

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

## INVESTMENT COMPONENT

Modernization

Recapitalization

Maintenance

### MISSION

To integrate multiple Army- and DoD-managed systems and commercial off-the-shelf systems with a command and control (C2) 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.

The C-RAM component systems are the Forward Area Air Defense command and control system; the Air and Missile Defense Workstation for C2; the Lightweight Counter Mortar Radar and Firefinder radars as sensors;

Landbased Phalanx Weapon System to intercept; and wireless audio/visual emergency system and a wireless local area network for warning. Response is provided through C-RAM integration with Army and Marine Corps battle command systems and the Air Force 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 system was then fielded five months after initial funding and just eight months after ONS validation.

In transition to a program of record, the C-RAM warning capability will be fielded to all Army Brigade Combat Teams (BCTs) as Increment 1 of the indirect fire protection capability.

### SYSTEM INTERDEPENDENCIES

Army and Marine Corps Battle Command Systems, Sentinel radar

### PROGRAM STATUS

Sustainment

### PROJECTED ACTIVITIES

- **2QFY09:** Increment 1 CPD validation
- **1QFY10:** Increment 1 low-rate initial production milestone

## ACQUISITION PHASE

Technology Development

Engineering & Manufacturing Development

Production & Deployment

Operations & Support

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



### FOREIGN MILITARY SALES

United Kingdom (UK)

### CONTRACTORS

#### Software/Hardware:

Northrop Grumman Mission Systems  
(Redondo Beach, CA; Huntsville, AL)

#### SETA:

ITT-CAS, Inc. (Huntsville, AL)

