



Thales and L-3 Communications venture ACSS claim the first-ever 'smart' cockpit instrument designed to alert pilots of ground collision danger.

# ACSS Aids in Avoidance of Ground Collisions

The world's first "smart" cockpit instrument to alert pilots of a potential collision on the ground is being unveiled here at NBAA by ACSS, the joint venture of L-3 Communications and Thales,

where you are in relation to other aircraft on the ground—it also tells you when an impending or potentially dangerous situation is about to occur," Kris Ganase, president of ACSS, told *Show News*.

**"I don't want to berate my competitor, but the GPS in my car gives me more information than my competitor's product."** —Kris Ganase, president, ACSS

known for its airborne TCAS II and T2CAS Traffic Collision Avoidance Systems.

A demonstration of the pilot warning system can be seen at Booth 1135, where recordings of an actual "near miss" runway incursion incident at Chicago O'Hare are combined in a reenactment to show how ACSS's new Surface Area Movement Management (SAMM) would have helped the crew prevent the situation.

"The system not only shows

"For example, on the airport map display a runway will change color as you approach it, turning red if it is active or if somebody is on it. The system also alerts the crew with voice warnings."

Ganase said SAMM goes far beyond any other system on the market in that it predicts a conflict and adds a conflict alert to situational awareness on the ground. It is one of the first available to business aviation based on Automatic Dependent Surveillance-Broadcast (ADS-B) reporting, and, like TCAS, tracks every aircraft in the vicinity equipped with today's standard-fit Mode S transponder.

"The only other product out there is a voice in the cockpit telling you that you are approaching Runway 27R," said Ganase. "It doesn't tell you there is a 747 about to land on your head. Ours will tell you. SAMM tells you to get out of there."

SAMM is one of two ADS-B

products being unveiled as software upgrades to existing and future ACSS TCAS black boxes—the other helps aircraft approaching a busy airport sequence themselves and is intended for airline fleets. They are the first products to be rolled out under the SafeRoute family name, which will encompass a range of ADS-B software solutions designed to improve safety and efficiency for flight operators in the airport environment.



Kris Ganase.

SafeRoute can be installed in any of ACSS's TCAS 2000, T2CAS or later safety "boxes," including TCAS 3000, and can also be hosted in any ARINC 653-compatible black box made by competing avionics companies. There are currently some 7,000 TCAS 2000s in airline and business aviation service that could be upgraded with SafeRoute.

Older systems might need some modifications to display SafeRoute, Ganase said. —John Morris

## TCAS 3000 Certification Soon

The world's first third-generation traffic alert and collision avoidance system, TCAS 3000, will be certified by the end of the year and appear on the Dassault Falcon 7X in first quarter 2006, according to ACSS, the Phoenix-based avionics company owned by L-3 Communications and Thales.

"This is not just another TCAS," says ACSS president Kris Ganase. "It is the first application of our common computing platform, which we call our Surveillance Processor." This black box is available in either a four- or six-MCU form factor, and enables aircraft owners to upgrade their entire suite of safety avionics

systems by adding software. The many functions that can be added to the new hardware platform include modules for terrain awareness (TAWS), Mode S transponder and automatic dependent surveillance-broadcast (ADS-B) capability.

Among the launch customers for TCAS 3000 is UPS. The airline, according to Ganase, was initially drawn to the SafeRoute sequencing and runway incursion product and decided to install TCAS 3000 instead of upgrading the current ACSS TCAS systems across its entire fleet. UPS will also integrate TCAS 3000 into the flight deck of its Airbus A380s, he notes.

### Ready-to-Fly Aircraft Mods

Could NBAA become the safety software bazaar? One can see the day when the latest safety software will be purchased at the show on a DVD or flash card and loaded into the aircraft before departing for home.