

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

Executive Summary

- The Joint Tactical Radio System (JTRS) Handheld, Manpack, and Small Form Fit (HMS) product line continues to progress within its 2005 program baseline under the direction of the Joint Program Executive Office (JPEO).
- The Small Form Fit (SFF) Cv(1) Rifleman Radio is on schedule for operational testing to support a Milestone C decision in 3QFY09.
- The Handheld and Manpack variants are proceeding with test planning for operational testing in FY11 to support a low-rate production decision for Phase 2.
- The JPEO is reviewing JTRS enterprise-level testing requirements and responsibilities between HMS, the Networking Enterprise Domain, and other JTRS product lines.

System

- JTRS is a family of software-programmable and hardware-configurable digital radios designed to provide increased interoperability, flexibility, and adaptability to support many diverse warfighter communications requirements.
- The JTRS HMS program provides handheld and two channel manpack radios for Army, Marine Corps, Navy, and Air Force operations. The program develops SFF radio configurations which produce the standalone Army Rifleman Radio and embedded SFF variants that serve 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.
- The program strategy defines two phases of HMS production, differentiated by the type of encryption. Phase 1 will produce Rifleman Radios requiring encryption of unclassified information (National Security Agency (NSA) Type 2). Phase 2 will produce manpack radios requiring encryption of classified information (NSA Type 1).



Mission

Commanders from the Army, Marine Corps, Navy, and Air Force intend to:

- Use JTRS handheld, manpack, and Rifleman 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.
- Integrate JTRS SFF variants into host platforms to provide networked communications capabilities for users engaged in land combat operations to support voice, video, and data across the immediate battlespace.

Prime Contractor

- General Dynamics

Activity

- The JTRS HMS program continues baseline efforts under the restructured JTRS program and the transfer of the program office from Fort Monmouth, New Jersey, to San Diego, California.
- The JTRS HMS program 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).
- The JTRS HMS program is conducting developmental testing and production of embedded SFF radio variants. The SFF variants will be used as components of Army host platform programs (e.g. Future Combat System (FCS) Unattended Ground Sensors) which will then complete platform developmental and operational testing.
- The JTRS HMS program will conduct a SFF Cv(1) Rifleman Radio Limited User Test (LUT) in 3QFY09 to support

DOD PROGRAMS

Milestone C in 3QFY09. The Army completed Operational Test Readiness Review 1 for this LUT on July 10, 2008.

- The JTRS HMS program continues to synchronize activities with FCS.

Assessment

- The JTRS HMS program continues hardware development, technical testing, and preparation activities for the SFF Cv(1) Rifleman Radio LUT. The program is working to develop the maturity of the Soldier Radio Waveform and network management software necessary for the Phase 1 LUT.
- The Handheld and Manpack sets continue development in support of a LUT scheduled for 1QFY11 to support a low-rate production decision in process review for Phase 2.

Recommendations

- Status of Previous Recommendations. The HMS program is addressing all previous recommendations.
- FY08 Recommendation.
 1. The JTRS HMS program should establish agreement with the JTRS Networking Enterprise Domain regarding roles and responsibilities for testing waveforms and large-scale JTRS networks.