

Ottawa Aviation Services

Brief to the House of Commons Standing Committee on Transport, Infrastructure and Communities on M-177 (Canadian flight training schools)

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About Ottawa Aviation Services

Ottawa Aviation Services (OAS) has been offering flight training, maintenance and other aviation services for more than twenty-five years. Our Flight Training Academy provides professional pilot trainees with efficient training using modern, innovative, high quality and competency-based modules for fixed and rotary wing operators.

Along with the concept of professionalism, safety and excellence are at the core of all our training programs.

OAS is an approved flight training unit (#8022-0678) by Transport Canada and one of thirteen flight schools allowed to deliver the Integrated Airline Transport Pilot course. We are a registered private career college (#107060) by the Ontario Ministry of Training, Colleges and Universities. OAS is also a Designated Learning Institution by the Department of Immigration, Refugees and Citizenship, and thus able to host international students.

Advanced flight instructors, coupled with modern glass-cockpit, multi-engine and aerobatic aircraft, simulators, and partnerships with leading airlines, help our graduates to succeed in their careers. We stress the fundamentals of flying, new aircraft training technologies and best practices, in order to transform our students into proficient pilots.

About our Students

Our graduates are:

- Finding employment (100% of the graduating students in the past seven years have done so);
- Sought after by OAS partner airlines such as: Porter Airlines, Jazz Airlines, Air Georgian and Keewatin Air; and
- We maintain a ratio of 50% Canadian students in our more advanced flight training programs.

Recommendations

- 1. Offer comprehensive, enhanced and simplified federal financial support to student pilots similar to the advantages provided to students pursuing law and medical careers.
 - a. As an example, support students enrolled in Canadian aviation schools by considering time spent in the aircraft (flying time) as part of the instructional time. This would permit students to be eligible for greater financial support through various grants/loans. While this is partially a provincial issue, the federal government could show leadership by amending the terms of Canada Student Loan program accordingly.
 - b. Make financial support available for in-flight training and not limited to ground instruction only.
 - c. Guarantee loans issued by commercial banks to student pilots. This will increase the funding available through commercial channels.
- 2. Encourage (through financial and regulatory measures) the use of new technologies within flight training academies, including:
 - a. Recognizing the use of Virtual and Augmented Reality and Flight Simulators and considering the time spent using this training method toward the required flying time;
 - b. Approving the use of electric aircraft for educational institutions to reduce the cost and the carbon foot print; and
 - c. Supporting the use of Artificial Intelligence in personalized training programs thereby increasing the number of candidates suitable for training.
- 3. Eliminate the federal excise tax on fuel for educational purposes. Alternatively, allowing the use of electric aircraft would enable flight schools to support reducing our collective carbon footprint.
- 4. Elevate the professional standing of flight instructors
 - a. Provide incentives for pilots to become flight instructors through loan forgiveness after a period of service in a flight school similar to the process already in place for medical professionals who serve in remote communities.
 - b. Create an exemption under the Canada Job Grant program that stipulates that regulated training (such as a flight instructor rating) does not need to be performed by a third party.
 - c. Encourage pilots in the late stage of their careers to return to the flight training industry as instructors, mentors, professors and resources to improve teaching methods and curricula in line with industry best practices.
 - d. Provide federal support to encourage pilots to choose flight instruction as a career path.

Pilot Shortage in Canada

According to the UN's International Civil Aviation Organization (ICAO), as well as CAE Inc, Boeing and Airbus, in order to meet global demand for aviation services, approximately 620,000 pilots will be needed world-wide by 2036. Underscoring this fact reveals that 80% of would-be pilots have yet to begin their training.

There are significant opportunities for the personal development of future students and the development of the Canadian economy, especially for the Canadian aerospace cluster.

Canadian Council for Aviation & Aerospace projections indicate that we will need 7,300 pilots by 2025. The impact of this is already being felt across the sector. Regional airlines are currently forced to cancel select flights due to lack of available pilots. This situation will rapidly deteriorate without appropriate policy changes.

As the entry point to aviation enhancement, Canada's flight schools are uniquely positioned to help our sector to face this challenge head-on.

Canada's aviation industry as a whole has the potential to have a significant impact on our economy, and it is vital that key steps be taken in order to help us achieve this.

Over the next decade, the Canadian aviation training industry must include new technologies in order to enhance training and improve efficiency. Our sector must change our approach to professional pilot training in order to allow our students to learn at their own pace within their own learning skills.

Acute pilot shortages are happening now in specific areas such as flight instruction and services to remote areas of Canada (Northern Canada, medevac, cargo, charter). Instructor retention at flight training schools is at an all-time low with schools reporting instructor turn-over above 100%. The shortage of instructors reduces the capacity to train more pilots, exacerbating the problem.

Canadian flight training organizations such as OAS are facing several recurring challenges.

- 1. Lack of subject matter expertise and qualified instructors;
- 2. Expensive specialized equipment; and
- 3. High operating costs and insufficient funding.

This situation makes it difficult to implement a cost-efficient training program that meets the demand from airlines while simultaneously changing the pilot training model to reflect current realities.

Support for Students

As with any higher education program, cost is often a concern for students. Students want to feel as if their investment in their education will pay off with a rewarding career in the sector.

Considering the shortage of qualified personnel in the aviation industry, the odds of a graduate, who meets the required standards and passes the required tests being employed in the sector, is quite good.

However, barriers exist at the recruitment and retention stages.

An important component of pilot training programs is the in-flight instruction. As an example, the Commercial Pilot License program includes 80 hours of classroom time, 35 hours of dual instruction (in flight) and 30 hours of solo flight time.

If the flight time (both with instruction and solo) were considered instructional time, the same as the classroom time, it would allow for students to qualify for greater financial support through various grant/loan opportunities.

While the administration of some of the available grants/loans funding is on a provincial level, the federal government can show leadership by changing the terms of the Canada Student Loan program to allow more aviation training students to benefit from this support.

Support for New Technologies

New technologies are being embraced across many industries, and aviation training is no different.

Encouraging the use of new technologies within flight schools will:

- Help our students to get the training they need to meet the requirements;
- Make our training more efficient and better for the environment; and
- Make the training more appealing to potential students.

The federal government can encourage the use of these new technologies through various measures, including tax credits and other financially-based incentives, regulatory measures and more.

Many of these technologies have the potential to produce a higher number of qualified graduates in a shorter time frame, as well as lessen the industry's carbon footprint.

Some examples of this new technology:

a. Virtual and Augmented Reality/Flight Simulator: This self-paced and adaptive learning technique includes the integration of a fully synthetic environment, including Air Traffic Controllers, to increase competency-based training at a reduced cost.

The use of flight simulators allows for specialized training to occur in a controlled environment. It also increases the frequency of training availability, as flight simulators are much less expensive to operate and require less maintenance than traditional aircrafts. It also allows training to continue in inclement weather.

The federal government can show support for this new technology by allowing hours logged on a flight simulator to be considered toward the required flying time.

b. **Electric Aircraft:** these have the potential to revolutionize the industry as a whole, and by some accounts, may be the future of the sector, positioning Canada as a leader in this segment of the market.

Currently, the federal government is moving forward on its plan to implement a carbon pricing regime as a part of its Pan-Canadian Framework on Clean Growth and Climate Change. Airlines have already noted that this will impact revenues and could mean higher fares.

This same principle applies to aviation training: a carbon tax may drive up the price of training.

By approving the use of electric aircraft for educational use, the federal government could offer sectors like ours an incentive to use environmentally friendly technology and help to reduce noise around aerodromes and airports.

c. **Artificial Intelligence:** Using data analytics and an artificial intelligence-based platform, we are able to create personalized and evidence-based training modules for students.

Excise Tax on Fuel

Typically, one of the largest expenses for flight schools is fuel. That annual expense for OAS is forecasted to reach nearly \$2 million by 2021.

In turn, this expense is passed on to our students through tuition fees.

Offering training institutions a refund on the federal taxes levied on fuel used for aircraft during instructional time would mean significant savings. This could be reflected in lower tuition fees, making the sector more appealing for potential students.

Alternatively, supporting the use of electric aircraft for training purposes would greatly reduce our fuel expenses on the whole. We encourage the government to consider both of these recommendations.

Elevate the Professional Standing of Flight Instructors

The inability to train sufficient pilots is exacerbated when flight instructors are offered jobs at scheduled carriers after only a few months of instructing. Experienced instructors are already a scarce resource, making it difficult to train and supervise new instructors. Flight schools across the country report backlogs of students wishing to begin flight training but are unable due to the shortage of instructors.

It is therefore essential to expand the capacity of Canadian flight schools to train new pilots by increasing the pool of available flight instructors.

This can be done through changes that make it easier for airline pilots to instruct new pilots parttime, and by aiming recruitment efforts at people who might consider flight instruction as a career.

Instructor positions should be encouraged in groups currently underrepresented in aviation, such as Indigenous people, women, and people from remote communities.

Flight schools are the foundation of the aviation industry. Attracting those groups will ensure the deployment of such groups in the rest of the industry while responding to a specific demand for pilot instructors.

Furthermore, people from specific communities are more likely to want to serve those communities after they become pilots, providing more stable staffing for companies that serve Canada's remote regions after they have spent time as instructors.



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