



F-35 Lightning II Program

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F - 3 5 B E G I N S I N T E G R A T I O N P H A S E O F W E A P O N S T E S T I N G

EDWARDS AIR FORCE BASE, Calif. -- The Joint Strike Fighter began the integration phase of weapons testing Oct. 26 when the F-35A Conventional Takeoff and Landing (CTOL) aircraft successfully completed the first in-flight test with an AIM-120 Advanced Medium Range Air-to-Air Missile.

It was the first time a weapon communicated with the aircraft during flight using a data link.

The program's milestone rounded out a successful month of flight test, which also included inert weapons separation tests of both the AMRAAM and Joint Direct Attack Munition.

"In October, we were able to begin weapons separation testing with the JDAM and AMRAAM. We proved we can carry them safely and that the shapes, which matched the exact mass properties of the real weapons, could separate from the aircraft safely. Now, with the integration testing, we've initially proved the aircraft can talk to the weapon and that the weapon can talk to the aircraft," said Col. Roderick L. Cregier, 412th Test Wing, F-35 program manager.

Prior to Oct. 26, mass models with no internal electronics were used during all F-35A weapons testing. The AIM-120 AMRAAM used during the integration test contained the same electronics as a full-up missile, but without the rocket motor.

"The program is doing very well meeting its goals after it was rebaselined in 2010, and I'm very proud of the team. Even though the testing was incredibly complex and difficult; their hard work enabled it to happen relatively smoothly without any serious glitches that would delay the program. We just pressed right on through, and we're ready for the next phase," said Cregier.

Successful integration testing, along with the safe separation releases in October means that the F-35 Integrated Test Force can continue progressing towards the weapon delivery accuracy test phase and live fire testing scheduled to begin in early 2013.

"This was a very important milestone to get us over that hump, to move on to the next phase of the program, which is going to start very soon. This success was critical, now what we're doing is putting the teeth into the F-35. It's important that the jet can meet all the corners of its envelope, but what we're really designing it to do is employ weapons," said Cregier.

"Starting in February and continuing through the end of April, we are anticipating releasing roughly two weapons per week. This is going to be just the beginning of what I would characterize as the most ambitious weapons integration program in the history of tactical aircraft."

The F-35A is designed to carry a payload of up to 18,000 pounds using 10 weapon stations. The F-35A features four internal weapon stations located in two weapon bays to maximum stealth capability. The CTOL aircraft can also utilize an additional three weapon stations per wing if required.



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