CAE is the prime contractor responsible for the NATO Flying Training in Canada (NFTC) program that produces qualified military pilots for the Royal Canadian Air Force (RCAF) and other global defence customers. The NFTC program significantly enhances CAE’s core capabilities as a training systems integrator (TSI), and expands its offering into support for live flying training of future military pilots, including next generation fighter pilots, for the RCAF and its allies.

The NFTC program operates out of Moose Jaw, Saskatchewan and Cold Lake, Alberta and is designed and operated in collaboration with the Government of Canada. The program combines basic, advanced, and lead-in fighter training – also referred to as Phases II, III and IV – as part of the comprehensive pilot training program.

CAE operates the NFTC base facilities, delivers the ground-school classroom and simulator training, and supports the 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 comprehensive academic, simulator and live flying training are integrated as part of this world-class, turnkey training system.

Since inception of the NFTC program in 2000, over 1,500 pilots have been trained and more than 350,000 hours of live flying training have been delivered. The program is anchored by the knowledge and expertise of more than 200 CAE employees who support the training and operations of the NFTC program, which utilizes more than 700,000 square kilometres of low level flying air space at 15 Wing Moose Jaw and 4 Wing Cold Lake.

**Academic/Classroom Training**

CAE delivers academic classroom training to teach student pilots the theory and concepts of flying the Beechcraft T-6 (CT-156 Harvard) trainer aircraft and BAE Systems Hawk (CT-155 Hawk) lead-in fighter trainer aircraft. Our skilled instructors carefully follow the learning curve of each student and tests are administered to ensure they have learned and integrated the theory before moving on to hands-on, simulator training. In addition, student pilots are also taught topics such as meteorology, theory of flight, instrument flight procedures, visual flight procedures, aerodynamics, air regulations, and egress training.

**Simulator Training**

Once the theory is mastered, the students are ready to move on to the next phase of training performed in CAE-built simulators and training devices. The curriculum is designed in such a way to increase the level of difficulty as the student learns and masters simple tasks. Over the course of the three phases of flying training, instruction to student pilots in the simulators include clear hood flying, instrument flying, low level navigation as well as several simulator sessions where students are presented with numerous emergency scenarios that are not normally practiced during live flying operations. After having successfully completed all requisite testing in ground school, student pilots complete over 30 hours of training in a simulator, alternating with live flying training in the aircraft, over the course of Phase II.

**Live Flying Training**

Live flying training is performed under the supervision of highly-qualified Royal Canadian Air Force (RCAF) and NATO qualified flying instructors (QFIs). The students must complete nearly 170 training hours in the live aircraft and must achieve successful test results to obtain their military wings during phases II and III. Military flying training in both the Harvard and the Hawk include clear hood and instrument flying, low level navigation, and formation flying. Lastly, students complete Basic Fighting Manoeuvering (BFM) for Phase IV training.
Base Operations and Fleet Maintenance

CAE is responsible for the overall maintenance of the aircraft under the governance of Canada’s Department of National Defence airworthiness program and partners with the RCAF to operate the two fleets. The safety of the aircrew operating the Hawk and Harvard aircraft is critical to the program, and our experienced and dedicated personnel ensure that the aircraft are safe, well-maintained and fully operational when needed.

CAE also manages ground operations and performs facility management as part of the contract by the Government of Canada.

NFTC Customers

CAE's primary customer at the NFTC is the Royal Canadian Air Force. Since the inception of the program, training has also been provided to aircrews and instructor pilots from other NATO allied countries such as Denmark, the United Kingdom, Singapore, Italy and Hungary.