



#### AVIATION CENTRAL

For seven days every other June, all eyes from the aviation world are attending, watching on television or reading about the Paris Air Show. This year there are 2,000 exhibitors from 42 countries in the halls and 361 chalet units. There also are about 140 aircraft for all of the attendees to gawk at.

## UPS says ADS-B will save \$3 million a year

by Stephen Pope

United Parcel Service will save millions of dollars a year by introducing technology that is designed to provide improved aircraft spacing for arriving aircraft.

UPS will install automatic dependent surveillance-broadcast (ADS-B) avionics across much of its fleet, allowing flight crews to provide their own spacing on certain arrivals. Karen Lee, director of flight operations for UPS, said that once the fleet is equipped the company will save nearly \$3 million in fuel costs plus additional gains from capacity improvements at its shipping hub in Louisville, Kentucky.

#### CDA Approaches

"Each of our aircraft will save between 250 and 465 pounds of fuel per arrival," Lee said. "That equates to about 900,000 gallons of fuel a year," a figure that does not include fuel savings on the ground, where taxi delays are expected to be much shorter thanks to the technology and efficiency gains due to the time ADS-B will save.

Developed for UPS by Aviation Communications and Surveillance Systems (ACSS), a joint venture of L-3 Communicatons and Thales, the so-called Safe Route technology provides symbology on an electronic flight bag display showing the position of all other appropriately equipped aircraft. Pilots can select any target on their screen and are automatically given airspeed commands to follow the aircraft at set distance.

Controllers are still responsible for separating airplanes, but

their role is reduced to that of aircraft "manager," Lee said. Crews can fly continuous descent arrival (CDA) procedures into Louisville and then self-separate on final approach for time and fuel savings. This merging and spacing will also enable crews to throttle back to idle power and stay there for most of the descent.

"The controllers love it, the pilots love it," she said. "ADS-B will increase our capacity by 10 to 15 percent once we install it on all our airplanes."

#### August Start

Lee said UPS eventually will equip all 107 airplanes in its Boeing 757 and 767 fleet as well as the 10 747-400s it has on order. The company hopes to start flying with the technology in August, but the full range of savings and capacity improvements won't be felt until a large percentage of the fleet has been equipped with SafeRoute, Lee said. "We might then consider bringing this capacity to other hubs," including places like Newark, New Jersey, and Cologne, Germany.

Widely expected to be required in all commercial airplanes by 2020, ADS-B technology lets pilots see what airplanes are around them, how fast they are flying, their flight numbers and their headings.

U.S. Federal Aviation Administration officials say the ground infrastructure required to operate the technology would be cheaper than radar to install and maintain. At a press conference here yesterday, FAA associate administrator for safety Nicholas Sabatini said proposed rulemaking will be introduced this September. □