



Viper Shield Is in Production: Priming the F-16 for Tomorrow's Fight

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L3Harris' Viper Shield—the only modern F-16 electronic warfare system currently in production—harnesses the power of software to give pilots and commanders the edge in an increasingly contested battlespace.

With an extensive history and unsurpassed reputation for agility, versatility and maneuverability, the F-16 is the world's most widely used military fixed-wing aircraft. L3Harris is leading the charge to keep this icon of the skies protected from sophisticated threats and primed to dominate the future fight.

L3Harris recently began production of its next generation AN/ALQ-254 Viper Shield electronic warfare (EW) suite at its facilities in Clifton, N.J., making it the only modern F-16 EW solution that's currently in active production, on schedule and fully funded for international F-16 partners. Currently 168 systems are on order for six countries, with more partner nations expected to follow.

Viper Shield provides a virtual electronic shield around the aircraft, enabling warfighters to complete missions safely in increasingly complex battlespace scenarios. Its modern, all-digital architecture using commercial off-the-shelf (COTS) technology enables enhanced system performance, a smaller form factor, reduced weight and easier upgrades.

Designed for Block 70/72 aircraft variants, Viper Shield is compatible and interoperable with all legacy F-16 blocks as well. It can be installed as an integrated system within current F-16 aircraft or added as an external pod using identical system hardware—greatly reducing installation costs and schedule impacts while still meeting required specifications.



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“Providing F-16 pilots and commanders with real-time situational awareness of the electronic landscape empowers them to quickly identify, locate and neutralize threats,” said Ed Zoiss, President, Space and Airborne Systems, L3Harris. “With Viper Shield, we’re building on decades of experience in supporting the F-16 and a heritage of advancing electronic warfare technology. Better yet, we continue to achieve critical program milestones on schedule.”

Lower costs, higher performance

Viper Shield’s open system design illustrates a key shift in how to address emerging and future threats as new EW capabilities can be easily added. Software-defined components allow easy upgrades without new hardware, and the system is designed to interact with wingmen – manned or unmanned – without any EW interference.

Viper Shield’s hardware-to-software shift delivers key benefits including:

- Faster response to emerging threats via quick software updates vs. extensive hardware changes
- Adaptable and customizable to meet specific customer or mission requirements
- Seamless integration with APG-83 AESA radar
- Scalable, modular design that allows for easier upgrades or capability expansion over time
- Lower lifecycle costs thanks to more affordable software updates vs. hardware changes
- Better integration with other aircraft systems due to open system design
- Reduced size and weight with a smaller physical hardware footprint
- Uses the identical system hardware for onboard or Pod configuration installations
- All Digital EW meeting next generation demands

Initial deliveries of Viper Shield are on schedule for late 2025 and will be flying in operational configuration on partner F-16s by 2026. Learn more about [Viper Shield](#) and L3Harris’ industry-leading [EW solutions](#).

