CymLITE-MCS AH-64
Mission Combat Simulator – AH-64 Cockpit Replica

Delivering immersive training from initial qualification through mission rehearsal, the CymLITE-MCS AH-64 merges CymSTAR's deployable CymLITE platform with a high-fidelity AH-64 Apache cockpit replica. Integrated with Mission Combat Simulator (MCS) software—developed in partnership with Mission Systems, S.A.—this configuration delivers a realistic, scalable, and cost-effective training solution for active-duty Army and Army National Guard Apache crews.

The AH-64 variant replicates the attack helicopter's controls, displays, and weapon systems with precision. Crews can rehearse tactical operations, weapons employment, and mission coordination in a virtual combat environment that mirrors real-world conditions. The system supports training for both pilots and co-pilots/gunners, enabling synchronized crew coordination and enhanced combat readiness.

Primary Operators

The CymLITE-MCS AH-64 is used by military and defense organizations for attack helicopter training, operations, and mission rehearsal, including:

- AH-64 pilots and co-pilots/gunners
- Army aviation training centers
- Attack helicopter units
- Army National Guard AH-64 units
- Mission planners and aircrew instructors

Applications

- Deployable and networkable AH-64 mission rehearsal
- Procedural and weapon systems training for the Apache platform
- Tactics development for attack helicopter operations
- Joint and combined arms training with ground and air forces

Training, Mission Rehearsal and After-Action Review

- Realistic AH-64-specific mission scenarios for day and night operations
- Detailed debrief tools for reviewing crew performance and decision-making
- DIS-compliant for integration with other simulators and Live-Virtual-Constructive (LVC) networks
- Compatible with data import/export for mission planning and intelligence integration

Key Features

- High-fidelity AH-64 cockpit replica with fully functional controls, switches, and displays
- Accurate modeling of AH-64 weapon systems, including Hellfire missiles, Hydra rockets, and 30mm chain gun
- Equipped with a Virtual Reality and Mixed Reality visual system
- Uses AI for constructive unit control in dynamic combat situations
- Multiple theater maps with high-resolution elevation topography, landmarks, and dynamic weather conditions
- Tailorable using Software and Terrain Development Kits
- Comprehensive library of combat systems, including aircraft, weapons, ground vehicles, ships, air defense units, and structures
- Highly adaptable MCS environment—leverages a wealth of COTS development
- Supports JTAC and JFO coordination during distributed joint fire sessions for both symmetric and asymmetric training

Configurations

The CymLITE-MCS is offered in various configurations to suit our clients' budget and training requirements.

- Full Flight Simulator (FFS)
- Part Task Trainer (PTT)
- Virtual Reality and Mixed Reality
- Cockpit Replica
- Deployable Systems
- Dome
- Motion Systems
- Desktop

The CymLITE-MCS comes with pre-designed aircraft platforms for both rotary-wing and fixed-wing aircraft. CymSTAR can design additional platforms to meet clients' specific needs.