



## Trade Press Release

### Upgraded Royal Navy Lynx Mk8 simulators enter service use

**Burgess Hill, U.K., March 31, 2010** – (NYSE: CAE; TSX: CAE) – CAE announced today that in parallel timing with the Lynx Mk8 maritime helicopter fleet upgrade, CAE UK plc has completed a major upgrade of the CAE-built Lynx Mk8 Full-Mission Simulator (FMS), as well as delivered a new Lynx Cockpit Procedures Trainer (LCPT) and a CAE Simfinity System-Based Trainer (SBT) located at the Royal Naval Air Station (RNAS) Yeovilton, UK. This gives the Royal Navy a comprehensive suite of synthetic training devices in support of the Lynx Mk8 maritime helicopter.

The simulator upgrade meets the Defence Equipment and Support (DE&S) Flight Simulator and Synthetic Training (FsAST) Project Team requirement to incorporate the second generation anti-jamming tactical UHF radio for NATO (called SATURN), replacement of the central tactical system, the new Successor Identification Friend or Foe (SIFF) system and the latest Defensive Aid Suite (DAS) into the training devices. With the full complement of training devices, the Lynx Mk8 helicopter crews are fully trained to meet current and future operational commitments.

The LCPT solution is based on the flow-down of the full-mission simulator SATURN Radio Update (SRU) solution using CAE Simfinity, and in turn, a further flow-down of the design into the SBT to meet the perceived SBT classroom training requirement. This approach has provided the Royal Navy with a consistent and cost-effective suite of devices for the delivery of layered Lynx Mk8SRU training.

“The suite of synthetic training equipment is a very welcome and much needed capability,” said Commander Nigel Amphlett, Royal Navy Commander, Lynx Helicopter Force. “Not only does it enhance the output of the operational conversion unit, it improves the operational effectiveness of the Front Line.”

The newly procured CAE Simfinity SBT replaced the obsolete Computer-Based Trainer (CBT) systems used by the Engineering Training School (ETS) and 702 Naval Air Squadron. The classrooms and instructor stations are designed using commercial-off-the-shelf (COTS) hardware and stylised software emulations of actual aircraft equipment. The graphical Virtual Cockpit (VC) is driven from the same underlying aircraft model that is used to power the Lynx Mk8 FMS and therefore, has a high degree of core commonality.

CAE is a world leader in providing simulation and modelling technologies and integrated training solutions for the civil aviation industry and defence forces around the globe. With annual revenues exceeding C\$1.6 billion, CAE employs more than 6,500 people at more than 90 sites and training locations in 20 countries. We have the largest installed base of civil and military full-flight simulators and training devices. Through our global network of 29 civil aviation and military training centres, we train more than 75,000 crewmembers yearly. We also offer modelling and simulation software to various market segments and, through CAE's professional services division, we assist customers with a wide range of simulation-based needs. [www.cae.com](http://www.cae.com)

For high resolution downloadable photos of the Royal Navy LCPT, visit [www.cae.com/photos](http://www.cae.com/photos).

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### **Notes to Editors:**

Following is more detailed information on the suite of Lynx Mk8 training devices supporting the Royal Navy.

#### Lynx Mk 8 Full-Mission Simulator (FMS)

The Lynx Mk8 FMS is used for flying training, tactical training and mission rehearsal, and comprises a simulated Lynx Mk8 cockpit, visual system and on-board Instructor Operator Station (IOS) all mounted on a six degrees-of-freedom motion system. The CAE visual system comprises a five-channel out-the-window (OTW) view with a separate chin window collimated display for the pilot, and a Passive Identification Device (PID) thermal display. The OTW displays are projected onto a 200° by 40° collimated display with raster calligraphic Cathode Ray Tube (CRT) projectors. The pilot's chin window view is displayed on a dedicated collimated monitor display. The FMS employs Visual, Radar and Night Vision Goggle (NVG) databases of the UK general and local flying areas, parts of Norway and the Persian Gulf, plus an extensive suite of moving models. The mission sensor and weapons systems are fully simulated. A wide range of system malfunctions are also available. An off-board IOS allows full instructor control, teaching and monitoring facilities. The Lynx FMS has recently been enhanced to reflect the SATURN radio update. The updated FMS uses stimulated aircraft equipment, including the Control Display Navigation Unit (CDNU) and the Tactical Situation Display-Graphical (TSG-G), with appropriate firmware modifications. A simulation of the Successor Identification Friend or Foe (SIFF) and a Defensive Aids Suite (DAS) with Electronic Warfare (EW) equipment and related modifications are also integrated into the updated FMS.

#### Lynx Mk8 Crew Procedures Trainer (LCPT)

The Lynx LCPT enables efficient crew procedures training for SATURN Radio Update equipped Lynx Mk8 aircraft and consists of the following major components:

- A simple cockpit representation accommodating the pilot and observer
- Stimulated aircraft CDNU, TSD-G and Data Transfer Device (DTD)
- Representative simulation functionality of other avionics and instrumentation
- The same high fidelity simulation of aircraft systems as implemented in the Lynx Mk8 FMS
- Radar and FLIR models taken from the Lynx Mk8 FMS to provide sufficient fidelity to support training tasks, including prosecution of targets, target identification and damage assessment
- Synthetic tactical environment with computer generated forces
- OTW visual allowing the pilot to fly the LCPT from the pilot's position
- An integrated Instructor Operator Station (IOS) dedicated for controls such as generating lesson plans, malfunctions and flight scenarios.

#### Lynx Mk8 System-Based Trainer (SBT)

The SBT further flows-down the simulation software into a CAE Simfinity Virtual Simulator that represents the Lynx Mk8 aircraft using a suitable combination of COTS hardware and stylised software emulations of actual aircraft equipment and supports the training of both Lynx Mk8 Pilots and Observers. Unlike the FMS and LCPT, no stimulated equipment is provided. The training devices support individual training events for pilot or observer as well

as crew training events in which both pilot and observer participate. The Lynx SBT uses aircraft system emulation to support both instructor-led training and self-paced training. The devices also support the training of Lynx Mk8 maintainers for mechanical, electrical and radio/radar systems as well as aircraft "systems appreciation" training for Lynx Mk8 aircrews. The same devices (hardware and software) are used for the training of aircrews and maintainers.