## **DOD PROGRAMS**

# Joint Service Light NBC Reconnaissance System (JSLNBCRS)

#### **SUMMARY**

- The Joint Service Light Nuclear, Biological, and Chemical Reconnaissance System (JSLNBCRS) is a reconnaissance vehicle utilized by the Army, Air Force, and Marine Corps.
- A Limited User Test for the High-Mobility Multipurpose Wheeled Vehicles (HMMWV) in FY02 highlighted numerous performance and design issues. As a result, the system re-entered engineering development to address these issues. The system will re-test these issues in the First Article Test in FY05.



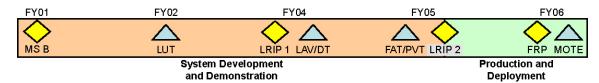
The Services intend to employ the JSLNBCRS as a mobile system to detect and report chemical, biological, radiological, and nuclear hazards on the battlefield.

- Low-rate initial production (LRIP) for the HMMWV is in two phases. Phase I will produce six HMMWV systems for First Article Testing and Production Verification Testing.
- If performances in the First Article and Production Verification tests are successful, then Phase II will
  complete fabrication of the remaining eight HMMWV systems and procure 16 Light Armored Vehicles
  (LAV) chassis. Four production-representative HMMWV and two LAV systems will support multi-Service
  operational test and evaluation in 2006.

### SYSTEM DESCRIPTION AND MISSION

The Services intend to employ the JSLNBCRS as a mobile system to detect and report chemical, biological, radiological, and nuclear (CBRN) hazards on the battlefield. The JSLNBCRS consists of a base vehicle equipped with hand-held and vehicle-mounted CBRN detection and identification equipment. The Services intend that JSLNBCRS detect, sample, and identify known CBRN agents, as well as toxic industrial materials. The communications suite will format and transmit analog and digital CBRN reports in accordance with the CBRN Warning and Reporting System to provide CBRN contamination predictions and warnings to battlefield commanders. The Services desire the system to mark contaminated areas, using standardized NATO hazard markers. Onboard meteorological and global positioning systems provide the system with real time, local meteorological, and navigational information. Two base vehicles are planned: the HMMWV for the Army, Air Force, and Marine Corps; and the LAV for the Marine Corps only.

#### **TEST AND EVALUATION ACTIVITY**



DOT&E approved the updated Test and Evaluation Master Plan (TEMP) on January 8, 2004.

The contractor performed an initial engineering Design Test of the LAV variant at the Nevada Automotive Test Center from August to October 2004; results are pending.

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#### **TEST AND EVALUATION ASSESSMENT**

During the past year, lessons learned from the LUT were evaluated and corrections made to the system with plans to test them in the First Article and Production Verification Tests in FY05. The test evaluators must establish pre-integration baselines for the primary onboard sensors to evaluate whether sensor performance has been degraded because of integration into the JSLNBCRS base vehicles.

The standoff chemical sensor emits a distinctive reflection from its faceplate, which is readily detectable by the naked eye. Anecdotal evidence also suggests that this reflection might be a problem in moonlight conditions. The detector has been fitted with a protective shield to lessen the reflection.

Developmental testing for the LAV variant, First Article Testing of the HMMWV system, and field sensor testing are key to demonstrating system readiness for LRIP II and the Initial Operational Test and Evaluation. The Joint Project Manager must develop strategies to fulfill the standoff chemical agent detection requirement should the standoff detector not be available to satisfy its requirement.