaloes currently do?

Mr. Marcello Cianciaruso: Actually, I think we will have better service, because basically, as I told you, in terms of speed, we have the same speed as the C-130, and we are faster than the Buffalo, but we have the same capability at low speed. So basically the overall fleet will have a faster response because we'll have faster airplanes.

In terms of range, we'll cover.... Sorry.

● (1730)

Mr. Chris Schreiber (Vice-President, Business Development, Alenia North America Canada Co.): May I?

In terms of the quantity, we could do the same job with either the same number or fewer aircraft and cover both fleets because of the versatility in the aircraft and its characteristics relative to the C-130H and the slow-flying characteristics similar to those of the Caribou. However, the maintainability of the aircraft is so much better that you don't need to have as many aircraft at each particular site to be able to cover the same on-station time.

Mrs. Cheryl Gallant: To be fair, could I just get a yes or no about the time?

Mr. Bob Carrese: Yes.

Mrs. Cheryl Gallant: Okay.

Thank you.

The Chair: Thank you very much.

I want to thank our witnesses from Bell Helicopter and Alenia. Thank you for being with us.

I just want to inform the members that on December 2, Lockheed Martin will be with us up until 5 o'clock. They have to leave at 5:05. So we're going to start at 3:30 sharp and will have until 5 o'clock on December 2 with Lockheed Martin.

Thank you.

[*Translation*]

This concludes the 35th meeting of the Standing Committee on National Defence.

The meeting is adjourned.

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