BAE Systems Updates F-35 Electronic Warfare Systems

NASHUA, N.H. – BAE Systems reached a critical program milestone with the successful insertion of new technology into its electronic warfare (EW) systems for the global fleet of Lockheed Martin F-35 Lightning II fighter aircraft, the company announced in a Feb. 28 release. Upgrades to the AN/ASQ-239 system position it to meet future capability requirements and improve warfighters' ability to conduct critical missions in contested airspace.

The improved EW system delivers the world-class functionality of the previous system in a smaller footprint, reducing volume and power requirements – creating space for Block IV modernization upgrades. The system update also resolves issues with manufacturing obsolescence that would have otherwise required costly redesign work.

The company's capacity expansion strategy – including a $100 million investment in 80,000 square feet of state-of-the-art manufacturing space, process automation and the growth of its highly skilled electronic warfare workforce by more than 23 percent – enabled BAE Systems to become the first F-35 supplier to insert updated technology into its systems at full production speeds, delivering 11 systems monthly and ramping production to match aircraft production.

The Digital Channelized Receiver/Techniques Generator and Tuner Insertion Program (DTIP) technology was introduced into BAE's manufacturing process in 2018, with the first deliveries starting in July. The team is consistently providing 11 shipsets per month, enabling the company to continue on-time delivery to its customer.

"We've delivered almost 400 EW systems to date, and now we've

updated the architecture and are manufacturing it at a high rate of production. This technology insertion gives the EW system room to grow and will help the F-35 maintain its dominance of the electromagnetic spectrum," said Deborah Norton, vice president of F-35 Solutions at BAE Systems. "The successful insertion of DTIP was the result of the outstanding focus, dedication and teamwork of our engineering and production teams working in close coordination with our customer."

The advanced F-35 EW system is a proven digital electronic warfare/countermeasures suite that provides pilots with real-time battlespace situational awareness and rapid-response capabilities. The ASQ-239 system provides fully integrated radar warning, targeting support and self-protection capabilities to engage, counter, jam or evade threats to improve survivability and mission effectiveness. The system builds on BAE Systems 60-plus years of EW experience and legacy of providing 13,500 tactical systems for more than 80 different platforms, including F-22, F-16, F-15, B-1, B-2 and classified platforms.