Aerospace Industries Association of Canada
L'Association des industries aérospatiales du Canada

The Aerospace Industries Association of Canada (AIAC) Submission to the Standing Committee on Finance's Pre-budget Consultations

Immediate Measures to Maintain and Increase our Global Aerospace Market Share

August 2011

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Executive Summary

The Aerospace Association of Canada (AIAC) and its member companies strongly support the Government of Canada's commitment[1] to review all policies and programs related to the aerospace industry within 12 to 18 months; to maintain the level of funding of the **Strategic Aerospace and Defence Initiative (SADI)** stable while doing so; and, to examine options for continuing the level of funding thereafter. SADI – along with other programs and policies – enables the Canadian aerospace industry to compete globally by leveling the playing field with competitors outside of Canada. AIAC also supports the Government's intention to balance the budget by 2014-15. The aerospace industry is determined to do its part through continued efforts to invest in innovation, enhance exports and create wealth across Canada.

The Review will result in longer-term recommendations and actions necessary to enhance the competitiveness of our industry regarding space, defence, and small business, among others. The AIAC presents the following key measures that we believe are urgently needed for the Canadian aerospace industry to remain competitive, maintain and grow its market share in the immediate term.

The measures include:

1. **Investments in technology demonstrators.** New, more eco-efficient technologies are currently being developed by aerospace nations all over the world. These technologies will be incorporated into new aircraft platforms. In order to ensure our continued position as a world leader - and to continue to contribute to Canada's technological advancement and economic prosperity - the Canadian aerospace industry must urgently technology demonstrators to showcase its own technological innovations. Technology demonstrators will ensure an optimal positioning of our industry on the platforms of the future which are being developed now. ***AIAC recommends that the Government create a special fund for a Technology Demonstration Project of a total of $140 million over four years***.

2. **Preservation and enhancement of the Scientific Research & Experimental Development (SR&ED) tax credit**. The existence and continuation of the SR&ED program is pivotal to the ongoing business plans and strategies of Canada's aerospace companies. The SR&ED program, along with the Strategic Aerospace and Defence Initiative (SADI) through Industry Canada, work in tandem to position these companies to compete successfully around the world. Given the aggressive direct financial support that several other nations offer to their domestic aerospace sectors, these two programs are of strategic importance to the creation of high-value, high-skilled jobs here in Canada. ***AIAC therefore recommends that the SR&ED program be protected and enhanced.***

3. **Assure the efficiency of Canadian Aircraft Certification Process.** The design and related manufacturing processes of aerospace products must be reviewed and approved by Transport Canada Civil Aviation. This requires not only the necessary number of technically competent staff but also requires those personnel to be experienced in the latest concepts that our industry is continuously developing to ensure that our products are both the safest and the most competitive on a world-wide basis. In the extremely competitive international industry, Canada's aerospace companies must both have the best ideas ***and*** must be able to follow through with the best results. This requires the necessary depth of regulatory resources to fully support certification requirements on a timely basis. An inefficient Certification process will lead to failure to sell and deliver our product on time, and will negatively impact our capacity to export and entail significant job losses. ***AIAC therefore recommends that the Transport***

[1] Government of Canada's 2011 Budget: "A Low-Tax Plan for Jobs and Growth". June 2011.

Canada Civil Aviation personnel funding, particularly in the Aircraft Certification branch, should be increased commensurate with new certification programs.

These recommendations are discussed in the following pages.

Economic Impact of the Canadian Aerospace Industry

As the world's fifth largest aerospace industry, Canada's aerospace sector generated more than $22 billion and employed nearly 80,000 Canadians in 2009. When indirect and induced employment is included in the calculation, the sector employs more than 150,000 workers. Nearly 80 percent of Canadian aerospace products were exported. 83 percent of the sector's revenues were generated from the civil (or commercial) sector while 17 percent came from the military (or defence) sector.

The industry's revenues are generated throughout the nation, particularly in Montréal (Quebec) (the third-largest aerospace center in the world) Western Canada, Ontario and Atlantic Canada as shown in Figure 1.

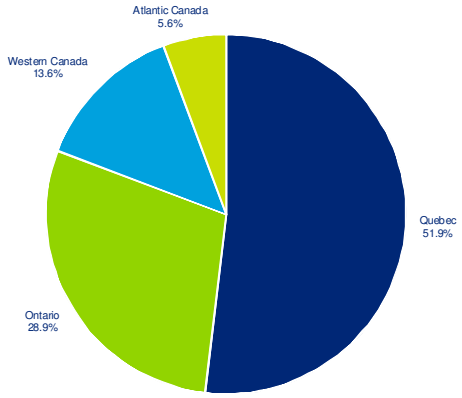

Figure 1 - Regional distribution of the revenues of the Canadian aerospace industry.

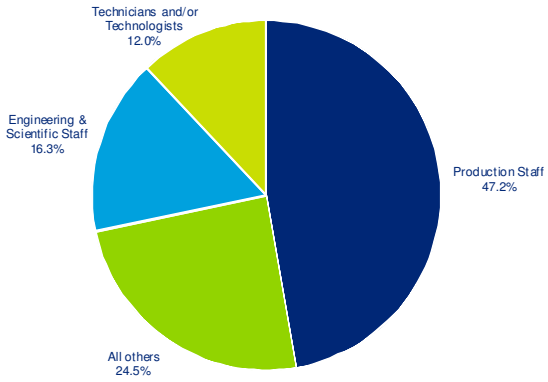

Figure 2 - Types of Employment of the Canadian aerospace industry.

In 2009, the aerospace industry's contribution to Canadian GDP reached $17.5 billion and contributed an additional $1.5 billion in tax revenue.[2] Investments in R&D and Capital reached $1.9 billion. Of this amount, $1.4 was exclusively spent on R&D, making aerospace one of Canada's largest investors in such activities.

The Canadian aerospace labour force consists of engineers and engineering staff, technicians and technologists and production staff, as charted in Figure 2. On average, wages are higher than in the manufacturing sector. In 2008, the average wage for aerospace parts and manufacturing reached 67,200[3] while the national average wage for manufacturing[4] was approximately $43,000.

Increasing World Demand: an Outstanding Opportunity for Growth

World demand for aircraft is expected to reach a value of $3.2 trillion (USD) over the next 20 years[5] for the production of more than 30,000 aircraft. This growth includes the replacement of older fleet with newer platforms as well as a steady increase in the need for air passenger craft generated mostly in China and Asia Pacific. This expected growth represents an outstanding opportunity for Canada's

[2] Includes corporate and income taxes at the provincial and federal levels. Deloitte & Touche, The Strategic and Economic Impact of the Canadian Industry, Impact of the Canadian Aerospace Industry, p. 27. October 2010.
[3] Statistics Canada, NAICS 336410.
[4] Statistics Canada, NAICS 31-33.
[5] Boeing Current Market Outlook 2010-2029 and Airbus Global Market Forecast 2010-2029.

aerospace industry to generate more wealth and create high-quality jobs for Canadian from coast to coast.

Indeed, simply by maintaining our current market share, employment in the industry would grow by 26 percent, while a 10 percent growth in our market share would increase employment by nearly 40 percent[6].

In order to maintain and grow Canada's market share and capture this growth, new technologies must be developed to allow Canadian industry to maximize its presence on future platforms. And, these innovations must be successfully commercialized. We must also develop sound new R&D partnerships, foster a healthy and effective investment and tax climate, and train a sufficient amount of engineers and technical workers to fuel growth.

Urgent Issues and Priorities in Detail

The AIAC recommends the following key measures that we believe are urgently needed for the Canadian aerospace industry to remain competitive, maintain and grow its market share in the immediate term:

1. Investing in Technology Demonstrators to Preserve and Grow our Global Market Share

The United States and the European Union are investing heavily in the development of new aerospace technologies. Both regions have adopted aggressive public-private framework and/or technology programs that aim to position their respective industries on future platforms. For example, the EU 7th and 8th Framework is providing aerospace firms with non-refundable funds for technology demonstrators. Likewise, the *Clean Sky* initiative provides non-refundable support for greener technologies. In the U.S.A., such funding is also available through defence technology procurement.

In Canada, the financing available to Canadian aerospace technologies is primarily directed at conceptual and pre-competitive phases of R&D. The development of technologies from university laboratories (Technology Readiness Levels TRL 1-3) to the stage where they are funded by SADI does not receive comparable support. When key technologies are not mature enough to be exploited in commercial developments, many excellent ideas remain at the level of concept validation in universities – effectively reducing innovation.

Industry is the natural player to develop ideas and bring them to the technology demonstration phase. In order to bridge that gap and to ensure the Canadian aerospace industry remains competitive and can take advantage of the forecasted growth in demand for civil aircraft, we recommend that **Canada should create a non-refundable fund for technology demonstrators to a total of $140 million over four years to be matched by industry.**

As such, in order to ensure that the Canadian aerospace industry's continued position as a world leader and as an important contributor to Canada's technological advancement and economic prosperity AIAC recommends that the Government creates a special fund for Technology Demonstration Projects to a total of $140 million over 4 years.

[6] Deloitte & Touche, The Strategic and Economic Impact of the Canadian Industry, Executive Summary. October 2010.

2. Preserving and enhancing the Scientific Research and Experimental Development (SR&ED) tax credit.

SR&ED is recognized by the aerospace industry as one of the leading programs offered by Government to assist with R&D across many industrial sectors. Many of AIAC's members are major R&D performers, partly as a result of their access to the SR&ED program. AIAC was concerned to read the SR&ED Policy Review Project's draft "Overhead and Other Expenditures Policy" from the Canada Revenue Agency (CRA) earlier this summer, as the document sought to codify what we consider to be overly severe restrictions on industry in terms of what will and will not be accepted under SR&ED. There is a real concern among AIAC membership that Canada's global economic competiveness in aerospace will be curtailed if access to the SR&ED program is curtailed.

Making significant changes to what is covered under SR&ED would cause uncertainty about the cost of multiple year R&D efforts currently underway. It would also add risk to future business investment decisions, and could potentially stall current investments with longer term market horizons.

The SR&ED program, along with the Strategic Aerospace and Defence Initiative (SADI) through Industry Canada, work in tandem to position Canada's aerospace companies to compete successfully around the world. Given the aggressive direct financial support several other nations offer to their domestic aerospace sectors, these two programs are of strategic importance to the creation of high-value, highly-skilled jobs here in Canada.

AIAC recommends the following enhancements to the SR&ED tax credit in order to be more effective in generating R&D expenditures:

- Make SR&ED refundable regardless of entity size; or alternatively, make SR&ED creditable against non-income taxes such as payroll taxes.
- Recognizing that many aerospace projects are international in nature, allow all R&D costs incurred outside of Canada to be eligible for SR&ED tax credits.
- Make the cost to protect the R&D intellectual property an eligible expense.

AIAC and its member companies recommend that the SR&ED program be protected and enhanced. Its existence and continuation is pivotal to their ongoing business plans and strategies.

3. Enhancing the Certification of Canadian aircraft

Canada's commercial aerospace industry generates approximately 83 percent of the total aerospace and space revenues in Canada. Of key importance to the industry are the 80,000 highly skilled employees many of which are engineers, technologists, scientists, and others that design and certify these aerospace products. They are key to our success, since without their collective innovative design input to the development of new products, Canada will not only fail to grow its world-renowned aerospace industry it will in fact start to decline in the world order of importance. This focus on highly skilled human resources is a keystone to our past successes and to the overall future success for our aerospace industry and its growth.

This human resource issue is much broader then mentioned above since it not only affects our aerospace industry companies and their own employees but it also seriously affects the other very important part of the design and certification supply chain, the regulatory system. In order to design, sell and deliver aerospace products to customers, the design and related manufacturing processes of our aerospace products must be reviewed and approved by Transport Canada Civil Aviation. This requires not only the required number of technically competent staff but also requires them to be experienced in the latest concepts that our industry is continuously developing in order that our products are the safest they can be and at the same time the most competitive on a world-wide basis. In the extremely competitive international industry our companies compete in we must have not only the best ideas but we must be able to follow through with the best results. This requires the necessary depth of regulatory resources to fully support our certification requirements on a timely basis.

AIAC applauds the Government of Canada's initiatives and support by removing trade barriers and supporting international marketing to the benefit of aerospace international trade. In conjunction with this we must also ask for the same level of support in providing the necessary certification resources within Transport Canada Civil Aviation such that our many current and future deign certification programs are successfully completed on time and that our products are delivered on time to the customers.

AIAC recommends that the Transport Canada Civil Aviation personnel funding, particularly in the Aircraft Certification branch, should not be reduced from current levels AND should in fact be increased commensurate with new certification programs.

About AIAC

The Aerospace Association of Canada (AIAC) is the national voice of Canada's aerospace industry. Our mission is to understand, build consensus and provide leadership on aerospace policy issues impacting the competitiveness of the industry. We also work to increase Canada's profile on the world stage by communicating our accomplishments in the air and in space; and, by promoting Canadian aerospace companies in foreign markets. AIAC represents the interests of more than 400 companies located across Canada.

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