

Facility Will Verify F-35 Stealth, Save \$1 Billion

January 23, 2008: The F-35 Program commemorated the completion of the Acceptance Test Facility (ATF) for the F-35 in Building 177 with a ribbon-cutting ceremony at Lockheed Martin Aeronautics' Fort Worth headquarters. The ATF is a one-of-a-kind facility that marks the creation of an advanced technical capability for Lockheed Martin to verify F-35 stealth for the customer.

The ceremony, hosted by F-35 Global Production Vice President Bob Fiorentini of Lockheed Martin, was attended by more than 40 people, including Paul Cushwa from the Joint Strike Fighter Program Office, members of the F-35 ATF team and suppliers from Burns and MacDonald (construction contractor that erected a building inside of a building), Vertex RSI (fabricated turntable, nose hoist and calibration target pylon), Systems Planning Corp. (state-of-the-art MkV^e radar system), and The Howland Co. (field probe analysis). Fiorentini acknowledged the more than four years of hard work undertaken to achieve this program milestone. During the ceremony he commended the ATF team and suppliers for a job well done, noting that the facility was finished ahead of schedule and under budget.

The ATF is a unique facility built around the F-35 aircraft. The ATF includes several pieces of special test equipment such as the vibration-free turntable, turntable pylons, nose hoist, calibration target pylon and radar, that contribute to the process of verifying the final finishes for all three F-35 variants. During testing, the aircraft is placed on the pylons, which are situated atop the turntable. The turntable is then rotated as radar energy is directed at the aircraft.

The facility will save the government more than a billion dollars that would have previously been dedicated to test flights used to verify stealth. Paul Cushwa, from JSFPO Mate and Delivery Production Operations Support said, "It is my pleasure to thank Lockheed for providing us with this wonderful facility, and a facility that will enable us to provide the warfighter with a truly outstanding aircraft."

Terry Mize of Lockheed Martin's LO (Low Observable) Signature group, the team that will lead the main effort to gather and integrate all of the verification data produced by the facility, talked about how the ATF would significantly change their operation. "In the past when anyone tried to build an LO jet it was somewhat of an art. You had unique fixes to every one of the jets; the signature of every jet was a little different. We tried all kinds of things in the past – and here comes the F-35. How do we verify that we can build a fleet of several thousand LO jets?" Mize said ATF is the answer. Today the JSF team is ready to build F-35 at production rates that were unthinkable for a stealth jet just a few years ago. The control room that supports the ATF operation captures the data being measured during testing, analyzes the data and conducts the pass/fail data analysis for the final-finishes application, and delivers that data to the LO Signature group. As recently as a year ago, it took four days to complete this process. The ATF will be able to complete the entire test and process the data in less than one day – a breakthrough for a program that will manufacture one aircraft per working day at full-rate production.

Fiorentini, Cushwa and Mize all acknowledge the tremendous work of the ATF team, led by project engineer Ted King; Subcontract Management administrator Joe Redinger; Greg Raeside of the LO Signature group; Neil Greathouse, Steve Yates and Gil Hallmark of Electronic Labs; and Scott Harrison of Facilities for their accomplishments in completing a facility that will ensure that U.S. Air Force, Navy, Marine Corps and allied pilots are secure when they fly the F-35 in the defense of freedom.