

Mystic Company Developing Flight Technology

By **ROBERT A. HAMILTON**

Day Staff Writer

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Mystic - A new federal initiative to spend \$206 million over the next eight years on research into systems that detect wake turbulence at busy airports could provide a significant boost to a local company that has its own device in field trials.

Flight Safety Technologies plans tests of a simple version of its Socrates system at Denver International Airport this summer, and could move to tests of a working prototype at Anchorage International Airport in Alaska by 2005.

Flight Safety Chairman Sam Kovnat said the so-called Beta test period could be expanded to other airports that have asked to be included in the trials, "and we're getting some international interest as well." Kovnat said over the last two days the company has received an infusion of about \$700,000 from investors exercising warrants that were issued last September, giving it about \$1.5 million in cash and no debt, a strong position for a fledgling technology company.

Flight Safety also has allied with some of the strongest companies in the field, including Boeing, Lockheed Martin and Anteon.

"We're really moving forward," Kovnat said. "There are no guarantees, but considering how most things like this go, we're in quite a comfortable position."

Socrates is an acronym for Sensor for Optically Characterizing Remote Acoustic Turbulence Emitting Sound, a system that uses lasers to monitor wake turbulence around airports, which can cause aircraft accidents.

In recent weeks, the Federal Aviation Administration has issued a Mission Needs Statement that formally outlines a program of research and development to develop a wake turbulence warning system as a way to relieve congestion safely at major airports.

Currently the last departing aircraft has to be at least 4.6 miles away before an airport can authorize another takeoff. With a detection system, studies have shown that can be reduced to less than 3.5 miles, which would allow the airport to have about 25 percent more aircraft movements on any given day.

According to the Mission Needs Statement, that would translate to an average of 1,500 fewer hours of departure delays at the nation's top 35 airports.

In filings with the Securities and Exchange Commission, Flight Safety acknowledges that it cannot guarantee how much of the increased funding it will receive. But Kovnat noted that the company will only need a small portion of the money, about \$4 million a year, to continue development of Socrates.

Flight Safety, founded in 1997, has so far relied primarily on funding through NASA, which was usually introduced late in the budget process by congressional committees.

"The fact that this is now becoming officially recognized as a requirement, and the administration has now identified the funding needs, is just huge," Kovnat said.

But the FAA Mission Needs Statement also said the program has a "moderate to high risk ranking" because the technology is still not sufficiently mature and controllers and pilots might not accept a ground-based system. In other countries, tests are under way on systems that would be based on the individual planes, and use lasers to detect turbulence out more than a mile. Those systems could be fielded in five to eight years, their advocates say.

This summer's test of Socrates at Denver Airport is scheduled to begin Aug. 18 and continue through mid-September. The company is also promoting Unicorn (Universal Collision Obviation and Reduced Near-Miss), a small airplane collision avoidance and ground proximity-warning device.

NASA, the U.S. Department of Transportation Volpe National Transportation Systems Center and the German Aerospace Center will be participating.

r.hamilton@theday.com