

BAE Systems successfully flight tests next-generation vehicle management computer for the F-35 Lightning II



[Release from BAE Systems](#)

Flight control technology upgrade maximizes processing power for added mission capabilities and safety enhancements

ENDICOTT, N.Y. – Sept. 6, 2023 – BAE Systems' next-generation [vehicle management computer](#) was successfully flight tested on the F-35 Lightning II aircraft. The test demonstrated a technology upgrade for all three F-35 variants that will increase computer performance and addresses obsolescence issues. Testing occurred at Naval Air Station Patuxent and Edwards Air Force Base.

BAE Systems' Vehicle Management Computer (VMC) enables advanced control modes and improves mission efficiency and safety. Its distributed architecture allows the aircraft to operate reliably with enhanced mission effectiveness in demanding environments. The upgraded VMC will not only help to mitigate obsolescence but will also improve safety, maintainability, and availability of the aircraft for the U.S.

military and its allies.

“The VMC provides the high integrity processing required to implement the advanced control algorithms that enable this platform’s critical missions,” said Corin Beck, director of Military Aircraft Systems for Controls and Avionics Solutions at BAE Systems. “This upgrade leveraged BAE Systems’ technology roadmap to ensure the F-35 will advance its mission management and flight control capabilities today and into the future.”

This technology upgrade incorporates a quad-core advanced processor for both a high-performance and efficient solution. The new level of computing power allows for additional aircraft capabilities while reducing pilot workload. It also adds advanced mission capabilities to the VMC such as the Joint Precision Approach and Landing System (JPALS) and Auto Ground Collision Avoidance System (AGCAS).

BAE Systems has more than 40 years of experience developing and integrating flight control technology for military and commercial platforms. Work on the VMC occurs at the company’s state-of-the-art engineering and manufacturing facility in Endicott, New York.

BAE Systems is a major global partner to Lockheed Martin on the F-35 program. The company provides the VMC, electronic warfare system, active inceptor control system, and aft fuselage for each F-35 at manufacturing facilities in the U.S., U.K., and Australia. The company also delivers sustainability, technical support, and training services to keep the F-35s mission-ready.