

## WHEN WE BUILD IT, THEY WILL COME WHY AN AEROSPACE INNOVATION CLUSTER CREATES NEW BUSINESS FOR BC AND CANADA

### ISSUE

Canada is facing a severe pilot shortage, and it has lost the ability to generate the pilots it needs now and in the future. This shortage includes fixed wing, helicopter pilots, and related services, such as fully licensed AME (Aircraft Mechanical Engineers)<sup>1</sup> for both types of aircraft. This problem continues to grow across the country<sup>2</sup>, and presents an opportunity for a centre for aerospace innovation and presents an opportunity for a centre for aerospace innovation based outside BC's lower mainland, i.e., in Kelowna. Other related service positions in all sectors of the industry are struggling: airport ops, flight instructors, ramp escorts, customer service agents, marketing and other professionals.

The Kelowna international Airport is now the tenth busiest in the country, setting new records every year for traveler numbers. The airport is also a centre of mechanical excellence, with KF Aerospace maintenance crew numbering just under 2,000 and Okanagan College's trade program graduates finding jobs before diplomas are conferred.

The opportunity for such a cluster includes all related industries, either not, or only partially available in the Okanagan: digital engineering, innovation around materials and production, communication systems, ballistic systems, and related support industries available only in the lower mainland, or in Quebec and Ontario.

### BACKGROUND

Aviation serves a variety of crucial roles in the Canadian economy by safely and efficiently transporting people, moving cargo and supplying or acting as a vital lifeline to northern and rural communities.

Canadian flight schools produce about 1,200 commercial pilots each year. Of these, only about 500 join the Canadian aviation industry each year as international student pilot graduates return home or to take up employment with international entities that purchase Canadian flight training schools which

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<sup>1</sup> The most pressing problem facing the industry is a severe labour shortage that is predicted to be even worse than that facing the pilot profession. The Canadian Council for Aviation and Aerospace (CCAA) labour market report predicts 5,300 new AMEs will be needed by 2025 to keep up with growth and retirements. April 20, 2018 <https://www.avaerocouncil.ca>; BC Aviation Council, February 25, 2019 AMEs unite to create strong national voice

<sup>2</sup> Canada has the third-largest aerospace sector in the world, generating \$29.8 billion in annual revenue and supporting 211,000 direct and indirect jobs and 5% of jobs in the north. Global air transport industries will double the number of aircraft and the amount of passenger traffic by 2036. This will require 620,000 new pilots to fly large commercial aircraft internationally. Eighty per cent of these pilots have yet to begin training, emphasizing the need and importance of the pilot training sector on a global scale. October 18, 2018, Member Motion M-177, Hansard

prioritize overseas home markets. International recruiting further strains Canadian- and territories-based northern operators, as well as critical crop-spraying and aerial forest fire operations.

Canada needs 7,000 to 10,000 new pilots by 2025, resulting in a projected shortage of at least 3,000 pilots, given current production rates.<sup>3</sup> This problem will significantly worsen in the future, affecting the travelling Canadian public, unless action is taken.

With new carriers commencing operations and established larger airlines experiencing both growth and the retirement of senior pilots, there has been an increase in the rate of “move-up” pilots from regional airlines and small operators. This affects regional carriers, as they lose pilots to larger carriers, often preferred by pilots on aggressive career paths.

Pilots’ current move-up timeframe is six to 18 months, rather than the three years it has been historically. Type endorsement training costs have traditionally been amortized over the expected retention period of a pilot. With retention periods dropping from three years to six months, the economics change dramatically. Some regional airlines have reported cancellations of flights due to a lack of pilots and/or higher training costs. Plus, flying schools can’t maintain sufficient instructors for chief or senior roles, further reducing training capabilities.

The traditional pathway to becoming a pilot in Canada has involved earning licenses and ratings that cost approximately \$75,000 but can climb to twice that, with tuition and other student costs, when combined with post-secondary education. Most student pilots acquire substantial debt to cover these expenses. It is common to see high rates of attrition in flight programs due to lost financing<sup>4</sup>.

An aerospace innovation cluster would with a single blow, help solve all the inter-related issues around industry shortages in BC and across the industry. Such a facility would have a direct positive economic impact to the region with regards to employment, housing, education and taxes. Additionally, location in

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<sup>3</sup> Canadian Council for Aviation & Aerospace 2018 labour market information report states that this number will significantly increase when new flight duty time rules are put into effect by Transport Canada. As noted in the report, half of flight operators state that finding qualified pilots is a significant challenge, with regional airlines reporting flight cancellations due to a lack of flight crew in the busy summer months. Kevin Hillier, Vice-president, Carson Air, has stated: “If and when the proposed Fatigue Management Regulations for pilots come into effect, we estimate that there will be up to 30% more pilots required for the work that we are doing today. This does not take into effect attrition through retirement and airline hiring in the future. This will force operators to reduce service, and potentially create safety issues for operators who have no qualified pilots.” *April 20, 2018*  
<https://www.avaerocouncil.ca>; *October 18, 2018, Member Motion M-177, Hansard.*

<sup>4</sup> “As an Aviation Council that is focused on ensuring the sustainability of our industry, BCAC fears this pilot shortage will have severe and critical impacts not only on our economy and operators, but on our remote and Indigenous communities. As one of the barriers to increased pilot supply is definitely the financial burden of obtaining the requisite flight time experience, we feel increased financial aid would be a strong indicator that the government is aware of the issue and supporting positive change.”  
*Heather Bell, Chair, BC Aviation Council, February 7, 2019* <https://www.bcaviationcouncil.org/wp-content/uploads/2019/02/BCAC-Presentation-to-House-of-Commons-Standing-Committee-on-Transport.pdf>

the central Okanagan would mean reduced land footprint costs, better access to and from northern communities, including the oilsands, and the introduction of state-of-the-art simulators for both fixed wing and helicopter pilot training which would act as a national and international draw, further stimulating local economies.

### **THE CHAMBER RECOMMENDS**

That the Provincial Government:

1. Work with the Federal Government, and the provinces of Ontario and Quebec to provide focused financial assistance for British Columbians pursuing careers as aviators, and in the aviation support industry
2. Support the Federal Standing Committee on Transport, Infrastructure and Communities to identify and determine how communities can support federal Member Bill M-177 (amended) to rapid implementation
3. Advocate that the Ministry of Advanced Education, Skills and Training to set up a new Aerospace Innovation Centre of Excellence outside the lower mainland, i.e., in Kelowna or Prince George, with the involvement of post-secondary institutions such as Okanagan College, University of BC Okanagan, Kelowna International Airport, KF Aerospace, and other related training organizations and end-users in interior BC.
4. Focus financial aid assistance to student aid in all areas of training, while encouraging women, girls and Indigenous Youth into the industry at all levels. Build in penalties for graduates receiving financial aid who leave Canada to pursue aviation-related careers outside the country within minimum service periods, *i.e.*, three years.

Submitted by the Kelowna Chamber of Commerce; supported by the Greater Vernon Chamber of Commerce, the Greater Westside Board of Trade, the Peachland Chamber of Commerce, the Summerland Chamber of Commerce and the Penticton & Wine Country Chamber of Commerce.