Northrop Grumman to Enable New F-35 Warfighting Capability



Pilots with Marine Fighter Attack Training Squadron 501 fly the F-35B Lightning II during the Marine Corps Air Station Beaufort Air Show, 2019. U.S. Marine Corps / Warrant Officer Bobby J. Yarbrough

BALTIMORE – Northrop Grumman has received a contract award from Lockheed Martin to enable new functionality to protect the 5th Generation F-35 Lightning II multi-role fighter, Northrop Grumman said in a Jan. 12 release.

As part of a collaborative arrangement between Northrop Grumman, BAE Systems and Lockheed Martin, the three companies will integrate Northrop Grumman's AN/ASQ-242 Integrated Communications, Navigation and Identification (ICNI) and BAE Systems' AN/ASQ-239 Electronic Warfare/Countermeasures system for optimal operational utility.

"This arrangement allows us to collectively provide enhanced capabilities without compromising the size, weight or power of the aircraft," said Howard Lurie, vice president, F-35 programs, Northrop Grumman. "We are proud to be a primary partner of the F-35 team, providing our U.S. and allied warfighters superior combat effectiveness."

Northrop Grumman's ICNI system provides F-35 pilots with more than 27 fully integrated operational functions. Using its industry-leading software-defined radio technology, Northrop Grumman's design allows the simultaneous operation of multiple critical functions while greatly reducing size, weight and power demands on the advanced F-35 fighter. These functions include Identification Friend or Foe, automatic acquisition of fly-to points, and various voice and data communications such as the Multifunction Advanced Data Link.

The BAE Systems' AN/ASQ-239 system is an advanced, proven electronic warfare suite that provides fully integrated radar warning, targeting support, and self-protection to detect and defeat threats and enable the F-35 to reach well-defended targets.

"As Lockheed Martin's electronic warfare integrator for all F-35 aircraft, we're committed to equipping our customers with advanced capabilities that help them conduct their missions," said Deborah Norton, vice president of F-35 Solutions at BAE Systems. "Under this collaborative agreement, we will work closely with Lockheed Martin and Northrop Grumman to enhance the capability of our fully integrated EW system – heightening pilots' situational awareness and helping them evade, engage and defeat modern threats."

As the provider for F-35's ICNI continuously since low-rate initial production Lot 1, Northrop Grumman has delivered more than 750 shipsets to date. Components of the new functionality

are planned to begin incorporation starting in 2025 (Lot 17) and will include upgraded electronics and software.

Northrop Grumman plays a key role in the development, modernization, sustainment and production of the F-35. The company manufactures the center fuselage and wing skins for the aircraft, produces and maintains several sensors, avionics and mission systems as well as mission-planning software, pilot and maintainer training courseware, electronic warfare simulation testing and low-observable technologies.