

# Pilot training solutions

CAE now offers advanced pilot training solutions that provide complete curriculum for initial, transition and recurrent training for the CRJ 200, Boeing 737NG-800 and Embraer 170 aircraft, which combine an instructor-led delivery environment, self-paced courses, simulation device training and documentation.

CAE's instructional strategy is based on introducing and maximizing skill-based training early and throughout the curriculum and reinforcing the operational aspects of flight wherever possible and as early as possible in the learning process. This allows students to attain a higher level of proficiency before they reach high-end flight training devices, allowing for a more efficient curriculum and improved use of the full-flight simulator. CAE's advanced pilot training solution is possible because of the advancements in

technology that have allowed CAE to provide high-fidelity simulation on a desktop, laptop or on the web. The result is:

- Reduction in travel and living expenses
- Reduction of remedial training and failure rate
- Consistency throughout the curriculum
- Improved student retention
- Optimized footprint

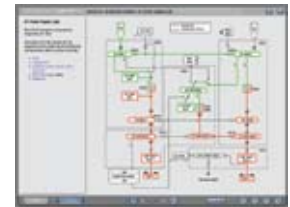
All self-paced modules can be available locally or on the web. The lessons can be launched and tracked from a learning management system, allowing trainers to supervise and track learner success in real time.

## Self-paced training lessons

### System modules



The system modules are designed to teach basic system knowledge, and 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 system lessons, increasing training effectiveness. They transform system modules into a pre-flight simulator session review, where the student operates a virtual system.



### Emergency/abnormal procedures lessons



These modules are designed to provide a deeper understanding of a system by integrating malfunctions in each system lesson. The trainee must carry out the actions required to resolve the problem, providing an opportunity for him/her to interact with the malfunctioning system at an operational level. The actions and procedures required for resolution are based on the manufacturer's QRH. This provides the added benefit of allowing the learner to become familiar with the established malfunction management associated with the aircraft type.



### Integrated procedures indoctrination (IPIN)

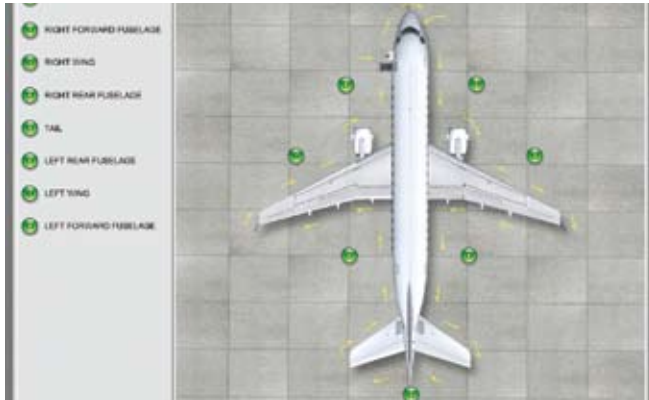


Integrated procedures indoctrination (IPIN) modules target procedures. They provide the knowledge required in order to carry out procedures associated with different phases of flight or situations.

The applicable task-sharing is indicated, but the trainee must conduct all the steps required of both crew members. This way he/she achieves the primary objective of learning every step in each procedure.

The procedures are detailed through an associated operational scenario, such as normal takeoff; precision approach; non-precision approach, go-around, etc.





## Integrated systems operation (ISOP)

Integrated system operation (ISOP) modules complement the information acquired from the systems modules, and provide the knowledge required to operate the aircraft systems during the different phases of flight. ISOPs teach the actual operation of the systems at hand by having the pilot perform normal checklists. Their purpose is multifold. They expand operational knowledge and reinforce the technical knowledge related to the operation of the systems. Each ISOP introduces one checklist and details the items it contains. Flows and task-sharing are introduced through the nature of these scenarios.

## Integrated avionics system trainer (IAST)

The IAST modules, which are fully integrated in the curriculum, considerably improve the avionics lessons by providing the trainees with a real flight scenario-based environment. Various procedural tasks are performed using the integrated avionics systems (AFCS, flight instruments, FMS, navigation, communications) during the following phases of flight, as required: ground operation, takeoff, departure, climb, level off, cruise, pre-descent, descent, transition, approach, landing, missed approach, holds and alternate. The IAST modules reduce reliance on "static" knowledge delivery by providing a more dynamic learning process, thus providing a deeper understanding of how the avionics systems are integrated.

## Walkaround

The interactive virtual walkaround lessons provide enlarged views of component locations and inspection areas around the aircraft. They also provide a description of specific items that need to be verified or checked in particular areas. These interactive virtual walkarounds replace the need for an actual aircraft to carry out similar tasks. This self-contained, self-paced tool is available via the web or resident on PC hard disc. An instructor-led module is also available.

## Instructor-led training Instructor support system (ISS)

The instructor support system (ISS) is available to facilitate instructor classroom training of systems and procedures. The ISS allows easy management and integration of multiple training media, ranging from simulation to PowerPoint presentations, manuals, photos and videos. The ISS can be configured in the classroom with multiple screens. A monitor is available for instructor notes and two or three (configurable) projected screens are used for student material. This computerized presentation provides structure and standardization of instructor delivery.

For student review, the ISS is configured for one screen, allowing for local or web review of content similar to that available in the classroom. The ISS is ideal for normal and abnormal systems training, as well as procedural training.



## Curriculum

### Integrated curriculum

CAE can provide complete curriculum that are designed in an integrated fashion. They offer a blended training solution using instructor-led and self-paced training, either in a classroom, over the web, and/or on various flight training devices. CAE carefully combines knowledge and skill training, making optimal use of the devices at hand in order to ensure cost-effective training.

## Services

### Learning management system (LMS):

Lessons can be launched via an LMS allowing trainers to supervise and track learner success in real time.

### Web training:

Self-paced modules can be available locally on PCs or delivered on the web.

### Customization:

Training can be customized to comply with company SOPs.



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