Executive Summary

- Joint Warning and Reporting Network (JWARN) Joint Mission Application Software (JMAS) is operationally effective as an automated tool to increase situational awareness regarding potential chemical, biological, radiological, and nuclear (CBRN) attacks and support force protection decisions.
- JMAS is operationally suitable when hosted on Global Command and Control System (GCCS)-Army, GCCS-Joint, and Command and Control Personal Computer (C2PC)/Joint Tactical Common Workstation (JTCW) command and control systems.

System

- JMAS provides a single CBRN warning, reporting, and analysis tool for battalion/squadron-level units and above to support joint operations.
- The program office designed JMAS to improve the speed and accuracy of the NATO CBRN basic warning and reporting process through automation.

Mission

JMAS operators in command cells support CBRN battlefield management and operational planning by predicting chemical, biological, and nuclear hazard areas based on sensor and observer reports, identifying affected units and operating areas, and transmitting warning reports.

Major Contractor

Northrop Grumman Mission Systems – Winter Park, Florida

Activity

- The Service Operational Test Agencies (OTAs) conducted a post-operational test demonstration in October 2009 and a reliability assessment conference in 2010 to assess the effect of software changes on system reliability.
- DOT&E provided an Operational Evaluation of the JWARN JMAS to support the JMAS Full Deployment Decision on GCCS-Army, GCCS-Joint, and C2PC/JTCW command and control systems.

Assessment

- A unit equipped with JMAS is able to provide CBRN warning reports in time to institute force protection actions before encountering CBRN hazards for units operating 10 or more kilometers from area in which the CBRN hazard is initially identified.
- JMAS is not effective for warning at the company level due to its limited capability for warning units operating between 2.5 and 10 kilometers from the hazard release, depending upon meteorological conditions and distance.
- JWARN is interoperable with GCCS-Joint, GCCS-Army, and C2PC/JTCW command and control systems.
- Engineering changes resolved JMAS software reliability shortfalls identified during the FY08 Multi-Service OT&E.

Recommendations

- Status of Previous Recommendations: The program manager addressed all of the previous recommendations.
- FY10 Recommendations. None.