F-16 Viper Modernization

Air National Guard



Fiscal Year 2025 Requirements for the Air National Guard



The Issue

Air National Guard F-16s make up a significant percentage of the Total Air Force fighter fleet. The F-16 Viper, a multirole air superiority aircraft, deploys in support of overseas contingency operations and performs domestic emergency response missions. However, the F-16 requires modernization and technology enhancements to continue to maintain readiness and lethality in the future.

F-16 Fighting Falcons from the 180th Fighter Wing, Ohio Air National Guard, conduct a routine training mission.

Background

Air National Guard F-16s provide 37% of the Air Force's total F-16 force and are engaged around the globe in numerous U.S. contingency operations. Since 2003, Air National Guard F-16s have fulfilled many precision-guided munitions and close air support missions, including convoy escort, dedicated infrastructure defense, border patrol, and raid support. Support for critical modernization

Recommendation

Continued procurement of AESA Radars, Digital Radar Warning Receiver, and Link-16 upgrades.

and sustainment efforts are required in order to ensure the safety, reliability and effectiveness of the F-16, both at home and abroad.

Currently, the three most pressing needs for the Air National Guard F-16 fleet include AESA digital radar systems, modernized center display units (CDUs), and enhanced datalink systems (Link-16, MIDS-J) to better communicate with fourth and fifth generation aircraft.

Most Air National Guard F-16s are currently equipped with legacy radar that has significant performance shortfalls, requires substantial maintenance, and is incapable of ensuring adequate defense against the majority of current and next-generation threats. The AESA radar system detects and tracks multiple airborne targets, as well as improves the F-16 capability to perform close air support, surface attack, and defensive counter-air missions. Thanks to Congressional investments, approximately 1/3rd of the Air National Guard F-16 fleet will be modernized with AESA, but approximately 230 aircraft remain.

Continued







Additionally, Air National Guard F-16s require a Center Display Unit (CDU) with a large screen and high definition display to replace aging flight instruments and fully utilize advanced targeting image quality. The ability to transfer data and exploit digital targeting video is critical to ensuring success of F-16 missions, including homeland defense.

Finally, Air National Guard F-16s require Link-16, MIDS-J enhanced datalink capability to better function in current and future operational environments. Legacy datalink equipment is inadequate and transitioning aircraft to Link-16 will allow for seamless deployment, connectivity, and interoperability with the Total Force F-16 fleet and better foster fourth to fifth generation aircraft communications.



