

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

FORM 8-K

CURRENT REPORT  
Pursuant to Section 13 OR 15(d) of The Securities Exchange Act of 1934

Date of Report (Date of earliest event reported) October 11, 2005



FLIGHT SAFETY TECHNOLOGIES, INC.  
(Exact name of registrant as specified in its charter)

<u>Nevada</u>	<u>000-33305</u>	<u>95-4863690</u>
(State or other jurisdiction of incorporation)	(Commission File Number)	(IRS Employer Identification No.)

28 Cottrell Street, Mystic, Connecticut 06355  
(Address of principal executive offices and Zip Code)

(860) 245-0191  
(Registrant's telephone number, including area code)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

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Item 7.01. REGULATION FD DISCLOSURE

**Cautionary Statement Pursuant to Safe Harbor Provisions of the Private Securities Litigation Reform Act of 1995:**

"Safe Harbor" statement under the Private Securities Litigation Reform Act of 1995: This report contains forward looking statements identified by the use of words such as should, believes, plans, goals, expects, may, will, objectives, missions, or the negative thereof, other variations thereon or comparable terminology. Such statements are based on currently available information which management has assessed but which is dynamic and subject to rapid change due to risks and uncertainties that affect our business, including, but not limited to, the outcome of an informal inquiry by the SEC that appears to be in connection with certain analysts reports about us and our press releases, whether the government will implement WVAS at all or with the inclusion of a SOCRATES® wake vortex sensor, the impact of competitive products and pricing, limited visibility into future product demand, slower economic growth generally, difficulties inherent in the development of complex technology, new products sufficiency, availability of capital to fund operations, research and development, fluctuations in operating results, and other risks detailed from time to time in our filings with the Securities and Exchange Commission. Any statements that express or involve discussions with respect to predictions, expectations, beliefs, plans, projections, objectives, goals, assumptions or future events or performance are not statements of historical fact and may be forward looking statements. Forward looking statements involve a number of risks and uncertainties which could cause actual results or events to differ materially from those presently anticipated.

Note: Information in this report furnished pursuant to Item 7.01 shall not be deemed to be "filed" for purposes of Section 18 of the Securities


Exchange Act of 1934, as amended, or otherwise subject to the liabilities of that section. The information in this current report shall not be incorporated by reference into any registration statement pursuant to the Securities Act of 1933, as amended. The furnishing of the information in this current report is not intended to, and does not, constitute a representation that such furnishing is required by Regulation FD or that the information this current report contains is material investor information that is not otherwise publicly available.

The attached articles were written about testing of our SOCRATES® wake vortex sensor technology at Denver International Airport.

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**SIGNATURE**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

FLIGHT SAFETY TECHNOLOGIES, INC.  Date: October 11, 2005  	
Samuel A. Kovnat Chief Executive Officer	

**EXHIBIT INDEX**

Exhibit		<u>Description</u>
99.1		October 7, 2005 Article Published on cbs4denver.com website.
99.2		October 9, 2005 Article Published on The New York Times website.



Published October 7, 2005 on the cbs4denver.com website

## **Lasers Could Warn Of Deadly Airplane Turbulence**

**By Steven K. Paulson, Associated Press Writer**

*(AP) DENVER* Pilot Steve Brown found out what it's like to run into the turbulent wake of a jetliner when his small prop-driven plane veered sharply while he was trying to land in Dallas, the wings gripped by an invisible hand.

"Think of it as a miniature tornado," he said. "You're flying along just fine and all of a sudden, the plane starts going into a bank," said Brown, senior vice president of the National Business Aviation Association in Washington.

Brown landed safely, but federal investigators blame the miniature tornadoes, called wake vortexes, for bringing down dozens of planes, including a jetliner that crashed in 2001, killing 260 people. A wake vortex can last up to three minutes and drift for thousands of feet, even crossing nearby runways.

Friday, an aviation technology company demonstrated a laser listening system being tested at Denver International Airport that's designed to spot vortexes and other dangerous air currents and warn pilots and controllers.

Flight Safety Technologies President William Cotton said the device could also allow airplanes to land closer together when controllers are sure a wake vortex is out of the way, potentially saving time and costly fuel.

The lasers act like huge microphones focused on the end of the runway. A burst of light is displayed on a computer screen as a jet flies overhead in the landing pattern. Moments later, a burst of light forms behind the jet as a vortex forms, then drifts slowly out of the landing pattern.

In some cases, the path is clear in as little as 15 seconds. However, because little is known about the phenomena, the FAA has been forced to keep planes three or four minutes apart to make sure the vortex is out of the way. The problem has become especially acute at the nation's 25 or 30 hub airports, which are already congested.

In 2001, American Airlines Flight 587 hit the wake turbulence of a Boeing 747 five miles in front of it. Everyone onboard was killed when the tail sheered off and the Airbus A300-600 plunged to the ground.

The airline industry realized 33 years ago it had a problem when a Delta Airlines DC-9 apparently got caught in the wake of an American Airlines DC-10 that had just completed a touch and go landing in Fort Worth, Texas, causing the DC-9 to crash.

The Federal Aviation Administration conducted tests and determined that the crash was caused by a small tornado the size of a plane's wing span created when large planes take off or land. The agency ordered planes to fly as much as six miles apart on takeoff and landing to allow the wake turbulence to dissipate.

Cotton said allowing planes to land closer together when conditions are good could save millions of dollars.

He said tests show airports could increase the number of landings by as much as 20 percent an hour if they knew when it was safe to bring them in closer together.

Cotton said that could save Chicago's O'Hare International Airport \$129 million a year in operating costs. A 6 percent increase at Dallas-Fort Worth International Airport would mean an additional seven planes an hour, he said.

"These are big dollars," he said.

Cotton said it would cost about \$10 million to install the equipment at a major airport, and it could be operating in five years if it wins approval from the FAA and pilots.

Wayne Bryant, a NASA manager working with Cotton on the project, said the technology is promising, though further tests are needed.

"We're really in a position now to make a difference," he said.

Published October 9, 2005 on The New York Time website

## With Laser 'Ears,' an Effort to Cut Air Traffic Delays

By MATTHEW L. WALD

DENVER, Oct. 7 - As planes mosey 800 feet overhead, on their way to touchdown at Denver International Airport, there is a ghostly roar - caused by turbulence left in the engines' wakes, mostly in the form of two horizontal tornadoes, one near each wingtip.

On bad weather days, it is the fear of those tornadoes, called wake vortexes, that determine how close the next airplane can follow, and that, in turn, determines how many airplanes can land on a runway in an hour.

But in a windblown wheat field two miles north of the runway end, something new is listening to that roar. These are giant laser "ears" that can pinpoint the airplanes' wake and watch it sink, blow sideways in the crosswind or decay like skywriting.

Finding the location of the invisible tornado could be crucial to reducing air traffic delays. On good days, planes can follow each other at a distance of three miles or a little less, while taking care to stay upwind of the plane ahead, to avoid the wake turbulence.

But when pilots cannot see one another and predict the vortex location, controllers are supposed to direct them to stay three to six miles apart, depending on plane type. Planes are most vulnerable to the vortexes as they are landing because that is when they are flying most slowly, and slow planes have poor control if a vortex starts to roll them over.

Planes also generate the strongest vortex when they are slow because they tend to be flying with the nose pitched up, said William Cotton, president of the company performing the test here, Flight Safety Technologies of Mystic, Conn. Mr. Cotton was formerly the chief technical pilot with United Airlines.

Vortexes are not an issue at airports with low traffic counts, but are especially serious at busy airports with a mix of traffic. "The problem is getting worse, fundamentally because of regional jets," said Wayne H. Bryant, a researcher at the National Aeronautics and Space Administration and a leader of the experiment here. With the arrival of Airbus's giant A380 double-decker plane, it could get worse yet.

A number of planes have crashed because of wake turbulence over the years. In 1972, a DC-9 crashed at Greater Southwest Airport in Fort Worth because of wake turbulence left by a larger DC-10 that had been two miles in front.

Flight Safety, after seven years of testing, hopes to have a system in place by next year that could tell controllers when the wake vortex is not a factor, increasing the capacity of some runways by 20 percent. Federal Aviation Administration rules require controllers to consider parallel runways that are fewer than 2,500 feet apart - like those at Philadelphia, Cleveland and San Francisco - as a single runway because a vortex could drift from one to the other. That makes it impossible to conduct closely spaced landings on parallel runways. A system that definitively located the vortexes could solve that problem.

If the system cuts bad-weather delays as predicted, some experts say, it could save tens of millions of dollars a year at a single busy airport.

"It has a tremendous potential in San Francisco, and in places like O'Hare," said Rocky Stone, an air traffic technology expert at United Airlines, who attended a briefing here Friday on the technology.

The general outline sounds like science fiction, using beams of light to locate waves of sound, but years of data collection have demonstrated an ability to "see" the invisible vortices and watch them drift out of the flight path of following planes. There are numerous practical problems, like the fact that the platforms that hold the lasers have to be completely vibration-free, and that the system may not tolerate stray noises from outside. The system measures the changes in density produced by sound waves from the vortexes. The lasers travel more slowly through disturbed air, although at the distances these lasers travel, several hundred feet at most, the timing differences are extremely small.

To determine where the sound is coming from, the system uses eight lasers in a row. The sound reaches each one at a different moment, and by timing the interval, a computer can determine the direction the sound came from. A second row of eight lasers on the other side of the runway also gives a direction. The source of the sound - the vortex - is where those two lines meet in space.

Technicians have installed the lasers on towers in four different arrays, angled slightly, so they focus on a spot about six-tenths of a mile from the towers, and about 1,000 feet in the air. This remote sensing, if it works, holds the promise of being able to put the equipment on low structures on the airport grounds, and sense conditions far distant.

Not everyone is convinced that the concept is practical, or that even if it is, that the approach by Flight Safety is the right one. The federal investment, about \$15 million since the late 1990's, so far, was not the choice of the Federal Aviation Administration or the NASA; it was ordered directly by Congress. And there are competing ways to locate the vortexes.

George Donohue, a professor at George Mason University in Virginia and a former associate administrator of the F.A.A. for research and acquisitions, said that other sensing systems might be more effective.

## Testing a Plane's Wake

A new system can detect wake turbulence, a vortex of air that forms behind a plane's wings. The system works by measuring noise coming from the plane and from the turbulence.

As an aircraft enters the detection range, the noise disrupts a series of laser beams. The system will have a record of how much disruption a plane's noise should normally cause.

As the plane moves out of the range, any additional disruption can be attributed to wake turbulence, so the system can determine the location and the amount of turbulence based on the impact of the sound.

