Canada’s Training Partner of Choice
Introduction

CAE is Canada’s largest full-service defence and security company with 8,000 employees worldwide – 4,500 of which call Canada home. We are an expert training system integrator with proven experience to define, develop, operate and deliver turnkey training centres for air, land, naval, public safety and healthcare customers.

Global defence customers including armies, air forces and navies are continuing to recognize CAE’s experience and expertise as a training systems integrator. The ability to deliver both simulation products and services as part of a comprehensive aircrew solution is well-received around the world. CAE addresses the pilot training requirements of the Royal Canadian Air Force (RCAF) with CAE’s full-service capabilities and continues to be its training systems integration partner of choice. As Canada transitions to its next-generation defence programs, we recognize the opportunities to expand CAE’s footprint and capabilities to better support the Canadian Armed Forces and public safety security programs with both comprehensive training and in-service support solutions.
CAE has been a partner to the Canadian Armed Forces since Ken Patrick, a Royal Canadian Air Force officer recently returned from wartime service, founded the company, in 1947, with 18 employees working from an aircraft hangar in Saint-Hubert, Quebec. CAE has been a cornerstone of the Canadian aerospace and defence market for 70 years, delivering a full suite of training and mission solutions to military customers across the country. Today we continue to support the Canadian Armed Forces across land, air and sea, and serve as an export hub to Canada’s allies across the globe. CAE’s long-standing partnership with Canada has provided us the opportunity to advance modern concepts in leading-edge training systems, mission systems and in-service support solutions. CAE’s close and collaborative relationships with our customers have ensured that, together, we provide the best possible solutions to their ever-evolving needs.

Joe Armstrong
Vice President and General Manager, CAE Canada, Defence & Security

With over 700 employees in Canada, CAE operates out of 15 different sites across the country, in many instances co-located with the Canadian Armed Forces.
CAE’s relationship with the RCAF dates back to 1952 with contract to provide a simulator to the Canadian Armed Forces for their CAF-100 Canuck interceptor aircraft, developed and manufactured by Avro Canada. Eight years later, CAE won a second benchmark contract, also with the Canadian Armed Forces, for their CAF-104 Starfighter; the program gave CAE entry into a global marketplace with sales to several NATO allies.

**World-leading Training Facilities**

Today, military training facilities owned or operated by CAE are considered world-leading in quality, training availability, and serviceability. In Canada, for the Royal Canadian Air Force, CAE is a long-term contractor providing training systems services on the CC-130J and CC-130H Hercules, CP-140 Aurora, CH-147F Chinook, CH-146 Griffon, CT-156 Harvard, and CT-155 Hawk. CAE is responsible for the NATO Flying Training Centre (NFTC) program dedicated to the flight training of Royal Canadian Air Force pilots in Canada, and is also prime contractor for the Canadian Advanced Synthetic Environment and Air Force Integrated Information and Learning Environment which later became known as the Defence Learning Network, today used by all branches of the Department of National Defence.

**In-Service Support**

CAE is also known for its Mission System and Combat System In-Service Support expertise: For example, CAE has been responsible for the maintenance and airworthiness of the CF-188 Hornet Operational Flight Program since 1986 and has been developing and delivering embedded system engineering services and Electronic Information Environment systems on multiple aircraft fleets and weapon systems since that time, including the CH-148 Cyclone.

**Fixed-Wing Search and Rescue (FWSAR)**

CAE has been selected as the Training Systems Provider for Canada’s Fixed-Wing Search and Rescue (FWSAR) program. Airbus Defence and Space has contracted CAE to deliver and sustain a comprehensive C295W training solution, including the design and construction of a new C295W training facility in Comox, British Columbia, the design and development of the complete ground based training suite for C295W aircrews, SAR sensor operators and maintenance technicians, including courseware. During the in-service support phases, CAE will be responsible for providing a range of training support services, including training device upgrades and maintenance, hardware and software engineering, courseware updates, technology insertion and obsolescence management, and other in-service support services. CAE will also be responsible for providing academic and simulator instructors to deliver aircrew and maintenance training.
Naval

In Canada, CAE has been delivering a range of solutions to the Royal Canadian Navy (RCN) for the Halifax Class Modernization (HCM) program. These include human factors engineering and human systems integration to optimize the Operations Room and combat management system (CMS) consoles and interfaces, mission critical systems development for communications intelligence (COMINT) and electronic warfare (EW), combat system integration, verification and validation, combat operator training, and in-service support.

UAE Naval Training Centre

On a global scale, our flagship naval training program is the Naval Training Centre we are developing for the United Arab Emirates, which is leveraging technologies and capabilities originally developed by CAE in Canada. This purpose-built facility will feature a range of integrated ship simulation-based training suites as well as maritime aircraft sensor stations for individual, command team and whole ship crew training. This will be accomplished through the ability to integrate Bridge, Operations Room, and Machinery Control Room trainers, for multiple ship configurations. The overall naval training system for the UAE Navy will also include networking, scalability, multi-purpose stations, reconfigurability and interoperability including distributed multi-platform and joint mission training.

Naval Warfare Training System

The Naval Warfare Training System (NWTS) we have recently delivered to the Swedish Naval Warfare Centre, is a shining example of CAE’s naval capabilities. The NWTS is a comprehensive, simulation-based system which includes simulation software, hardware, student stations and instructor/operator stations. This system is used to train and educate Swedish Navy sailors and officers in sensor and weapons systems operations, naval tactics, procedures and doctrine for anti-air warfare (AAW), anti-surface warfare (ASuW), anti-submarine warfare (ASW), mine warfare (MW) and search and rescue (SAR) operations. This program has demonstrated our ability to leverage our training systems integration capabilities to provide an integrated, cost-effective solution that combines products, core simulation technologies and post-delivery support services.

Training Systems Solution

CAE stands ready to provide a comprehensive training solution for the Canadian Surface Combatant (CSC) program, including in-service support services. CAE has the capabilities to analyze needs, design, deliver, manage and support the complete, flexible, integrated training solution across the naval training continuum. This will ensure RCN personnel are well-prepared to perform their missions safely, efficiently and cost-effectively. We intend to be the partner of choice to help prepare RCN crews to operate the new fleets and optimize their capabilities across the full-spectrum of operations to ensure mission success.
Land

CAE, with its coast-to-coast Canadian presence, is a leader in the concept development, design, implementation and in-service support of land-based training and operational systems. For the past 35 years, CAE has built and delivered systems to support the Canadian Armed Forces and national level Public Safety organizations, developed to the highest engineering and software standards. CAE has attained and maintains a Capability Maturity Model Integration (CMMI) Level 5 accreditation to support this development cycle. With services extending from program management through engineering and integrated logistics support to analytics and reporting, CAE has offered a full-spectrum ISS capability to the Land Force since its first fielded system in 1995. With services extending from program management through engineering and integrated logistics support to analytics and reporting, CAE offers a full-spectrum ISS capability.

Enterprise Simulation/Stimulation Systems

CAE is actively engaged in exploring next-generation simulation and training environments, advancing the use of open architectures and standards for simulation, managing enterprise simulation systems and networks, and integrating simulation technologies into operational systems. This focus facilitates the design and implementation of a distributed mission operations environment in support of concept development, mission rehearsal, training, and the acquisition cycle.

Mobile Electronic Warfare Technology - MEWT

Integrated into the Land Command Support System (LCSS) baseline, MEWT performs automated collection, correlation and fusion of EW and intelligence data to provide near real time enemy situational assessment and immediate threat warning to the battlefield commander. In support of this objective, MEWT integrates EW sensors, such as direction finding and intercept systems, with an automated analysis system and command and control facilities.

Information Request (IR)

Developed to support the management, tracking and distribution of intelligence information, IR Manager automates the flow of information by creating and maintaining active links between data sources and organizations requiring information. The IR Manager allows an entire organization access to the flow of operationally-critical IRs, reducing duplication of requests, shortening production time, providing an evaluation of where effort is being spend on IRs at the Joint level.
NATO Flying Training in Canada (NFTC)

CAE is the prime contractor responsible for the NATO Flying Training in Canada (NFTC) program, a world-class, turnkey training system that produces fully qualified military pilots for the Royal Canadian Air Force (RCAF) and Canada’s allies. CAE operates NFTC base facilities, delivers ground-school classroom and simulator training and instruction, and supports live flying training on a fleet of Beechcraft T-6 (CT-156 Harvard) trainer aircraft and BAE Systems Hawk (CT-155 Hawk) lead-in fighter trainer aircraft.

The program operates out of Moose Jaw, Saskatchewan and Cold Lake, Alberta. It is designed and operated in cooperation with the Government of Canada.
CAE Canada - Our Footprint

• Our significant presence in training systems positions CAE to deliver full live-virtual-constructive (LVC) training solutions, and CAE is one of Canada’s leading research and development investors to continually innovate specific to state-of-the-art training systems and solutions.

• CAE works across a full range of systems – from legacy fleets to current generation platforms, integrating training solutions into a single unified training enterprise.

• CAE has over 30 years experience in delivering world-class in-Service Support solutions to the Canadian Army, Navy, and Air Force – all aimed at driving out unnecessary cost in military platform life cycles.

• Highly invested in identifying development opportunities for Canadian youth, CAE is working with academic and educational institutions across the country to establish career programs for the future.

• CAE has a strong export value chain, taking Canadian investments and developments worldwide.

• CAE continues to grow and develop a deep understanding of the needs of the Canadian Armed Forces, and civilian companies as we collaboratively work as the key partner in continued delivery of the best business solutions.

Value Proposition & Industrial and Technological Benefits programs

With more than $1 billion of projects underway in Canada through the Industrial and Regional / Technological Benefits (IRB/ITBs) programs, CAE consistently and successfully delivers economic benefits to Canada.

As Canada’s Training Systems Integrator, CAE works with the Government of Canada and major original equipment manufacturers (OEMs), including Airbus, Boeing, Lockheed Martin, General Dynamics, Bell Helicopters and others, to provide tailored industrial engagement plan maximizing Canadian content.

With approximately 700 highly skilled Canadians working in our defence business unit across 15 locations in Canada, CAE is well positioned for IRB/ITBs and provides a strong Value Proposition offering 100 percent Canadian designed and developed solutions.

As a key member of the Canadian Aerospace and Defense community and a 70-year success story in Canada, CAE prides itself in helping to build the future success of Canadian Industrial members and our supply chain in Canada.
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