



AN/ALQ-257 Integrated Viper Electronic Warfare Suite

An electronic warfare suite that's a generation ahead

Freedom to maneuver in a near-peer conflict depends on spectrum dominance. The AN/ALQ-257 Integrated Viper Electronic Warfare Suite (IVEWS) is designed to give F-16 electronic warfare (EW) capabilities on a par with fifth-generation aircraft, significantly enhancing survivability for operations in contested and congested electromagnetic spectrum environments.

Northrop Grumman's ultra-wideband suite can detect, identify and counter advanced radio frequency threats, including millimeter wave systems.

The only electronic warfare Program of Record for the U.S. Air Force F-16 fleet, IVEWS is also available for export.

Common architecture. Uncommon capabilities.

The design of IVEWS incorporates Northrop Grumman's ultra-wideband electronic warfare system architecture.

This architecture, shared with other Northrop Grumman electronic warfare systems, offers cost advantages, shorter upgrade cycles and logistical efficiencies not possible with other systems.

IVEWS includes a next-generation digital radar warning receiver, an advanced processor designed specifically for EW applications, and high-powered transmitters with antennas optimized for the size, weight, and power requirements of the F-16.



In 2021, a Northrop Grumman test bed aircraft (pictured) flew with the company's IVEWS and AN/APG-83 SABR systems in a dense electromagnetic spectrum environment at the Northern Lightning joint training exercise. (Northrop Grumman photo)



IVEWS incorporates an advanced processor designed specifically for EW applications, and high-powered transmitters. (Northrop Grumman photo)

Proven AESA interoperability

IVEWS's pulse-to-pulse interoperability with the Viper's advanced AN/APG-83 SABR AESA radar provides capability without compromise—no filtering, no blackouts, and no diminished protection or targeting capability. The result is advanced survivability without compromising the Viper's lethal bite.

Flying in Exercise Northern Lightning, IVEWS was put to the test in a dense and demanding electromagnetic spectrum environment featuring multiple advanced ground emitters and more than 20 airborne radars. Hitting more than 170 test points, IVEWS and SABR didn't miss a beat—operating seamlessly together throughout the exercise.

Exportable and extensible

Radio frequency threats don't care whose flag you're flying under. IVEWS is the electronic warfare suite for the USAF F-16 fleet, but operators of the Viper worldwide face the same advanced threats. IVEWS is available for export to international partners, bringing commonality and advanced survivability to the global fleet.

The advanced protections built into IVEWS are not limited to fighter aircraft. Northrop Grumman has products with its electronic warfare architecture that makes it possible for aircraft of all sizes, from unmanned aircraft up to airlifters, to execute missions safely in contested spectrum environments.

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