



Kris Ganase says ACSS's merging and spacing system will be launched by UPS.

ACSS Develops Fuel Saver

A merging and spacing system that will save UPS millions of dollars a year in fuel costs is being developed by ACSS, the joint venture of L-3 Communications and Thales known for its airborne TCAS II and T2CAS Traffic Collision Avoidance Systems.

The ADS-B based product will allow pilots and air traffic control to space the aircraft for maximum efficiency as they swarm to a hub airport at the same time. They will be able to adjust speeds from hundreds

of miles out so as to line up like beads on a string and avoid circling and holding patterns.

"The program is well under way, and we plan to be in flight test toward the end of this year on five UPS 757s and our company aircraft," Kris Ganase, president of ACSS, told *Show News*. "We are still on schedule to certify by the middle of next year."

UPS became the launch customer for the Merging and Spacing system

after estimating that if it worked 80% of the time at just one airport it would save 880,000 gallons of fuel per year. "Multiply that by the price of Jet A-1, which is about \$2 now, and that savings alone will buy the whole thing," Ganase said.

Merging and Spacing is the second ADS-B product offered as software upgrades to existing and future ACSS TCAS black boxes—the other being SAMM (Surface Area Movement Management), the world's first "smart" cockpit instrument to alert pilots of a potential collision on the ground. SafeRoute will eventually encompass a range of ADS-B software products designed to improve safety and efficiency for flight operators in the airport environment.

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 avion-

ics companies. There are currently some 9,000 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.

UPS decided to upgrade to the latest TCAS 3000 as part of its SafeRoute purchase. It also elected to display SafeRoute information on the Boeing Electronic Flight Bag, leading ACSS and Boeing to team to market their products together.

Future ADS-B products for SafeRoute could include fuel-savers such as in trail information that would allow aircraft to fly closer together, and most-efficient descent profiles from cruise to landing (including aspects of merging and spacing). For the military, ACSS is looking at formation-keeping.

ACSS is exhibiting with L-3 Communications in Hall 4, Stand A14.

—John Morris