Lockheed Martin, Korea Aerospace Industries & Red 6 Announce Initial Augmented Reality Integration Work For T-50 Platform

PARIS, June 20, 2023 /PRNewswire/ -- Lockheed Martin, Korea Aerospace Industries and Red 6 today announced they have begun developing engineering solutions and a technology roadmap to establish an implementation path for Red 6’s Advanced Tactical Augmented Reality System (ATARS), into the T-50 platform and associated ground-based training systems.

Initial technology integration includes a T-50 demonstrator and the Red 6 ATARS technology that is electronically networked with the Lockheed Martin Prepar3D software simulation suite. This early engineering solution provides Lockheed Martin and Red 6 additional experience in integrating simulations which could eventually comprise embedded training for the T-50 program and ground-based training systems.

"ATARS addresses the critical training inefficiencies in today's training platforms. There has never been a training environment in which you can combine virtual assets being visually represented in the real outdoor world, and the opportunity to overlay this training into ground-based training, until now," says Daniel Robinson, founder and CEO at Red 6.

ATARS is a multi-node, all-domain augmented reality (AR) system that delivers a complete outdoor synthetic training environment for multiple users. Red 6 technology allows pilots to experience the cognitive loads of physically flying airplanes while capturing the value of synthetics by enabling them to enter realistic, scalable in range and ratio, secure, simulated training environments while airborne in the most dynamic of outdoor environments.

"Our vision is to help our customers leverage emerging technologies to seamlessly and securely connect all assets for joint missions, and enable fast and decisive action," said Aimee Burnett, vice president, Business Development for the Integrated Fighter Group at Lockheed Martin. "Lockheed Martin has made significant advances in digital engineering and built strategic partnerships that are enabling us to accelerate development across our platforms.

"One such example is continued integration with Red 6 as we look to build advanced 21st Century Security capabilities that support our customers' needs," Burnett continued.

Burnett added the T-50 program remains in demand around the world. Lockheed Martin recently submitted the TF-50A variant for the U.S. Air Force's trainer program to serve three near-term missions including tactical training, adversary air support and tactical fighter surrogate. The TF-50A is configured as a light attack fighter/trainer with additional enhancements to include radar, electronic warfare system, tactical data link and other capabilities to meet Air Combat Command requirements.

Lockheed Martin also submitted the TF-50N variant for the U.S. Navy’s trainer program. The TF-50N is uniquely configured to meet multiple U.S. Navy missions including pilot landing qualification, adversary air, training/chase and tactical surrogate.

While the ATARS system is initially targeted for the T-50 program, it could eventually be applied to operational Lockheed Martin platforms such as the F-16, F-22 and F-35.

Red 6 is a Lockheed Martin Ventures portfolio company.

About Lockheed Martin
Headquartered in Bethesda, Maryland, Lockheed Martin Corporation is a global security and aerospace company that employs approximately 116,000 people worldwide and is principally engaged in the research, design, development, manufacture, integration and sustainment of advanced technology systems, products and services.

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About Red 6
Red 6, founded in 2018, is the creator of Advanced Tactical Augmented Reality System (ATARS), and Augmented Reality Command and Analytic Data Environment (ARCADE). Red 6 systems are the first wide field-of-view, full color demonstrably proven outdoor augmented reality solution that operates in dynamic outdoor environments. Together, they bring virtual and constructive assets into the real-world by allowing pilots and ground operators to see synthetic threats in real-time, outdoors, and critically, in high-speed environments.

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Additional assets available online: Photos (1)