Lockheed Martin F-35 Begins Flying Block 1 Software

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NAVAL AIR STATION PATUXENT RIVER, Md., Nov. 15, 2010 /PRNewswire-FirstCall/ -- The fundamental building block for all future avionics software on the Lockheed Martin (NYSE: LMT) F-35 Lightning II stealth fighter has entered flight testing on an F-35 test jet.

"Block 1," the first of three principal software-development blocks for the F-35's mission systems, made its inaugural flight on Nov. 5 in the F-35B short takeoff/vertical landing (STOVL) aircraft known as BF-4. The functional check flight from Naval Air Station Patuxent River lasted 1.5 hours, and all planned test points were accomplished.

"Getting this software up and flying in an F-35 is a big step in the process of validating our avionics system and ensuring that it operates in a way that gives our warfighters a clear advantage over any adversary," said Larry Lawson, Lockheed Martin F-35 program general manager. "The flight went as planned, and we look forward to expanded mission systems testing in the coming months."

The Block 1 software will enable most of the primary sensors on the F-35, which possesses the most powerful and comprehensive mission systems package of any fighter ever to fly. Block 1 forms the foundation of all subsequent software blocks. It enables information fusion from the F-35's radar, electronic warfare system, distributed aperture system, electro-optical targeting system and other sensors, and provides initial weapons-release capability.

Block 1 has been undergoing airborne testing since May on the Cooperative Avionics Test Bed, a highly modified 737 airliner that incorporates the entire integrated F-35 mission systems suite, including an F-35 cockpit. The test bed provides initial in-flight validation for F-35 software blocks before they are introduced into actual F-35 aircraft.

The F-35 Lightning II is a 5th generation fighter, combining advanced stealth with fighter speed and agility, fully fused sensor information, network-enabled operations and advanced sustainment.

Lockheed Martin is developing the F-35 with its principal industrial partners, Northrop Grumman and BAE Systems. Two interchangeable F-35 engines are under development: the Pratt & Whitney F135 and the GE Rolls-Royce Fighter Engine Team F136.

Headquartered in Bethesda, Md., Lockheed Martin is a global security company that employs about 133,000 people worldwide and is principally engaged in the research, design, development, manufacture, integration and sustainment of advanced technology systems, products and services. The Corporation's 2009 sales from continuing operations were \$44.0 billion.

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