Raytheon

AN/ASQ-228 ATFLIR

Advanced Targeting Forward-Looking Infrared Pod

Revolutionary technology enables the AN/ASQ-228 ATFLIR pod to provide air-to-air and air-to-ground superiority on all F/A-18 A+, C/D, E/F tactical missions.

Benefits

- Integrates FLIR/EO targeting, navigation, and laser spot tracking in a single pod
- Substantially increases target detection and recognition range
- Enables targeting from greater standoff distances
- Reliability and maintenance improvements reduce total ownership costs
- Secure, interoperable technology supports network-centric operations

Increased Range and Enhanced Survivability

The AN/ASQ-228 ATFLIR pod is the most advanced targeting system available for the F/A-18 Hornet aircraft. Battle tested in Operations Southern Watch, Enduring Freedom, and Iraqi Freedom and deployed with U.S. fleet squadrons worldwide, ATFLIR provides pinpoint accuracy and real-time target assessment from long standoff ranges. Its target detection range shows a fourfold improvement over prior systems, and laser designation is effective at altitudes up to 50,000 feet and at a slant range of greater than 30 miles. These features enhance F/A-18 aircrew survivability, allowing the pilot and weapon systems operator to strike from safer distances.

Crisper Imagery and Persistent Targeting

ATFLIR combines mid-wave infrared targeting and navigation FLIRs, electro-optical (EO) sensor, laser rangefinder and target designator, and laser spot tracker into a single pod, freeing one air-to-air weapon station for other mission requirements. Compared to other targeting pods in production, the ATFLIR's EO/IR imagery has 3 to 5 times greater clarity.

ATFLIR's increased capabilities to locate, identify and designate targets dramatically enhance aircrew effectiveness in Close Air Support (CAS), Forward Air Controller-Airborne (FAC-A), and battlefield interdiction missions. Its 360-degree roll drive, with continuous automatic boresight alignment, ensures persistent target coverage and first-pass kill.

Greater Reliability and Easier Maintenance

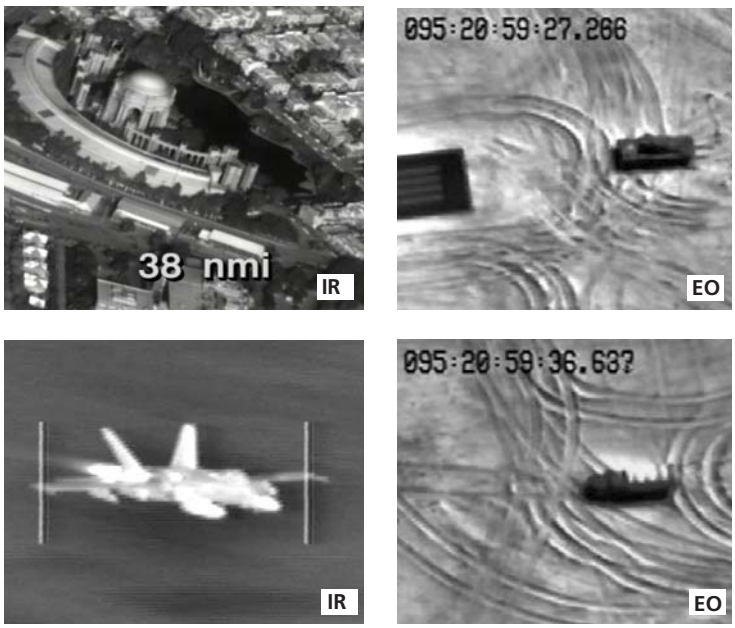
ATFLIR employs two-thirds fewer parts than previous systems, giving it a mean time between failure that exceeds 600 hours. Because ATFLIR uses COTS-based, lightweight weapon replaceable assemblies (WRAs) instead of the larger, heavier modules found in other targeting pods, repairs are faster and easier. Built-in diagnostics and solid-state, fiber-optic gyros further reduce the risk of mechanical breakdowns.

Network-Centric Capabilities and Future Enhancements

ATFLIR's multifunctionality and versatility make it relevant in the modern military's networked battlespace. Built

with secure, interoperable technology, this combat-proven targeting pod can easily share information with other weapon systems and platforms for close cooperation on the battlefield.

Working closely with its U.S. Navy and Marine Corps teammates, Raytheon is committed to a number of future enhancements, including laser (IR) marker, electronics consolidation, sensor fusion, and automatic target recognition as well as improvements to the pod's EO camera, laser tracker, and detection range.



In both air-to-ground and air-to-air missions, ATFLIR's sharp imagery makes it easier for aircrews to identify friendly versus enemy forces.

Tactical Capabilities

- Precision targeting
- Long range (>40 nautical miles)
- High-altitude (>50,000 feet) laser designation
- First-pass kill and J-series weapon delivery
- Tactical laser ranging
- Air and ground target tracking
- Real-time bomb hit assessment/indication

Current Features

- Common optical path
- Continuous auto-boresight alignment
- Visible (EO) camera
- Built-in navigation FLIR (optional)
- 360° roll drive unit

Planned Enhancements

- Laser marker
- Electronics consolidation
- Sensor fusion
- Automatic target recognition
- Improved EO camera and laser spot tracker
- Increased detection range

Specifications

Focal plane:	640 × 480 InSb
Spectral band:	3.7–5.0 mm
Field of view:	0.7°, 2.8°, 6.0°
Reliability:	>600-hr MTBF
Supportability:	Optional 2-level maintenance
Testability:	Detection: 95% Isolation: 98%
Weight:	420 lb (191 kg)
Length:	72 in. (183 cm)
Diameter:	13 in. (33 cm)

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