

## Overview

For over thirty years, the JT&E Program has provided quantitative information for analysis of joint military capabilities and delivered products that directly increased military effectiveness. The program is complementary to, but not a part of, the weapons acquisition process. A JT&E test brings together two or more Military Departments or other components to:

- Assess the interoperability of Service systems in joint operations.
- Evaluate improvements in joint technical and operational concepts.
- Evaluate and validate multi-Service testing methodologies.
- Assess performance of interacting systems under realistic joint operational conditions.
- Provide data from joint field tests and exercises to validate models, simulations and test beds.
- Improve joint tactics, techniques, and procedures (TTPs), recommend changes to Concepts of Operations (CONOPS), and provide recommended Doctrine.
- Improve Joint Training Tasks for the COCOMS.

Director, Operational Test and Evaluation (DOT&E) re-engineered the JT&E process in 2003 to provide increased capabilities and responsiveness to the warfighter. The program was restructured to be more agile and to respond more quickly to emergent needs and requirements. The nomination process was streamlined and testing accelerated, with Joint Tests shortened to a maximum of three years as opposed to the previous five- or six-year test duration. Added to the JT&E Program are Quick Reaction Tests (QRTs) that provide testing and reporting of results in twelve months or less for urgent, high-priority, warfighter operational issues. In its first year of inception three QRTs were directed. The **Joint Survivability (JSURV) QRT** developed and delivered convoy survivability procedures to U.S. Central Command (CENTCOM) to help minimize combat casualties. Approximately ninety percent of deployed convoys are using these procedures. JSURV also developed a U.S. Special Operations Command- (SOCOM) specific combat convoy handbook and convoy leader's graphic training aid for Special Operations Forces operating in Iraq and Afghanistan. The JSURV QRT was completed in nine months from inception to final reporting. Over 40,000 handbooks have been published and provided to our warfighters involved in the Global War on Terrorism.

Other on-going QRTs include **Joint Shipboard Weapons and Ordnance (JSWORD)** and **Joint Low Altitude Aircraft Survivability (JLAAS)**. JSWORD will establish, document, and publish a standard joint procedure for tube loading the 2.75-inch Folding Fin Aerial Rocket on U.S. Army (USA) and USSOCOM helicopters with engines running and blades turning while operating on U.S. Navy ships. JLAAS will develop and validate changes to fixed and rotor wing TTPs that enable them to avoid or defeat potential enemy threats to the aircraft from enemy weapon systems such as Man-Portable Air Defense Systems (MANPADS).

As part of the re-engineering process, current tests were accelerated and test durations shortened. **Joint Cruise Missile Defense (JCMD)**; **Joint Command and Control, Intelligence, Surveillance, and Reconnaissance (JC2ISR)**; and **Joint Unmanned Aerial Vehicle (JUAV)** have shortened their closedown process and accelerated delivery of their final reports to the warfighter by six months. In July 2003, OSD chartered **Joint Datalink Information Combat Execution (JDICE)** six months early, with their first test conducted seven months after being chartered.

As part of the re-engineering improvements, the program office stood up a Joint Test Support Cell (JTSC) to provide a "quick start" capability for both Joint Feasibility Studies (JFSs) and QRT efforts. JT&E efforts have historically been undermanned early in the process, hampered by a steep learning curve for new personnel. The JTSC was established to solve this problem and is manned by a core group of JT&E planning and operational subject matter experts.

During FY04, the JT&E Program Office coordinated participation of four JT&Es at the Combined Joint Task Force Exercise 04-2 (CJTfEX 04-2) to capitalize on program synergies, avoid duplication of effort and resources, and ensure the best employment of personnel and materiel. CJTfEX-02 was a first-of-its-kind designated effort to conduct a simultaneous test and training event that provided real-time testing opportunities to the tester and training improvements to the warfighter.

# JOINT TEST & EVALUATION

## **Joint Global Positioning System Combat Effectiveness (JGPSCE) JT&E provided:**

- Live GPS Electronic Warfare (EW) play.
- Assessment of the impact of GPS EW on the Joint Force Air Component Commander, and the ability of ISR sensors to detect GPS jamming.

**Joint Methodology to Assess C4ISR Architecture (JMACA) JT&E** provided (and validated) methods to rapidly identify C4ISR deficiencies and propose appropriate solutions. The test conducted a re-assessment of CJTFEX 04-2 architecture in less than three days, providing:

- Updated end-to-end information paths.
- Assessment of interoperability risk associated with each functional thread and system.

## **Joint Cruise Missile Defense (JCMD) JT&E:**

- Provided a cruise missile emulator.
- Conducted cruise missile defense mission area CONOPS.

## **Joint Command, Control, Intelligence, Surveillance, and Reconnaissance (JC2ISR) JT&E:**

- Provided mission area analysis for time-sensitive targeting (TST).

Based on the positive results of participation in Joint Test and Training events, the JT&E Program Office is providing a direct coordinator for future test events. In addition, the JT&E Program Office has established a liaison position to integrate JT&E Test Products into appropriate U.S. Joint Forces Command (JFCOM) directorates.

During FY04, the JT&E program selected two Joint Feasibility Studies (JFSs) that will be considered for charter in February 2005.

- **Joint Urban Fires and Effects (JUFE)** increases the ability of the Joint Force Commander (JFC) to conduct urban fires (lethal, non lethal, other) and assess effects relative to the desired operational effect. JUFE was extended as a JFS for one year after the Senior Advisory Council determined it was an important subject for test but the JT&E program lacked funding for it to be chartered.
- **Joint Fires Coordination Measures (JFCM)** proposes to test and evaluate new Joint TTPs designed to standardize kill box procedures and enable theater commanders to more fully integrate component fires at the operational and tactical levels.

A JT&E senior advisory committee will convene in February 2005 to recommend which of these proposed tests will be chartered and start testing. Additional information on current and transitioning JT&E test activities and the products they are delivering to the warfighter are described in the following pages.