Additional MetaVR visuals ordered for the USAF MQ-9 simulator program

MetaVR's VRSG will provide visuals for the MALET-JSIL Aircrew Trainer as part of program to upgrade U.S. Air Force PMATS simulators

Brookline, MA, 30 April, 2020: The Joint Systems Integration Lab (JSIL) has ordered 171 new MetaVR Virtual Reality Scene Generator™ (VRSG™) licenses for the MALET-JSIL Aircrew Trainer (MJAT) training capability.

The MetaVR real-time 3D licenses are coupled with government off-the-shelf software to create a ground control station (GCS) simulator for training pilots and sensor operators of the General Atomics MQ-9 Reaper Remotely Piloted Aircraft System (RPAS), as an upgrade to the U.S. Air Force's Predator/Reaper Mission Aircrew Training System (PMATS) program. The existing PMATS devices are being progressively shipped to the Joint Technology Center/System Integration Laboratory (JSIL) facility in Huntsville, Alabama where the original PMATS configuration is being upgraded with the newly updated simulation software suite.

Designed to provide crew training for U.S. Air Force MQ-9 operators, the MJAT is a roll-up system that appends to a tactical MQ-9 GCS in order to convert it to a training simulator. It provides RPAS operators the ability to conduct simulation training as part of qualification and follow-on training to maintain proficiency and currency in all required tasks.

The complete MJAT family of systems includes the MJAT as well as the MJAT Stand Alone Trainer (MSAT), which uses GCS-like hardware to provide a training-only solution; and the Desk Top Trainer, which is used for classroom familiarization training.

The deployment of MJAT began in 2016, with 56 systems installed at U.S. Air Force sites across the country. JSIL purchased additional VRSG licenses in 2019, and these new 171 licenses will support the continued roll-out of MJAT as an upgrade to the U.S. Air PMATS program.

Like other JSIL-developed RPAS/UAS trainers, the embedded MJAT uses the Air Force Synthetic Environment for Reconnaissance and Surveillance software to stimulate the tactical vehicle control software to simulate GCS functions: air vehicle control, payload control, weapons control, communications, send and receive video data, and mission planning.

VRSG simulates the GCS camera payload by streaming real-time HD-quality H.264 video with KLV metadata. This allows operators to train using the same hardware that they use while flying actual, real-world missions, simulating real ISR systems and interoperating with networked Joint Terminal Attack Controller (JTAC) simulators.

The MJAT simulator also uses Battlespace Simulations' Modern Air Combat Environment (MACE) for scenario creation and computer-generated/semi-automated forces. As this software is also used by JTAC simulators, systems that use MACE and VRSG can enable training for Reaper operators and

JTACs in a joint, simulated training environment that can identically replicates real-world missions via Combat Air Force Distributed Mission Operations (CAF DMO).

Image: The General Atomics MQ-9 Reaper RPAS flies over virtual geopsecific 3D terrain in MetaVR's Virtual Reality Scene Generator (MetaVR image).

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About MetaVR

MetaVR, founded in 1997, develops commercial PC-based software for the military simulation and training markets, featuring high-speed 3D visualization content and rapid creation of networked virtual worlds using real-world data. MetaVR's real-time visual systems provide the fidelity of geospecific simulation with game-quality graphics. Users can build (with real-world photographic imagery, elevation data, and feature data) high-fidelity virtual worlds with our terrain generation tools, and render in real time, at 60Hz frame rates, the resulting virtual world with our real-time 3D visualization application, Virtual Reality Scene Generator. MetaVR systems are used for applications such as UAS/RPA trainers, manned flight simulators, mission planning and rehearsal, joint fires and JTAC simulation training, urban operations training, and emergency response management training. For more information, visit www.metavr.com.