

http://www.acq.osd.mil/mda/ mda.info@mda.mil

7100 Defense Pentagon Washington, DC 20301-7100

04-FYI-0038

3 December 2004

## **Airborne Laser Returns to Flight**

EDWARDS AIR FORCE BASE, Calif. – YAL-1A, the Airborne Laser (ABL) aircraft, returned to flight today for the first time in almost two years, equipped with a sophisticated beam control system designed to detect, track, and condition the high energy laser beam used to destroy hostile ballistic missiles soon after launch.

The modified 747-400 freighter aircraft last flew in December 2002, capping a series of test flights that started five months earlier at McConnell Air Force Base, Kan.

Today's 22-minute flight, and the next several in the planned series, are designed to begin the flightcertification process necessary any time major modifications are made to an airplane. The flight was confined to the sprawling Edwards test range, located about 110 miles east of Los Angeles. Flight characteristics and air data systems performed as expected. The flight was shorter than originally planned as the crew returned to base to investigate some anomalous instrumentation readings. The team will review the test data in detail and continue the flight test program as planned.

The current series of tests will last about four months. After that, the aircraft will be taken out of service again for installation of ABL's two illuminator lasers.

ABL is a component of MDA's boost-phase segment designed to destroy enemy missiles soon after they are launched to provide a defense of the United States, its international allies, or its deployed troops.

The beam control complex installed aboard ABL over the last two years is the most sophisticated of the major ABL systems, which include the aircraft itself, a battle management suite, and an array of high energy and illuminator lasers.

When complete, ABL will be the first combat aircraft relying entirely upon a directed energy device as a weapon.



PHOTO CAPTION: The Airborne Laser (ABL) aircraft, YAL-1A, returned to flight at Edwards Air Force Base, Calif., on December 3, 2004 for the first time in almost two years. It was the first in a planned series of approximately 20 flights that will re-affirm the aircraft's airworthiness and test the newly installed beam control system's ability to detect and track hostile ballistic missiles so they can be destroyed shortly after launch.