

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

## INVESTMENT COMPONENT

Modernization

Recapitalization

Maintenance

### MISSION

Integrates multiple Army- and DoD-managed systems and commercial off-the-shelf systems with a command and control system to provide protection of fixed and semi-fixed sites from rockets and mortar rounds.

### DESCRIPTION

The Counter-Rocket, Artillery, and Mortar (C-RAM) system was developed in response to a Multi-National Force-Iraq Operational Needs Statement (ONS) that was validated in September 2004. An innovative system-of-systems approach was implemented in which multiple DoD Program of Record systems were integrated with two commercial-off-the-shelf (COTS) items to provide seven C-RAM functions: SENSE, WARN, RESPOND, INTERCEPT, Command and Control (C2), SHAPE, and PROTECT.

C-RAM component systems are: Forward Area Air Defense Command and Control (FAAD C2) system and Air and Missile Defense Workstation for C2; Lightweight Counter Mortar Radar and Firefinder Radars for

SENSE; Landbased Phalanx Weapon System for INTERCEPT; and Wireless Audio/Visual Emergency System and a wireless LAN for WARN. RESPONSE is provided thru C-RAM integration with Army/USMC battle command systems and the USAF Tactical Automated Security System.

Using this system-of-systems approach, C-RAM completed development, integration, and testing in April 2005, meeting the requirements of the ONS. The C-RAM systems was fielded five months after initial funding and just eight months after ONS validation.

In transition to a Program of Record, the C-RAM WARN capability will be fielded to all Army Brigade Combat Teams as Increment 1 of the Indirect Fire Protection Capability (IFPC).

### SYSTEM INTERDEPENDENCIES

#### In this Publication

Advanced Field Artillery Tactical Data System (AFATDS), FAAD C2, Sentinel

#### Other Major Interdependencies

Army and Marine Corps Battle Command Systems, Sentinel Radar

### PROGRAM STATUS

- **4QFY04:** C-RAM ONS validated
- **2QFY05–3QFY05:** C-RAM Validation Test
- **2QFY05–1QFY08:** C-RAM SENSE and WARN fielded
- **3QFY05–2QFY07:** C-RAM INTERCEPT fielded
- **4QFY10:** Increment 1 CPD validation
- **Current:** Sustainment

### PROJECTED ACTIVITIES

- **1QFY12:** Increment 1 low-rate initial production

## ACQUISITION PHASE

Technology Development

Engineering & Manufacturing Development

Production & Deployment

Operations & Support

