

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

Provides an airborne countermeasure system that detects missile launches/flights and protects aircraft against infrared missiles.

INVESTMENT COMPONENT

Modernization

Recapitalization

Maintenance



Description & Specifications

The Advanced Threat Infrared Countermeasures (ATIRCM)/Common Missile Warning System (CMWS) integrates defensive infrared countermeasures capabilities into existing, current generation aircraft for more effective protection against a greater number of guided missile threats than is afforded by currently fielded infrared countermeasures. The U.S. Army operational requirements concept for infrared 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 core element of the SIIRCM concept is the ATIRCM/CMWS Program. The ATIRCM/CMWS, a subsystem to a host aircraft, consists of an integrated ultraviolet missile warning system, an Infrared Laser Jammer, and Improved Countermeasure Dispensers (ICMDs).

The 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 ICMD, it activates expendables to decoy/defeat infrared-guided missiles. ATIRCM adds infrared laser jamming to CMWS, and is a key survivability system for Future Force Army aircraft.

The A-Kit contains the modification hardware, wiring harness, cable, and other items required to install and interface the ATIRCM/CMWS Mission Kit to each platform. The A-Kit ensures the Mission Kit is functionally and physically operational with specific host platforms.

The Mission Kit, also known as the B-Kit, consists of the ATIRCM/CMWS components that perform the missile detection, false alarm rejection, missile declaration, and countermeasure functions of the system. The CMWS Electronic Control

Unit receives ultraviolet missile detection data from electro-optic missile sensors and sends a missile alert signal to on-board avionics and ATIRCM. Threat missiles detected by the CMWS are subsequently tracked and jammed by ATIRCM and ICMD. Working together, CMWS/ICMD and ATIRCM provide a combination of missile seeker and countermeasures including decoy flares and laser jamming to defeat all known Tier 1 threat missiles.

Program Status

- **3QFY06:** CMWS full rate production

Projected Activities

- **Ongoing through 1QFY09:** ATIRCM reliability demonstration testing

ACQUISITION PHASE

Concept & Technology Development

System Development & Demonstration

Production & Deployment

Operations & Support

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

FOREIGN MILITARY SALES

None

CONTRACTORS

BAE Systems (Nashua, NH)
 L-3 Communications (Lexington, KY)
 DynCorp International (Ft. Worth, TX)
 Westwind Technologies, Inc.
 (Huntsville, AL)
 Sikorsky Aircraft Corp. (Stratford, CT)



SYSTEM WEIGHT (includes A-Kit weight):

ATIRCM/CMWS: Ranges from 189–313 pounds, depending on platform type

CMWS and improved countermeasure dispenser only: Ranges from 80–150 pounds, depending on platform type

