Joint Test and Evaluation Program

The primary objective of the Joint Test and Evaluation (JT&E) program is to provide rapid solutions to operational deficiencies identified by the joint military community. The program achieves this objective by developing new tactics, techniques, and procedures (TTPs) and rigorously measuring the extent to which their use improves operational outcomes. JT&E projects may develop products that have implications beyond TTPs. These products are submitted to the appropriate Service or combatant command as a doctrine change request. The Joint Requirements Oversight Council reviews these suggested changes for inclusion as joint doctrine. The project's products may also be submitted to the Air, Land, Sea Application Center that promulgates multi-Service tactical documents. Additionally, the program develops operational testing methods that have joint application. The program is complementary to, but not part of, the acquisition process. Projects annotated with an asterisk (*) closed in FY11.

The program managed seven joint tests in FY11 that focused on the needs of operational forces:
* Joint Air Defense Operations-Homeland (JADO-H)*
* Joint Civil Information Management (J-CIM)*
* Joint Cyber Operations (JCO)
* Joint Data Integration (JDI)*
* Joint Integration of Maritime Domain Awareness for Homeland Defense (JIMDA)
* Joint Jamming Assessment and Mitigation (JJAM)
* Joint Unmanned Aircraft Systems (UAS) Digital Information Exchange (JUDIE)

The JT&E Program instituted a quick reaction test (QRT) capability in 2003 to respond to the pressing needs of today's deployed forces.

The program managed 14 QRTs in FY11:
* Afghanistan Mission Network Coalition Battlespace Management (AMN-CBM)
* Airborne Maritime Moving Target Indicator (AMMTI)
* Foreign Humanitarian Assistance/Disaster Relief (FHA/DR)*
* Host Based Security System (HBSS)*
* Joint Analytical Network Assessment (JANA)
* Joint Exploitation of Modern Surface-to-Air Missile Systems (JEMS)
* Joint Maritime Evaluation of Transit Escort (J-METE)*
* Joint Military Working Dog (JMWD)
* Joint Modular Protection System (JMPS)*
* Joint Passive Electronic Radio Frequency Emission Classification and Tracking (J-PERFECT)*
* Joint Passive Electronic Radio Frequency Emission Classification and Tracking II (J-PERFECT II)
* Joint Rapid Attack Process (J-RAP)*
* Joint Vehicle Protection and Survivability System (JVPSS)
* Rapid Development and Sustainment of Enterprise Mission Services (RDEMS)

The program executes special projects, as directed by DOT&E, which address problems DoD-wide. The program managed one special project in FY11, the Joint Test and Evaluation Methodology-Transition (JTEM-T).*

JOINT TESTS

JOINT AIR DEFENSE OPERATIONS-HOMELAND (JADO-H)*
(Closed December 2010)

Sponsor/Charter Date: North American Aerospace Defense (NORAD) and U.S. Northern Command (USNORTHCOM)/ August 2007

Purpose: To develop joint TTPs and planning processes for deployable, integrated air defense systems (D-IADS)

Products/Benefits: Standardized collaborative planning tools used to counter emerging air threats to the homeland.

These collaborative tools included:
* D-IADS process modeling that provides a view of the entire planning process
* Checklists for critical steps in the planning process
* An exercise planning guide
* A commanders' planning handbook

JOINT CIVIL INFORMATION MANAGEMENT (J-CIM)*
(Closed June 2011)

Sponsor/Charter Date: U.S. Special Operations Command/ August 2008

Purpose: To research and develop processes and joint TTPs to standardize the collection, consolidation, and sharing of civil information among DoD, other U.S. Government agencies, host nations, coalition forces, and nongovernmental organizations to support the joint force commander's operational planning.

Products/Benefits: A J-CIM users guide that:
* Improves sharing of unclassified civil information
* Standardizes collection, consolidation, and sharing of civil information
* Identifies senior leader and staff requirements for the integration of civil data to support planning, operations, and assessments in support of non-lethal operations

- Enables commanders, senior leaders, and other stabilization and development partners to better share, identify, prioritize, and apportion civil affairs resources

JOINT CYBER OPERATIONS (JCO)

Sponsor/Charter Date: U.S. Pacific Command (USPACOM)/ August 2010

Purpose: To assess, develop, and evaluate joint TTPs to employ a virtual secure enclave strategy, an adaptive cyber defense concept, and to ensure the protection and availability of critical command and control services in support of joint task force (JTF) commanders in operational environments.

Products/Benefits: The JCO-developed concept of operations (CONOPS), TTPs, quick reference guides, and related training will:
- Address network vulnerabilities of critical command and control services by enabling JTF commanders to employ the virtual secure enclave architecture to protect against, detect, and respond to cyber threats to specific services at the operational level
- Provide the commander with situational awareness and cyber defense options to maintain a proactive defensive posture
- Facilitate a systematic approach to implement the principles of war in the cyber domain
- Test and validate operational effectiveness of a JTF implementation.

JOINT DATA INTEGRATION (JDI)*
(Closed April 2011)

Sponsor/Charter Date: U.S. Joint Forces Command and JTF 519/August 2008

Purpose: To develop joint TTPs for Global Command and Control System – Joint (GCCS-J) operators, track data managers and system administrators to provide the combatant and JTF commanders with an effective common tactical picture.

Products/Benefits: The JDI project developed a data management handbook with quick reference guides for developing and sharing the common tactical picture. These products provide new command and control data management procedures that improve the quality of the common tactical picture used by combatant and JTF commanders to support force employment decisions. Other benefits:
- Improved policies and procedures for implementation emphasizing common tactical picture management
- USPACOM, U.S. European Command (USEUCOM), and U.S. Southern Command (USSOUTHCOM) established and now routinely use the Joint Data Network Operations Cell at JTF headquarters.
- U.S. Strategic Command (USSTRATCOM) reported a marked overall improvement in USPACOM and USEUCOM theater inputs to the Global Common Operating Picture after JDI recommendations were adopted within those commands.

JOINT INTEGRATION OF MARITIME DOMAIN AWARENESS FOR HOMELAND DEFENSE (JIMDA)

Sponsor/Charter Date: NORAD and USNORTHCOM/ August 2009

Purpose: To develop TTPs that synchronize maritime domain information for key decision makers across operations centers for homeland defense with comprehensive coordination across the maritime domain awareness community.

Products/Benefits:
- Integrated maritime domain awareness processes, procedures, and checklists
- JFC Handbook for Developing and Sharing MDA across the NORAD and USNORTHCOM Command and Control Network
- Implementing a maritime central access portal for NORAD and USNORTHCOM operational use

JOINT JAMMING ASSESSMENT AND MITIGATION (JJAM)

Sponsor/Charter Date: Air Force/August 2009

Purpose: To develop joint TTPs that mitigate the effects of adversary purposeful interference to satellite communications (SATCOM). JJAM will formulate, refine, and improve the methods and processes that allow operational forces to effectively conduct operations when SATCOM are degraded.

Products/Benefits:
- Multi-Service TTPs, handbooks, and operator checklists
- Seamless and effective command and control through mitigation of purposeful interference to SATCOM
- Heightened awareness of the threat and consequences of SATCOM purposeful interference
- Shorter timelines to mitigate SATCOM purposeful interference
- Incorporation of SATCOM mitigation training and procedures into joint exercises
- Enhanced operations in a SATCOM degraded environment
- Recommendations on needed changes to joint publications, USSTRATCOM instructions, and user checklists

JOINT UNMANNED AIRCRAFT SYSTEMS DIGITAL INFORMATION EXCHANGE (JUDIE)

Sponsor/Charter Date: Air Force Joint Test and Evaluation Program Office/August 2010

Purpose: To develop, test, and evaluate cross-component UAS information exchange TTPs used to improve joint battlespace situational awareness and target prosecution capabilities for the supported and supporting commanders at the tactical level of brigade and below.

Products/Benefits:
- Standardize UAS information exchange TTPs and checklists
- Standardize terminology for UAS information exchange
- Utilize 561st Joint Tactics Squadron's Flash Bulletin process to deliver interim TTPs

QUICK REACTION TESTS

AFGHANISTAN MISSION NETWORK COALITION BATTLESPACE MANAGEMENT (AMN-CBM)

Sponsor/Charter Date: U.S. Central Command (USCENTCOM) and Defense Information Systems Agency (DISA)/January 2011

Purpose: To apply a test methodology that can adequately measure and evaluate the battlespace management TTPs for both joint and coalition forces.

Products/Benefits: Development of TTPs for the Afghanistan Mission Network testing organizations to enable them to develop reliable, mission-based measures and metrics for coalition mission threads under test, and to execute repeatable test events that answer these mission-based measures.

AIRBORNE MARITIME MOVING TARGET INDICATOR (AMMTI)

Sponsor/Charter Date: USSOUTHCOM/July 2011

Purpose: To develop and test TTPs to employ an AMMTI capability that can detect and track self-propelled semi- and fully-submersible vessels.

Products/Benefits:
- Tactics Bulletin submitted to the 561st Joint Tactics Squadron for subsequent integration into Air Force TTP 3-1 (JSTARS), Air Force TTP 3-3 (JSTARS), and Combat Aircraft Fundamentals at scheduled review and rewrite conferences.
- New AMMTI section added to the Joint Interagency Task Force–South standard operating procedure and managed by the task force Air Component Coordination Element.

FOREIGN HUMANITARIAN ASSISTANCE/DISASTER RELIEF (FHA/DR)*
(Closed July 2011)

Sponsor/Charter Date: USSOUTHCOM/July 2010

Purpose: To develop, assess, and validate CONOPS and TTPs for DoD operational and tactical forces tasked to conduct foreign disaster relief missions subsequent to a natural disaster in support of the Department of State and U.S. Agency for International Development and in coordination with intergovernmental and nongovernmental organizations.

Products/Benefits: The Department of Defense Support to Foreign Disaster Relief Handbook for the Joint Task Force Commander and Below contains CONOPS and TTPs that enable Title 10 forces to effectively integrate disaster response efforts with the Department of State and the U.S. Agency for International Development, as well as international organizations (such as the United Nations and Red Cross and Crescent Societies), intergovernmental, and nongovernmental organizations. The handbook will improve interagency coordination, cooperation, collaboration, and communication to foster unity of effort.

HOST BASED SECURITY SYSTEM (HBSS)*
(Closed January 2011)

Sponsor/Charter Date: USSTRATCOM and DISA/ January 2010

Purpose: To develop, assess, and validate standard enterprise HBSS configurations and TTPs that will give joint network defenders the ability to effectively implement and use the HBSS for prevention, detection, diagnosis, and response to cyber attacks, as well as maintain situational awareness in the cyber domain.

Products/Benefits: A handbook of proven standard HBSS enterprise configurations and TTPs that USSTRATCOM's Cyber Command can use to direct DoD network defenders to ensure critical mission operations in the face of a cyber attack.

JOINT ANALYTICAL NETWORK ASSESSMENT (JANA)

Sponsor/Charter Date: USPACOM, USNORTHCOM, and DISA/January 2011

Purpose: To develop, test, and validate a mission essential circuit list (MECL) for all inter-landmass command circuit service designators in the Pacific theater supporting operations plans and critical mission operations, both inside and outside of the USPACOM area of responsibility.

Products/Benefits:
- A methodology utilizing an analytical hierarchy process to develop standardized inter-landmass MECLs and TTPs for use of MECLs during strategic communication restoration.
- The benefits to the commander will be properly sequenced restoration efforts based on inter-landmass MECLs and TTPs to ensure the most important capabilities are restored first.

JOINT EXPLOITATION OF MODERN SURFACE-TO-AIR MISSILE SYSTEMS (JEMS)

Sponsor/Charter Date: Naval Air Weapons Center-Weapons Division; Naval Strike and Air Warfare Center; U.S. Air Force Warfare Center/January 2011

Purpose: To develop and test TTPs that will outline the characteristics of effective countermeasures to modern surface-to-air missile systems for improving aircrew survivability.

Product/Benefits: The JEMS project is anticipated to provide updates to the Joint Research Assessment and Analysis Center for inclusion in applicable computer simulations. It will also produce generic TTPs and training outlines for incorporation by the Services into applicable tactics and training products.

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* Project closed in FY11

JOINT MARITIME EVALUATION OF TRANSIT ESCORTS (J-METE)*

(Closed January 2011)

Sponsor/Charter Date: U.S. Transportation Command and U.S. Coast Guard Forces Command/January 2010

Purpose: To develop and test the CONOPS and TTPs for the employment of joint Service support, personnel, and equipment that will assist in reducing the threat from asymmetric underwater attacks to high value ships while transiting critical ports and restricted waterways in the continental United States.

Products/Benefits:
- A J-METE handbook outlining the TTPs to detect and interdict asymmetric underwater threats to ships in transit
- Enhancement of mission success against asymmetric underwater threats for commanders responsible for escorting high value ships transiting militarily significant ports and restricted waterways

JOINT MILITARY WORKING DOG (JMWD)

Sponsor/Charter Date: USCENTCOM/April 2011

Purpose: To develop, test, and validate TTPs to support the ground tactical commander's use and support of military working dogs while performing counter-IED missions.

Products/Benefits: The JMWD QRT will transition TTPs to USCENTCOM to support the ground tactical commander's use and support of military working dogs while performing counter-IED missions. In addition, the project will develop a multi-Service tactical manual for use in the field by commanders and units receiving military working dogs for the same mission.

JOINT MODULAR PROTECTION SYSTEM (JMPS)*

(Closed July 2011)

Sponsor/Charter Date: USCENTCOM/July 2010

Purpose: To develop and validate Modular Protective System TTPs that enhance force protection to military personnel deployed in potentially hazardous areas.

Products/Benefits: TTPs that articulate the proper employment and deployment of the Modular Protective System in USCENTCOM's area of responsibility.

JOINT PASSIVE ELECTRONIC RADIO FREQUENCY EMISSION CLASSIFICATION & TRACKING (J-PERFECT)*

(Closed March 2011)

Sponsor/Charter Date: NORAD and USNORTHCOM/ March 2010

Purpose: To develop joint CONOPS and TTPs for sustained air vigilance operations against aviation threats to the homeland.

Products/Benefits: A standard, globalized CONOPS and TTPs that optimize the execution and employment of multi-Service, combatant command, and national agency capabilities to detect, identify, track, and evaluate air threats to the United States.

JOINT PASSIVE ELECTRONIC RADIO FREQUENCY EMISSION CLASSIFICATION & TRACKING II (J-PERFECT II)

Sponsor/Charter Date: NORAD and USNORTHCOM/ May 2011

Purpose: To develop and evaluate CONOPS and TTPs based on DoD intelligence, surveillance, and reconnaissance capabilities that have the potential to improve near real-time situational awareness for decision-makers in support of tactical operations against modern air threats to the United States.

Products/Benefits: Test results will provide enhanced CONOPS and TTPs for air defense employment to the joint operational community.

JOINT RAPID ATTACK PROCESS (JRAP)*

(Closed March 2011)

Sponsor/Charter Date: USSTRATCOM/January 2010

Purpose: To investigate, evaluate, and make recommendations to improve cyber mission planning methods used to employ alternative approaches of current capabilities against complex targeting challenges.

Products/Benefits:
- Cyber playbook
- Operational TTPs to improve cyber mission planning, rehearsal, execution, and assessment

JOINT VEHICLE PROTECTION AND SURVIVABILITY SYSTEM (JVPSS)

Sponsor/Charter Date: USCENTCOM/July 2011

Purpose: To develop, test, and validate TTPs to support the ground tactical commander's focus on vehicle survivability, protection, and detailed safety design features and enhancements.

Products/Benefits: The JVPSS tactical level handbook will focus on survivability, protection, and detailed vehicle safety design features and enhancements.

RAPID DEVELOPMENT AND SUSTAINMENT OF ENTERPRISE MISSION SERVICES (RDEMS)

Sponsor/Charter Date: DISA/July 2011

Purpose: To develop, validate, and document new processes and TTPs that will contribute to DoD's move from its legacy information systems to a modern enterprise services environment.

Products/Benefits: RDEMS test products will include:
- Updated CONOPS and revised technical and operational TTPs
- A use-case reference with process implementation guidance
- Lessons learned captured in an enterprise "how to" process document

SPECIAL PROJECT

JOINT TEST AND EVALUATION METHODOLOGY TRANSITION (JTEM-T)*
(Closed April 2011)

Sponsor/Charter Date: DOT&E/May 2009

Purpose: To integrate, implement, and apply the JTEM developed Capability Test Methodology methods and processes into component and agency test organizations in support of the DOT&E Testing in a Joint Environment Roadmap, with particular emphasis placed on enhancing and improving current operational test agency test processes.

Products/Benefits:
- Documented improvements to operational test agency and other component and agency test and assessment processes that improve and enhance the ability to test system-of-systems in a joint environment
- Functional and reusable mission and task-based measures decomposition process and a complementary analysis framework to facilitate the ability to test in a joint environment
- Fundamental elements of JTEM were the basis of successfully assessing Afghanistan Mission Network operational shortfalls.