

AN/AAR-60 (V) 2 MILDS® F

Missile Warning System for Fighter Aircraft

The Threat

Armed forces have recognised the increasing threat to their tactical aircraft from anti-aircraft infrared guided missiles. An estimate of 90% of aircraft losses in current and recent conflicts resulted from ground-based air defence systems using IR SAMs.

Another estimate counts for more than 500.000 shoulder fired surface to air missiles fielded worldwide, not all under control of regular troops.

This threat is evident and imposes an undeniable danger to aircrew, aircraft and mission.

New Solutions Needed

To counter the IR missile threat, armed forces need to introduce more sophisticated solutions. Advanced missile warning systems and countermeasures against IR-guided missiles have become vital for survivability.

Our Solution

To cope with this threat, Hensoldt developed the Missile Launch Detection System AN/AAR-60, known as MILDS. Its original configuration is qualified for installation on-board a wide variety of tactical rotary-wing and wide-body aircraft including NH-90, Tiger, UH-60, CH-47, C-130 and P-3. With more than 7,000 sensors sold so far, MILDS has earned a worldwide reputation for reliability and effectiveness.

The AN/AAR-60 (V) 2 MILDS F is the solution adapted to the demanding requirements of fighter-type aircraft.

Its very low false alarm rate, fast detection/declaration, automatic countermeasure release and crew alert ensures:

- improved situational awareness
- enhancement of mission capabilities
- safe return of the aircrew and aircraft

Protection against short-range air defence missiles and manpads.

Function

AN/AAR-60 (V) 2 MILDS F is a passive, true-imaging sensor device optimised to detect the radiation signature in the UV solar blind spectral band that is emitted from an approaching hostile missile exhaust plume.

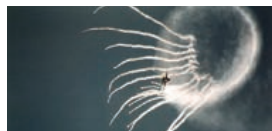
MILDS F detects incoming missile threats, indicates the direction of arrival precisely and with maximum warning time and releases countermeasures automatically.

The inherent high spatial resolution of MILDS F sensors combined with advanced signal processing enables a reliable declaration while virtually eliminating false alarms.

MILDS F comprises up to six sensors that provide high resolution and high sensitivity without the need for extra cooling. The MILDS F Countermeasure Signal Processor (CSP) has a highly sophisticated processing capability and hosts all interfaces to the aircraft as well as an internal recording capability for post mission analysis.



Fast Detection and Declaration



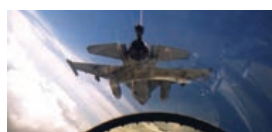
Automatic Countermeasure Release



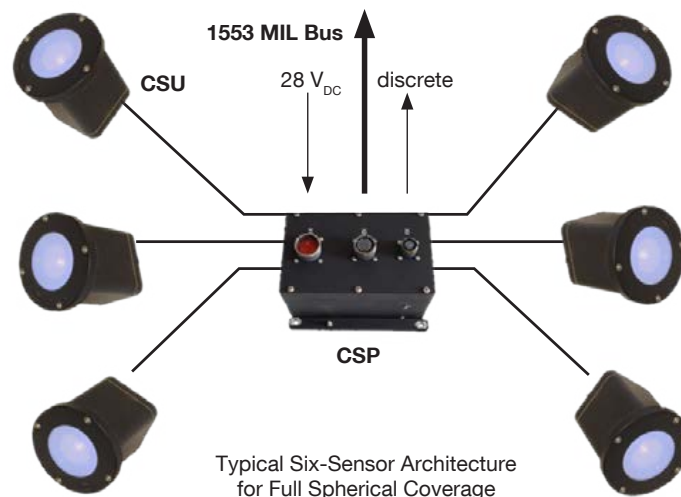
Crew Alert



Sufficient Warning Time



Low False Alarm Rate



High Angular Accuracy



Full Spherical Coverage



Fits on Pylon or Aircraft Body



High MTBF



Data and Technology Release to Customer

Integration

MILDS F offers easy installation due to extreme low weight and size. No scheduled maintenance in line with a high MTBF (Mean Time Between Failures) ensures low life cycle costs. MILDS F is optimised for installation on pylons, pods as well as for mounting on the fuselage of fighter-type aircraft.

MILDS F stands for high quality and long-term support combined with integrity and expandability concerning the entire system without causing any electromagnetic compatibility problems on board.

MILDS F is already in operational use with various air forces operating F-16 aircraft.

Specifications & Dimensions

- Field of view: 115° per sensor
- Angular resolution: < 2°
- Designed to handle multiple threats simultaneously
- Power consumption: < 150 watts
- Interfaces: MIL-STD-1553B; discrete line
- MTBF: > 900 flight hours (system)
- MTBF: > 6,500 flight hours (sensor)
- Weight: < 15 kg
- Cooling: NOT REQUIRED