

Immersive Technology Enhances Aircrew Training Realism



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 turn-key solution that enables aircrew students to train in an actual aircraft equipped with simulated weapons. Enclosed in a Kratos mixed reality "holodeck," a fully-immersive, mixed reality environment, the entire aircrew can simultaneously train in blended virtual and real environments. This creates an environment in which aircrew engage in scenario-driven ACMT training events, such as air interdiction, aerial combat and close air support, among others.

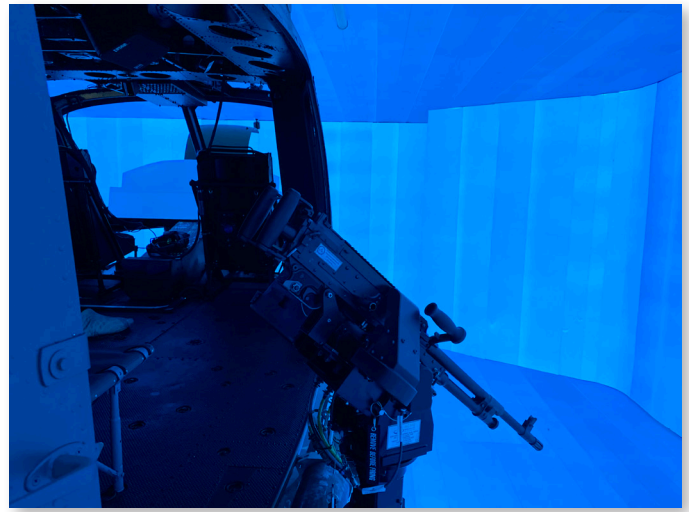
The accompanying Ground Party Holodeck can be networked with the MP-AVET to allow JTACs, Forward Observers, Fire Teams, and Combat Controllers to seamlessly join the collective training mission and train with their air support just as they would engage with them in real life. Currently, up to four Ground Party personnel can train alongside four aircrew in the MP-AVET to accomplish the mission. This mobile, containerized system can be set up in 3 days from off the truck to the first training mission and is offered as a full turn-key service at the point of need, offering zero risk to the customer.



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

Enhance Training Efficiency

Immersive technology coupled with devices like the UH-1 MP-AVET 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.

Immersive Simulation Platform

While immersive technologies such as mixed reality can greatly enhance skill acquisition and retention, even more critical is the fact that customers can monitor the performance of a student in real time so that individual training effectiveness can address skills gaps and drive improvement. Kratos has developed a complete collective, immersive technology simulation platform that integrates advancements in gaming and similar technologies to achieve a fully immersive military training solution. With full mission rehearsal capability, virtual aircrew combat mission training scenarios, tailored to each combatant role, enhances combat team readiness to assess the situation and determine a course of action prior to live combat.

For the first time, Helicopter Aircrews [Pilots and Flight Engineers] and their associated ground parties can train together, in a completely immersed, fully blended, collective environment using Mixed Reality technology. No projectors, no domes, no plastic weapons or other low fidelity hardware - this solution uses a real aircraft fuselage, flight deck, flight controls, cabin, and simulated weapons with recoil and windloading. This system can be packaged in containers for transport and quickly set up after arrival at the point of need (PoN).