INSTRUMENTED-TACTICAL ENGAGEMENT SIMULATION SYSTEM (I-TESS II)
I-TESS II: DELIVERING A FULLY INTEGRATED GROUND COMBAT TRAINING SYSTEM IN A DEPLOYABLE PACKAGE

Cubic is pleased to provide the U.S. Marine Corps with an advanced Instrumented-Tactical Engagement Simulation System (I-TESS II), a fully integrated ground combat training system based on Cubic’s latest laser-based wireless instrumentation products.

Cubic provides a turnkey training capability that includes an immersive training environment replicating the threats of actual combat. The I-TESS II System provides force-on-force training capable of direct fire and indirect fire engagements between Marine units and similarly equipped opposing forces employing simulated minefields and simulated nuclear, biological, and chemical (NBC) agents. Vehicles, watercraft, bridges, and buildings can also be outfitted with I-TESS II equipment. It allows Marines to fully integrate live, virtual, and computer-based constructive elements into their training mix.

Ease of use is a key feature of the system. The system requires minimal setup time and delivers After Action Reviews (AARs) immediately upon training completion. From unloading the equipment through exercise setup, exercise execution and AAR, all aspects are carefully designed to provide maximum training value with minimum support personnel.

SYSTEM COMPONENTS
The system components include small arms laser transmitters, rocket-propelled grenade and AT-4 anti-armor simulators, man-worn and wireless vehicle laser detection, and mobile and portable command and control systems. The system is fully compatible and interoperable with IWS, MILES 2000 and I-TESS I components. All component laser transmitter and detection systems are MILES (PMT-90) compliant.

The system has proven effectiveness in structures and in open terrain. The components are ruggedized for operation in open terrain environments, including urban, mountain, desert, jungle, littoral and riverine.

KEY BENEFITS
- Provides Marines with immediate feedback when a deadly mistake is made.
- Puts Marines in a training environment that replicates the effects of the real battlefield.
- Enables Marines to train like they fight, rehearse missions, and improve their chances of winning the battle and returning home safely.

MANWORN DETECTION SYSTEM (MDS)
- Provides an accurate representation of the Marine’s skill in a combat environment
- Shooters can transition from one weapon type to another seamlessly
- Simulates medical casualties and CBRNE effects
- Safety features include panic button, eye safe lasers, and position location information
- MDS is one-half the size, weight, and consumes half the power of equivalent industry implementations

SOFTWARE SUPPORT ENVIRONMENT
- 2D and 3D mapping for accurate modeling of the battlefield terrain
- Performs issue and receipt processing
- Software expandable/customizable for growth

MOUT BUILDING INSTRUMENTATION (MBI)
- Enables tracking inside GPS-denied areas
- Delivers collateral damage to building occupants

COMMAND & CONTROL (C2) SYSTEMS
- Mobile C2 trailer is easily transportable and simple to setup
- Automated collection exercise data for AAR debriefing package
- Single man-portable C2 is lightweight, self-contained, and based on the mobile C2 in a smaller package

INDEPENDENT TARGET SYSTEM (ITS)
- Easy to install, universal wireless target system
- Configurable for any structure: building, bridge, small watercraft, or vehicle

OTHER SIMULATION CAPABILITIES
- Hand Grenade Simulator (HGS) - Designed to simulate M-67 detonation time and blast radius (approx. 10 meters)
- Battlefield Effects Simulator Interface Module (BESIM) - Works with and attaches to existing BES in the field, and triggers realistic effects on all I-TESS II devices
- RPG and AT-4 Surrogate - Realistically simulates the size, weight, feel, range performance, and operational procedures of the actual weapon.
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