

Lightweight Counter Mortar Radar (LCMR)

INVESTMENT COMPONENT

Modernization

Recapitalization

Maintenance

MISSION

Identifies indirect fire threats by providing the ability to rapidly locate rockets, artillery, and mortar firing positions automatically by detecting and tracking the shell and backtracking to the weapon position. Provides observed fires (for friendly fires), will provide accurate “did hit” data of friendly fires, and will detect and template hostile locations.

DESCRIPTION

The AN/TPQ-50 Lightweight Counter Mortar Radar (LCMR) is a man-portable and High Mobility Multipurpose Wheeled Vehicle 1152A mountable lightweight radar system used to locate rocket, artillery, and mortar Points of Origin (POO) and Points of Impact (POI) out to a range of 10 kilometers. The radar accomplishes this by detecting and tracking the projectile then extrapolating the POO and POI to within 50 meters Circular Error Probability. The AN/TPQ-50 has a continuous 360 degree surveillance using an electronically scanned antenna. The radar can be

rapidly deployed by two Soldiers. The AN/TPQ-50 sends a warning message to indicate an incoming round and is a critical sensor to the Counter Rocket Artillery and Mortar (C-RAM) system of systems construct. The radar also is digitally interoperable with the Advanced Field Artillery Tactical Data System and Forward Area Air Defense Command and Control.

SYSTEM INTERDEPENDENCIES

In this Publication

Counter-Rocket, Artillery and Mortar (C-RAM)

PROGRAM STATUS

- **FY12:** Continued Low-rate initial production
- **3QFY12:** Initial Operational Test and Evaluation

PROJECTED ACTIVITIES

- **1QFY13:** Full Materiel Release
- **2QFY13:** Full-rate production decision
- **3QFY14:** Follow-on Test and Evaluation

ACQUISITION PHASE

Technology Development

Engineering & Manufacturing Development

Production & Deployment

Operations & Support

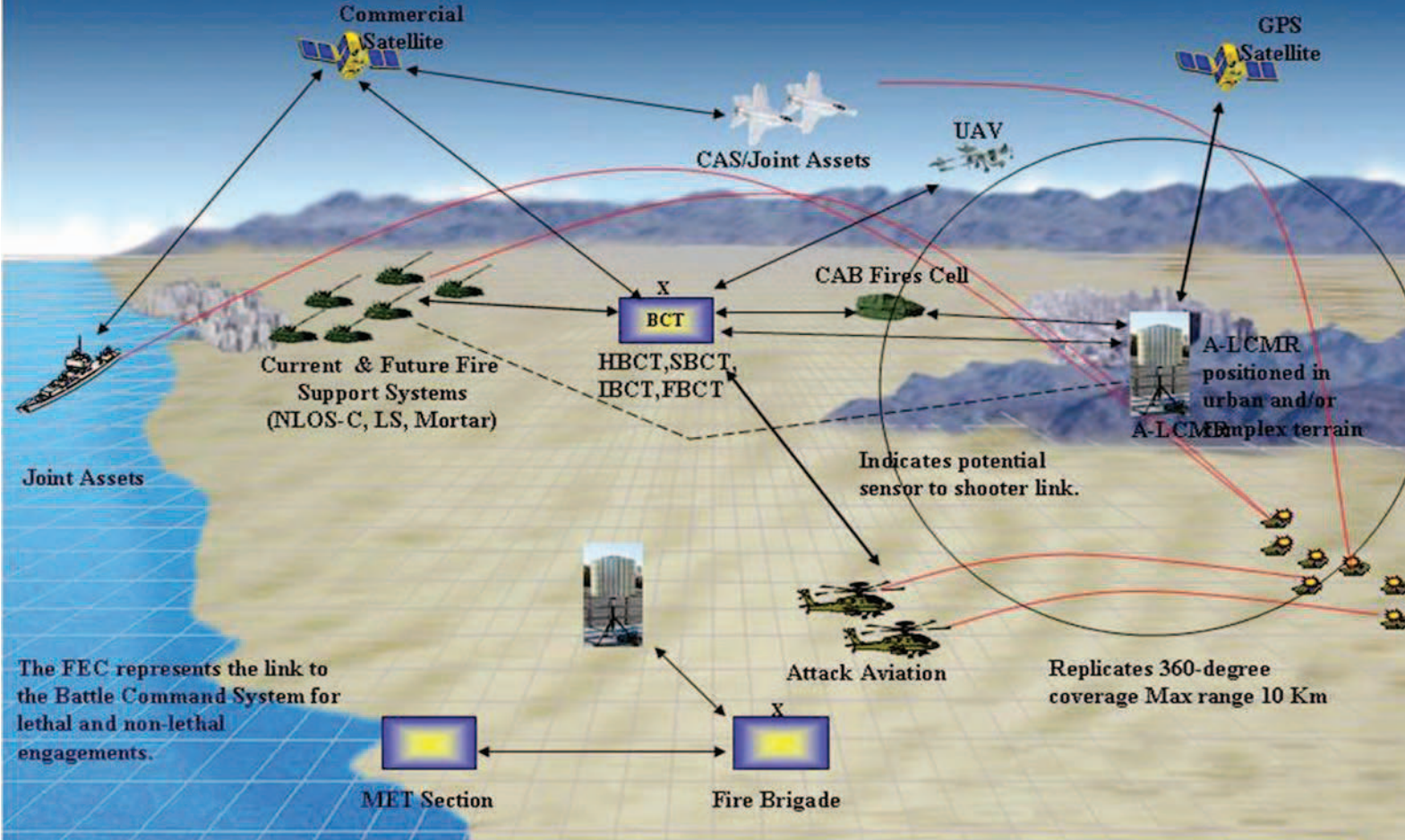
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FOREIGN MILITARY SALES

None

CONTRACTORS

SRCTec (North Syracuse, NY)
Syracuse Research Corp. (SRC) (Syracuse, NY; Statewide, MD)
Yuma Proving Ground (Yuma, AZ)
Tobyhanna AD (Tobyhanna, PA)



The FEC represents the link to the Battle Command System for lethal and non-lethal engagements.

The A-LCMR is a lightweight, 360-degree, rapidly man-transportable, digitally connected, day/night mortar, cannon and rocket locating radar that uses computer-controlled signal processing of the radar signal data to perform target detection, verification, and tracking of enemy and friendly mortars. POO and POI are determined and provided to C2 nodes for engagement of Threat firing platform and early warning for force protection.

