MVRsimulation showcases mixed reality flight, JTAC, CAS, and RPAS operator training at I/ITSEC 2022

MVRsimulation is demonstrating the PTMT and newly Interim Accredited DJFT in booth (#1187) at I/ITSEC on 28 November – 2 December, 2022.

Orange County Convention Center, Orlando, FL, 28 November, 2022: At I/ITSEC 2022 MVRsimulation is demonstrating two fixed-wing Part Task Mission Trainers (PTMTs) networked with one full Deployable Joint Fires Trainer (DJFT) simulator in mixed reality high-speed flight, JTAC, Close Air Support (CAS), and RPAS operator training scenarios – all supported by geospecific terrain rendered in Virtual Reality Scene Generator (VRSG).

The newly Interim Accredited DJFT will have a flexible configuration incorporating an Instructor, JTAC Observer, and Role Player MQ-9 Reaper operator providing mission overwatch with a KLV metadata-based sensor feed. The two PTMTs will be networked in as CAS Role Players configured as an A-10 and F-18.

Full spectrum training scenarios will be running, including exercises such as Digitally Aided CAS (DACAS) in accordance with current joint tactics, techniques and procedures, match sparkle target identification between JTAC and CAS aircraft, and full NVG-supported day/night transitions. All missions will showcase full integration of partner technologies, including the new Varjo XR-3 Focal Edition mixed reality headset, Battlespace Simulation's MACE, Sierra Nevada Corporation's SNC TRAX, and all physical/emulated hardware and software.

Critically, all DJFT and PTMT role players in each scenario will train in a shared virtual, dense urban area within VRSG's high-resolution, round-earth Hajin, Syria terrain, populated with dense culture. MVRsimulation's Hajin terrain is built from geospecific high-resolution 50cm imagery from Maxar Technologies compiled with underlying SRTM elevation data at a 30-meter elevation post spacing. The source data is blended to underlying 1-2 meter source imagery of all of Syria. This means VRSG simulates the first-person virtual world for all trainees in the scenario from the same terrain – whether they are a JTAC on the ground looking at the horizon, an A-10 acquiring a ground target at 1,400ft, or an MQ-9 RPAS sensor operator performing overwatch at 50,000ft - and enables all trainees to identify and lock-on to the same 3D target entity for Match Sparkle training exercises.

MVRsimulation's DJFT has recently been granted Interim Accreditation by the Joint Fires Support Executive Steering Committee for the system's first customer, the 4th Combat Training Squadron (CTS), USAFE-AFAFRICA Warfare Center. The U.S. Air Force interim accreditation enables the DJFT to replace terminal attack controls as authorized by Table 5.2.4.1 (Certification) and Table 5.2.5.2 (Qualification) of the JTAC MOA. The DJFT enables JTACs to log controls for currency that would normally be required as live events using the simulator.

The DJFT is a joint effort between MVRsimulation and Battlespace Simulations, Inc. and includes a TAA compliant Varjo XR-3 mixed reality headset at the heart of the system. The DJFT as accredited is a portable configuration consisting of a Role Player, Instructor Operator Station, and Observer

Station system equipped with mixed reality head mounted display enabling 360 degree FOV; and integrated JTAC equipment (emulated/simulated SOFLAM, LRF, DAGR, IZLID 1000P, NVGs, IR strobe, signal mirror, ROVER/VDL, binoculars, PRC-117G, PRC-152).

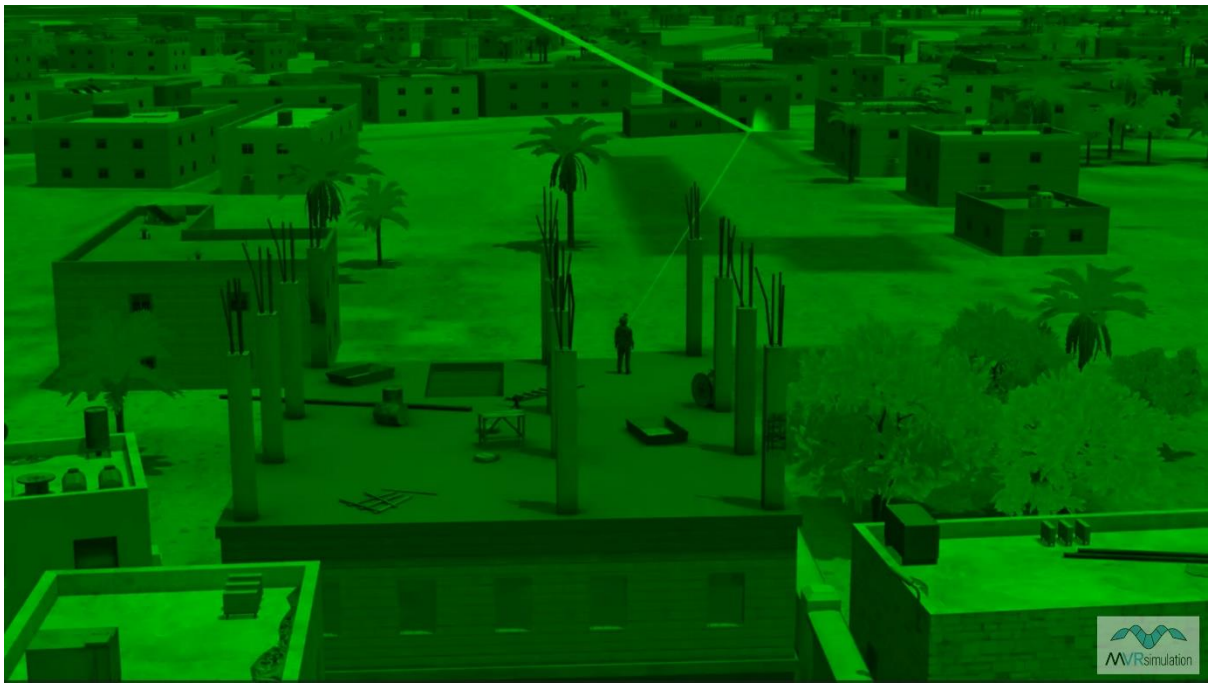

Image: A match sparkle targeting exercise between JTAC Observer (with IZLID and NVGs) and networked A-10 Role Player rendered in VRSG.

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About MVRsimulation

Founded in 1997, MVRsimulation 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. MVRsimulation'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. MVRsimulation 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.mvrsimulation.com.