

Advanced Threat Infrared Countermeasures (ATIRCM) and Common Missile Warning System (CMWS) Programs and Pre-MDAP Common Infrared Countermeasure (CIRCM)

INVESTMENT COMPONENT

Modernization

Recapitalization

Maintenance

MISSION

Detects missile launches/flights, protects aircraft from infrared (IR) guided missiles, and provides threat awareness and IR countermeasures using an airborne self-protection system.

DESCRIPTION

Advanced Threat Infrared Countermeasures (ATIRCM) and Common Missile Warning System (CMWS) Programs and Pre-MDAP Common Infrared Countermeasure (CIRCM) integrates defensive infrared countermeasures capabilities into existing, current-generation aircraft to engage and defeat IR-guided missile threats.

The U.S. Army operational requirements concept for IR countermeasure systems is the Suite of Integrated Infrared Countermeasures (SIIRCM). It mandates an integrated warning and

countermeasure system to enhance aircraft survivability against infrared guided threat missile systems. The ATIRCM and CMWS subprograms form the core element of the SIIRCM concept.

An April 2009 Acquisition Decision Memorandum from the Defense Acquisition Executive directed the Army to establish a subprogram for the Next Generation ATIRCM (now called CIRCM). ATIRCM and CMWS have a modular configuration consisting of an integrated ultraviolet missile warning system, an Infrared Laser Jammer, and Improved Countermeasure Dispensers (ICMDs). This configuration can vary with aircraft and type.

CMWS can function as a stand-alone system with the capability to detect missiles and provide audible and visual warnings to pilots. When installed with the Advanced IIRCM Munitions and ICMDs, it activates expendables to decoy/defeat infrared-guided missiles.

ATIRCM adds the Directed Energy Laser Countermeasure Technology to CMWS and is a key for Future Force Army aircraft. ATIRCM is the Army's

latest Aircraft Survivability Equipment (ASE) initiative to protect crews and aircraft from advanced threat Man Portable Air Defense Systems (MANPADS) until CIRCM is fielded.

The CIRCM subprogram is being developed to replace the ATIRCM system. CIRCM is expected to be lighter in weight, more reliable, and achieve more affordable life-cycle costs. CIRCM is being designed to operate with the Army CMWS missile warning system and the evolving Navy Joint and Allied Threat Awareness System to provide protection for rotary wing, tilt-rotor and small fixed wing aircraft across DoD.

SYSTEM INTERDEPENDENCIES

In this Publication

None

Other Major Interdependencies

AH-64D, C-12R/T/U, C-23, C-26, Constant Hawk-A, Constant Hawk-I, DHC-7, HH-60L, HH-60M, MH-47E/G, MH-60K/L/M, RC-12/C-12, RC-12K/N/P/Q, UC-35

PROGRAM STATUS

- **Current:** All aircraft deployed to Operation Enduring Freedom equipped with CMWS prior to deployment; OH-58D, Kiowa Warrior is latest platform to integrate CMWS
- **Current:** In process, next-generation Electronic Control Unit (ECU) and Missile Warning Algorithms for all aircraft
- **1QFY13:** CIRCM system approved for Milestone A
- **2QFY13:** Two contracts awarded for the Technology Development Phase effort

PROJECTED ACTIVITIES

ATIRCM

- **4QFY13:** Continue fielding to CH-47D/F; Complete all A-Kit installation

CMWS

- **4QFY13:** Start fielding Next Generation ECU

CIRCM

- **2QFY14:** Pre-EMD Review
- **1QFY15:** Milestone B planned

ACQUISITION PHASE

Technology Development

Engineering & Manufacturing Development

Production & Deployment

Operations & Support

Advanced Threat Infrared Countermeasures (ATIRCM) and Common Missile Warning System (CMWS) Programs and Pre-MDAP Common Infrared Countermeasure (CIRCM)

FOREIGN MILITARY SALES

United Kingdom

CONTRACTORS

ATIRCM and CMWS (Prime):

BAE Systems (Nashua, NH)

Logistics Support:

DATA Inc. (Huntsville, AL)

Software Configuration Management Support:

Science Applications International Corp. (SAIC)
(Huntsville, AL)

CMWS-GTRI E2E Data Analysis/SIL Development:

Georgia Tech Applied Research Corp. (Atlanta, GA)

OH-58D Product Documentation Update:

Bell Helicopter Textron (Fort Worth, TX)

Test Support Data Analysis:

MacAulay-Brown Inc. (Dayton, OH)

UH-60A/L P31 Upgrade:

Rockwell Collins (Cedar Rapids, IA)

Engineering/Tech Production Support:

Computer Sciences Corp. (CSC) (Huntsville, AL)

Open Architecture Translator System (OATS):

David H. Pollock Consultants (Eatontown, NJ)

CIRCM (Primes):

BAE Systems (Nashua, NH)

Northrop Grumman (Rolling Meadows, IL)

Logistics Support:

DATA Inc. (Huntsville, AL)

Software Configuration Management Support:

SAIC (Huntsville, AL)

Engineering/Tech Production Support:

Computer Sciences Corp. (CSC) (Huntsville, AL)

OATS:

David H. Pollock Consultants (Eatontown, NJ)

