F-16 SimuStrike™

In 2021, CAE acquired L3Harris' Military Training business, which included Link Simulation & Training and Doss Aviation. These businesses are now integrated with CAE USA as part of CAE's Defense & Security business unit.

Overview

CAE's F-16 SimuStrike™ is an effective low-cost and deployable tactical training solution. The F-16 SimuStrike implements high-fidelity simulation solutions for all F-16 aircraft operational systems. It is designed to complement F-16 Full Mission Simulators as a force-multiplier by providing lead and wingman functions.

The solution

At the heart of the F-16 SimuStrike is a fully integrated avionics, air vehicle, weapons, targeting, and electronic warfare equipment simulation solution. These solutions provide support for radar engagements; targeting pod tracking, lasing, geocoordination and buddy operation; fully qualified Link-16 team member contributions and situational awareness; and Communication Navigation and Advanced Identify Friend/Foe (CNI) training tasks.

The F-16 SimuStrike provides exceptional capability to familiarize and train pilots on many training tasks. It can be operated as a standalone system or can seamlessly be networked into a larger distributed training mission scenario. This advanced trainer's small footprint enables it to be easily placed in an 8'x10' office setting.

A wide array of visual display solutions are available to immerse the pilot in a virtual training environment that approximates real-world flying missions. A high-resolution graphical cockpit provides all heads-down cockpit displays, flight instruments and control panels to support all major flight, avionics, CNI and weapons system deployment tasks.

High physical fidelity Hands-On Throttle and Stick (HOTAS) and an up-front controller data entry panel support critical hands-on combat tasks requiring optimal pilot responsiveness.

The value proposition

➔ Low-cost, high-value training capabilities

➔ Operates with common software load and hardware computational components used on full mission trainers

➔ Common image generation system and visual/sensor imagery databases

➔ Full IR targeting and weapons system processing and display formats

➔ Stand-alone, self-paced or multi-ship mission-level asset controls

➔ Embedded training and courseware preview and review capability

➔ Embedded mission control feature to manage ownship payload and environmental effects

➔ Small footprint

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The technical edge of F-16 SimuStrike

→ High functional fidelity software solution for the ownship air vehicle, avionics, targeting, CNI and electronic warfare subsystems

→ Avionics package using actual aircraft operational flight program (OFP) software for maximum realism and concurrency

→ High-definition computer imagery that provides consistent resolution, brightness, contrast and scene content throughout the field-of-view.

→ High-definition visual, sensor and natural environment

→ Mission event markers, reset points, record, and debrief features

The flexibility of F-16 SimuStrike

→ Modular structure and integrated maintenance design affords ease of assembly and maintenance

→ Commercial-off-the-shelf display and computer components support a low cost of ownership

→ Multiple visual display options, from simple flat-panels with 20/40 visual acuity to helmet-mounted displays with 360-degree field-of-regard

Proven credentials of F-16 SimuStrike

→ Network-capable, force-multiplier

→ Combat baseline concurrency

→ Common databases

→ Avionics/takeoff/landing/emergency procedures training

→ Weapons employment/tactical training

→ Deployable, small footprint

→ Scalable common architecture across all components

→ Optional rudder pedal assembly

F-16 SimuStrike has been qualified as a best value solution in recent M5 multi-ship training events and extends our commitment to providing superior high-fidelity F-16 training solutions.

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