

Transport Canada Civil Aviation

Executive Summary

An adequately funded and competently staffed Transport Canada Civil Aviation (TCCA) branch is critical for the continued ability of Canada's civil aviation sector to develop, manufacture and export its products and services worldwide. TCCA's certification or approval is the final and essential step in the innovation value stream for Canadian civil aviation products and services.

Based on the best information available to the AIAC, we recommend that the budget of TCCA be increased by approximately \$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 airworthiness and maintenance bilateral agreements;
3. The updating and modernization of TCCA's regulatory framework.

AIAC recommends that the additional funding be provided in the following tranches: year 1: approx. \$3 million; year 2: \$6 million; year 3, 4, 5: \$7 million/year.

Given the importance of the civil aviation manufacturing sector to the Canadian economy, and the critical role that TCCA has in the continued success of this sector, AIAC encourages the Standing Committee on Finance to review, in detail, the current budget situation at TCCA.

Background

TCCA is recognized as a premiere civil aviation regulatory authority. Alongside the FAA and EASA, the regulatory agencies for the United States and the European Union respectively, certification and regulatory approvals from Transport Canada are globally recognized as being the gold standard for civil aviation products and services. TCCA's reputation gives Canada's civil aviation manufacturing industry an important competitive advantage since it facilitates Canadian trade and export opportunities around the world, opening doors for Canadian products and services into new markets and making it easier for Canadian manufacturers and service providers to do business in foreign jurisdictions.

However, TCCA's ability to continue its levels of service is at risk, and its international reputation, as a competent certifying authority, is rapidly being lost. This situation is due to the current funding levels at TCCA and persistent, inadequate funding levels for the Certification and Standards departments at TCCA. Over the past decade, AIAC understands that the budgets for these departments have not increased.

The 2016 "State of Canada's Aerospace Industry Report", prepared by Innovation, Science and Economic Development Canada and AIAC, details the significant contribution of the sector to Canada's economic wellbeing (see link https://www.ic.gc.ca/eic/site/ad-ad.nsf/eng/h_ad03964.html). In 2015, the industry generated \$29.8 B in revenues and supported 211,000 jobs. Canadian aerospace manufacturing was the number one R&D investor, accounting for almost 30% of total manufacturing sector R&D; the sector was over five times as R&D intensive as the manufacturing sector average.

Approximately 80% of aerospace manufacturing output (\$23.8 B) was exported; the majority of the exports are civil/ commercial products or services. Because of its global reputation, TCCA certification, approval and oversight is a key enabler for civil exports.

The 2016 Report confirms that Canadian operations of foreign owned firms account for roughly 40% of the sector's exports (\$9.5B) and 40% of its R&D activity. This level of foreign investment and activity is facilitated, at

least in part, by a globally respected TCCA. AIAC is concerned that TCCA's current funding levels will discourage new foreign investment in the sector and could, in the medium to longer term, lead to disinvestment by foreign entities in the Canadian aerospace sector.

During the 2004-2014 time period, Canada's aerospace industry grew substantially, increasing its economic impact by 31% (GDP), its productivity by 39%, and its R&D spending by 64%. The growth trend for the aerospace sector is expected to continue, with global demand for civil aircraft estimated at a value of over \$5.6 trillion over the next 20 years.

Recognizing the importance of aerospace manufacturing to the Canadian economy and its growth potential, federal agencies, provincial agencies and municipalities have invested significantly in the sector. Support for the sector has been both direct (for example the SADI program) and indirect (for example SR&ED tax credits). However, these government investments are ineffective unless TCCA's Certification and Standards departments are properly funded and competently staffed.

Since approximately 80% of the sector's products and services are exported, airworthiness and maintenance agreements ("bilaterals") with foreign regulatory authorities are very important facilitators for this trade. Bilateral agreements are the responsibility of TCCA's Standards department. Persistent, inadequate funding of the Standards department is severely hampering TCCA's ability to negotiate new bilateral agreements and to update/improve existing bilateral agreements.

The same, inadequate funding levels are also severely hampering TCCA's ability to update its regulatory framework to respond to technological changes and international regulatory developments. For example, the International Civil Aviation Organization (ICAO; a specialized UN agency) has adopted Safety Management System (SMS) requirements for design and manufacturing organizations; ICAO member states are expected to enact regulations reflecting the ICAO requirements. Regulatory authorities in the US and Europe are currently developing regulatory policies for SMS, however due to budget constraints, TCCA is "dragging its feet" on this matter. Design standards for civil aviation aircraft are developed through international working groups comprised of the lead regulatory authorities (FAA, EASA, TCCA, ANAC-Brazil) and manufacturers; budget constraints are now preventing TCCA from participating in these working groups.

The Certification and Standards departments at TCCA employ highly specialized engineers and other technical staff. AIAC has been advised that many staff will retire soon, leaving significant skills gaps and thereby impacting TCCA's ability to competently certify/approve Canadian civil aviation products and services. Increased funding is urgently required to permit the training and hiring of key technical staff in the Certification and Standards departments.

In closing, an adequately funded and competently staffed TCCA is critical for the continued ability of the Canadian aerospace industry to develop innovative products and services, to export these products and services and to attract much needed foreign investment to the sector. Current budget constraints at TCCA are having immediate adverse impacts on the Canadian aerospace industry and are harming TCCA's international reputation. Failure by the Government of Canada to immediately increase the budgets of TCCA's Certification and Standards departments will have long term adverse effects on Canada's civil aviation manufacturing and services sector.