

February 24, 2016

Hon. Wayne Easter
Chair, Standing Committee on Finance
Sixth Floor, 131 Queen Street
House of Commons
Ottawa ON
K1A 0A6

Dear Mr. Easter,

The fifth largest aerospace nation in the world, Canada's aerospace industry is an important economic driver, contributing over \$29B in GDP to the national economy each year and helping to employ over 180,000 Canadians. The industry is highly innovative, investing over \$1.8 billion into R&D annually. It is also well-integrated into global markets and supply chains, exporting 80% of its products each year, 60% of which are destined for the global supply chain.

As the global aerospace industry prepares for a period of significant growth – it is estimated that global demand will require nearly 40,000 new aircraft valued at \$5.6 trillion over the next 20 years – Canada has a unique opportunity to leverage the strength of our industry to attract some of that work. Our nation is already reaping the economic and innovative benefits of a strong aerospace industry. We would like to work with the government and with all parliamentarians to continue expanding those benefits for Canada by partnering to take advantage of this opportunity and grow our industry's footprint here at home and around the world.

In advance of the federal budget later this spring, we have prepared a submission that outlines some ways in which we believe the aerospace and space industries are well-positioned to create new opportunities for Canada's manufacturing sector and middle class. As an association, we are committed to working with parliamentarians to develop strong program and policy solutions that deliver value to Canadian taxpayers and drive growth for our national economy. We believe the recommendations included in this proposal meet those objectives, and we would be delighted to discuss them with you further at your convenience.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Jim Quick", is written in a cursive style.

Jim Quick
President & CEO

Innovation, Science and Economic Development

Recommendations:

1. Reaffirm support for the creation of a national supply chain development initiative by allocating \$6 million to fund the set-up of the program in 2016-17. Thereafter the program would be funded by industry fees and contributions.
2. In collaboration with BDC, develop a new program using funds from the Strategic Aerospace and Defence Initiative (SADI) to provide funding and support to help accelerate the growth of innovative small aerospace businesses in Canada by bridging the gap between product innovation and the commercial execution.

Context:

Aerospace is unique within the Canadian manufacturing sector for a number of reasons. Both productivity and research and development, two issues that have plagued much of Canada's manufacturing sector, are remarkably high in Canadian aerospace: R&D intensity and productivity growth are 5 times and 2.5 times higher than the Canadian manufacturing average, respectively. In addition, aerospace supply chains are almost exclusively global. With 80% of Canadian aerospace products exported to destinations around the world, the ability of aerospace firms of all sizes to access international markets and supply chains is essential for their survival.

Two issues require particular attention if Canada's aerospace industry is to maintain its position of leadership as the fifth-largest aerospace nation in the world and an important national economic driver. First, Canadian aerospace suppliers sometimes struggle to set in place the processes and systems that will enhance their operations and make them more attractive to global customers. A national supplier development initiative would set up an industry-led program that would provide suppliers with guidance and accreditation in order to strengthen the Canadian supplier base. One-time federal funding of \$6 million to fund the set-up of this program has already been allocated for the 2016-17 fiscal year. We urge the government to reaffirm this commitment so that the initiative can move ahead as planned in the months ahead.

A second issue, closely linked to the first, is the need for small and medium sized aerospace firms grow more quickly. A program designed to encourage small businesses to investigate ways of accelerating their growth through business combination strategies would play an important role in helping businesses to innovate, grow, and bring new products to market more quickly and competitively than in the past. AIAC recommends that Innovation, Science and Economic Development, in collaboration with BDC and industry, develop this program, drawing from funds allocated to the Strategic Aerospace and Defence Initiative (SADI). The intent of the program should be to competitively select companies for early support which is designed to defray up-front risk and graduate companies into business model where they could make use of BDC's normal commercial lending supports.

Transport Canada

Recommendation:

Increase the budget of the Transport Canada Civil Aviation Directorate's (TCCA's) Civil Aviation Branch by \$30 million over 5 years. This budget increase should be used to support:

1. The hiring of much needed, highly specialized Certification and Standards staff;
2. An increased focus on effectively negotiating international bilateral agreements;
3. The updating and modernization of TCCA's regulatory framework.

Context:

Transport Canada's Certification Branch is world-renowned as a premiere certification authority. This prestigious reputation gives Canada's aerospace industry an important competitive advantage because it facilitates Canadian trade and export opportunities around the world, opening doors to Canadian products into new markets and making it easier for Canadian manufacturers and operators to do business in foreign jurisdictions.

However, Transport Canada's ability to continue maintaining its standard of service is at risk, even as the importance of certification to aerospace is more important than ever. Over the past 10 years, the budget for Transport Canada's certification branch has not increased. At the same time, Canada's aerospace industry is growing substantially, increasing its economic impact by 31% (GDP), its productivity by 39%, and its R&D spending by 64% over the last 10 years.

Because Canadian aerospace manufacturers export over 80% of their products to foreign markets, Transport Canada's ability to maintain a modern regulatory framework that responds quickly to industry growth will be essential to Canada's ability to keep pace with growing global demand and maintain its position as one of the world's aerospace leaders. The lack of new funding to the Certification Branch's budget over the last ten years, however, has impeded its ability to meet growing demand, threatening to create critical bottlenecks. An increase to the certification branch's budget is urgently needed in order to ensure that it can continue to keep up with demand and support Canadian industrial competitiveness in foreign markets.

Public Services and Procurement

Recommendation:

Allocate \$15 million to extend the existing BCIP program to target aerospace and space companies in particular, leveraging the government's existing innovation programs to provide enhanced benefits and greater support to companies as they move through the innovation and commercialization process.

Context:

Part of the challenge of driving innovation in the Canadian aerospace industry is making sure that support exists to move innovative ideas all the way through the process from an idea or theory to a viable, commercialized product that is ready to generate returns on the R&D investment. Several programs – IRAP, SADI, and the CSA's SDTP program, to name a few – already support research in the later stages of the innovation and commercialization spectrum, but nothing exists to help supported products and technologies move into the last stage: finding buyers and successfully completing market roll-out.

By making BCIP an adjunct to existing programs like IRAP, SADI and SDTP, companies who successfully completed these programs could also be provided with a first-buyer opportunity: support from government as the first buyer of the finished product or technology, making the government a reference customer during wider market roll-out and helping the manufacturer to commercialize the product more effectively. This would ensure that Canadian innovations succeed and begin generating jobs, revenue and economic impact as quickly as possible.

There are also opportunities to continue to use the BCIP program to expand the way that government uses its buying power to encourage innovation. We recommend that the BCIP program be expanded in terms of the funding provided to it, that it be asked to continue its efforts to integrate into both “upstream” and “downstream” funding and business support programs across government, and also that it be directed to explore and test novel approaches to using government procurement to support and accelerate the growth of the growth of dynamic and innovative companies.

Space

Recommendations:

- 1. Increase Funding for Space Technology Development and Innovation** – In Budget 2015, the government announced a modest investment of \$30M to fund Canada’s continued participation in the European Space Agency (ESA) ARTES program. AIAC recommends that the government redouble its investment in technology development and allocate an additional \$70M over the next three years for research and development of innovative Canadian space technologies through competitive, broad based programs such as CSA’s Space Technologies Development Program or participation in other ESA programs. Care should be taken that the key niche areas of Canadian space technology should be funded including: satellite communications, space based radar, optical sensors and space robotics.
- 2. Commit to Developing New Canadian Space Missions** – Space missions are the heart of innovation and renewal for Canada’s space industry. Global space technology markets are exploding and Canadian industry needs to consolidate their niche leadership in key technology areas to grow in the future. Space technologies must be tested and validated in space; therefore, new space missions are essential to this requirement. The AIAC recommends that Canada immediately initiate a program for the definition, design, development and execution of multiple new Canadian space missions over the next five years, with a budget of \$600M. These missions would address government priorities in the areas of climate change, communications and connectivity, monitoring climate change, weather, water management, security, cyber security, resource management, international collaboration, space science and exploration. These missions should be competitively selected and provide the flight opportunities for a range of Canadian space technologies that are the essential prerequisite for commercialization. The scope of these missions would include stand-alone missions, Canadian-led contributions to larger international space missions, or the utilization of Canada’s access to the International Space Station for research experiments or demonstration instruments.
- 3. Continued Support for Flagship Missions and Capabilities** – Canada is the world leader in space radar and robotics because of decades-long investments in the RADARSAT Earth observation program and our partnership with NASA for the Shuttle and International Space Station programs. These unique capabilities position Canada as an instrumental partner for global security cooperation and international space science and exploration missions. To maintain and grow Canada’s leadership in space radar, it is urgent that we begin the next space-based radar missions now so that critical expertise and capability will not be lost and our sovereignty will remain protected. Similarly, Canada’s iconic space robotics and electro-optic sensing capabilities will be in demand for international space exploration missions and for emerging innovative commercial space ventures. To this end, Canada must begin now to implement its commitment to extend our participation in the International Space Station program from 2020-2024.

4. **Develop and Maintain a Balanced Approach for Space** – It is important to recognize that investment required to continue and extend marquee missions and industrial capabilities over the long term cannot be accommodated within the current operational budget of the Canadian Space Agency without displacing other critical activities and programs. A balanced approach that supports both legacy programs and a range of emerging innovative space initiatives in remote sensing, telecommunications, science and exploration is essential. Incremental investment to support and extend these missions with adequate new funding is imperative to prevent them from starving other initiatives of much needed resources.

Over time, Canada needs a long-term vision for Canada's future in space that sets realistic and compelling objectives to guide the priorities of Canada's space program and facilitate informed investment in our industrial sector. The plan should be developed in consultation with all stakeholders in the space sector and should include clear objectives for national need, industrial competitiveness and the sector's economic contribution to the Canadian economy.