F-35 Lightning II Flight Test Update

FORT WORTH, Texas, May 8, 2012 /PRNewswire/ -- Lockheed Martin's [NYSE: LMT] F-35 Lightning II flight test program continues to make progress during the first four months of 2012. In March, the program completed 123 test flights totaling 223 flight hours, setting a record for the most System Development and Demonstration (SDD) flights and flight hours for a single month.

During the time period, the SDD fleet surpassed the 15,000 total test point threshold, completing approximately 25 percent of the SDD program's entire requirement of more than 59,000 test points. Overall the F-35 test program remains ahead of the 2012 flight test plan, which calls for the accumulation of 1,001 test flights and 7,873 baseline test points as well as additional points beyond the original plan.

Through April 30, the program completed 373 flights against a plan of 281 and achieved 2,810 test points – 2,307 of which were baseline points earned against a plan of 2,151. At Eglin Air Force Base, Fla., 30 local area orientation flights were completed totaling 39.5 flight hours as progress toward F-35 pilot training checkout continues.

Another aspect of flight testing is the progressive check out of the latest version of mission system software known as Block 2A. To date, more than 90 percent of Block 2A airborne software code is complete with more than 85 percent of that code currently being flight or lab tested. Block 2A flight test is being conducted at Edwards AFB and will continue through this year. Block 2A is scheduled for "ready for training" in the summer of 2013.

"The 2012 F-35 flight test program execution continues to build momentum," saidOrlando Carvalho, F-35 executive vice president and general manager. "From flight envelope expansion to night refueling to external weapons testing, our flight test program is off to a good start this year. We are working to build on this success and deliver unprecedented 5th generation fighter performance capabilities – including radar-evading stealth, supersonic speed, extreme agility and the most comprehensive integrated sensor package of any fighter aircraft in history – to our Armed Forces and allies."

The F-35 program has accomplished many flight test, production and training milestones sinceJan. 1:

- On Jan. 17, demonstrating the ongoing maturation of the F-35 integrated sensor suite, AF-3, an F-35A conventional takeoff and landing (CTOL) test jet, completed the first low Distributed Aperture System (DAS) approach.
- On Jan. 18, the first night flight in the history of the F-35 programwas completed at Edwards AFB, Calif.
- On Feb. 16, at Edwards AFB, Calif., AF-1, an F-35A CTOL test jet,flew the first external weapons test mission in F-35 program history.
- On March 6, the 33d Fighter Wing at Eglin AFB, Fla., flew its first local F-35 Lightning II sortie, marking a major milestone.
- On March 22, AF-4, an F-35A CTOL jet,completed the first night refueling mission when it successfully connected to an Air Force KC-135 tanker and received fuel through the F-35's boom receptacle.
- On March 28, BF-4, an F-35B short takeoff/vertical landing (STOVL) test jet based at Naval Air Station Patuxent River, Md., completed the first F-35 flight with two unarmed air intercept missiles known as AIM-120 Instrumentation Measurement Vehicles (IMVs). The IMVs are used to measure environmental influences such as temperature, vibration and acoustics of the aircraft on the weapon to ensure they do not impact the weapon's ability to be carried and employed by the aircraft.
- On April 1, the first F-35 Lightning II for the Netherlands rolled out of the F-35 production facilityThe Netherlands will use this CTOL jet, known as AN-1, for training and operational tests for pilots and maintainers.
- On April 5, the program completed in-flight refueling of an F-35B STOVL while configured with external weapons at Naval Air Station Patuxent River, Md. The mission tested the flying qualities of the aircraft while maneuvering with external weapons.

- On April 10, two F-35A CTOLs from the 33d Fighter Wing assigned to Eglin AFB, Fla., completed the unit's first formation flight. The mission was part of a continuing process to validate pilot syllabus objectives in preparation for future training.
- On April 11, an F-35A CTOL from the 33d Fighter Wing assigned to Eglin, AFB, Fla., completed the unit's first air-to-air refueling mission with a KC-135R Stratotanker.
- On April 13, BK-1, the United Kingdom's first F-35 Lightning II production aircraft, flew its inaugural flight. The U.K. Ministry of Defence will use this short takeoff/vertical landing jet for training and operational tests at Eglin AFB, Fla., beginning later this year.
- On April 18, for the first time, two F-35C Lightning II carrier variant test aircraft launched together and conducted formation flying at Naval Air Station Patuxent River, Md. The mission tested flying qualities of the aircraft while taking off, landing and flying in formation for more than one hour.
- On April 21, the program completed the first in-flight refueling of F-35A CTOL aircraft while configured with external weapons at Edwards AFB, Calif. The two-hour mission tested the flying qualities of the aircraft while maneuvering with external weapons.

Cumulative flight test activity totals for 2012 through April 30 are provided below:

- F-35A CTOL jets have flown 164 times.
- F-35B STOVL aircraft have completed 122 flights, 114 of which began with a short takeoff. Additionally, F-35B STOVL aircraft have conducted 49 vertical landings.
- F-35C carrier variant (CV) jets have flown 87 times.

Cumulative flight test activity totals for the duration of the program through April 30 are provided below:

- F-35A CTOL jets have flown 811 times.
- F-35B STOVL aircraft have completed 711 flights, 533 of which began with a short takeoff. F-35B STOVL aircraft have also conducted 328 vertical landings.
- F-35C CV jets have flown 279 times.

Since December 2006, F-35s have flown 2,066 times and accrued more than 3,000 cumulative flight hours. This total includes 91 flights from the original test aircraft, AA-1; 1,801 SDD test flights; and 174 production-model flights. For video highlights of the F-35 program, click here.

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