

# Aircrew Combat Mission Trainer



Kratos' turn-key Aircrew Combat Mission Training (ACMT) service prepares aircrews to anticipate, recognize and react to threats in a tactical environment. Skills, procedures and processes learned in the classroom and labs are practiced and honed in advanced simulators.

**ACMT** is a complete solution that enables aircrew to train in an actual aircraft environment equipped with blended live and simulated mission equipment under day, night and NVG conditions. The system includes a **student environment** (replicated aircraft cockpit and cabin) mounted in a mixed-reality (MR) enclosure (Kratos 'Holodeck'); an **Instructor Operator Station (IOS)** and rack-mounted computational equipment. The student station is aircraft specific and configurable for mission requirements such as door gunnery, hoist/fast roping, medical evac, etc. The simulated mission can be flown from the student environment cockpit or remote via the IOS.

The ACMT is designed as the most comprehensive collective mission trainer, involving the rear and cockpit crew members of the helicopter (or linked to several helicopter crews) in a shared and common exercise. The objective of this trainer is to allow a complete crew to engage in initial qualification, refresher



*Mobile, containerized system can be set up in 3 days.*

and continuation training plus scenario-driven currency and proficiency **mission readiness** training events. It enables practice of Crew Resource Management (CRM) between the different crew members (pilot and co-pilot, and rear crew members) in the most realistic simulated scenarios.

## **Crew Resource Management (CRM) enabled with Kratos ACMT**

Crew coordination begins with battle rostering and training, proceeds through mission planning, and culminates in the effective execution of aircrew tasks. Research has shown that

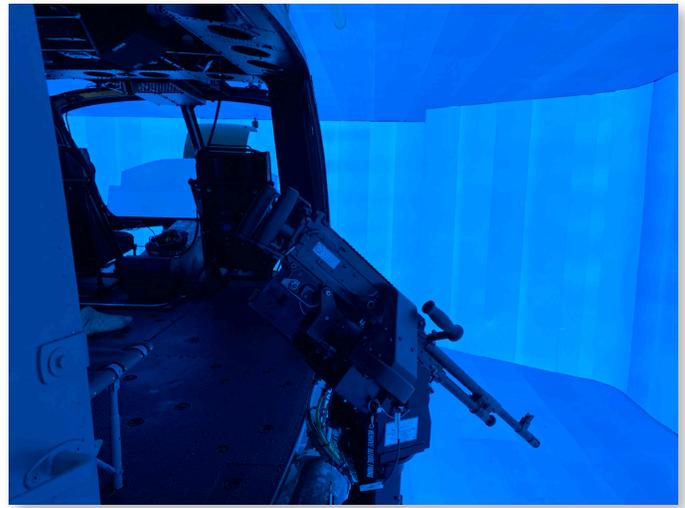
crew coordination is related to mission performance. Defined specific aspects of crew coordination enabled with Kratos Mission Readiness Training (MRT) devices (dependent on tier), include the following:

1. Involvement of the entire crew in mission planning and rehearsal of critical mission events and contingencies.
2. Development of standardized communication techniques, including the use of confirmation and acknowledgment.
3. Assignment of specific task priorities and responsibilities to each crew member and individual acknowledgment of those responsibilities during the pre-flight crew briefing.
4. Involvement of each crew member in monitoring the need for assistance in coping with difficult aspects of the mission.
5. Development of positive team relationships to preclude overconfidence or subconscious intimidation because of rank or experience differences.

An accompanying Ground Party Simulator can be networked with the ACMT device to allow ground-based training teams to seamlessly join the collective training mission and train with their air support just as they would engage with them in real life.

## **Enhance Training Efficiency**

Immersive technology coupled with devices like the UH-1 MPAVET and GPS increases training efficiency and effectiveness and enhances the Pilots', Flight Engineers' (FEs), and Ground Party's ability to anticipate, recognize, and react to threats in a simulated tactical environment. The MP-AVET's and GPS' electroluminescent technology allows trainees to experience the real world while interacting with virtual training scenarios as they can see their hands, weapons, and other aircrew at the same time. The ability to customize holodecks for various platforms coupled with the training benefits of immersive technology significantly lowers life-cycle costs while increasing training value.



*Aircraft is fitted with weapons on right and left sides.*