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## Airborne Laser Conformal Window Exposed During Flight

Air Force Lt. General Henry "Trey" Obering, Missile Defense Agency Director, announced today that the Airborne Laser's 1.7-meter-wide conformal window was successfully exposed during flight for the first time, a maneuver necessary for the weapon system to complete its future mission of shooting down a ballistic missile during the boost phase.

The conformal window exposure occurred on May 17 during the eighteenth flight in the current test series for the Airborne Laser aircraft. The window, which is shaped like a huge contact lens, took five years to manufacture and is one of the most complex optics ever developed. It is mounted in a rotating turret-ball assembly on the nose of the Airborne Laser aircraft. During takeoff and landing, the window is rotated into the "stowed" position where it is protected by a gasket and shield. During an operational mission, three of the four lasers that propagate outside the aircraft, including the megawatt-class "killer" laser, are fired through the conformal window.

Although the lasers have not yet been installed aboard the aircraft, the exposure test, referred to as "unstowing the turret ball," is an important part of the flight test series being conducted this year.

The Airborne Laser is one of the boost-phase segments of the overall integrated missile defense system, being developed to defend the United States, its allies and its deployed troops from ballistic missile attack.



Photo Caption: The Airborne Laser's optically-ground conformal window was exposed during a test flight on Tuesday, May 17. It was the first time the 1.7-meter optic, one of the most complex ever developed, had been unstowed during a flight, a maneuver necessary for the weapon system to complete its mission of shooting down a ballistic missile during the boost phase. During an operational mission, three of the four lasers that propagate outside the aircraft, including the megawatt-class "killer" laser, are fired through the window. USAF Photo by Jim Shryne.