

# JOINT TEST & EVALUATION

## Joint Datalink Information Combat Execution (JDICE)

### SUMMARY

- JDICE is a three-year test in its second year of testing. It is headquartered at Nellis AFB, Nevada. The Air Force is the lead Service.
- JDICE was chartered six months early as part of the JT&E re-engineering process and conducted its first test within seven months after chartering.
- JDICE test concept is based on empirical testing during three live mini-tests and a field test using current joint warfighters, their fielded systems, and realistic targets.



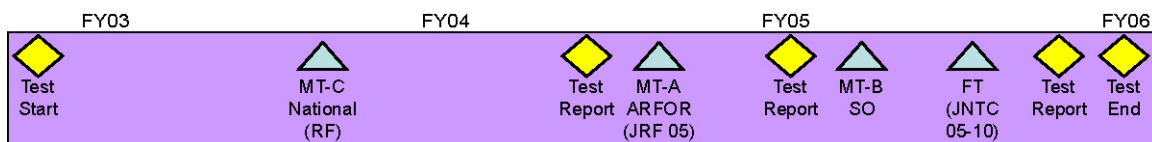
*The objective of Mini-Test A is to integrate filtered ground picture information on the Link 16 net with the targeting and deconfliction information.*

### TEST DESCRIPTION AND MISSION

The purpose of JDICE is to improve the Joint shooter's tactical situational awareness. JDICE does this by developing, testing, evaluating, and institutionalizing Joint and Service tactics, techniques and procedures (TTPs) that provide actionable mission information across multi-platform, fielded, tactical air and ground data links specifically focused on improving the tactical user's combat employment capability. JDICE will specifically determine if the expanded application of Link 16 improves joint targeting and deconfliction processes. JDICE disseminates interim test results via quick look reports, test event reports and a Final Test Report. The JDICE Joint Test is sponsored by the Air Warfare Center, and supported by Air Combat Command (ACC) and USAF/XI.

In order to provide for accelerated testing, JDICE is using an "out-of-the-box" approach, using typical Tactics Development and Evaluation and qualitative methods. The test team is documenting the methodology used to accomplish this effort in the shortened time frame.

### TEST AND EVALUATION ACTIVITY



JDICE selected each mini-test focus as a direct result of the Advanced Working Group and Joint Warfighter Advisory Group inputs. The Army Forces/Marine Forces test event is the most involved mini-test (Mini-Test A) and therefore, will be accomplished after the initial Mini-Tests C and B. Simply stated, the objective of Mini-Test A is to integrate filtered ground picture information on the Link 16 net with the targeting and deconfliction information tested in Mini-Tests C and B. This information is not currently on the Link 16 network and is not effectively transmitted to the tactical level combatant.

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Mini-Test B integrates Special Operation Forces (SOF) forces into the targeting and deconfliction equation. The objective of Mini-Test B is to integrate SOF forces in the joint employment campaign plan with emphasis on reduction in probability of friendly fire incidents and optimization of passing SOF derived mission information to joint shooters. Mini-Test A will consider several of the actionable information paths looked at in the completed mini-test and add rapid ground force movement into the equation. JFC prioritization is required to focus the application of the JDICE TTP development methodology to develop TTPs to move actionable information designated by the JFC to the tactical level shooters via Link 16.

Mini-Test C, the first JDICE test, prioritized passage of National asset information. The objective of Mini-Test C provided a usable real-time emitter picture to tactical level shooters and passed applicable actionable information to tactical level combatants. This information previously only existed at operational levels, but not at tactical levels.

JDICE conducted Mini-Test C at Nellis AFB, Nevada, from October to November 2003 in conjunction with Red Flag 04-01 and included dedicated test assets from the 422 Test and Evaluation Squadron, Navy fighter aircraft from Fallon Naval Air Station, along with normal Red Flag participants. The second week of Mini-Test C was a dedicated JDICE test and evaluation on the Nellis Test and Training Range to ensure that JDICE generated statistically significant data to support testing requirements.

Mini-Test C was designed to flow quick look results directly into scheduled Air Force and Navy JTTP conferences covering Space, Command and Control, and Fighter mission areas. This immediate feedback enabled new and proven JTTP and TTP development methodology to be rapidly disseminated to all Joint combatants and applicable Service components. Operational constraints, TTP development methodology, and other limitations discovered during the test serve as a foundation to evolve the role of Link 16 in modern warfighting, and potentially influence ongoing and future machine-to-machine acquisition strategy.

JDICE briefed the 2004 ACC Weapons & Tactics Conference in January 2004. The Al Udeid CAOC/CC, was so impressed by the project's positive impact on the warfighter, that he requested a copy of the JTTP in order to immediately implement them in Al Udeid.

## TEST AND EVALUATION ASSESSMENT

JDICE is finalizing the Detailed Test Plan in preparation for the execution of Mini-Test A. Venues for the March 2005 Test will be Joint Red Flag, Joint Roving Sands, USA NTC, and USMC CAX. In addition to these JNTC venues, portions of Mini-Test A will also be conducted in conjunction with the USMC's MAWTS-1 syllabus at Yuma.

Mini-Test B, originally planned for summer 2004, was postponed because test assets received higher priority real-world tasking. The DTP for Mini-Test B is completed and approved, and JDICE is awaiting final determination of the test venue. Risk reduction sorties began June 04, in conjunction with 422 Test and Evaluation Squadron and VX-31 TD&E sorties at Nellis AFB, Nevada. The risk reduction effort verified CAOC-N procedures and connectivity to Link 16, test instrumentation, database procedures, test procedures, aircraft Link 16 capabilities, data collection procedures, and JTTP procedures. JTTP development methodology used for Mini-Test C is the baseline for Mini-Tests A and B.