Advanced Threat Infrared Countermeasure/Common Missile Warning System (ATIRCM/CMWS)

INVESTMENT COMPONENT

Mod	ernization

Recapitalization

Maintenance

MISSION

Detects missile launches/flights, protects aircraft from Tier 1 infrared (IR)-guided missiles, and provides threat awareness and IR countermeasures using an airborne self-protection system.

DESCRIPTION

The Advanced Threat Infrared Countermeasure/Common Missile Warning System (ATIRCM/CMWS) integrates defensive infrared countermeasures capabilities into existing current-generation aircraft to engage and defeat multiple IR-guided missile threats simultaneously.

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 IRguided threat missile systems. The ATIRCM/CMWS program forms the core element of the SIIRCM concept. ATIRCM/CMWS has 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 IRCM Munitions and ICMDs, it activates expendables to decoy/defeat IR-guided missiles. ATIRCM adds the Directed Energy Laser Countermeasure Technology to CMWS and is a key for Future Force Army aircraft.

SYSTEM INTERDEPENDENCIES

Other Major Interdependencies AH-64A, 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 Iraqi Freedom/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

PROJECTED ACTIVITIES

- **Continue:** ATIRCM Quick Reaction Capability (QRC), the Army's latest Aircraft Survivability Equipment (ASE) initiative to protect crews and aircraft from advanced threat Man-Portable Air Defense Systems (MANPADS)
- **Ongoing:** Fielding to CH-47D/ F models
- **3QFY12:** Start of fielding nextgeneration ECU (for CMWS)

ACQUISITION PHASE

Technology Development

eering and Manufacturing Developm



Advanced Threat Infrared Countermeasure/Common Missile Warning System (ATIRCM/CMWS)

FOREIGN MILITARY SALES United Kingdom

CONTRACTORS

ATIRCM/CMWS (Prime): BAE Systems (Nashua, NH) **Logistics Support:** AEPCO (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 (Ft. 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) **OATS Phase 3:**

David H. Pollock Consultants (Eatontown, NJ)

