

**The carrier plans to use 40,000 disposable tags in a one-month test designed to see how RFID can transform its "under-wing" operations.
**

June 20, 2003 - Last year, airlines in the US lost an average of about four bags for every 1,000 passengers carried. Delta Air Lines lost fewer than most, but it thinks RFID may help it do a lot better -- and provide additional benefits along the way.

Delta announced that it plans to test RFID on selected flights from Jacksonville, Fla., through its Atlanta hub this fall. During the 30-day test, which is being done in conjunction with the Transportation Security Administration (TSA), more than 40,000 bags will be tagged and tracked as they move through the system.

The fundamental goal is to see if RFID can transform the way Delta does business. "Under-wing operations have never had a high concentration of technology thrown at them," says Pat Rary, manager of baggage planning and development for Delta. "We're all doing things the same way they handled baggage on trains 50 years ago. Our goal is to see if RFID can give us a complete and total understanding of where the bag is in our operations."



Delta's Rary

For the test, [Matrics](#) of Columbia, Md., and [SCS Corp.](#) of San Diego, Calif., will supply RFID inlays, which operate in the 900 MHz range (UHF). [Moore Wallace](#), a multinational technology and printing company, will convert them to baggage tags.

The paper tags will be printed at the check-in counters at Jacksonville Airport. They will look like regular tags, with all of the normal information that airlines print on bag tags. An RFID reader will also scan the embedded RFID tag's serial number and associate it with the passenger. Readers will be placed at five key read points, including the baggage carousel at Atlanta.

One goal of the test is to see if the bags can be diverted en route when flights change. Airlines struggle to identify a specific bag belonging to a passenger who misses a connecting flight. During the pilot, Delta will test the ability to identify the bag and send a wireless message to staff in a position to pull the bag and send it to a different destination with the passenger.

Rary says Delta has been looking at RFID for more than two years and believes the technology is now reaching maturity. The company is looking to deploy it to track not just luggage, but also US mail, cargo, equipment, spare parts and other items.

"We're focused on understanding the technology and how it can be integrated into a company's environment," Rary says. "We want to understand the implication of having the data and how it can affect our operations and what the ROI is."

Delta chose to work with two RFID tag suppliers because they use slightly different approaches. Matrics' tag is based on the Auto-ID Center's Class 0 specification and carries only a serial number programmed at the factory. SCS's tag allows Delta to write some information to the tag once. "We want to find out who can literally supply product that can affect our business," says Rary. "We've found two prime candidates. [Alien Technology](#) is also right there with them."

Other airlines have run tests, and the FAA has been working for several years on determining the benefits of RFID. San Francisco Airport uses RFID tags to identify the baggage of high-risk passengers, so the bags can be removed from the conveyor and run through an bomb detection scanner. Jacksonville has a similar system.

But the industry is unlikely to adopt RFID for baggage tracking until the major carriers agree on a standard. The International Air Transport Association, a trade group, has been working to establish a standard. The TSA may also play a role in promoting a standard, at least in the US, if it determines that RFID can greatly improve the safety of air travel by preventing terrorists from sneaking bombs on planes.

Rary says Delta is running the test primarily to determine what benefits RFID offers Delta internally. But it may take a couple of years before it begins deploying the technology. "You wouldn't see a full roll out until [tag] prices drop and the airline revenue environment improves," he says.

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