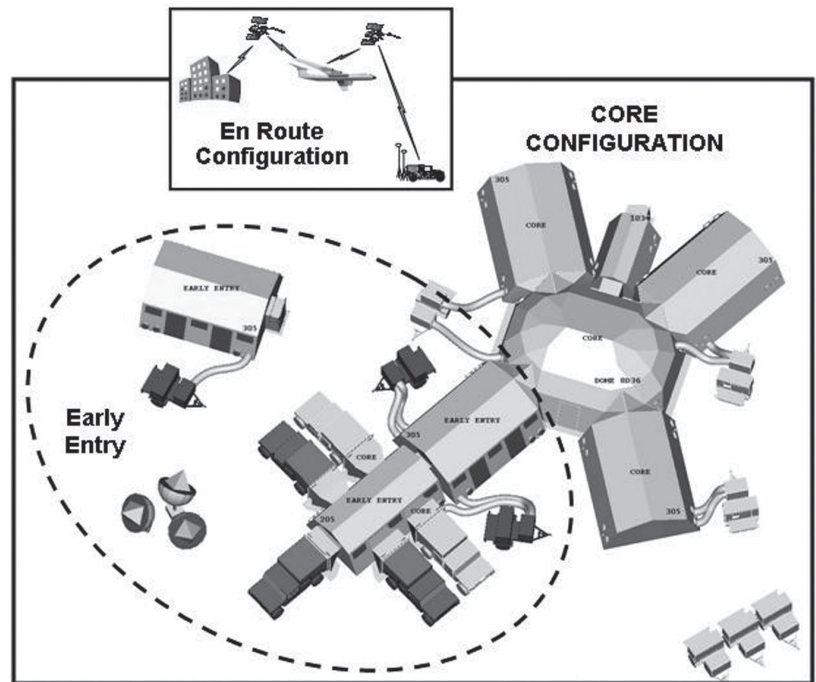# Deployable Joint Command and Control (DJC2) System

SUMMARY

- The Deployable Joint Command and Control (DJC2) program office successfully deployed the prototype DJC2 to support U.S. Southern Command exercises. The exercises provided early, operationally relevant insights to support selection of components.
- In the operational test conducted in June 2004, operators successfully used the DJC2 system to execute the Effects Based Planning and Operational Net Assessment methods of the Standing Joint Force Headquarters (SJFHQ).
- While the parts of DJC2 that were included in the test show DJC2 successfully supports SJFHQ planning methods, the test did not exercise all the DJC2 capabilities that were outlined in the Test and Evaluation Master Plan (TEMP) for this event.

DJC2 provides the Joint Force Commander with a deployable integrated family of systems to plan, control, coordinate, execute, and assess operations.

- As a result, the program office is seeking another operational event in early FY05 to reduce performance risk prior to the multi-Service Initial Operational Test and Evaluation (IOT&E).
- In addition, DOT&E estimates the schedule is high risk due to the time available to execute the required integration, acceptance testing, and government test events prior to the multi-Service IOT&E in 3QFY05.

SYSTEM DESCRIPTION AND MISSION

The DJC2 system provides the Joint Force Commander with a deployable integrated family of systems to plan, control, coordinate, execute, and assess operations across the spectrum of military operations. The DJC2 infrastructure and information technology systems support:

- Collaborative planning.
- Predictive battlespace situational awareness.
- Dynamic asset synchronization and oversight.
- Executive battle management and control.

DJC2 Increment I uses existing command and control systems including the Global Command and Control System-Joint and the Collaborative Information Environment. Future increments will use the Joint Command and Control system to provide for both garrison and deployed operations. The DJC2 consists of shelters, hardware, software applications, databases, and communication support systems. The DJC2 system has three basic configurations:

- The En-route package fits on a C-130 or C-17 aircraft and has hardware to support 10 to 20 operators.
- The Early Entry package consists of sufficient infrastructure (e.g., tents, tables), computers, and communications equipment to support 20 to 40 operators.
- The Core package expands on the Early Entry package with additional infrastructure and other elements to support up to 60 operators.

To provide needed agility, each Regional Combatant Commander receives multiple Core packages to combine into larger command headquarters.

The program follows an evolutionary acquisition strategy. DJC2 Increment I completed Milestone B in March 2004. Milestone C occurs in December 2004. A Milestone B for Increment II follows in 3QFY06. The government is the system integrator for the first increment and transitions this task to industry for future increments.

TEST AND EVALUATION ACTIVITY
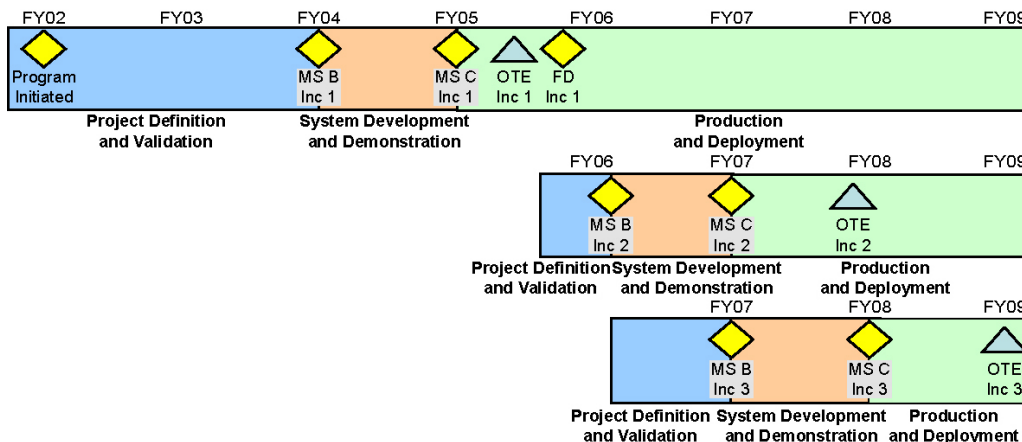
The U.S. Southern Command used a DJC2 prototype in two training exercises (December 2003 and January 2004). The prototype included equipment from several manufacturers in order to compare components and finalize the DJC2 design. The prototype provided the infrastructure parts (e.g., tents, generators, tables, etc.) planned for the eventual design. However, the information technology capability was limited to two networks, 13 servers, and collaboration and operational net assessment software tools. The Joint Communications Support Element provided the communications support, including tri-band satellite, Global Broadcast System, phone lines, and video teleconferencing.

The DJC2 system completed Developmental Test BII and Operational Test BI in June 2004 at the DJC2 Engineering and Test Facility. The DJC2 demonstrated information technology (servers, networks, and laptops), portal software, collaborative information environment tools, and a beta version of the Global Command and Control System-Joint common operational picture and intelligence functions. The test did not include deployable components (e.g., tents, generators) or tactical communications.

The Test and Evaluation Integrated Product Team continues to plan and coordinate with the United States Pacific Command (PACOM) on required test conditions and potential exercises for the multi-Service IOT&E in FY05. Due to schedule considerations, the Cobra Gold 05 training exercise in May 2005 appears to be the best match.

TEST AND EVALUATION ASSESSMENT
The Program Office successfully deployed the prototype DJC2 to support U.S. Southern Command exercises. The exercises provided an early opportunity to obtain operationally relevant insights to support component selection before finalizing the system design and configuration. It also offered the test community an opportunity to become familiar with the DJC2 design and operational concepts. The experience helped system engineering efforts, development of operational concepts, and planning for future test events.

In Operational Test BI, the operators did mission planning using the Effects Based Planning and Operational Net Assessment methods of the SJFHQ. While the parts of DJC2 that were included in the test show DJC2 successfully supports SJFHQ planning concepts, the test did not exercise all the DJC2 capabilities outlined in the TEMP for this event. As a result, the Combined Test Force and the program office are planning another event to reduce performance risk prior to the multi-Service IOT&E.

DOT&E considers the program's ability to deliver a mature system to PACOM in February 2005 to support Cobra Gold 05 in May high risk due to the limited time available to:
- Finalize the design.
- Complete integration activities.
- Plan and execute an additional operational test.
- Conduct developmental testing.