

# CAE e-Learning

## Extending our global reach



In response to industry demand for more accessible and operational training, as well as for lower training costs, CAE is providing an extensive library of web-enabled training solutions. These range from aircraft specific simulation-based training aids, simulation-based system and procedural courses to general operating subject courses for pilots and maintenance technicians. These solutions can be used for initial/transition, recurrent and continuous training, as well as for on-the-job-training (OJT). The simulation-based products offer real time interaction with a virtual aircraft using a high-fidelity simulation, thus ensuring that training is consistent with actual aircraft functions. These can all be accessed anytime and from anywhere on the web.

CAE's simulation-based web training solutions will provide you with:

- Lower cost of training
- Reduced down time for pilots, technicians and instructors
- Increased student retention due to operationally focused courseware
- Solutions in line with regulatory changes regarding distance learning
- Reduced maintenance operational costs
- Environment for continuation training
- Learning management solutions for student tracking and record keeping
- 24/7 web service support

Our e-Learning solutions are another example of our dedication to constantly improving our products to address our customers' training needs.

## Self-paced courseware for pilots

CAE has a series of e-Learning courses to support pilot training from initial to continuation training. These include systems and procedural courses and general operating subject (GOS) courses. All courses combine knowledge and skill-based learning and assessments. Courses are available for the B737NG, CRJ-200, CRJ-700 and the EMB 170.

## Initial, transition and recurrent system modules

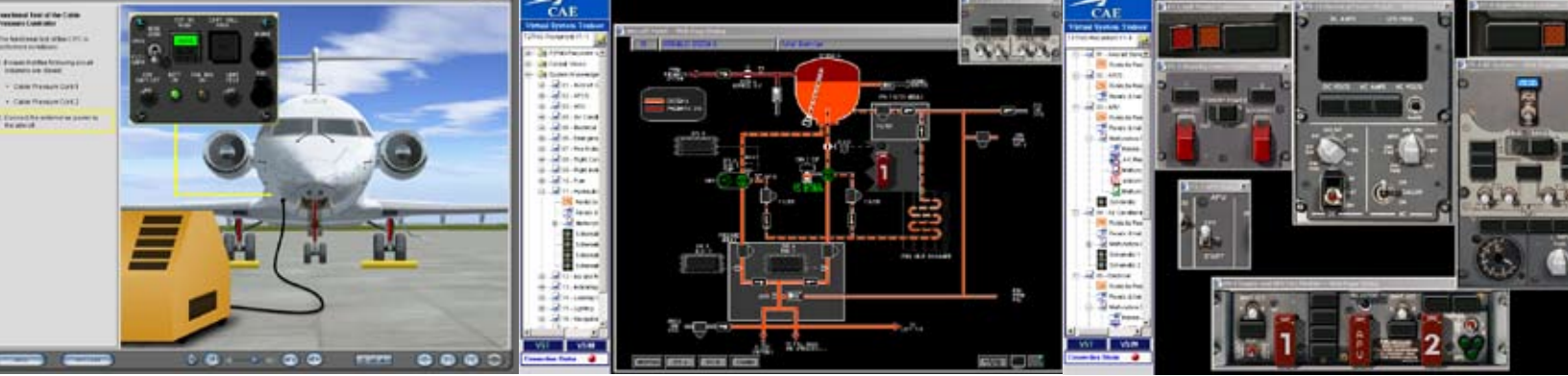
These self-paced system modules are designed to not only teach basic system knowledge, but also to let the trainees respond to indications and interact with the various controls as they do in the real aircraft. Advanced tools such as our CAE Virtual Simulator (VSIM) are embedded within these system lessons, increasing training effectiveness. Our lessons allow the student to operate the system virtually in normal and abnormal conditions.

## Integrated avionics system trainer (IAST)

These IAST modules provide a scenario-based environment for the different flight phases under normal and abnormal conditions. Various procedural tasks are performed using the integrated avionics systems (AFCS, flight instruments, FMS, navigation, communications). The IAST modules reduce reliance on "static" knowledge delivery by providing a more dynamic learning process and a deeper understanding of how the avionics systems are integrated.

## Aircraft walkaround

Interactive virtual walkaround lessons provide views of component locations and inspection areas around the aircraft, along with descriptions of specific items that need to be verified or checked. These interactive virtual walkarounds replace the need for an actual aircraft to learn how to correctly perform these tasks.



## General operating subjects

A portfolio of web-based GOS courses is available to support the development of aeronautical knowledge not addressed in type-specific courses. These courses include:

- Automatic dependant surveillance broadcast (ADS-B)
- Clear air turbulence (CAT)
- Cold weather operations
- Dangerous goods
- Dangerous goods (recurrent)
- Extended range with twin engine aircraft operations (ETOPS)
- High altitude weather
- High altitude physiology
- High altitude, high speed aerodynamics
- Land and hold short operations (LAHSO)
- Minimum equipment list/configuration deviation list (MEL/CDL)
- Polar routes
- Reduced vertical separation minimum (RVSM)
- Required navigation performance (RNP)
- Required navigation performance, area navigation (RNP RNAV)
- Surface movement guidance & control systems (SMGCS)
- Takeoff performance
- Traffic alert and collision avoidance system (TCAS) II version 7

## Gap courses

Gap courses address the essential knowledge and skills required by technicians who will be transitioning from working on general aviation aircraft to the technically advanced systems of today's new aircraft. Relevant simulation is used to provide hands-on experience.

## Type courses

These courses provide the simulation-based self-paced equivalent of traditional type training courses.

## Specialty courses

These specialty courses are aimed at specific problem areas experienced on an aircraft type that is systematically the cause of excessive aircraft down time or "no fault found" return of aircraft parts and equipment. The courses cover the necessary material within a simulation environment to allow technicians to rapidly diagnose and rectify these aircraft faults.

## Simulation training aids

For years, CAE has provided the equivalent of level D full-flight simulation on a desktop environment. This simulation is now available over the web for use by trainees or instructors for systems, procedural, FMS and troubleshooting training, review and/or practice. Solutions are available today for the B737NG, CRJ-200, A330, and G-IV. Upcoming: Citation X, G-V, A320 and CRJ-700.

## Virtual simulator, virtual maintenance trainer (VMT) and FMST

The VSIM is a pilot tool allowing access to all panels and controls for flight training. The FMST is a VSIM configured with only the panels required for FMS training. The VMT is a training tool allowing access to all panels and controls with features such as LRU, cockpit-initiated BITE, and component location. It provides a complete "virtual aircraft".

## Virtual systems trainer (VST)

The VST is a VSIM/VMT or FMST with a tree-based course structure providing easy management and integration of multiple training media, ranging from simulation to PowerPoint presentations, manuals, photos and videos. The student or instructor can access these for more structured training. Customer-specific learning materials can be added and integrated with a simulation and deployed at large on the web.

## Other services

**Learning management systems (LMS)** CAE provides an LMS to launch and manage all web-based, self-paced courseware. It allows for detailed tracking and reporting of student activities, and assessments by instructors. CAE allows you to launch your web-based courses directly within the LMS, thus allowing all student material to be available from the same environment.

CAE has courseware development specialists with extensive subject matter expertise in instructional design, multimedia design, simulation-based training methodology, aviation training, and web technology. We can offer you this expertise for:

**Curriculum design** – analyze your curriculum, content and delivery methods to derive the optimal solution to efficiently meet your web (and non-web) requirements.

**Courseware development** – develop new courses to address your needs, integrate simulation with your existing materials, or web-enable your existing courseware.

**Hosting and web support** – provide the infrastructure to host and maintain your web lessons and the resources to ensure servers are up and running when needed.



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