

VENOM™ – ENHANCING ADVERSARY AIR PLATFORMS

A cost-effective solution to integrate 5th generation adversary capabilities into 3rd generation platforms

Venom™ is a cost-effective Adversary Air software suite that integrates the latest air-to-air capabilities utilizing commercial off the shelf components, enabling a desired look and feel in the cockpit.

PRODUCT OVERVIEW

By combining a high resolution tactical situation display that presents radar and datalink track information, threats, system status and weapons engagement information with the Garmin® G3000™ Integrated Flight Deck touch controller and bezel key interfaces, Venom™ offers pilots an intuitive, cutting-edge capability for performing adversary missions.

Venom provides multiple next generation capabilities, such as an integrated Thales Scorpion Helmet Cueing System (HMCS) with off-boresite capability, Duotech Nemesis Radar and Argus Radar Warning Receiver (RWR), Link 16, Red Net and the

latest in weapons simulation.

Venom includes a robust mission recording and debrief system. The Garmin Integrated Flight Deck displays and pilot HMCS video are recorded with an engagement shot card and mission data on a cockpit-removable drive, allowing adversary crews to provide timely debrief to blue force pilots.

Venom was built for easy adaptation to additional platforms and mission sets. With a modular display interface, Venom allows for future additional systems integration.

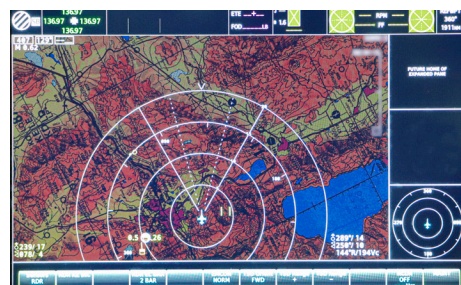


photo courtesy: Tactical Air Support



ACTIONABLE INTELLIGENCE

Features

- > Configurable graphical user interface
- > Modular system architecture
- > Configurable platform simulation and emulation
- > COTS architecture with Windows-based OS
- > Integrated Mission Systems

Benefits

- > Adaptable - Software suite is structured to adapt to various missions including Adversary Air, close air support and ISR operations
- > Flexible - Allows the aircraft to emulate various adversary capabilities to improve blue force training
- > Affordable - reduced integration costs and flexibility to adapt to rapidly changing adversary capability; allows hardware components to be changed with minimal software NRE; integrators can leverage the latest GPU and CPU capabilities with reduced costs
- > Powerful - 5th gen pilot vehicle interface in a 3rd gen aircraft, operated at 3rd gen cost per hour

TECHNICAL SPECIFICATIONS (F-5AT CONFIGURATION)

Integrated with the Garmin G3000 Integrated Flight Deck

- > Bezel key integration, configurable user interface - Control of radar, datalinks, stores, displays, etc.
- > Adjustable brightness
- > Touch screen controller
- > Gateway between mission systems and Garmin data concentrators

Ownship position

Tactical Situation Display with radar, tracks and weapons

- > Target data display, including distance to target, weapons staple
- > Display of range rings, at varying distances, radar FOR and FOV
- > Next to Shoot target display, ability to cue to NTS - Each shot-list item displays mach and altitude
- > Supports NGA imagery data and map scales, to include: CADRG, MrSID, CIB and GeoTIFF

Integrated Thales Scorpion Helmet Mounted Cueing System (HMCS)

- > Displays flight path marker, pitch, Mach number
- > Next to shoot marker
- > Displays missile interim shoot indicator

- > Displays munitions count and type

Integrated HOTAS

Integrated SMS – simulation of various weapons types

Implemented Mission Data Recorder

- > Records shot card, target, radar, RWR, SMS and CATM data
- > Records pilot display
- > Records pilot viewpoint with HMCS symbology

Integrated Systems

- > Garmin G3000 Integrated Flight Deck
- > Duotech Nemesis Radar
- > Duotech Argus Radar Warning Receiver
- > Northrop Grumman LN-251
- > Thales Scorpion Helmet Mounted Cueing System
- > AIM-9M CATM



Venom™

MODERN ADVERSARY AIR CAPABILITIES IN LEGACY PLATFORMS

Flexible, Powerful and Affordable - The Venom graphical user interface is scalable via configuration to a wide range of platforms and customer-specific design requirements, enhancing any Adversary Air Platform.

Venom™ – Enhancing Adversary Air Platforms

© 2019 L3Harris Technologies, Inc. | 06/2019

This document consists of general capabilities information that is not defined as controlled technical data under ITAR Part 120.10 or EAR Part 772.

L3Harris Technologies is an agile global aerospace and defense technology innovator, delivering end-to-end solutions that meet customers' mission-critical needs. The company provides advanced defense and commercial technologies across air, land, sea, space and cyber domains.



L3HARRIS™
FAST. FORWARD.

1025 W. NASA Boulevard
Melbourne, FL 32919
t 629 888 4200 | f 629 888 4223
FRX.Products@L3Harris.com