United States Air Force Announces F-22 Completes Round Of Static Tests

Air Force officials announced today the successful completion of the F-22 Raptor static tests required to enter production. The F-22 air dominance fighter aircraft will replace the F-15 currently in the Air Force inventory.

This latest achievement satisfies the eighth of 11 criteria the Defense Acquisition Board (DAB) will use to decide that the F-22 program can enter low-rate initial production for the first ten aircraft. The program will complete the remaining three criteria before or shortly after the first of the year. The DAB is scheduled to meet Jan. 3 to review criteria completion and make a production decision.

The F-22 program is managed by the F-22 System Program Office, Aeronautical Systems Center, Wright-Patterson AFB, Ohio.

The latest test completed, and the last static test necessary to satisfy the DAB criteria, was designed to test the forward fuselage inlet duct. The loads applied during this test were based on pressures the F-22 could experience during operational usage.

"This test achievement is really significant," said Brig. Gen. Jay Jabour, F-22 System Program Director. "It is a testament to the strength of the aircraft, and now clears the Raptor for complete scheduled flight envelope limits for 2001 flight tests."

The full-scale ultimate static test program consists of 19 "Air Vehicle" level conditions and a set of "local" level conditions. The Air Vehicle level tests were the first phase of the test program and were designed to test the strength of the primary components of the aircraft with the forces and pressures it could experience in actual flight. Limit load tests, completed in 1999, tested the aircraft to 100 percent of simulated flight conditions, according to David Bushroe, F-22 System Program Office strength and static test lead.

One of the DAB criteria established for CY 00 was to complete the static testing necessary to support envelope expansion of the flight test aircraft at Edwards Air Force Base. All the Air Vehicle level conditions and nine of the local level conditions were defined to support this criterion. The latest test completed was the final local level test condition required for the DAB criteria. Once analysis of the test results is complete, the "clean wing" (without extra fuel tanks or munitions) aircraft configuration will be allowed to fly above current flight limitations, Bushroe said.

The second phase of the test program consists of the remaining local level tests and is designed to exercise the localized structure of the aircraft to ultimate load levels. This test phase will be completed in April 2001. Full-scale static testing of the F-22 is conducted at Lockheed Martin Aeronautical Company's facilities in Marietta, Ga.

Lockheed Martin, the Boeing Company, Seattle, Wash., and Pratt & Whitney, Hartford, Conn. have joined the U.S. Air Force to develop and produce the revolutionary F-22, which is slated to be operational in late 2005. The world's first stealth air-to-air fighter, the F-22 will be virtually unseen on radar, deadly at long range and unmatched at close-in dogfighting. As a true multi-mission fighter, it will also have superb, precision-strike ground attack capability. A multimode electronically scanned radar, internal weapons carriage, vectored thrust and a sophisticated fully integrated sensor array are only some of the revolutionary advantages that Raptor brings to the air combat arena, according to Air Force officials.

SOURCE: Lockheed Martin Aeronautical Company

Website: http://www.lmasc.com/
