

The Area Weapons Effects Simulator

The World's Most Capable Land Combat Training Package



The Area Weapons Effects Simulator (AWES), developed for the UK Ministry of Defence, is the most advanced combat training system of its kind. Now operational at the UK-based Salisbury Plain Training Area (SPTA) and the British Army Training Unit (BATUS) at Suffield, Alberta, Canada, AWES provides unprecedented fidelity and realism for simulated force-on-force battles and objective After Action Reviews.

The Cubic-developed system is designed to support joint, combined arms training missions involving fixed and rotary wing platforms. It is also easily adaptable to mobile, PC-based training systems.

AWES features an enhanced Tactical Engagement Simulation (TES) system that accurately tracks, monitors and records the actions of individual soldiers and combat vehicles for post-mission analysis. The system integrates portions of the British Army's existing Direct Fire Weapons Engagement System with Cubic's Multiple Integrated Laser Engagement System, or MILES 2000.

A key element of AWES is its timely, accurate simulation of area weapons effects. In addition to replicating the "direct fire" from individual weapons and vehicles, AWES accurately simulates "indirect" events such as artillery, mortar fire, smoke, nuclear, biological, chemical attacks, mines and air-delivered munitions.

Enhanced TES components include new soldier and vehicle instrumentation systems and a software-based system for exercise planning, mission control and post-mission analysis. Participants in the training exercises are equipped with digital communications that indicate their position, weapons fired and casualty status.

The system electronically captures and records event data from individual soldiers and vehicles and sends the information to an exercise control center for real-time training analysis. The recorded information is reviewed during After Action Reviews, which are conducted in either a stationary theater or two mobile theaters in the field.

Future plans for AWES include the integration of the new Bowman radio communication system. AWES also is designed to support future interoperability with the WAH-64 Collective Training System and the Rangeless Airborne Instrumented Debriefing System, or RAIDS.





Major Features

- Supports combined arms training
- Simulates indirect fire, minefields, obstacles, air-delivered munitions and nuclear, biological and chemical munitions
- Integrates MILES 2000 and the existing DFWES to enable participants equipped with both systems to operate and provide casualty assessment as a cohesive unit
- Features an instrumentation system that monitors exercises in near-real time and provides event data and position for After Action Reviews
- Includes a universal player unit (instrumentation issued to all vehicles and soldiers) with extended battery life
- Features innovative audio cues for area weapons effects that enhance the use of pyrotechnics
- Includes small, lightweight equipment for the participants to ensure comfort
- Utilizes Cubic's highly reliable and robust data link technology using VHF frequencies
- Produces realistic notional casualties through automated electronic casualty cards, enabling effective training in casualty treatment and evacuation
- Provides the ability to monitor and record Combat Net Radio across the instrumented battlefield; to be expanded to support Bowman digital radio capabilities.
- Includes a seamless interface with the British Army's Battlefield Artillery Target Engagement System (BATES) to allow for fully integrated indirect fire simulation and battlefield effects

Future AWES Capabilities

- **INTEROPERABILITY** with air maneuver through integration of rotary wing & fixed wing platforms
- **DIGITIZATION** with the fully integrated Bowman radio communications system and digitized environment
- **HLA SERVER INTERFACE** to provide the integration path for other training systems to support higher formation and joint training
- **EXPANSION PLANS** for Brigade and higher level commands while supporting any scale mobile TES requirement