

Airbus in January placed a multi-year order to equip its A350XWB fleet with radio frequency identification (RFID) tags for flyable components.

Memory chip developer Tego, Inc., of Waltham, Mass., and Paris-based firm MAINtag SAS will provide two designs of their jointly developed "FLYtag" product line, initially to tag some 1,500 parts on the new widebody.

Tego is supplying the 8 Kbyte memory chip specified by Airbus, which is designed to the Air Transport Association (ATA) Spec 2000 data standard. MAINtag provides the tags, conforming to the Society of Automotive Engineers (SAE) AS5678 aerospace standard.

The order, announced Jan. 19, was described as a pioneering effort to introduce RFID tracking on aircraft. Airbus reports 505 orders for three variants of the A350, potentially representing hundreds of thousands of RFID tags.

"What Airbus has done here is provide a contract vehicle and a pricing model to allow the industry to get up and running pretty seamlessly without having to use a lot of contractual activities to make the whole thing work," said Timothy Butler, Tego president and CEO.

RFID uses radio frequency waves to transfer data between a reader and the tagged components. The tags developed for use on aircraft are "passive," without a dedicated power supply. The A350 widebody will be the first Airbus aircraft to use the passive RFID tags on flyable parts. Boeing has said it will use RFID tags for "maintenance-specific parts" on the 787 Dreamliner.

Airbus on Nov. 26 introduced a new maintenance, repair and overhaul strategy supporting RFID adoption for "value chain visibility," with tracing of both flyable and non-flyable components over their total lifecycle.

The RFID tags on flyable parts will support improved aircraft configuration management and line maintenance, repair shop optimization, warehouse logistics, payload tracking and life-limited parts monitoring, the companies said.

"Broadly speaking what they're looking to do is tag both pressurized and non-pressurized flyable parts," Butler said. "Pressurized flyable parts are inside the cabin — initially avionics equipment, audio visual equipment, seats, materials, life-limited parts like oxygen generators, potentially life vests where there's not as



Two designs of the FLYtag radio frequency identification (RFID) tag, seen here in relation to a Euro, will be supplied to Airbus for application across the A350XWB fleet. Airbus specified an 8 Kbyte memory chip to tag thousands of aircraft parts.

much information required but there's a need to maintain reporting requirements.

"In non-pressurized areas, you're talking about major repair and overhaul areas [such as] jet engines, the wings, major components and subassemblies of those components," he said. "It's really permeating throughout the whole plane."

Butler said Tego had already started shipping memory chips to MAINtag. The tagging of components is expected to begin later this year and in 2011. The A350 is expected to enter service in 2013.

Other aerospace manufacturers and suppliers have expressed interest in RFID tagging, Butler said.

"What we've heard from a lot of the manufacturers and the OEMs is that once this gets implemented, [they will] begin incorporating into the designs of all their parts going forward these sorts of tags," he said. "In our conversations with the OEMs, virtually everyone that we have talked to — and it's over a dozen at this point — are expecting privately to begin implementing and tagging virtually their whole inventory over the course of the next couple of years." —*Bill Carey*

MC-21 Actuation

Goodrich Corp. was selected by Irkut and Aviapribor of Russia to provide the flight control actuation system for the new Irkut MC-21 family of single-aisle commercial aircraft, the company announced Feb. 1.

The MC-21 is being developed by Irkut as a family of short-to-medium range airliners, carrying between 150 and 210 passengers. Initial entry into service is planned for 2016.

Irkut has selected Rockwell Collins to provide communications, navigation and surveillance equipment and pilot controls.

Goodrich will contract with Aviapribor to design, develop and produce primary and secondary flight control actuation for all variants of the MC-21. In addition, Goodrich will provide complete actuation system integration optimized for the aircraft.

"The new MC-21 aircraft will benefit from lower weight, enhanced reliability and ease of maintenance through the latest Goodrich fly-by-wire flight control technology," said Jack Carmola, Goodrich segment president for Actuation and Landing Systems. "We look forward to developing a long and successful relationship with Aviapribor and Irkut."

Aircell Funding

In-flight connectivity system provider Aircell said Jan. 21 it had secured \$176 million in equity funding from new and existing investors, the proceeds of which will be used for network expansion and operating needs.

Aircell said its Gogo in-flight Internet service has been deployed on more than 700 commercial aircraft, with commitments from nine airlines.

"This substantial capital raise is a strong endorsement of our business achievements to date," said Ron LeMay, Aircell president and CEO.

"Aircell is well positioned to continue its ongoing aircraft deployment and rapid acceleration in customer adoption of Gogo throughout 2010 and beyond."