

Joint Chemical Agent Detector (JCAD) M4E1

INVESTMENT COMPONENT

Modernization

Recapitalization

Maintenance

MISSION

Protects U.S. forces by detecting, identifying, alerting, and reporting the presence of chemical warfare agents and toxic industrial chemical vapors.

DESCRIPTION

The Joint Chemical Agent Detector (JCAD) is a pocket-size, rugged, handheld detector that automatically detects, identifies, and alarms to chemical warfare agents and toxic industrial chemical vapors.

The Services can use the system on mobile platforms, at fixed sites, and on individuals designated to operate in a chemical threat area. The system can operate in a general chemical warfare environment and can undergo conventional decontamination procedures by the Warfighter.

The Enhanced JCAD (M4E1 JCAD) goes into production in FY11. The M4E1 JCAD will reduce operation and sustainment costs, has an improved user interface, and is net-ready.

The JCAD replaces the Automatic Chemical Agent Detector and Alarm (ACADA or M22), M90, and M8A1 systems. The JCAD may replace the Chemical Agent Monitor (CAM) and Improved Chemical Agent Monitor (ICAM).

Specific capabilities include:

- Instant feedback of hazard (mask only or full Mission-Oriented Protective Posture)
- Real-time detection of nerve, blister, and blood agents
- Stores up to 72 hours of detection data
- The M4E1 will be net-ready through implementation of the common chemical, biological, radiological, and nuclear standard interface

SYSTEM INTERDEPENDENCIES

In this Publication

Abrams Tank Upgrade, Bradley Fighting Vehicle Systems Upgrade, Family of Medium Tactical Vehicles (FMTV)

Other Major Interdependencies

Modular Lightweight Load-carrying Equipment (MOLLE)

PROGRAM STATUS

- **FY11:** Continued fielding M4 variant to the Services
- **2QFY11:** Production cut-in decision review for M4E1

PROJECTED ACTIVITIES

- **FY12-FY14:** Production and deployment

ACQUISITION PHASE

Technology Development

Engineering and Manufacturing Development

Production and Deployment

Operations and Support

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FOREIGN MILITARY SALES

None

CONTRACTORS

Smiths Detection Inc. (Edgewood, MD)

