FY 2027 Budget sets out IVEWS Retrofit Plan for F-16 Aircraft

By Richard Scott

The US Air Force (USAF) is planning to upgrade over 200 legacy F-16 fighters with an advanced electronic warfare (EW)/self-protection suite developed by **Northrop Grumman** (Rolling Meadows, IL).

Justification items contained in the service's Fiscal Year (FY) 2027 budget request reveal the service is seeking $438 million in-year to buy 48 AN/ALQ-257 Integrated Viper Electronic Warfare Suite (IVEWS) sets for F-16C Block 40/42 and 50/52 aircraft operated by Air Force and Air National Guard squadrons. The full program of record, running through FY 2031, foresees the IVEWS upgrade being implemented across 206 aircraft, plus four engineering and manufacturing development installs.

Developed by Northrop Grumman as a Middle Tier Acquisition Rapid Prototyping program, IVEWS was initiated to design, develop, test, and produce a mature internal EW system interoperable with the F-16's AN/APG-83 active electronically scanned array radar, designed to Open Missions Systems Tier II requirements, and enabling future upgrades. Operating in conjunction with Terma's AN/ALQ-213 common EW controller, IVEWS introduces an ultra-wideband architecture providing extended frequency coverage (including millimeter wave), improved digital radar warning performance and operationally relevant geolocation, a self-protection jammer, and provision for future expansion (such as a fiber-optic towed decoy, adaptive/cognitive processing, and full Open System Architecture compliance).

The USAF completed an Operational Assessment of IVEWS in spring 2025. Two F-16 Block 50 aircraft assigned to the 85th Test and Evaluation Squadron accumulated over 100 flying hours over a seven-month timeframe.

FY 2026 spending included an initial six IVEWS buys (Group A/Group B kits) using mandatory funds. These first installs are planned for FY 2028.

In October last year, Northrop Grumman was awarded a $9.3 million contract modification by the Air Force Life Cycle Management Center for the delivery of two additional flight test releases for the IVEWS suite. The company received a further $30.6 million in late April 2026 for an increase in flight test releases and software development requirements in support of IVEWS Spiral 1 functionality. Spiral 1 software is due to qualify in the first quarter of FY2028.