

Joint Threat Emitter (JTE)

Train aircrews to be battle-hardened before the battle ever starts.

The JTE simulates both single and double digit surface-to-air and anti-aircraft artillery radar systems



The Joint Threat Emitter offers "True" Warfighter Training for the combat aircrews and provides a modern, reactive battlespace war environment, designed to help train military personnel to identify and effectively counter enemy missile or artillery threats. A multi-threat, hi-fidelity simulator with realistic effective radiated power levels, the JTE simulates both single and double digit Surface-to-Air and Anti-Aircraft Artillery radar systems and accurately trains combat aircrews to defeat or avoid Integrated Air Defense Systems (IADS) around the world in a war-like training environment.



What is a Joint Threat Emitter (JTE)?

- JTE is a mobile air defense threat simulator that enables aircrews to train in threat environments matching actual combat conditions
- Each JTE can simulate up to six threat systems and multiple JTEs can be integrated and controlled in a coordinated manner to simulate hostile Integrated Air Defense Systems (IADS)
- A plug-and-play Emitter Kit approach provides an adaptable configuration that allows training against today's hostile threats as well as new generation threats not yet fielded.

The JTE Mission

- Simulate Electronic Combat Signals Produced by Surface to Air Missile (SAM) and Anti-Aircraft Artillery (AAA) Threats
- Provide Realistic Electronic Warfare Training for Pilots and Aircrews

- Assess Performance of Aircraft Radar Warning Receiver (RWR) and Electronic Countermeasure (ECM) Systems
- Replace Antiquated and High Maintenance Threat Emitter Systems with modern, more capable state-of-the-art JTE Systems

Joint Threat Emitter Offers:

- Capability to Train as You Fight
- Multi-Threat Training from a single System
- Fully Integrated IADS command and control emulation
- Reactivity to aircraft maneuvers and ECM
- Complete Debriefing Capability
- IFF Tracking System (Multi-Player)
- Superior Reliability & Capability
- Integrated Logistical Support (ILS)
- Spiral upgrade capability

Joint Threat Emitter (JTE)



JTE Components

The JTE is composed of three subsystems – A Threat Emitter Unit (TEU), Command and Control Unit (C2U) and a Remote Power Unit (RPU).

Threat Emitter Unit (TEU)

- TEU is designed to utilize several full Effective Radiated Power (ERP) kits that are interchangeable. Any kit can emulate up to six threats at full ERP.
- A Wide Band Kit is also available which emulates the EW threats across the spectrum needed by test and training ranges when less than full ERP is suitable.

Command and Control Unit (C2U)

- Controls up to 12 different threat emitter units and serves as the overall system command and control center.
- Can be deployed in two configurations: fixed within a range control center or mobile within a trailer mounted S-280 shelter.
- In the mobile configuration, an Identification Friend or Foe (IFF) tracking subsystem is added to provide for autonomous tracking of all players on the training range.

Remote Power Unit (RPU)

- In remote locations, when commercial power is unavailable, the RPU provides AC power for the TEU and C2U.

For more information, please contact

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Realistic Training for the Warfighter

- Provides Multiple Realistic Threat Systems
- Superior Fidelity
- Real Time Kill Notification (High Fidelity Models)
- Full Reactivity
- Autonomous Operation

Advanced Threat Emulation Capabilities

Threat Generation

- Emulate actual threat RF parameters
- Reprogrammable for new threats
- Multiple Threats from one pedestal for training flexibility
- Emitter kit capability supports fast reconfiguration and future threats

Threat Reactivity

- Removes shortfall known as “Death Ray”
- JTE simulates operator & equipment reactivity for: ECM, Terrain blockage, Aircraft maneuvers, Expendables

Range Types

- Large Force Exercise Ranges
- Primary Training Ranges
- Test & Evaluation Ranges

Tracking Sources

- ACMI (podded, non-podded aircraft)
- FAA, ATC, and Military Radar Data
- IFF Tracking Option

Training Scenarios

- “Train-as-you-Fight” IADS scenarios
- Duplication of simple or complex enemy air defense systems
- Real Time Kill Removal and Notification/Rebirth

Feedback and Debriefing

- Video and ECM recorded during mission
- Compatible with ADDS-based debrief systems

Mobility and Deployment

- Packaging allows rapid relocation of JTE subsystems

Sustainability

- 24/7 Integrated Logistics Support (ILS)