



News Release

LOCKHEED MARTIN COHERENT TECHNOLOGIES UNVEILS *WINDTRACER TERMINAL DOPPLER SOLUTION*

New All-Weather Wind Detection System Combines Lidar and Radar to Improve Flight Safety and Runway Management

BOULDER, Colo., Oct. 27, 2005 – Lockheed Martin Coherent Technologies, Inc., a supplier of laser-based remote-sensing systems, is debuting its new *WindTracer*[®] *Terminal Doppler Solution* at the 50th Annual Conference and Exposition of the Air Traffic Control Association, Booth #912, which opens on Sunday in Dallas. The *WindTracer Terminal Doppler Solution* combines Lockheed Martin's (NYSE:LMT) proven lidar technology with unique radar technology capable of high performance and reduced ground clutter interference. The result is an all-in-one wind detection system that increases the safety of flight operations for the aviation industry and the traveling public, and improves runway management with direct economic benefit.

The company's flagship commercial product, *WindTracer*, was designed to provide air traffic control personnel with advanced warning of wind hazards, enabling them to offer precise, timely direction to pilots during takeoff and landing. It uses an eye-safe laser with precision pointing and scanning capabilities to reflect off aerosols 100 times smaller than the width of a human hair, collecting wind data over a broad volumetric area.

In addition to LMCT's lidar technology, and all the features and capabilities already offered in *WindTracer*, the new *WindTracer Terminal Doppler Solution* integrates traditional Doppler radar technology, resulting in an all-encompassing, economical airport solution. Rain or shine, the *WindTracer Terminal Doppler Solution* achieves wind shear detection rates of at least 95 percent. The unit is self-contained within an environmental equipment shelter; it is typically sited on airport grounds and operates unattended. In the tower, air traffic controllers reference alerts generated by the lidar and radar, which are combined into one data stream and displayed in a manner consistent with that used by the conventional Terminal Doppler Weather Radar.

"Radar has a successful track record of hazard detection during storm conditions when large, moist particles are present. Lidar excels in dry and clear air conditions because it reports on data received when the laser reflects off naturally-occurring, microscopic dust particles," said Dr. Stephen M. Hannon, products division director for Lockheed Martin Coherent Technologies. "In the *WindTracer Terminal Doppler Solution*, radar and lidar work together seamlessly to produce the most comprehensive weather hazard data available from one compact unit."

The first airport installation of *WindTracer* occurred in 2002 at the Hong Kong Observatory, the meteorological organization that forecasts weather and issues warnings on weather-related hazards at the Hong Kong International Airport and within a designated airspace over the South China Sea. For more than three years, *WindTracer* has been in service at Hong Kong Airport,

achieving a 95 percent detection rate for wind shear events, confirmed by pilot reports. In addition, LMCT recently concluded a multi-month evaluation of *WindTracer* by the Federal Aviation Administration at McCarran International Airport in Las Vegas. *WindTracer* has been successfully used by airports, the Department of Defense, NASA and other government agencies for a variety of applications.

This announcement follows closely on the heels of Lockheed Martin's acquisition of Coherent Technologies, Inc. to form the new wholly-owned subsidiary on Oct. 5, 2005.

Lockheed Martin Coherent Technologies, Inc. is Lockheed Martin's center of excellence for coherent laser radar development. The company's roots date back to 1984 when Coherent Technologies, Inc. was founded on the premise that solid-state laser radar technologies would prove invaluable to remote-sensing applications. Today, the company maintains its position as the global leader in laser radar technologies and products for airport, defense and meteorological applications. More than 185 professionals work in two locations near Boulder, Colo.

Headquartered in Bethesda, Md., Lockheed Martin [NYSE:LMT] employs about 135,000 people worldwide and is principally engaged in the research, design, development, manufacture and integration of advanced technology systems, products and services. The corporation reported 2004 sales of \$35.5 billion.

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