European NATO JTAC simulator systems set for upgrade

Latvian and Slovenian JTAC simulators to be upgraded and supported by DefenseTek Solutions Ltd

Sudbury, MA, 10 February, 2022:

DefenseTek Solutions has secured contracts to upgrade and support NATO Joint Tactical Air Controller (JTAC) simulator equipment at training sites in Slovenia and Latvia. The technical refresh will include updates to MVRsimulation's Virtual Reality Scene Generator (VRSG) image generator software and Battlespace Simulations' MACE computer-generated/semi-automated forces software; plus, ongoing help-desk support from DefenseTek for both nations.

Under the first multi-year agreement, DefenseTek Solutions will maintain and sustain the Latvian Ministry of Defence's Advanced JTAC Training Simulator, and carry out a system rehost, hardware technical refresh, with updates to both Battlespace Simulations' MACE and MVRsimulation's VRSG software. DefenseTek Solutions will also provide ongoing helpdesk and contract logistical support under the contract, which began in 2021 and will run for three years.

The second contract covers maintenance and sustainment of the Slovenian Ministry of Defence's JTAC Training Simulator. This effort includes a system rehost utilizing XTS Corporation's XCore host software, as well as updates to VRSG and MACE. Additionally, DefenseTek will provide on-site and remote contract logistical support, cybersecurity patching, hardware and software maintenance, and spares management services. This five-year contract began in 2021 and will run for five years.

Both Latvia and Slovenia use the dome-based Advanced Joint Terminal Attack Controller (JTAC) Training System (AJTS). The device is designed to support JTAC and Combat Controller squadron level continuation, qualification and mission rehearsal training requirements.

The AJTS is based on the Air National Guard AJTS system, which is a 5-meter, 270 degree FOV dome-based system that uses high resolution projectors and 14 image generator channels to fully immerse the JTAC trainee in a 3D, real-time virtual battlefield provided by MVRsimulation's VRSG. Scenario generation and execution are provided by Battlespace Simulations' MACE with call-for-fire and 9-line interfaces. Training missions are carried out with simulated rangefinder/designator equipment. The Latvian and Slovenian systems are similar in design, but use 3-meter and 4-meter domes, respectively, and fewer image generator channels.

As part of these multiyear support contracts, DefenseTek will also be delivering the first of its Training, Cybersecurity and Support (TCAS) portals. The TCAS portal will enable the AJTS to support Distributed Interactive Simulation architecture training for the first time, allowing multiple AJTS devices to be networked together (locally or remotely), as well as with virtual Close Air Support

aircraft devices. It will also allow DefenseTek technicians to securely provide remote support, troubleshooting, and cybersecurity patching to the Latvian and Slovenian devices.

The Latvian JTAC training site at the Adazi Military Base renewed seven MVRsimulation VRSG licenses in August 2021. MVRsimulation is also upgrading its 3D terrain of the whole of Latvia using 25cm open-source imagery for the project. This includes compiling the high-resolution imagery into 3D terrain using MVRsimulation's Terrain Tools plugin for ESRI's ArcGIS software and building high-fidelity geospecific areas of interest populated with buildings, roads, vegetation and dams of the Ķeguma Hydroelectric Power Station.

The Slovenian Armed Forces Air Ground Operations School (AGOS) at Cerklje ob Krki Airbase renewed seven VRSG licenses and one Terrain Tools license in January 2022.

“We’re pleased to have this opportunity to help enable our NATO partners in Eastern Europe to continue training on their JTAC training systems,” Chris Johnson, Chief Operating Officer at DefenseTek Solutions, said. “This technical refresh will boost the Latvian and Slovenian Armed Forces’ ability to rehearse critical defensive operations at a time when regional geopolitical pressures are building. It will also give them the ability to participate in distributed NATO training, and ensure their JTACs remain fully current and accredited for NATO operations.”

AJTS is designed to meet the requirements for unit level JTAC training and is accredited for type 1, 2, and 3 controls for both day and night, and for laser target designation controls with a simulated military laser device by the US Joint Fire Support Executive Steering Committee Memorandum of Agreement, and is also NATO certified for full STANAG 3797 accreditation when used within an approved training curriculum.

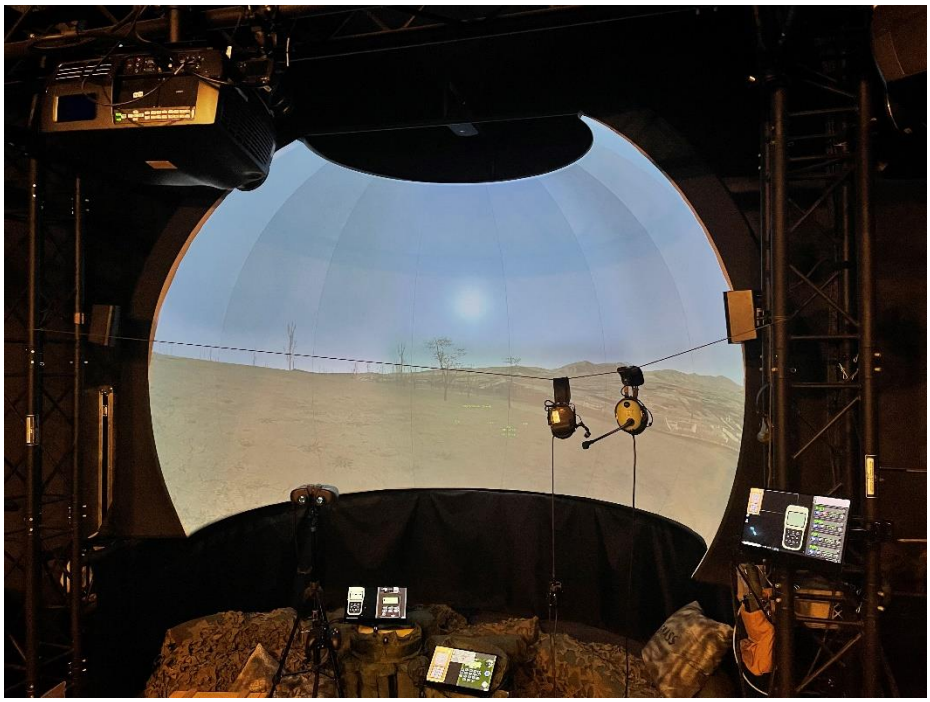

Image: The dome-based Advanced Joint Terminal Attack Controller Training System (AJTS) (DefenseTek image).

About DefenseTek Solutions

DefenseTek Solutions, Ltd., an SBA certified Economically Disadvantaged Woman Owned Small Business, was founded in 2021 to provide reliable, high quality cybersecurity services and training system support to US and NATO operators around the world. DefenseTek prides itself on providing the support and service our customers need to accomplish the mission, regardless the obstacles. For more information please visit us at www.def-tek.com.

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.