

Block III Super Hornets Headed for Navy Flight Tests



F/A-18 Block III flight test aircraft F287 makes its first flight in May. Boeing has delivered the first two Block IIIs to the U.S. Navy. Boeing

ARLINGTON, Va. – Boeing has delivered the first two Block III Super Hornet strike fighters to the U.S. Navy. The aircraft, an F/A-18E and two-seat F/A-18F, will go through comprehensive testing by Navy air test and evaluation (VX) squadrons over the next year.

VX-23 at Naval Air Station Patuxent River, Maryland, will receive the F/A-18F (the 287th built) aircraft for “shore-based carrier testing” and will be used for testing of hardware and aeromechanical aspects, the Program Executive Office-Tactical Aircraft (PEO(T)) said in a June 17 release.

Once that testing is completed, the F/A-18F will go to VX-31 at Naval Air Weapons Station China Lake, California, to complete Block III testing. The F/A-18E (the 323rd built) will go to VX-31 for software functionality and network architecture testing.

The Block III Super Hornet features several major structural and mission system improvements over the Block II, Jennifer Tebo, Boeing’s director of development for F/A-18E/F & EA-18G Programs, said in a June 17 teleconference with media.

The Advanced Cockpit System includes replacement of a set of displays with a single large touch-screen display for improved user interface and display of the Common Tactical Picture, the PEO said.

The Advanced Network Infrastructure will have 17 times the computing power of the mission computer of the Block II

through the Distributed Targeting Processor Network and Tactical Targeting Network Technology (TTNT).

Tebo described the TTNT as a “big data pipe – low latency, high-data” for better situational awareness. The infrastructure will be open to accept third-party applications for “speed to the fleet with urgent needs,” she said.

The Block III Super Hornets will feature an improved radar cross section for better survivability.

The most distinguishable characteristic of the Block III is the addition of streamlined, low-drag conformal fuel tanks to the upper wing and fuselage junctions. These will be optional for use and will enable the Super Hornet to carry 3,500 pounds more fuel, reducing the need for underwing external fuel tanks and freeing up the pylons to carry more weapons.

When delivered, each Block III will have a service life of 10,000 flight hours, far more than the 6,000 hours of a Block II strike fighter.

“In addition to the Block III delivery, Boeing will also perform service life modification (SLM) to hundreds of Block II Super Hornets, to extend their service life and integrate Block III capabilities,” the PEO said. “SLM is key to building the capacity and capability to ensure the Navy has jets ready to fight into the mid-2040s.”

Tebo said the SLM will extend the life of Block IIs to 10,000 hours and that deliveries of Block IIIs converted from Block IIs will begin in 2023 and continue into the mid-2030s.

Tebo said the Block III Super Hornet made its first flight on May 14. Delivery of 78 full-up production Block IIIs is planned to begin in mid-2021 at a rate of two per month through early 2024.

“The first squadron deployment of Block III Super Hornet is

anticipated in mid-2023, with a plan in place to have two Block III squadrons, composed of new production and Block IIs that have undergone SLM, accompanying each carrier air wing by 2027," the PEO said in the release.

"Now it's up to our test squadrons and our integration team to verify requirements are met and ensure the engineering behind the Block III is validated prior to full-scale production and delivery of the Block III to the fleet," Capt. Mike Burks, F/A-18 E/F deputy program manager, said in the release.

"These new capabilities are essential for ensuring we maintain the tactical advantage in the Great Power Competition," Capt. Jason Denney, the Navy's F/A-18 & EA-1G Program Manager, said in the release. "Block III production and SLM for our Block IIs also demonstrate contracting efficiency and solid partnerships with industry – an all-around win for the Navy, for Boeing, and for the warfighter."