



# News Release

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## **Airborne Laser Successfully Completes Low-Power Flight Testing**

Lieutenant General Henry "Trey" Obering III, Missile Defense Agency director, announced today that the Airborne Laser (ABL) program has completed one of its most important milestones to-date. Using all three of the aircraft's laser systems to detect, track, and then engage a "non-cooperative" target aircraft with a low-power laser that is serving as a surrogate for the high-power laser that will be installed aboard the modified Boeing 747-400 aircraft later this year. This is a critically important milestone, as the program has now successfully completed the low-power phase of testing and demonstrated ABL's integrated battle management and beam control/fire control systems in flight by detecting, tracking, targeting and engaging an airborne target.

This most recent development milestone included a number of history-making firsts: lasing an external airborne target using all three ABL lasers--the Tracking Illuminator Laser (TILL) to track the airborne target; the Beacon Illuminator (BILL) to compensate for atmospheric distortion and the Surrogate High Energy Laser (SHEL) to engage the target, called "Big Crow," a modified NC-135 aircraft loaded with test instrumentation and equipped with a missile-shaped profile painted on the side of the aircraft to provide an aimpoint for the three lasers. Cameras onboard Big Crow verified all laser beams hit their intended locations and data analysis has verified ABL's performance is adequate to enter the program's next phase. This is the first time in history an airborne directed-energy platform has successfully engaged a non-cooperative airborne target at significant ranges. The prototype ABL aircraft completed 48 flight test missions, firing its on-board lasers more than 200 times.

Completion of this phase of flight testing satisfies another of the key 2007 "knowledge points" that the Missile Defense Agency uses to measure program success. With the completion of this "knowledge point," efforts will now focus on the installation of the megawatt-class Chemical Oxygen-Iodine Laser (COIL) at Edwards Air Force Base in preparation for high-power testing scheduled to begin in late 2008. The high-power laser will have the ability to destroy a ballistic missile in its "boost phase" -- the first few minutes of flight -- when it is highly vulnerable to the directed energy beam ABL will deliver. The ABL will be the first combat aircraft relying entirely upon a directed energy device as a weapon.

When available for operations, the ABL will be an integral part of a layered ballistic missile defense that will be capable of destroying a ballistic missile of any range, during any phase of its flight—boost, midcourse and terminal.

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