BAE Systems to Upgrade Flight Control Computers for FA-18E/F and F-15EX Fighters

Technology refresh increases processing power to enhance aircraft performance, capabilities, and readiness

ENDICOTT, N.Y. – August 20, 2024 – BAE Systems has been selected by Boeing to upgrade the fly-by-wire (FBW) flight control computers (FCC) for the F-15EX Eagle II and F/A-18E/F Super Hornet fighter aircraft. The FCCs feature common core electronics that support the quad-redundant FBW flight control systems (FCS), providing the safety, reliability, robustness, and performance needed for the missions of these advanced platforms.

As the original manufacturer of the FCCs for both aircraft, BAE Systems will modernize the FCC electronics hardware and software to increase processing power, enhance cyber and

product security, address obsolescence issues, and support sustainment well into the future. The upgraded FCC will leverage the company's high-integrity flight control product roadmap, built upon technology investments, and used across multiple recent military airborne platform flight control upgrades. The F/A-18E/F FCC will also receive an additional processor to enable future capabilities for the fleet.

"BAE Systems is a leader in high-integrity controls and this upgrade reflects our commitment to providing our customers with next-generation solutions," said Corin Beck, senior director of Military Aircraft Systems for Controls and Avionics Solutions at BAE Systems. "Our advanced flight-critical solution ensures that these platforms will maintain fleet readiness now, and in the future, as well as provisions the aircraft to support the integration of new functions."

These computers efficiently manage aircraft flight by processing pilot inputs, monitoring real-time aircraft movement conditions via on-board sensors, and transmitting commands to actuators that move the control surfaces. The redundant FCS, along with the flight control laws, enables the pilot to maintain controlled operation across the demanding flight regime and multiple loadout configurations. Additionally, the FCS can reconfigure how it controls the aircraft in case of a failure or battle damage by mixing the remaining control surfaces differently. The advanced FBW FCS allows the pilot to focus more on the mission and less on flying the aircraft.

BAE Systems has more than 40 years of experience developing and integrating flight control technology for military and commercial platforms. This flight control upgrade will be conducted at the company's state-of-the-art engineering and manufacturing facility in Endicott, New York.