

British Army Expands Use of Engagement Simulation System to Enhance Training

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The British Army is expanding its use of the Roundless Tactical Engagement Simulation system and exploring additional training tools to enhance soldier readiness. The expansion reflects a modernised approach to combat preparation that prioritises realism, data-driven feedback, and scalability.

The RTES system, based on Bagira Systems' MAGNET Live Training System, uses replica small arms equipped with sound, flash effects and laser transmitters. It utilises replica small arms, such as the SA80 service rifle and the L129A1 sharpshooter weapon, equipped with realistic firing sounds, flash effects, and barrel-mounted laser transmitters. Soldiers wear head-mounted sensors that connect wirelessly to the rifle's electronics, providing 360-degree hit detection and position tracking. These features support detailed after-action reviews and enhance tactical learning.

Initially deployed at the Army Foundation College in Harrogate and the Combat Manoeuvre Centre in Warminster, the system was procured under a £13 million contract confirmed in May 2023. Each contract tranche included equipment kits supporting up to sixty personnel. Following positive feedback from early users, RTES is being extended to additional regiments and training sites, with further expansion under consideration.

At the Defence Simulation Education and Training conference in Bristol, Bagira Systems confirmed that the British Army is considering additional kit builds and deployment locations. Officials indicated the system may integrate with other live training platforms under the Live Training Architecture concept.

RTES complements synthetic training systems like the Combined Arms Tactical Trainer and the Interim Combined Arms Virtual Simulation, which blend live and virtual elements for flexible and efficient training. By integrating RTES, the Army aims to deliver high-fidelity training without using live ammunition or requiring extensive field deployments.

Commanders have praised the system's ability to improve performance monitoring and accelerate learning cycles. Early use has shown measurable benefits in infantry-level coordination, decision-making, and situational awareness.

Looking ahead, the British Army is assessing how RTES could support initiatives such as the Morpheus tactical communications programme and next-generation soldier systems. The long-term objective is to link individual training, mission rehearsal, and command-level simulation into a unified ecosystem.

The increasing use of RTES demonstrates a tangible commitment to modernising training, creating a force that is better equipped, adaptable and prepared for the complexities of modern warfare.