Joint Tactical Radio System (JTRS)
Handheld, Manpack, and Small Form Fit

Executive Summary
- The Joint Tactical Radio System (JTRS) Handheld, Manpack, and Small Form Fit (HMS) product line continues progress within the new program baseline started in 2005 under the direction of the Joint Program Executive Office (JPEO), including updating acquisition documents and transferring program management to San Diego, California.
- The Handheld and Manpack variants are proceeding with test plans in compliance with U.S. Code Title 10 and DoD policies.
- The seven Small Form Fit (SFF) variants present challenges in coordinating test opportunities with their associated host platforms. The program has not yet identified SFF test events to support proposed acquisition decisions.

System
- The JTRS is a family of software-programmable and hardware-configurable digital radios designed to provide increased interoperability, flexibility, and adaptability to support the many diverse warfighter communications requirements.
- The JTRS HMS product line provides handheld and manpack radios for Army, Marine Corps, Navy, and Air Force personnel, and SFF variants to be embedded in Army host platforms such as the Intelligent Munitions System, Unattended Ground Sensors, Ground Soldier System, Unmanned Aerial Vehicle (Class I and Class IV), and the Non-Line-of-Sight Launch System.

Mission
Commanders from the Army, Marine Corps, Navy and Air Force intend to use:
- JTRS handheld and manpack radios to communicate and create networks to exchange voice, video, and data using legacy waveforms or the newly developed Soldier Radio Waveform during all aspects of military operations
- JTRS SFF variants to provide a networked communications capability for users engaged in land combat operations to support voice, video, and data across the immediate battlespace

Activity
- The JTRS HMS program continues baseline efforts under the restructured JTRS program and transfer of the program office from Fort Monmouth, New Jersey, to San Diego, California. The Program Office is reestablishing its Acquisition Programming Baseline and updating acquisition documents, including the HMS annex to the JTRS Enterprise Acquisition Strategy and the HMS Test and Evaluation Master Plan (TEMP).
- Contractor testing of the SFF variants intended for integration into the Intelligent Munitions System and the Unattended Ground Sensor began in 3QFY07; testing of the SFF variant intended for integration into the Ground Soldier System began in 4QFY07.
- The Program Office is updating its Acquisition Strategy and developing a TEMP to support Milestone C in 1QFY09.

- The HMS Program Office is coordinating with host platform program offices to identify host platform operational tests that could provide data to support HMS program decisions.
- In July 2007, DOT&E approved the JTRS Enterprise Test and Evaluation Strategic Guidance.

Assessment
- The Handheld and Manpack variants of the HMS product line continue to progress through development in accordance with the JTRS Joint Program Executive Office schedule.
- The synchronization of operational testing for the SFF sets within their host platforms remains a concern. The 1QFY09 Milestone C will require operational testing of SFF sets integrated into host platforms. The program continues to

work to identify host platform tests to support SFF operational testing requirements.

• The program is determining an acceptable and executable strategy to operationally test SFF radios for inclusion in the updated Acquisition Strategy and HMS TEMP.

Recommendations

• Status of Previous Recommendations. JTRS HMS is making good progress in creating a TEMP and supporting an enterprise strategy as published in the 2007 JTRS Enterprise Test and Evaluation Strategic Guidance (FY06).

• FY07 Recommendations. The JTRS JPEO should:
  1. Develop an operational test strategy for each SFF variant that supports JTRS HMS program decisions and is coordinated with the program test schedules of associated host platforms.
  2. Examine enterprise level testing requirements and establish responsibilities for testing the performance of large-scale JTRS networks.