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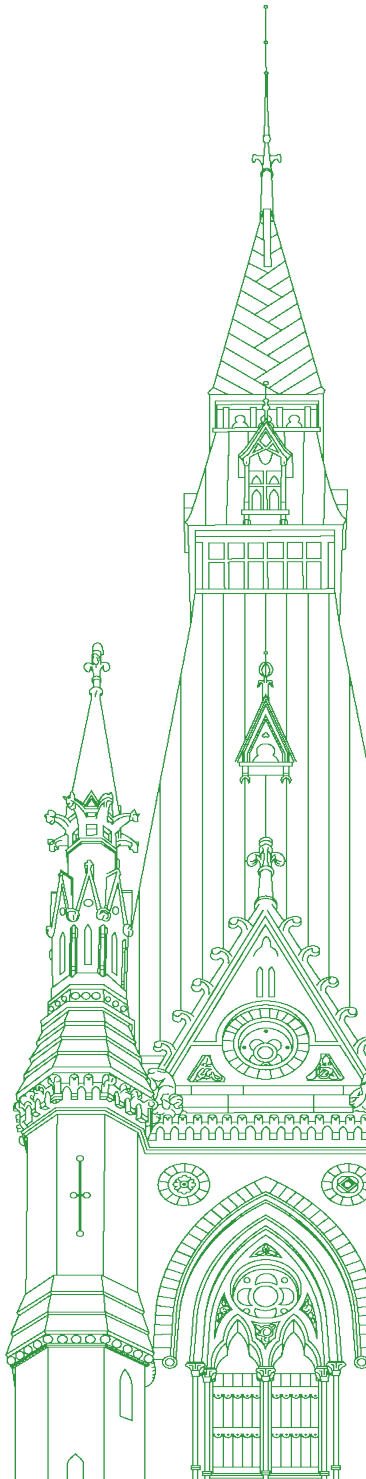

Chair: Charles Sousa

Standing Committee on National Defence

Monday, June 1, 2026

● (1100)

[*English*]

The Chair (Charles Sousa (Mississauga—Lakeshore, Lib.)): I call this meeting to order.

Welcome to meeting number 38 of the House of Commons Standing Committee on National Defence.

Today is the first day of National Indigenous History Month. We know there are a lot of partnerships that we are doing with first nations communities as we proceed forward with the defence industrial strategy.

Pursuant to Standing Order 108(2) and the motion adopted by the committee on Monday, February 23, the committee is meeting to study the impact of the defence industrial strategy.

Today's meeting is taking place in a hybrid format. Members are attending in person and some may be watching remotely using the Zoom application. Before we continue, I ask participants to consult the guidelines on the table. These are measures to help prevent audio and feedback incidents in order to protect the health and safety of our interpreters.

As a reminder to witnesses and members, please wait until I recognize you by name before speaking. If you wish to speak, please raise your hand. The clerk and I will manage the speaking order as best we can. I remind witnesses that committee members may ask questions in either French or English. If you need interpretation, please take a moment now to prepare your earpiece and select a listening channel in advance. We oftentimes fuss over that, so if we can do it beforehand, all the better. All comments should be addressed through the chair.

I'd now like to welcome our witnesses.

We have, from Bombardier, Inc., Pierre Seïn Pyun, vice-president, government and industry affairs; from CAE Inc., France Hébert, vice-president, defence and security, Canada and international; from Canada Rocket Company, Hugh Kolias, chief executive officer; from MDA Space, Mike Greenley, chief executive officer; from Nordspace Corporation, Rahul Goel, chief executive officer; and from Reaction Dynamics Lab Inc., Bachar Elzein, chief executive officer.

We're going to proceed with five minutes each. We have a large panel today, so I'm going to keep it as tight as I can throughout the process. I look forward to an engaged conversation.

Why don't we begin with Pierre Seïn Pyun from Bombardier?

We'll go over to you, sir, for five minutes.

[*Translation*]

Pierre Seïn Pyun (Vice-President, Government and Industry Affairs, Bombardier inc.): Thank you, Mr. Chair.

Members of the committee, thank you for the opportunity to speak with you today.

My name is Pierre Pyun, and I am the vice-president of government and industry affairs at Bombardier.

[*English*]

Bombardier is a world-leading business aircraft manufacturer, headquartered in Canada. We employ directly more than 12,000 people in our Canadian operations. They are proud to participate in the Canadian aerospace industry and to contribute to making it one of the most pre-eminent, advanced technological sectors in Canada and a leading aerospace hub on the international scene. They're also extremely proud to have the opportunity to support Canada's national security objectives.

My remarks will focus on Bombardier's capabilities and impact in Canada and our contribution to Canada's defence sovereignty and the defence industrial strategy.

Bombardier has existed in Canada for nearly 85 years. Innovation is in our DNA. We have proudly developed and received certification for 30 aircraft programs in the last 30 years to the highest performance and safety standards. We have established a strong working relationship with Transport Canada.

Bombardier contributes around $7.4 billion Canadian to Canada's GDP annually. We support close to 50,000 jobs across the country. Bombardier's success is made possible by a robust network of more than 1,500 suppliers from coast to coast, demonstrating that the company is at the heart of a thriving national ecosystem.

Our expertise in business aviation allows us to contribute to airborne defence. An important pillar of our company is to leverage our portfolio of Challenger and Global aircraft with our unparalleled engineering and maintenance expertise to offer business jet-based solutions for defence missions. We have decades of experience in this space. Bombardier is known to be a collaborative, trusted and flexible partner. We have built long-term partnerships with governments and militaries worldwide. We have joined forces with the world's most advanced mission system integrators and providers.

Bombardier delivers multi-mission, long-range, high-performance aircraft platforms used for different solutions, including intelligence, surveillance and reconnaissance; airborne early warning; signals intelligence and electronic warfare; medical evacuation; and more. Business aircraft have become increasingly attractive as platforms for defence applications, because they are cost-effective in terms of acquisition, operation and maintenance costs compared with the legacy platforms, the larger commercial airliners. It's also because of their performance—for instance, the speed at which they fly and the range and altitude at which they fly of 40,000 feet to 45,000 feet. The Global 8000 is a case in point. It has a range of 8,000 nautical miles, connecting almost any two points around the world. Its certified speed is slightly below supersonic, at Mach 0.95.

We welcomed last week's federal government announcement to invest in the Canadian aerospace industry by favouring a solution based on the Bombardier Global 6500, a made-in-Canada aircraft. We also congratulate Saab on being selected as the preferred supplier for Canada's airborne early warning and control fleet, with its GlobalEye solution.

This announcement further highlights the versatility of the Bombardier Global 6500 aircraft as well as its growing role in Canada. Last December, the federal government announced the purchase of six Global 6500s to enhance the RCAF's multi-mission air transport capability. This March, the National Research Council of Canada announced it had acquired a Global 6500 aircraft for critical research and development activities.

Bombardier's business aircraft are chosen around the world for defence missions. Some examples among many include Germany, for the PEGASUS program for signals intelligence; Sweden, for ISR and multi-role government transportation missions; the U.S., with the U.S. Army and the U.S. Air Force in the HADES and BACN programs; and Switzerland, for medical evacuation and government transportation.

We have a strong reputation around the world for providing reliable and robust aircraft to perform critical, demanding missions. We have expertise in complex modifications, certifications and special mission integration. We also have a worldwide network of maintenance support infrastructure, not only for our civil customers but also for our government and military customers.

● (1105)

[*Translation*]

We are pleased to see that Canada is leveraging its own resources to strengthen its defence capabilities. This is very encouraging for Bombardier as one of the many proud Canadian companies that have much to offer this country.

As I said earlier, nothing would make our employees prouder than knowing the planes they build here in Canada are being used to defend our country and our borders.

Bombardier welcomes Canada's first defence industrial strategy and looks forward to working closely with the federal government to strengthen our country's sovereign defence capabilities. We are convinced Bombardier still has a lot to offer Canada in the years to come. Very few countries have the capacity to design, build, certify and maintain aircraft. This is a strategic capability we can all be very proud of.

[*English*]

We see the recent launch of the defence industrial strategy by the Canadian government as very positive, not only for Bombardier but also for the Canadian industry. The defence industrial strategy sends a strong signal that defence investments are intended to be an economic and innovation driver for the country, while ensuring—

The Chair: Those are great words, but we have to move on to the next witness, sir.

Pierre Seïn Pyun: —that capabilities, preferably the types that Canada has sovereignty over, are provided to our armed forces.

I look forward to the conversation and to providing you with more input in terms of our views on the strategy—

The Chair: I apologize for the interruption, but I am trying to keep to the time. Thank you very much for your presentation.

I'm going to go now to CAE and France Hébert.

[*Translation*]

France Hébert (Vice-President, Defence and Security, Canada and International, CAE Inc.): Good afternoon, Mr. Chair and members of the committee. Thank you for this opportunity to testify on the impact Canada's defence industrial strategy will have on the country, a strategy that was proudly announced from our plant and head office in Montreal.

My name is France Hébert, and I am vice-president and director general of the defence and security division at CAE, for Canada and international.

[*English*]

At CAE, our purpose is simple. We exist to make the world safer. On the civil side, we do this by training over 150,000 pilots annually. In defence, we train the women and men of the Canadian Armed Forces to support operational readiness through advanced training and simulation.

We are headquartered in Montreal and employ approximately 11,000 people globally, with approximately 5,000 here in Canada. We operate in more than 40 countries with over 240 locations worldwide. In defence and security, we employ more than 6,000 people and support over 85 military platforms from a wide range of manufacturers. This global experience allows us to deliver integrated training solutions across air, land and sea.

Here in Canada, we have a strong coast-to-coast footprint from Halifax, Nova Scotia, to Comox, British Columbia, with 11 more locations in between, including in Trenton and Petawawa. We also support a network of more than 400 Canadian small and medium-sized enterprises through our supply chain.

The defence industrial strategy identified 10 key sovereign capabilities, one of which is training and simulation. CAE is uniquely positioned to champion this priority in Canada. We already build right here in Canada with Canadian suppliers. We partner with all major manufacturers and over 400 small and medium-sized businesses across Canada. We can integrate any platform the government would want to buy.

Our experience shows that acquiring platforms alone is not enough to achieve mission readiness. Without integrated modern training systems, mission support and a skilled workforce, Canada will not fully unlock the value of its defence investments.

● (1110)

[*Translation*]

In defence, there are three trends.

First, operations are increasingly complex. Fifth and sixth-generation fighter jets, advanced sensors and integrated systems require high-quality training environments, including simulations.

Second, there is an urgent need for action. Canada and its allies need to deploy capabilities more quickly. Beyond acquiring platforms, this also means accelerating recruitment and training.

Third, we have a great opportunity to strengthen Canada's industrial base. National champions must ensure that defence investments benefit the entire ecosystem by being targeted and creating sovereign intellectual property to support industry over the long term.

CAE is a popular partner. We recently announced several partnerships with global defence leaders. We are having productive discussions with Canada's allies, including German defence minister Pistorius, who visited our offices last week. These are a direct result of Canada's defence industrial strategy. These partnerships benefit our vast supply chain while strengthening the country's sovereign capabilities, which then become internationally competitive.

[*English*]

Based on our experience, I would highlight three recommendations.

First, identify and engage national champions quickly. We are encouraged by the recent release of the strategic partnership framework. We hope the government will identify strategic partners swiftly so that together we can implement the defence industrial strategy.

Second, use defence investment to build a Canadian industrial base. With a deliberate strategic partnership between government and industry, large corporations, SMEs and academic institutions can work in unity to drive economic growth, support innovation and create export opportunities. Established players can help mobilize the ecosystem and are best positioned to help the government achieve maximum economic impact.

Third, prioritize sovereign training and sustainment capabilities. Canada should invest in domestic training systems and infrastructure as part of major acquisitions. It could reverse the current trend. Instead of relying on foreign support, Canada could welcome its allies, expand international defence collaboration and share its expertise with the world as a strategic export capability.

Thank you again for this opportunity.

The Chair: Thank you.

Mr. Kolias, it's over to you.

Hugh Kolias (Chief Executive Officer, Canada Rocket Company): Thank you, Mr. Chair.

Thank you to the committee for the opportunity to speak today about the impact of Canada's defence industrial strategy and the efforts to develop a Canadian sovereign launch capability.

Before I begin, I want to acknowledge the Algonquin Anishinabe as the traditional stewards of this land.

My name is Hugh Kolias, and I am chief executive officer of the Canada Rocket Company. We are a Canadian owned and controlled company developing medium-lift launch capability in Canada. We are also one of three companies on today's panel that have received funding through the innovation for defence excellence and security—or IDEaS—program's launch the north initiative. In short, this initiative aims to accelerate the development of sovereign launch in Canada.

I want to start by emphasizing how grateful we are that the Government of Canada has launched this initiative. We are an example of how the defence industrial strategy is working. The public signalling and initial funding from the launch the north initiative have acted as a significant catalyst. To date, every single public dollar invested in the Canada Rocket Company has attracted nearly two dollars of private capital. This demonstrates that strategic government signals unlock private markets.

We believe that the best use of public contributions is to be multiplied by private investment. In just six months since incorporation, we have raised $22.8 million in total capital, $14.5 million in private investment, including from the BDC, and an $8.3 million non-dilutive grant through IDEaS. We have attracted over 20 experienced engineers from around the world, many of whom are Canadians repatriating back. These engineers have all worked at global launch and technology companies such as SpaceX, Blue Origin, ArianeGroup, Rocket Lab and Tesla.

I provide these examples to you today to demonstrate the real-world impact of the defence industrial strategy. It would not be possible to attract the engineers and private capital or move at the speed we are without the signalling and support from the Government of Canada.

The global space economy is expected to be $1.8 trillion by 2035. Our world runs on satellites. GPS-dependent systems underpin over 20% of our GDP from global financial networks, logistics, telecommunications, power grids, weather forecasting and defence coordination. Access to space is critical infrastructure.

Canada currently depends on our allies to place Canadian payloads into orbit. The current commercial launch market is dominated by one actor, SpaceX, which launched over 84% of payload mass to orbit in 2024. China is a distant second. There is a multi-year backlog for launch capacity globally, and the cost over the last few years has risen by at least 30%.

The current IDEaS launch the north framework is an exceptional first step, focused on establishing tactical, light-lift capabilities; however, to truly secure our sovereignty and economic future, Canada must look towards medium-lift capability.

The medium-lift launch market, classified as between 2,000 to 20,000 kilograms of payload to orbit, held over 56% of the commercial market in 2024 and is expected to be up to $20 billion in the mid-2030s. Medium-lift capability, especially on the higher end of payload delivery, is limited to a few global players and represents a substantial national security and economic opportunity for Canada to capture. To scale from the foundation laid by the IDEaS program to a fully operational medium-lift capability, we require three strategic commitments from the Government of Canada.

The first is to anchor demand. The government must become an early customer by committing to contract domestic launch capacity for future Canadian civil and military payloads. Underwriting first flights, exactly as NASA did in the early 2000s, is the single most effective way to crowd in the private capital required.

Second is continued co-investment in development. We need continued, cost-shared, milestone-based funding models that match private capital investments through the next phases of test, qualification and flight.

Third is regulatory alignment. Streamlined launch licensing, expedited permitting and appropriate export-control treatment for a Canadian sovereign launch program are necessary to make this viable at the pace that the strategic environment requires.

To quote Brigadier-General Christopher Horner, commander of the 3 Canadian Space Division, who spoke at the Space Canada Horizons conference last month, “The strategic question before us is no longer whether space matters.... The strategic question is, will Canada possess the freedom of action required to protect its sovereignty, security, and economic prosperity of the future?”

Canada has a narrow window to establish this capability. The talent exists. The private capital is available. The government investment to date is already producing results. The question before this committee is this. How do we continue to accelerate policy and investment?

Thank you very much, Mr. Chair. I'd be happy to answer any questions committee members may have.

● (1115)

The Chair: Thank you.

Mr. Greenley, it's over to you for five minutes.

Mike Greenley (Chief Executive Officer, MDA Space): Thanks.

Good morning. As stated, I'm Mike Greenley, the CEO of MDA Space, Canada's largest space company. It was founded 57 years ago, has 4,000 employees and is headquartered in Canada and growing globally. We're active in the defence sector through the provision of earth and space observation satellites, space-based defence communication satellites and space control capabilities. Through our subsidiary 49North, we provide C4ISR capacity to the joint forces.

I have personally led companies in the Canadian defence sector for the past 35 years. I spent six years as the chair of the Canadian Association of Defence and Security Industries, and I'm currently the chair of Space Canada, the industry association for Canada's space companies.

MDA Space is a defence prime contractor and prime integrator, meaning that we sign the primary contract with the government, select and manage the supply chain, integrate our own systems, supply our subsystems and components to the platform, and shoulder financial and logistical burdens and risk in order to deliver complex national programs on time and on budget. In our case, that often means we are responsible for launching and operating satellite systems and networks.

I'd like to provide input for the committee's study of the defence industrial strategy in two areas: one, how the strategy should be implemented to achieve industrial expansion and job growth; and two, how procurement governance and ingrained culture need to change in order to realize the benefits of the defence industrial strategy.

The existence of the defence industrial strategy is excellent. We have been seeking policy like this for my entire 35-year career. It is a necessary start for Canada to achieve policy alignment with allied peer nations and to support the development and global competitiveness of our defence industrial sector. Canada now has a national policy stating that there are 10 key areas where the country needs to have sovereign capability and that the Government of Canada's priority is to build this capability in Canada, in partnership with Canadian industry. That is a strong statement and one that will need consistent and rigorous application and attention; otherwise, the strategy is a waste and we will continue to rely on foreign countries.

To ensure that this is achieved, the policy must have three tiers of capability procurement: mature solutions, technology acceleration and technology development.

Mature solutions are being produced today by established defence firms in Canada and should be procured as quickly as possible through strategic partnerships in order to meet the immediate needs of the Canadian Armed Forces. The new strategic framework will be very helpful with that.

Technology acceleration should be targeted at emerging Canadian defence companies with promising technologies in order to bring these to full operational capability and deployment.

Technology development should be targeted at mid- to long-term R and D cycles for next-generation technologies, and in a rapid, competitive process that iterates on solutions that are operational.

These tiers of capability require two road maps: one that maps the Canadian Armed Forces' capability needs in the 10 sovereign capability areas over the short, medium and long terms, and one that maps Canada's industrial capability from fully mature to emerging, with the core skills that can be applied to further capability development.

This multi-faceted strategic partnering with Canadian industry will be challenging for the government in the short term as the Defence Investment Agency acquires its organizational authorities, takes over decision-making from other departments and increases its staffing levels. It will require an unprecedented cultural change for the government, and particularly for the Canadian Armed Forces, when it comes to partnering on and promoting Canadian defence industrial capabilities. This has not occurred in Canada since the Second World War's industrial buildup but must now be reinvigorated.

Canadians and Canada's industrial base are proud of our Canadian Forces, and we massively appreciate the sovereignty and security they provide to our way of life. The CAF has best-in-the-world elite units like the JTF 2, large and growing professional military teams across the army, navy and air force, and—in some cases—emerging capabilities that need to be developed, matured and made more operational. Canadian industry is really proud of our industrial base, and we require that same pride in return: Be proud of the Canadian industrial base and work with us to build Canadian military capability as we move forward into the future.

All public servants, including those at DND and in the CAF, must commit—all the time—to the government's stated policy of engaging with trusted industry leaders in the key sovereign capability areas and developing the next generation with Canadian industry. We are seeing some early signs that this cultural shift is taking shape, but we're also seeing signs of early resistance as procurement teams flinch and revert to the old ways of buying from foreign countries and foreign companies. Executive levels of government must stand in and flow the policy downward in the 10 sovereign capability areas in order to reinforce that building with Canadian firms is mandatory, and that it begins now.

Overall, this is very exciting. This policy is a great opportunity for Canada. We just need to keep our focus on it every single day.

Thanks for the opportunity to speak.

● (1120)

The Chair: Thank you, Mr. Greenley.

Mr. Goel, it's over to you—

[*Translation*]

Christine Normandin (Saint-Jean, BQ): On a point of order, Mr. Chair.

I understand you want to be very strict on speaking time and that the witnesses must respect the five minutes they are allotted. However, if they have to speak more quickly, it becomes more difficult for the interpreters. We need to take a moment to think about them; they do an exceptional job.

[*English*]

The Chair: The point is well taken. Speak slowly. We'll have a lot of time throughout the debate to have these discussions. I apologize for rushing you. I don't mean to do so.

Mr. Goel, take your time, but you only have five minutes.

Voices: Oh, oh!

Rahul Goel (Chief Executive Officer, NordSpace Corporation): Thank you, Mr. Chair and members of the committee.

Thank you for the opportunity to appear today in my capacity of CEO of NordSpace, a 100% Canadian-owned company, dedicated for years to providing a made-in-Canada sovereign space launch capability with our manufacturing facility located in Markham, Ontario, and spaceport located in Newfoundland and Labrador.

Space is recognized in defence policy as critical to our sovereignty, our security and our prosperity. NordSpace's mission is to help Canada translate that policy ambition into practical, domestic capability. Today we have a choice to make and a narrow window of opportunity to make it. Will Canada choose to be a participant or a leader in space? Will we choose to be buyers or builders?

NordSpace builds orbital launch vehicles, a spaceport and spacecraft, designed, manufactured and soon to be launched in Canada. Our focus is simple: Canadian payloads on Canadian rockets from Canadian soil to save Canadian lives on and off the battlefield while securing thousands of Canadian jobs, components and intellectual property. This end-to-end approach is intended to complement the Government of Canada's procurement framework by strengthening the “build” pillar of build-partner-buy with a truly sovereign option for assured access to orbit. For NordSpace, launch is a means to an end. Our simple, scalable and proven architecture focuses on reliably progressing from light- to medium-lift vehicles and prioritizing urgent capability development over science experiments—experiments that unnecessarily delay achieving operational capabilities.

From a defence perspective, assured access to space is critical. It underpins navigation, communication, surveillance and command and control for the Canadian Armed Forces and our allies. In a crisis, we cannot assume that launch capability elsewhere in the world will be available or even prioritized for Canadian needs. Indeed, Canada and Canadian taxpayers have experienced this reality in recent times with RADARSAT-2. History will repeat itself. A sovereign launch capability helps to ensure that when a satellite must be deployed or replenished quickly, Canada has responsive options at home. If it does not, bluntly, foreign nations are making national security decisions for Canada.

Economically, a domestic launch capability supports high-quality jobs in engineering, manufacturing and advanced technologies. It draws on strengths in aerospace and automotive, aluminum and critical minerals. It generates significant economic activity and will create over 1,000 permanent jobs over the coming decade alone. It also keeps intellectual property in Canada, allowing us to innovate quickly in response to evolving CAF requirements while exporting competitive solutions to our allies.

NordSpace is working relentlessly to provide sovereign space solutions through our launch vehicle and our space systems division to build a self-sustaining launch cadence. We are working hard to demonstrate suborbital launch in the coming weeks, powered by our in-house designed, manufactured and tested patent pending Hadfield rocket engines, followed by orbital launch in 2028.

Our satellite, Terra-Nova, is headed to orbit later this year to demonstrate real-time, AI-driven space domain awareness and wildfire monitoring. We have also secured a ride to the moon for Canada's first lunar rover TERRY, named after Terry Fox, on an Artemis mission as early as next year.

These small, privately funded, internal pathfinder missions are carefully planned and executed today to scale and support a viable and commercially sustainable launch program for tomorrow, one that does not perpetually rely on the DND and government grants and contracts to thrive and is resilient against all odds so that we do not end up with another Avro Arrow moment. Building real businesses is indeed the reason why companies such as SpaceX and New Zealand's Rocket Lab have thrived, not just survived, and continue to provide resilient, defence-specific launch, hypersonic, surveillance and communication capabilities to defend their nations.

Let me be clear: NordSpace is here to win—to win in Canada, to win on the world stage and to establish a new Canadian prime born from this bold defence industrial strategy. We have been encouraged by recent federal initiatives, from launch the north to the Canadian space launch act. These measures send a strong signal to industry and investors that Canada is, in fact, serious.

Already, NordSpace is increasing the size of our manufacturing facility in Markham tenfold to support 235 employees and, as we speak, we are expanding our spaceport in Newfoundland. We are forging critical partnerships across Canada, including launch services agreements, most recently, just last week with Alberta-based Wyvern to demonstrate state-of-the-art deployable optics for Canada, potentially a first-ever fully sovereign Canadian space mission upon launch with NordSpace.

Finally, space is a powerful source of national unity and inspiration. As Minister Champagne recently noted, Canadian astronaut Colonel Hansen's journey around the moon reminded us that “the sky is no longer the limit!”

In closing, NordSpace has three key brief recommendations. First, we recommend that the Government of Canada ensure that Transport Canada has the resources it needs to develop the regulatory regime envisioned by the Canadian space launch act, and that the government consider Canada's own dedicated space command.

We further recommend that the government continue to invest in sovereign launch over the long term on the higher end of light-lift, extending to medium- and heavy-lift, alongside a spaceport that genuinely can support these scaled capabilities.

Finally, NordSpace would like to work with the government, under the defence industrial strategy, specifically to develop a framework for ensuring that the Government of Canada prioritizes building truly sovereign space launch solutions over buying foreign ones.

● (1125)

As Brigadier-General Horner, commander of the 3 Canadian Space Division, has said, “From the Arctic to cislunar space, Canada's strategic environment is expanding. And so must our ambition.”

Thank you, and I very much look forward to your questions.

The Chair: Thank you.

Mr. Elzein, it's over to you. You have five minutes, nice and slow.

Bachar Elzein (Chief Executive Officer, Reaction Dynamics Lab Inc.): Mr. Chair and members of the committee, thank you for the invitation.

My father came to Canada as an immigrant seeking safety, opportunity and stability. Canada also gave that to me and to so many others, and this is why I'm starting this company here.

Today, the question is whether Canada remains a safe, sovereign and technologically capable nation or becomes dependent on others for its most critical infrastructure. This is the question the defence industrial strategy was written to answer.

● (1130)

[*Translation*]

As a student and a scientist, I have too often seen innovation leave Canada. Good people have left, and good ideas have emerged from elsewhere. As a founder, I decided to build a company that secures advanced manufacturing, highly skilled jobs and strategic capacity here, at home.

[*English*]

Reaction Dynamics isn't just a start-up. It's designed to underpin Canada's economy, sovereignty and role in allied security for decades.

I want to leave you with three problems and three things we, as industry, can offer in return.

The first problem is talent drain. The strategy puts a number on it: 125,000 new defence jobs by 2035. Those jobs will not appear on their own. They will come from keeping our best people in the country, not training them for someone else's industrial base.

The second problem is a lack of competition. Competition creates heat, and heat creates value. Invest in more than one winner. A strategy that builds national champions still needs more than one contender behind each capability. Otherwise, the champion has nothing to beat, and the country pays more for less.

The third problem is perception. We treat defence as a use case. It is not. Defence is an enabler. It is the root of navigation, communications, banking, imaging, sensing and timing. The farmer relies on it—the fisherman, emergency services, aviation and oil and gas. The defence base has always been the industrial base. They are one and the same. The strategy says this out loud when it comes to space, sensors and specialized manufacturing, etc. A modern army cannot fight without its space assets. Lose them, and you lose not only a weapon but also the backbone of the civilian economy.

[*Translation*]

Here's what the industry can offer. First, it can offer jobs and expertise only available here. Second, it can provide economic viability and banking for agriculture and energy sectors to strengthen the Canadian economy. Third, and most importantly, it can provide safety and security in Canada, and allow us to make our own decisions based on our own timelines and in our best interests and those of our allies. This is what “strategic autonomy” means in the strategy. Canada remains the only G7 country without a sovereign defence capability.

Canada's defence industrial strategy has started to change that through DRDC's launch the north program, which aims to be operational in the fourth quarter of 2028. Reaction Dynamics is one of the three companies to benefit from this funding, along with those of my two colleagues.

[*English*]

On that note, there are a few people I want to recognize.

The first of them are my team, my investors and my board. Without them, this company would not exist. As I speak to you, some of my engineers are at our test site preparing for our first flight. We had some very exciting testing on Friday. We stayed up until midnight. I was with the team. I'm really happy that things are moving forward.

I also want to highlight the champions who believed in space and who saw it for the strategic asset it is.

The first is Ahmad Khorshid of the IDEaS program at DRDC, whose exceptional ability to navigate the many pillars of government and breathe life into this program is why it will deliver orbital launch. Angelina Ermakov at ISED has advocated for sovereign launch since the inception of RDX, which was nine years ago. Cody Pelletier masterminded the program, identified the key needs and did so at a back-breaking pace. Last but not least is Brigadier-General Horner. His confidence means more than I can express here. His leadership in championing sovereign launch capability as a national imperative has been instrumental in securing the support and funding this industry has long needed.

Of course, there is the CSA, which has carried this country's space ambitions on its shoulders for decades, quietly and without enough credit, until a moment like this makes us look up. Lisa Campbell is a hero and a role model.

I will close with this. We cannot expect a different outcome when the outcome we are after is the product of the same processes that got us here. The strategy is the chance to change the process, and we should not waste it. Our first step to the stars is a first launch in Q4 2028, feeding into a medium-lift capability that meets this country's needs and gives Canada true space sovereignty through optionality.

The Prime Minister has asked us to be bold. Being bold is not about making better decisions. It is about accepting that on the heels of our success, we should be willing to accept failure. This is what we call autonomy. We pay it now in our own currency, or we pay it later in someone else's.

Thank you. I look forward to your questions.

The Chair: Thank you all.

I really applaud your leadership in this industry. These are very thoughtful and powerful statements that all of you have made. Our committee appreciates that and welcomes it.

To start us off in our first round of questions, for up to six minutes, is Mr. Bezan.

● (1135)

James Bezan (Selkirk—Interlake—Eastman, CPC): Before you hit the clock, Mr. Chair, I want to give a notice of motion.

The motion reads:

> That the Minister of National Defence and officials be invited to appear on the Supplementary Estimates (A), 2026-27, for two hours; and that this meeting take place at least five calendar days before the Supplementary Estimates (A), 2026-27, are to be reported to the House.

That's the notice of motion.

The Chair: It's noted.

We'll go back to you again, sir.

James Bezan: Thank you. Now you can start the clock.

I want to thank all our witnesses for coming in.

I know a lot of you were here for CANSEC as well. We got to see some of you on the trade floor. It was interesting to listen to all of you. We have some newer start-up businesses here, and we have some well-established primes. It's interesting to have this conversation with you, especially with the aerospace sector.

Some of the comments stuck out to me.

Mr. Greenley, you talked about culture. We often talk about culture change within the Canadian Armed Forces, but you're talking about culture change within the industry itself, as well as for those in PSPC and other government departments, taking on more risk.

Mike Greenley: It's not necessarily to take on more risk but to make sure that people make decisions that align with the defence industrial strategy. It doesn't necessarily take on more risk. If we work with proven prime contractors, create strategic agreements with them and move forward with immediate procurements, and if we have our heads up and look at a road map of what defence capability we need and when, and work with other Canadian industries to fund technology acceleration or new R and D, then we can make sure that we have the right capabilities available and operational at the right time.

I think that's what we need to do, but while we're doing that, we need to stay committed to the Canadian defence industrial base in the sovereign capability areas that are in the defence industrial strategy.

James Bezan: Are we seeing any contracts actually getting signed out of the defence industrial strategy?

I know that there's a notice of contract, potentially, that was announced on the GlobalEye, but pen to paper, I don't believe.... We don't know value. We don't know quantity.

Mr. Pyun, definitely from Bombardier's standpoint, it was good news, but it's not necessarily a certainty.

Pierre Seïn Pyun: In the past, our defence business, when we looked at our projects and our success, to be quite frank, they've been mostly outside of Canada. What we've seen with the launch of the defence industrial strategy and with the creation of DIA.... You mentioned a culture change, and I think it is quite transformational. It is the first time that Canada has a defence industrial strategy in place.

Implementation will be key. We welcome the focus on exports. We welcome the focus on R and D, as well, in the defence space.

I gave two recent examples of contracts that were put in place. These are the Global 6500 for the RCAF's multi-role airlift capability project and the NRC's aircraft for research purposes.

James Bezan: The last time you were at committee, you were complaining about lack of competition when it was down to the decision to buy the P-8. You mentioned the Defence Investment Agency. Have you guys looked at division 16 in Bill C-31, the budget implementation act, which establishes the defence investment agency act? Has anyone had a chance to read it?

I recommend that you read it because, in that act, they are providing over 20 different exclusions to limit competition as well as providing an out for the minister responsible for the DIA to explain why someone was excluded. The act smells more of sole-sourcing than competition.

Mr. Elzein, you talked about competition and how it will make us all stronger if we have competition. It also protects the taxpayer. On the side of competition, can you talk more about, first, how important it is to ensure that we are getting, first and foremost, what we need for the Canadian Armed Forces; second, how it is being brought forward in the best interest of the Canadian taxpayer, who is ultimately going to be paying for the procurement; and third how it removes the government's ability to select who they want as the champion?

Bachar Elzein: Thank you for the question.

Competition we see as a positive, because it also helps to create an ecosystem. I will talk specifically about launch.

There are three companies that have received funding from IDEaS DND for the launch the north initiative. Multiple companies have applied. If a single company ends up being a champion but that company goes under, we lose that capability. Having competition means that we maintain that capability.

As a country, funding those capabilities means that you have to ensure they are also resilient and sustainable. I will push that even further: That will just make us better companies. It will make any of us three.... I'm happy to have Rahul and Hugh as friendly competitors. We talk a lot and we work together, but also, we all seek the same thing. We want to have that capability developed here in the country. I'll push further: I'd rather have any of us succeed than have our satellites launched on other rockets.

I'll push even further: We do not want satellite companies to launch their satellites on Canadian rockets just because we're Canadian. We want them to launch because we offer the best option. We're already in competition with the international market. We're already competing with SpaceX and Rocket Lab, and that's okay. That's really good.

Having that internal competition in the country means not only that the capability can be maintained and sustained, but that we can also offer the best offering for our commercial partners and for the government.

● (1140)

James Bezan: Thank you.

Mr. Kolias, you used to work for SpaceX, if I remember correctly. You talked about talent drain and brain drain. You went to the States, but you came home. If you want to, can you talk from that standpoint and about the importance of having the capacity within Canada?

You talked about the backlog in the international market: Over 82% is controlled by SpaceX right now. What's the actual ability for us to get our rockets in space and take some of that business away from SpaceX and others?

The Chair: If I could, I'll suggest, Hugh, that you answer that question through Mr. Watchorn.

It's over to you, sir.

Tim Watchorn (Les Pays-d'en-Haut, Lib.): Well, I don't agree to give my time to Mr. Bezan, but anyway....

Voices: Oh, oh!

Tim Watchorn: Go ahead, Mr. Kolias.

Hugh Kolias: Thank you for the question, Mr. Chair.

Just as a quick clarifier, it was my co-founder who came from SpaceX, as well as a number of other engineers.

The exciting opportunity for Canada is that SpaceX and Blue Origin are going to be preoccupied with their own demand: Starlink and data centres in space, as well as the lunar missions that were recently announced through NASA. There's a large opportunity for really any country to come in and replace Falcon 9. That's the global opportunity we see. Canada is right at the precipice of beginning that journey, and I think that's where we've been able to bring in a ton of engineers and experience to make this happen.

We're really focused on being the most un-innovative launch company, at least to start. That's because getting to space is a very difficult challenge. Even if you procure the IP and you purchase the plans, it's really important that you bring in the experience of folks who have seen it and done it before, and that's a key part to our strategy.

[*Translation*]

Tim Watchorn: Thank you, Mr. Chair.

It's such a great panel today, with all these innovating Canadian companies. These industry leaders and new companies are really going to take us to space. I have a lot of confidence in you for that.

I'd like to start with one of the pillars of the strategy, which is to change the paradigm. National Defence used to buy 75% of our military equipment from the United States. The strategy calls for a change in that regard with 70% of Canadian content.

Mr. Pyun, I'd like to know how you're going to operationalize your approach to achieve Canadian content in the contracts you're going to get.

Pierre Seïn Pyun: Thank you for the question.

To start with, I would say supply chains are very integrated in the aerospace sector. We don't necessarily see these objectives as mutually exclusive. As we diversify our partnerships, we can continue to strengthen the very important partnerships we have, for example, with Americans. We also have obligations within NORAD and NATO, regarding Arctic sovereignty, and for the defence of the north or North America.

Our supply chains are already highly integrated with the U.S. and Mexico, to a certain extent, and with very large suppliers elsewhere, such as in Europe. It's not a zero-sum game for us. This is an opportunity to reach multiple goals simultaneously. I'm thinking about what happened a few years ago in the context of the Canadian multi-mission aircraft project.

[*English*]

We have turned the page on this. We're looking into the future. What has changed is this focus on sovereign capabilities. Of course, for a country like Canada, we cannot be a jack of all trades. We'll have to be very focused on areas where Canada has competitive strengths, comparative advantages and where we want to focus to develop sovereign capabilities. That requires an earlier engagement with the industry even pre-RFP.

It's through that lens that I see the changes that have occurred in the last few years and the opportunities for Canada. There are many areas where we'll need to keep partnering, and we'll also need to keep buying from other countries.

● (1145)

[*Translation*]

Tim Watchorn: Ms. Hébert, I'm going to continue with you on the same topic.

We're fortunate in Mirabel to have a beautiful ecosystem, companies integrated into the aerospace industry. We try to integrate as many Quebec businesses as possible. I'm from near Mirabel, and we advocate for these companies.

How do you use the defence industrial strategy to go after these small businesses and bring them into your value chain?

France Hébert: Thank you for the question.

Our value chain already has over 400 companies, many of which come from the aerospace sector in Quebec.

Ninety per cent of CAE's revenue comes from exports. The big upside of that is it gives us a link, a global market. What we've done traditionally, and what we'll continue to do, is bring our suppliers along with us, the whole ecosystem, as we grow. Sometimes, SMEs also become exporters, because they're part of our ecosystem at that point. Essentially, with the defence industrial strategy, we'll continue to do that and more.

Tim Watchorn: That's excellent.

The companies here today represent exactly what we want to do with the defence industrial strategy, especially those looking at space. I'm sure my colleagues will tell you a little more about that.

Mr. Elzein, I'm sure my colleague from Longueuil will ask you questions about your company.

I'd like to focus on the three companies that want to go into space.

Mr. Kolias, tell us how the competition is going. Between the three of you, how will you make it to space? How will you operationalize that?

[*English*]

Hugh Kolias: As Bachar was mentioning, competition is always welcomed. At some point, we as a group will need to find a way to work together, not just as a group but also with the industry here at this table and those who are not. We're all taking very different approaches. Ours is medium-lift, a much larger capable vehicle for deploying Telesat Lightspeed into orbit. We view this as being of very strategic importance for the country as well as from a commercial business model perspective. We look forward to seeing how all the teams progress, and we'll find a way to get into orbit one way or another.

Tim Watchorn: Thank you, Mr. Chair.

The Chair: Thank you, Mr. Watchorn.

Christine Normandin, welcome back to the committee.

You have six minutes.

[*Translation*]

Christine Normandin: Thank you very much, Mr. Chair. I'm happy to be back at the Standing Committee on National Defence.

Thank you to the witnesses for joining us. We do have a very nice panel.

Every time I ask a question, regardless of who it's directed at, I invite the other witnesses not to hesitate to raise their hand if they wish to add something. All the witnesses are interesting.

My first question relates to one of your comments, Mr. Greenley. You stressed the importance of properly laying out the needs of the Canadian Armed Forces so the industry can keep up, and also chart the links we have with allies. I'd like to hear your thoughts on that.

Regarding the defence industrial strategy, isn't that putting the cart before the horse, in a way? We don't have an up-to-date defence policy that makes it possible to fully understand the armed forces' needs and the operational needs in relation to our allies.

It would have been interesting to have this document before we had the defence industrial strategy, no?

[*English*]

Mike Greenley: I don't think we needed it before we had the DIS. What I was referring to was the importance of keeping our heads up about what capabilities we need on the different horizons into the future. Some of the excuses that will be used to not buy from Canadian industry will be for interoperability or for speed. There is no excuse for interoperability. We can have sovereign interoperability. There's a requirement in the systems that are delivered by Canadian industry. Also, if we're looking ahead, there should be no excuse for speed.

Today, a lot of the activities that are going on. To answer Mr. Bezan's question, we have a strategic agreement. We signed it in November with the Defence Investment Agency. It's absolutely working to provide satellites for enhanced polar communications in the Arctic. We are moving with speed. This procurement is going much faster than anything I've seen in 35 years. It is excellent, and it works for Canadian industry. There are examples of where this is really working.

To do that for the next generation of capabilities, we have to be looking ahead because in some cases.... Maybe mine's working today because I have 100% of the capability necessary to deliver. Maybe there's a Canadian industry today that's at 60% or 70% capability to deliver. If we're looking ahead on the road map of what we're going to buy next, then those types of firms can be getting seed money to be able to complete the operational building of their systems and have them ready for procurements when they come.

If we're committed to Canadian industry and are looking ahead at the next things we need, we can make sure that we're funding and seeding industry to be ready for the next things we need. Then there's no excuse not to go to Canadian industry to meet the need that Tim was talking about in terms of making sure that 70% of those dollars are being applied to Canadian firms.

● (1150)

[*Translation*]

Christine Normandin: Thank you very much.

I'll move on to my next question. I know everyone will be watching out for their own interest, because this is a very aerospace-focused panel.

This sector is part of the sovereign capabilities highlighted in Canada's defence industrial strategy. However, the list of sovereign capabilities is very long. Sometimes, when you have a lot of priorities, it can seem like you don't have any real priorities.

How can we make sure the aerospace sector is clearly seen as a priority among priorities? Could an aerospace policy, for example, be something to renew in the short, medium or long term?

Pierre Seïn Pyun: I can comment on that.

I want to go back to your question about mapping. I think it's also important to do a better job at mapping the skills that exist in Canada, particularly those in the aerospace sector. As I mentioned, there are very few countries that have the capacity Canada has. Over 220,000 people work in this sector in Canada, including 90,000 direct jobs. It's also a much more intensive sector on average in terms of research and development compared to other manufacturing sectors. On average, it's 2.6, so almost 3 times more intensive in terms of R and D.

It'll be important to go beyond mapping to very clearly identify the areas in which Canada really has a comparative advantage and the gaps that exist and that could be filled by investing more. I think those are the next steps in implementing Canada's defence industrial strategy, and it's very encouraging. We had to start somewhere, and it's good that we have. Obviously, implementation is really the key for this strategy.

You suggest a strategy for the aerospace sector. Some of the panellists here represent member companies of the Aerospace Industries Association of Canada. The association does advocate a more targeted strategy for the aerospace sector. We definitely have very strong comparative advantages in this area. It's a lever that can be used to build the nation and increase Canada's defence industrial capacity.

Historically, there's been a very strong link between military aviation and civil aviation in Canada. Unfortunately, that has been lost over time. Our peers in the industry all have a very strong defence division, and a flow of technologies between the two aviation fields. A lot of civilian technology comes from military programs, and more and more it's the other way around. That's what we do. We leverage our business aircraft as platforms for defence applications.

We have an opportunity to build closer ties and create and encourage those synergies between the civilian and military fields.

The Chair: Thank you.

[*English*]

Mr. Anderson, I'll turn the floor over to you for five minutes.

Scott Anderson (Vernon—Lake Country—Monashee, CPC): Thank you very much.

The pace of adaptation in Ukraine is.... We can see it's entirely different. Symmetrical warfare has changed radically over the last two years. I don't see anything in the defence industrial strategy to keep up with or to maintain that nimbleness. We are always building for the last war. It's an adage that's true. Clearly, it's been true up to now. Our procurement strategy right now is quite hidebound. We want to change that.

I'll start with you, Mr. Pyun.

What is there that's built into the industrial strategy? Is there any proactive nimbleness built into your R and D?

● (1155)

Pierre Seïn Pyun: From a procurement framework point of view and from the point of view of the defence industrial strategy, it's really good and welcome to see a focus on R and D investment. I think this is one of the pillars of the defence industrial strategy.

However, to be quite frank, I think Canada is starting from afar. If you look at the U.S. as an example, 15% of its defence investments are going to R and D and innovation. They have programs like DARPA, DIU and others where they are working very closely with the industry upstream to develop the next generation of technologies.

In Canada, with our procurement system and procuring innovation, we don't have the risk-taking culture or the processes in place to really work much more upstream with the industry in the back-and-forth way that I think you were alluding to. It's a building-block approach. There is more trial and error as well, instead of the traditional way, which is where the government and armed forces come up with very defined requirements and then do an RFP.

Scott Anderson: Do you find that the DIS addresses this problem?

Pierre Seïn Pyun: It talks about R and D, but as I was saying, the key will be implementation. In my view, this is an area where more work needs to be done in order to go beyond our traditional ways to support R and D. Include innovation and dual-use technologies as well. Come up with other ways to engage with the industry more upstream in a building-block kind of approach.

I think that, by and large, it doesn't exist, or the programs that exist are small-scale programs. I think we need to scale up. I haven't seen any reliable stats, but I've seen some indications that in Canada, the percentage of investment in defence going to R and D is below 5%, whereas in the U.S., it's 15%. In other countries, I've seen figures hovering around 15% to 20%.

I think we have some distance to go here in terms of procuring innovation and coming up with different types of models to engage with the industry and innovate at the speed of relevance.

Scott Anderson: Is there anything in the DIS—I haven't seen it—that envisions a crossover with the CAF and the things we're learning in Ukraine right now in order to direct the development?

Mike Greenley: I think the opportunity for that is there in the defence industrial strategy. If there are capability areas where we sign a strategic agreement with the Canadian Armed Forces or the Department of National Defence so that we can then work together, especially under this new strategic framework that's coming out, then we would have all the potential in the world.

If the capability desired was, for example, swarming UAVs or something like that—some of these more innovative capabilities that we're seeing in Ukraine—then partnering with Canadian industry on that capability and going through an iterative process to develop it and make it operational is completely available to us through these new frameworks that are being established.

Scott Anderson: One of the things that's brought up is the aspirational 70% Canadian content. I listened to Secretary Fuhr recently at a trade conference, where he used 80% as an aspirational.

How realistic is it, at the current time, to have 70% Canadian content in our procurement?

Mike Greenley: I think we ought to watch the words “70% Canadian content”.

Scott Anderson: Well, we're watching and I'm asking a question—

Mike Greenley: Correct me if I'm wrong, but it was my understanding that the goal was to shift from 70¢ of every dollar going to United States vendors, which don't have 100% U.S. content—

Scott Anderson: It's aspirational 70% Canadian content.

Mike Greenley: Is it Canadian content, or is it to move to 70% of the dollars going to Canadian industry?

Scott Anderson: Yes.

Mike Greenley: Absolutely, 70% of the dollars to Canadian industry over the next decade is a possible thing.

Scott Anderson: It's possible, but right now is it realistic? What is the rough percentage right now?

● (1200)

Mike Greenley: Right now, it would be low. It might be—I don't even know the number—probably 15% or some number like this. It'll be low. If we procure from Canadian industry in the sovereign areas and more over the next decade, 70¢ of every dollar going to Canadian industry instead of going to U.S. industry is an achievable outcome.

Scott Anderson: Sure it is in industrial capacity, but given the nimbleness to be able to switch, the previous question I asked was about being able to match the technologies of the future today because we pretty much have to do that.

The Chair: Thank you, Mr. Anderson. The time is up.

I believe it's qualifying Canadian content of 100%. He's saying if you have 70% partnership with Canadian content, we'll consider that 100% in that qualification.

Mr. Elzein, I know that you had your hand up a few times. Be very quick, because we're running out of time.

Bachar Elzein: To go to your first question about the war in Ukraine, we see drones. It is the most visible part of that shift in warfare. The underlying foundation to that is also space. We shouldn't underestimate the importance of space for targeting, surveillance and recognizance, which is clearly cited in the defence industrial strategy, which is something I'm really happy about.

A modern army cannot fight without space, and there's nothing we will put into space, be it launch or satellites, that will be more expensive than the cost of war on Earth. If you have a disruption in the port of Montreal—

The Chair: Mr. Elzein, that's good.

Ms. Lapointe, it's over to you for five minutes.

Viviane Lapointe (Sudbury, Lib.): Thank you, Chair.

Mr. Greenley, at the last session, this committee undertook a study on space defence. One thing that really stood out was how much we rely on space-based systems without necessarily realizing it. Many of the services we Canadians use every day depend on satellites and space infrastructure that we may not be fully aware of. When people think about critical infrastructure, we think about roads and bridges and energy systems. We don't always think about space.

How much of Canada's economy and security now depends on space-based infrastructure, would you say?

Mike Greenley: It's a significant amount. There are estimates that say that if we lost access to the global positioning system, for example, that would cost the Canadian economy $1 billion every day. It is very significant.

For Canada to really get into our own lexicon that space is critical infrastructure and that space is dual use, that lets you say, “I'm going to spend money on space as critical infrastructure for observation, communications, global positioning, timing for banks, all these different areas that are dual use, which means that it can then count towards my defence spending and my 5% target”. Space is a very powerful critical infrastructure investment for the country.

Viviane Lapointe: Mr. Kolias, you referenced critical infrastructure in your opening remarks. Do you want to add comments to the question I just asked?

Hugh Kolias: I think Mr. Greenley did a fantastic job.

Some of the estimates that we've seen are up to 20% of GDP. No one truly knows the vast impact, because even power systems, if they go without timing and GPS—which is essentially electricity—would be a substantial hit to the economy.

Viviane Lapointe: Mr. Greenley, which space-based capabilities do you consider most critical to Canada's economic and national security? Where do you see Canada's greatest vulnerabilities today that the defence industrial strategy should address?

Mike Greenley: Most countries these days, with their sovereignty push, are looking for observation of the earth from space to be able to have monitoring of their territory.

They want communications from space for both broadband, Internet-type services and direct-to-voice, cellphone-type services, so that everyone in the country can have equal access to communications and the ability to operate a business and get an education. Those are extremely important.

Alternative GPS would be an important thing for sovereignty. We just talked about that.

We keep talking about launch, whereby, if you have to wait in line or if any other country reprioritizes their launch systems for their own national interests, and we can't get our things into orbit, then we don't have sovereignty in space. That's critical.

Viviane Lapointe: Mr. Goel, as a newer company entering the space sector, the defence industrial strategy places a strong emphasis on innovation.

What does successful support for emerging companies look like in practice?

Rahul Goel: We have a pretty strong opinion when it comes to innovation. Innovation should be applied in the right domains, perhaps where operational capability is not of significant urgency or where we are exploring a scientific question that humans are not at the forefront of. Launch is a capability that humans have been capable of for decades now. The fact that Canada has not developed it does not mean that the rest of the world has not.

Our priority is to get Canadian assets into space as quickly as possible. There are lives on the line. The economy is on the line. If there's an innovative route that makes this more feasible and quicker to attain, then we will certainly take it, but there isn't. It's rocket science for a reason. The margins are extremely thin. We have a job to do.

There's room and time for innovation. Certainly, every aspect of it is, quite literally, rocket science. From printing our engines in 3-D to robotic manufacturing of our composite pressure vessels, we've been doing this for many years now. There's innovation at every step. We choose to apply it to the manufacturing and to the unit economics but not to the fundamental first principles that actually govern the rocket science behind our capability.

I think we have to be very measured in how we apply innovation. In our case, it's all about first principles and getting that capability up and in orbit as quickly as possible.

● (1205)

Viviane Lapointe: Where do you see smaller companies having the greatest opportunity to contribute to Canada's defence and security objectives?

Rahul Goel: We have the ability to take on the type of risk that larger companies simply do not. In our team's experience and in my personal experience, we work weekdays and weeknights and weekends. We skip anniversaries and birthdays. This is something that's very tough in large companies, but this is the type of commitment that is required, and that has been required, by every company.

We talk about companies like SpaceX. They started in a very similar capacity in a similar way. They had people sleeping in tents on an island in the middle of the Pacific to launch the Falcon 1 rocket in 2008. We look at the Falcon 9 and say, yes, we want to build medium-lift for Canada, but the reality is that so much came before that point to get SpaceX to what it is now, a trillion-dollar IPO. We talk about the Falcon 9 rocket, for example, and 70% of that rocket launch is Starlink satellites. Their internal cost to launch Starlink is $18 million, but they charge customers like us and the rest of the world $75 million. Starlink runs 66% of SpaceX's actual economics. We think of them as a rocket company, but they're a space telecommunications company. They're a space systems company.

We have to be very realistic about the type of capability we're developing. Small companies are the ones that can take on the risk and build up to a point where we can reach that level.

The Chair: Thank you.

Ms. Normandin, it's back to you. This time you have two and a half minutes.

[*Translation*]

Christine Normandin: Thank you very much.

The issue of timelines is something that comes up a lot in conversation. We need to move faster and faster, particularly when it comes to awarding contracts. I was wondering to what extent Canada's defence industrial strategy addresses this aspect and solves certain issues.

I'll give an example, something I hear from time to time. A fixed price policy makes it difficult to focus on projects, particularly when there is, for example, a large building portion. We know that construction costs are rising quite quickly, whereas a contract may only be awarded at the end of a two-year period.

Does Canada's defence industrial strategy answer the question of delays before contracts are awarded?

Pierre Seïn Pyun: I can comment.

In Canada's defence industrial strategy, a leading role was given to the Defence Investment Agency, or DIA.

We understand that one of the agency's mandates is precisely to speed up procurement in the defence sector. We experienced this with the two contracts with the National Research Council of Canada, or NRC, that I referenced earlier. One of them was for a research aircraft for defence, a Global 6500. The other one was for the multi-role aircraft, the six Global 6500. Procurement was accelerated for both projects and the Defence Investment Agency was a big part of that. For the six Global 6500, it was a separate process directly with the NRC.

Christine Normandin: I see, so this is the DIA's mandate. However, is the procedure clearly established so that, in the future, we don't wind up with really long delays and back and forth major expansions and recessions, where a lot of jobs are created and contracts are awarded, but followed by a slowdown? Are we missing something here?

Pierre Seïn Pyun: I want to add that Mr. Bezan was referring to that. What I understand from the legislation regarding the Defence Investment Agency is that it's precisely in relation to the processes that we need to clearly see what actions will be taken and what will be the agency's framework to speed up procurement processes.

● (1210)

Christine Normandin: Thank you.

[*English*]

The Chair: Welcome, Mr. Dalton. We'll go over to you for five minutes, sir.

Marc Dalton (Pitt Meadows—Maple Ridge, CPC): Thank you very much.

Thank you to all of our panellists for being here. This is an important topic. Prior to asking a few questions here, I want to make a couple of comments.

I'm quite encouraged, and I'd say enthusiastic, about the direction for building our defence capacity. Having been raised in a military family and having been in the military myself, I think it is really important to be developing our capabilities here in Canada for jobs and for technology. I'm enthusiastic about that, but I also want to share a concern.

That concern is that we've seen how funding can so often be led into the mismanagement of funds. I'm not pointing to you right now, but I will mention that we have seen, for example, how the dollars have rolled out with the environmental funds, the green slush fund and all of these different commitments. It's been really good sometimes for Liberal insiders, friends and companies, but it hasn't been great for the taxpayers of Canada.

We've seen that also with the COVID contracts for the ArriveCAN app and for the ventilators. We've seen all sorts of money thrown out, hand over fist, with very poor results. That's the concern I have. I'm not pointing any fingers here, but I will also say that the announcement of a $200-million spaceport and the contract for 10 years for land that was already leased is very concerning to me, to taxpayers and to this side right here. This is the flashing red light, as much as I want it to just go forward.

Mr. Elzein, you mentioned building a real business that is not dependent on grants. There can be accountability issues, and it can get pretty sloppy, but it's important. You also mentioned having defence contracts that are not based just on Canadian defence, because that's boom or bust. We've always seen that, whether it's shipbuilding or whatever else. That's important. I just had that comment.

[*Translation*]

Ms. Hébert, Mr. Pyun, can you talk about the impact of U.S. tariffs on the auto sector, especially in Ontario? Are you also feeling an impact in your sector?

France Hébert: We haven't really seen a big impact from tariffs in our sector, because we do a lot of work in defence and in the aerospace sector. There are some exemptions, but we haven't really seen a big impact. Moreover, we manufacture a lot of products here, in Montreal, based on a domestic supply chain, so we haven't really suffered any repercussions.

[*English*]

Pierre Seïn Pyun: From our perspective, I will add that we are deeply invested in the U.S. We have suppliers in 49 different states that provide some of the key components for our aircraft. Although the Globals and the Challengers are assembled and completed in Toronto and Montreal, we do have a very integrated value chain with the U.S. We have over 2,000 suppliers in the U.S. and, as I mentioned, over 1,600 suppliers in Canada.

In what we've seen so far, as France—

Marc Dalton: If you don't mind, just because my time is going.... Just continue with the question.

Pierre Seïn Pyun: Just to confirm what France was saying, the impact for us so far has been quite minimal. The aircraft and main aircraft parts are not tariffed. There's a recognition on the U.S. side that the U.S. aerospace and defence industry has been hugely successful. They have a surplus of $100 billion in—

Marc Dalton: I'm going to have to interrupt. I hope you don't mind.

The question here is this: Does any entity in your ownership or core supply chain trace to a foreign state-owned enterprise or non-like-minded government?

I'll be clear: With China, there's a concern. It's important to have trade relationships, but with technology.... Do you see that? Maybe I can quickly get a yes or no.

Go ahead.

● (1215)

Bachar Elzein: No.

Rahul Goel: Not that we know of.

Marc Dalton: Those are good things.

It looks like my time is probably up. Is that right?

The Chair: Yes, sir, it is.

It is now over to Mr. Earle. Go ahead, sir.

Philip Earle (Labrador, Lib.): Thank you, Chair. Through you, I want to thank the witnesses. I assure you I don't have analysis paralysis, but it's obvious it's in the room.

I want to direct my question to you, Mr. Pyun. I will tell you that I've spent some time in the—

[*Translation*]

Christine Normandin: Mr. Chair, interpretation is not possible: There's a buzz in the microphones.

[*English*]

The Chair: Who's mic is it?

Mr. Earle, it's your mic.

Philip Earle: Shall I continue?

The Chair: Can you use Mr. Watchorn's mic?

Philip Earle: Now I do have analysis paralysis. I will speak up and make it quicker.

As I was saying, I come from the aviation-aerospace-defence sector.

Mr. Pyun, from your perspective as an industry leader, what are the most significant challenges that you may be able to tell us about as they relate to dealing with the Canadian regulator? Are there opportunities to improve the regulatory process while continuing to maintain Canada's strong commitments to safety, the highest standard in the world?

Pierre Seïn Pyun: Absolutely. We have a strong relationship with Transport Canada. I think that having a strong Transport Canada regulator is absolutely critical for the success of the aerospace industry. It is a key function of safety, for sure, but it's a function of market access as well. Our aircraft developed here in Canada are type-certified by Transport Canada. In order to facilitate exports of our products, we rely on the confidence that other authorities have in the standards and the certification processes that Transport Canada has in place.

Bombardier exports over 90% of its output to foreign countries from a very strong base here in Canada. However, in many ways we're punching above our weight. The strong presence of the aerospace industry is not necessarily commensurate with the size of the Canadian market. We are a very export-oriented company and a very export-oriented industry. For the overall industry, 80% of production is being exported to foreign countries. Transport Canada's work is absolutely critical in negotiating technical arrangements and bilateral safety agreements to facilitate the access for Canadian products and services to foreign markets.

There's one last point I would make. I think that a bottleneck we're seeing in aerospace—and we can come back to that if you're interested—is the workforce, for sure. If we look at our own situation at Bombardier, we do anticipate in the years to come that between employee retirements that we anticipate and supporting growth, there will be thousands of positions to fill.

Philip Earle: Ms. Hébert, in your presentation I heard you talk a lot about teaming and the different partners you have for the different work you do in many countries around the world. How important is teaming and bringing partners on board with you to the success of the programs that you run?

France Hébert: For us, I think that teaming is integral because we're not a platform manufacturer. We actually provide training and simulation, and we work with all of the platform providers—be it in the air, land or sea domain—to train the men and women in uniform. For us, it's integral from that perspective.

As well, we cannot do it alone. We rely on our supply chain of over 400 companies to get the work done, and we also partner with our allies and forces.

Philip Earle: I have one minute left. For the space people in the room, here's your opportunity to market-pitch to us. What differentiates the three of you?

Hugh Kolias: I can start. I can probably do it in 10 seconds.

We're focused on a larger vehicle—quite frankly, it's about 12,500 kilograms—in sun-synchronous orbit, and that's enough to get Telesat Lightspeed up to orbit. That is, I'd say, our key differentiator there.

● (1220)

Mike Greenley: What differentiates us is 57 years of experience and world leadership positions in earth observation, robotics, rovers and communications satellites.

Rahul Goel: For NordSpace, we're a vertically integrated company. We're the only one in Canada that develops space launch vehicles, a spaceport and satellite capabilities. The integrated capability allows us to maximize our capture of the value chain.

Bachar Elzein: For us at Reaction Dynamics, we're focusing on storable propellants, which means offering more flexibility to the end-user, customer and government operators alike.

Philip Earle: Thank you, Chair.

The Chair: Thank you.

Welcome, Mr. Groleau. It's over to you for five minutes.

[*Translation*]

Jason Groleau (Beauce, CPC): Thank you, Mr. Chair.

This is my first time speaking at the Standing Committee on National Defence. Before I begin, I'd like to thank the brave women and men who serve in the Canadian Armed Forces and the Canadian Coast Guard. I thank them for protecting us.

Mr. Pyun, I hope you're doing well. I'm very pleased to welcome a representative from Bombardier, which is a source of Canadian, international and Quebec pride.

Over the past decade, the Liberal government hasn't focused on defence building in Canada. Do you think the country left well-paying jobs and economic growth on the table?

Pierre Seïn Pyun: Thank you for your comments and your question.

We're quite focused on the future. We've seen this in recent years with Canada, which has adopted a defence industrial strategy for the first time. Over the past few years, we've been the lawyers who, alongside other players in the Canadian industry or economy, argued for more investment in defence.

As I said earlier, it isn't a zero-sum game. We can strengthen our relationships with our current partners, in particular the United States. I said earlier that we have considerable investments with the United States. We actually have some major defence projects in the United States, in particular with the American air force and army, involving surveillance and communications aircraft.

However, we can also further invest in our sovereign capabilities and diversify our partnerships, including with Europe. There was a question earlier about partnerships. I think that this is absolutely the key to success for the industry. It's our model too. We focus on platforms, which in our case are aircraft. We work with system integrators all over the world.

We're really focused on the future. Some good benchmarks have been set. I agree that one of our priorities will be to set this in stone and ensure that these changes become permanent.

Jason Groleau: You build some of the best aircraft in the world, right here in Quebec.

Let's talk about the defence procurement process. Do you find that Canadian companies are given sufficient priority to innovate or continue development, or are we turning more often to foreign markets?

Pierre Seïn Pyun: We've recently seen some encouraging signs when it comes to developing sovereign capabilities or leveraging Canada's aerospace industry. As I said earlier, we're one of the few countries with this complete capability, from service design to production and from aircraft design to certification and maintenance. It's a strategic capability.

I also noted something earlier. We think that it's encouraging to see the defence industrial strategy include the important pillar of research and development. However, work remains to be done. Programs and initiatives have been launched, including BOREALIS. These are encouraging signs. We need to roll out these programs on a larger scale.

We also need to focus on creating partnerships in innovation, which requires a different approach. We're talking about innovation procurement and about having structures, processes and channels in place in order to embark on development programs with our own government in the areas of its choice. This means areas where we want to develop sovereign capabilities. This calls for engagement with the industry at a much earlier stage, even before the tendering process. This also calls for security infrastructure. Both the government and the industry must work hard on this in order to create a framework for this type of discussion.

● (1225)

Jason Groleau: Thank you for your response.

Ms. Hébert, you spoke about the need for Canada to have a sovereign training capability. Yet the Liberals cancelled fighter pilot training. This training is being transferred abroad. How does this government mismanagement, such as the replacement of fighter jets and the end of the Snowbirds aerobatic team, directly affect your capacity and expertise?

France Hébert: At CAE, we're leaders in training around the world, and here in Canada as well. We're currently training a number of Canadian Armed Forces members across Canada. As I said, we have operations at a number of sites across Canada. We see a great deal of potential in the future pilot training program. We're managing the program ourselves. We have a strategic partnership for the future fighter lead-in training program. Through this strategic partnership, together with the Government of Canada and the Canadian Armed Forces, we're trying to speed up this program so that we can properly train future fighter pilots.

In terms of the Snowbirds, when we obtain the new aircraft, we're really looking forward to continuing to train pilots on them.

The Chair: Thank you both.

[*English*]

We're going to have bells soon. I would ask the committee for unanimous consent to sit through the bells until the vote.

Some hon. members: Agreed.

The Chair: Ms. Idlout, I'll turn the floor over to you now for five minutes.

Lori Idlout (Nunavut, Lib.): *Ulaakut*. Good day.

Thank you to all the witnesses for appearing today, and thank you to the chair for acknowledging that today is the first day of National Indigenous History Month.

Having said that, I have just one question for France and Mike to respond to.

Also, thanks to Hugh for acknowledging that we're on Algonquin Anishinabe territory.

I think we all know that given Canada's history towards indigenous people, we've tended to see that we have an under-representation of indigenous people—our first nations, Métis and Inuit—in this field.

France and Mike, I wonder if you can respond to this question: What does the federal government need to do to help increase and have sustained engagement of indigenous people in this field?

France Hébert: I can start.

We have seen changes in recent time with respect to reconciliation and working with indigenous people. As part of one of the programs that we currently work on, the future aircrew training program, there are requirements to work with indigenous people and indigenous businesses. It's a process that we're all learning through. With that, we are committed to work with indigenous businesses to also work at skills development, as well as at finding ways that we can better collaborate for the future.

I think there are a lot of opportunities there. It was mentioned earlier from a labour perspective that in the world of aerospace, a lot of our pilots and aircraft maintenance technicians.... We do have an aging population. We are really focusing now on skills development with indigenous people because we need more skilled workers. There are a lot of opportunities, so that's what we're working on.

Mike Greenley: I agree with France.

The requirements are in the procurements increasingly, and it does affect our behaviour, for sure. It's a part of every major project activity now to determine where we can engage with the community and include more.

Lori Idlout: Thank you.

I do see that I have some time left. Maybe the other witnesses could respond if they're interested.

Hugh Kolias: I'd also echo both Mike and France.

I think Pierre mentioned that there's a shortage of workers and talent, and it's also up to the companies to work with aboriginal communities and companies. We work with Eagle Flight Network, and there is a lot of opportunity to incorporate across the value chain of test qualification flight.

● (1230)

Rahul Goel: I'd like to comment on some very tangible examples of what we can do at the SME level as well.

Two examples come to mind. One is that, just last week, we announced an $8-million project in advanced manufacturing, a consortium led by NordSpace and with NGen support. One of the key contributors is Bear Paw Manufacturing in Ontario, which is developing specialized metal superalloy powders that go into our 3-D printers that develop our rocket engines. We've been very intentional about pursuing that.

As mentioned, it also comes down to the talent in the workforce. We're very proud of our lead structures engineer, who worked at SpaceX, worked on the Raptor engines and is of indigenous origin. He's from Alberta. He came back to Canada because he saw that we are developing rockets here in Canada and that he could leave the United States and come back home. We're constantly trying to develop that sort of talent here in Canada. It's abundant. Again, we just have to be intentional about it.

Bachar Elzein: I would mirror Rahul's comments. We're pretty much similar. We've been very intentional in our decisions to partner with some companies, notably on the southern shore of Montreal in Kahnawake. In fact, some parts that will be flying on our propulsion systems and rockets have been manufactured there. It is our intention to expand that partnership. We are currently in discussion. It is something that is led by my chief operating officer, Maxime. He's spearheading that effort to see how we can incorporate more manufacturing. We're very sensitive to the cost.

Pierre Seïn Pyun: Maybe I can reinforce the point about skills development that was made by my colleagues. To give you an example, according to the Quebec sector council, CAMAQ, there's a need for 65,000 new positions to be filled in the coming 10 years in Quebec alone. That's in the aviation industry writ large. That includes services and airlines but also the manufacturing sector. It is a huge issue, the bottleneck, and it includes schools' capacity. The key schools in Quebec are actually full. When you look at the future, between anticipated retirement and also supporting the growth, the need is very substantial. There's a concern around the capacity of the school system to meet that demand. We believe this will create opportunities, and we should explore those opportunities to work with first nations to address this skills challenge.

From a supply chain point of view, at Bombardier we have an established supply chain for our aircraft that serves as a base for defence applications with modifications. However, as I mentioned, until recently our success in defence was mostly outside of Canada. This is now changing here in Canada, and I think it creates opportunities for us. We are exploring supply chain opportunities, especially on the defence side, here in Canada. That should provide some opportunities for first nations businesses.

The Chair: Thank you. That was very great. I appreciate it.

Ms. Normandin, you have two and a half minutes.

[*Translation*]

Christine Normandin: Thank you.

Mr. Greenley, you touched on the issue of procurement governance. The Defence Investment Agency, which will be created through Bill C-31, places a great deal of procurement power in the hands of a single minister.

I would like to know whether you see this situation potentially leading to the politicization of procurement. If so, what can we do about this?

[*English*]

Mike Greenley: I don't think consolidating powers under the Defence Investment Agency would necessarily be politicized. You would still have to go through the same approval processes with government to be able to expend funds. There would be the same budgeting processes and the like.

The biggest opportunity there is the opportunity for speed—to be able to establish partnerships with industry and to be able to move things with speed through the system. A lot of time is spent in the current system, especially on larger procurements, in the interactions between National Defence, ISED, PSPC and all of those authorities, to get them to always come together. I think if there is consolidation on the ones that matter, we can move much quicker. I think that's good.

[*Translation*]

Christine Normandin: Thank you.

Let me put my question another way. One of the complaints expressed to this committee in the past concerned the politicization of procurement. We saw this in particular with the foot-dragging surrounding the F-35 contract.

Do the new defence industrial strategy and the new structure planned for the Defence Investment Agency solve this problem of politicization, which already existed to a certain extent?

● (1235)

[*English*]

Mike Greenley: I was going to say that it already existed to a certain extent, so I don't think they're fixing it. I think politics is politics. Whether it was the maritime helicopter cancellation a couple of decades ago or whether it's somebody playing around with a fighter jet today, there will always be politics in the largest discretionary spend of government. I think that will be there. I don't see how the Defence Investment Agency makes it better or worse. Politics will be there. It just allows us, when it is time to go and buy something, to actually go at speed.

[*Translation*]

The Chair: Thank you.

[*English*]

Mr. Kibble, it's over to you, sir. You have five minutes.

Jeff Kibble (Cowichan—Malahat—Langford, CPC): Thank you, Mr. Chair.

It's great to have such a large panel of witnesses today. I'm requesting that they make their answers short. I have three questions, and I'm going to try to hear from each.

Could you name a document—the single most recent Canadian government planning document—that your firm or organization actually uses to forecast defence demand, and the year it's from?

Bachar Elzein: That's a good question. This for us has been a very strong signal to understand where that demand will be heading. Something that I think is noteworthy is that we are building something that doesn't exist in the country already. We are building orbital launch capabilities.

Jeff Kibble: Is there a planning document to guide you to the capabilities of what you're building or particular products? Is there any document that you can name that's helping you plan your business?

Bachar Elzein: Based on the priorities of the DIS, we're able to navigate where we see that demand coming from. Is it more observation—

Jeff Kibble: Is there no document particularly you can name?

Bachar Elzein: Aside from the DIS, there's no document that comes to mind.

Jeff Kibble: Thank you.

Rahul Goel: For us, one of the largest signals was the federal budget, which helped identify—

Jeff Kibble: Okay. Thank you.

Pierre Seïn Pyun: It's the defence blueprint, but I would say also proactive engagement to understand the needs of the future is very important beyond documents.

Jeff Kibble: Okay.

France Hébert: I would say it's between the budget and the defence blueprint.

Mike Greenley: The true north strategy and the budget.... That's why I was saying earlier that we need the road maps as we go forward into the future.

Hugh Kolias: I would echo that.

Jeff Kibble: I'm going to try to squeeze in another one here. I have two left.

Again from left to right, have you signed any new military contracts since May 2025? I'm not referring to an MOU or that you entered into a discussion or talks, or stuff that we've seen, but an actual signed contract with dollars and work started for the government.

Bachar Elzein: We have, yes.

Jeff Kibble: Go ahead, briefly.

Bachar Elzein: It's with the DRDC Valcartier.

Rahul Goel: We have not.

Pierre Seïn Pyun: I mentioned talks with the RCAF through the DIA for the Global for multi-role airlift capability and also the NRC aircraft for research purposes.

France Hébert: We have signed a co-development contract with the Government of Canada on the future fighter lead-in training program as part of the strategic partnership.

Mike Greenley: Yes, it's a strategic agreement for the enhanced satellite communications polar project. That's about a $5 billion-plus program.

Jeff Kibble: Is it an agreement with a signed contract with dollars flowing? Is this agreement signed with a contract?

Mike Greenley: Dollars are flowing within it, yes, in addition to the long lead item component of a new satellite.

Jeff Kibble: Since May...?

Mike Greenley: That was in October.

Jeff Kibble: It was October.

Okay.

Hugh Kolias: Yes, through the DRDC, with contract signed and dollars flowing.

Jeff Kibble: Thank you.

Very quickly then, we seem to be missing a national security policy as the foundation, the guidance, the threat assessment and the strategic assessment that would underpin or be the foundation for the defence industrial strategy, and then the Defence Investment Agency, to get those contracts going and focus on what the particular needs are. In my opinion what I'm seeing is that it seems to be more willy-nilly all over the place as opposed to focused on what we need collectively as a country, not for your individual organizations.

My quick-answer question in the time that I have remaining is this: Would procurement planning, coordination and co-operation, focused and efficient and national in effect, be better, in your opinion, if we had an underpinning national security policy?

Bachar Elzein: It would definitely help. I would say it all depends on the national security policy as well.

Rahul Goel: Absolutely, it would help.

Pierre Seïn Pyun: I think it's one of the building blocks.

France Hébert: I would say the same.

● (1240)

Jeff Kibble: I would agree.

Mike Greenley: I think the most important thing is to have a long-term defence capability procurement road map, which I think, for government, would be helpful if backed up by a security policy in terms of why you need that capability.

Jeff Kibble: I agree. Thank you very much for your comment.

Do I have any time left, Mr. Chair?

The Chair: You do actually.

Jeff Kibble: This is a first.

My last question here will be really quick now. We don't have a national inventory of capability, production, companies, assets, etc., the national inventory of everything. We don't have that. I brought this up before. Again, I know it might not be within your own silo of what you do, but in terms of effectively coordinating and efficiently using our dollars, do you think that would be of benefit and something for the government to have to help better plan?

Bachar Elzein: It would be extremely helpful because it would help also guide who we can work with on what. That's, I think, very key.

Jeff Kibble: That's a shared national inventory.

Go ahead.

Rahul Goel: Yes, absolutely understanding the gaps and how to fill them would be critical.

Pierre Seïn Pyun: I would support this detailed capability mapping. I think it should go hand in hand with the build-partner-buy framework, because we need to understand where the gaps are. In terms of promoting exports as well, I think it's important for the Canadian government to understand where the capabilities at a detailed level reside.

The Chair: Thank you, Mr. Kibble.

Jeff Kibble: Do we have time for a quick one?

The Chair: We have time for Sherry Romanado.

Sherry Romanado (Longueuil—Charles-LeMoyne, Lib.): Thank you, Mr. Chair. Through you, I would like to thank the witnesses for being here.

Because there seems to be some confusion, I wanted to map out some things. In 2017, we brought forward "Strong, Secure, Engaged", which was our first-ever white paper defence policy. That was then updated in "Our North, Strong and Free", or ONSAF, which is our bible in terms of what we're working on. We have the defence capabilities list. We have the NORAD modernization. We have the Arctic and northern policy, and then we have the defence industrial strategy, which maps out and provides clear indicators to industry of the 10 sovereign capabilities that Canada is looking at, including in the budget. We've talked about the space launch legislation as well.

I understand that my colleagues across the way seem to have difficulty finding documentation, so perhaps we need to put that in one document that strings those lines together to show Canadians that they are linked.

I have children serving in the Canadian Armed Forces. Rest assured that the Canadian Armed Forces do provide DND with what their capability needs are. DND then provides that to the DIA, in terms of going out and getting what we need and engaging with industries such as your own. I think that's something we're really doing differently, which we didn't do in the past. We didn't come to industry and say, "What can you help us with?" We didn't go to academia and say, "What research are you doing?" or "What kind of problems can you help us solve? If we threw you, a start-up and a researcher in a room with a CAF member, could you solve this problem for us?"

I think that's what's interesting about the defence industrial strategy. We've created that ecosystem where we're bringing all of these partners who have the solutions to the table, through the defence innovation support hubs, to allow us to tap into that capability.

We have some incredible talent across this panel. I wish I had another hour with you because I could spend an hour.

Mr. Greenley, when we were at CANSEC, you were showing us the latest satellite with payload capabilities. We talked a little bit, and I asked what was preventing you from getting this payload up. You said that you don't have the rockets. We don't have the launch capability here in Canada.

I'm looking at the three colleagues who are sitting beside you. I'm super excited to have Reaction Dynamics from Longueuil here with us today.

What could we be doing in terms of supporting this incredible capability gap we have?

You mentioned it, Mr. Greenley. You mentioned that if we were to lose satellite capability right now, we would have to wait on somebody else to launch a satellite to replace it. What does that mean in terms of our sovereignty and why it's so important we're investing in rocket technology and also in launch capabilities?

Mike Greenley: I think there's an industrial capability that is greater. We just completed an expansion of our manufacturing facilities in Montreal, as a satellite builder. As we go through this year, now we'll be able to produce two satellites a day. That's 400 satellites a year. Next year, we're under contract to do about 250. All of those will be launched outside of Canada because there's nowhere to go. There's an industrial or an economic opportunity, in addition to a sovereignty sustainment opportunity, by ensuring we have launch.

We mentioned this $200-million seed contract that's been given to the spaceport, in addition to a couple of hundred million to the rocket players in the room, to be able to advance technology. That keeps things going and puts a small light on all this stuff, but there are a lot of other gears we could engage here to be able to lean into that further to ensure that we are creating capacity even quicker and getting it out of the country. It's definitely an area that would benefit from any focus we would like to bring to it as we go forward into the future.

● (1245)

Sherry Romanado: Often we're talking about defence. I brought this up as well. In my previous role, I was the parliamentary secretary for emergency preparedness. One of the gaps we had was the capabilities in terms of wildfires and detecting atmospheric issues, whether it be wildfires, hurricanes, flooding or so on and so forth. We do not have the capability we need to be able to continue to launch independently of our allies and to also augment our eyes in terms of the Arctic.

I'm going to give a chance to Reaction Dynamics, of course, because I visited you and I've seen the incredible work you're doing. I'll ask all three rocket scientists if they could provide us with what we can be doing to assist them in making sure that we continue to support them, perhaps through the IDEaS program, to make sure they can develop that capability here in Canada, so that they can not only provide it to Canada but also export it.

Bachar Elzein: Thank you for the question.

I would mirror what Mr. Greenley highlighted. What I think will be very important is not only the support but also the consistency of support. That gives us a lot of certainty. I think, in a certain way, all three of us have experienced a rise in interest from investors. That means we can hire. We have been hiring one or two people per week. We've added 20 people to the team since September—not September 2024 but September of last year—which is pretty remarkable. It's about consistency and the belief that even if the first launch doesn't succeed, it's not the end. SpaceX needed three failed launches before they had a fourth successful orbital flight. That is really going to be key.

I would push it further. When we are able, as a country, to launch our own satellites, it means we can also support the alliance. That means we can also launch satellites for Latvia, Poland and the countries that are currently in a life-or-death situation. They need to launch assets into space, but they can't necessarily develop their own programs or invest. This is something that we are fortunate enough to have in Canada. We have the ecosystem, the companies and the knowledge to do so. Now it's really about that signal.

We've been around for nine years. The question we've always been asked when talking to investors to get capital and secure funding is, “Why do we need a rocket company in Canada when we have SpaceX?”—or pick your favourite. I haven't heard that question for a year. This is really good and refreshing because it means we can focus on building, not surviving.

A strong signal—while ensuring that the signal remains consistent—is important. The launch industry in Canada is a bit like a seed that has been planted. We need to water it and take care of it to ensure that it grows. It's fragile, but one day it will become a very strong tree that will throw shade on other stuff. That's what is really important.

The Chair: We have some housekeeping to do, and we have a vote.

Before we conclude, I want to express, on behalf of the committee, our appreciation of your time, expertise and leadership in enabling Canada to build and prosper, especially to support our sovereignty in space and enable us to protect ourselves as necessary. Part of that is speed, which is critical to responding to the urgency of matters before us—Ukraine has been a great example of how to do that—all while being transparent and ensuring that we protect taxpayer money. We are investing and moving forward because of folks like you. Thank you for being here, for your diligence and for your very robust responses in the discussion.

Before we conclude, however, I'm going to ask the clerk to put something up on the screen for us to talk about. There are a couple of things. One is an agreement for our budget. I think we circulated it.

Sherry Romanado: Can we take a five-minute break so—

The Chair: I'm sensitive about time.

I need concurrence to adopt the defence industrial strategy budget of $30,400.

Some hon. members: Agreed.

The Chair: Also, tomorrow we have a delegation coming from Luxembourg. They'll be here at 10 a.m. in room 125-B, West Block. I'm hoping we can count on members of the committee to attend. I think they're also going to be accompanied by some senators from the other committee.

With that, we have to go upstairs to vote. Do I have concurrence to conclude our meeting and adjourn?

Some hon. members: Agreed.

The Chair: Folks, the meeting is adjourned.