

CymLITE-MCS F-18 Hornet

Advanced Mixed-Reality F-18 Combat Simulation



Train Like You Fight.

Deploy Where Naval Aviation Operates.

CymSTAR delivers next-generation naval aviation training with the CymLITE Mission Combat Simulator (MCS) PRECISION X HORNET—an advanced system that integrates Mission Systems, S.A.'s Mission Combat Simulator® (MCS) with the high-fidelity DogFight Boss PRECISION X HORNET cockpit replica. This modular, cost-effective solution provides a fully immersive environment built to accelerate mission readiness for F/A-18 pilots.

Immersive, Combat-Proven Simulation Software

MCS software supports integration with test networks, threat-generation systems and secure classified environments. Training scenarios cover everything from basic navigation to complex air-ground coordination, radar operation, weapons deployment and emergency procedures.

Aircraft and weapons performance are customizable to reflect platform-specific parameters at any classification level. This allows aircrews to train with mission-relevant realism.

True-to-Life Cockpit Hardware

PRECISION X HORNET replicates the real F/A-18 cockpit with full tactile fidelity. Every switch, display and control delivers the muscle memory pilots need for combat effectiveness.

Modular by Design

CymLITE-MCS offers modular and customizable cockpit configurations tailored to each customer's training needs. Whether adapting to a new F/A-18 BLOCK or operational profile, the system is built for rapid updates and mission relevance.



Deployable. Agile. Mission-Ready.

CymLITE-MCS is lightweight, compact and deployable. It operates with standard power and secure network connections, making it ideal for use in classrooms, hangars or forward locations without specialized infrastructure.

Elevate Mission Rehearsal

Simulate full CONOPS and real-world theaters of operation. CymLITE-MCS F-18 PRECISION X Hornet supports distributed, joint, and coalition training in the most complex mission scenarios.

Key Features

- Network-ready for joint and Distributed Mission Operations
- Configurable MCS environment with real-time mission editing
- Full-scale F/A-18 cockpit replica integrated in mixed reality
- Simulates missiles, guided bombs, gun pods and other weapon systems
- AI-driven constructive and semi-autonomous unit control
- High-resolution terrain with elevation data, dynamic weather and landmarks
- Extensive database of aircraft, weapons, vehicles, ships, air defense systems and structures
- Customizable via Software and Terrain Development Kits
- Supports JTAC/FAC training for Joint Fire Sessions and close air support
- Optional analytics: eye tracking, gaze mapping and gesture recognition



High-Fidelity Mixed Reality

Varjo's XR Focal Edition mixed reality headsets deliver the visual precision required for high-consequence training and are compatible with other headsets approved for classified use.



Built for Operational Readiness

CymLITE-MCS supports real-world CONOPS and complex theater operations. It enables asymmetric and symmetric training scenarios, test event simulations and mission rehearsal for high-stakes environments.