



*(Auto-ID) is the preferred technology for automatic data collection because it is the simplest means available to meet the airlines' tracking needs."*

*- Air Transport Association  
(Preamble to Spec 2000, Chapter 9)*

## ATA Spec 2000 Solutions

*OATSystems' RFID Solutions give you a new level of control over your manufacturing, logistics and service operations, providing you with detailed visibility and process monitoring at a single site, or across multiple facilities.*

### Improving Aircraft Quality and Safety with Part Traceability

Across all industries, arguably the most complex supply chains are managed by Aerospace and Defense firms. The chain of custody for aircraft and their component parts changes continually through multiple manufacturers, airlines, leasing companies and maintenance firms, over decades of service



Aerospace manufacturers, logistics companies and airlines require traceability of aircraft component parts throughout their service life to ensure documentation accuracy and aircraft safety. The Air Transport Association (ATA), the industry trade association for U.S. airlines, along with global counterparts, recently expanded guidelines for component parts tracking in **ATA spec 2000**, with specific recommendations for automating part traceability with RFID in Chapter 9.

RFID technology provides real-time visibility into the location, status, manufacturing and maintenance history of component parts and subassemblies as aircraft are assembled, inspected, placed in service and maintained over time. **OAT ATA Spec 2000 Solutions** automate part marking and traceability, leveraging your existing business processes and enterprise systems.

### Features:

- Creates Birth Records & Maintenance Records per ATA spec 2000 guidelines
- Writes & updates part information on High Memory Tags & Control Memory Buttons for use in manufacturing, final assembly & maintenance operations
- Provides optional Integration to Enterprise Systems & Processes

### Information Shared by Trading Partners

	Supplier	OEM	3PL	Airline	MRO
Original part manufacture/birth record	X	X			
Parts installed in larger subassemblies	X	X			
Part removal, part maintenance & repair	X				X
Part modification, overhaul	X	X		X	X
Part shipping, receiving, warehousing	X	X	X		X

Manufacturing and service history may be shared by multiple parties for 30+ years while an aircraft is in service.

### Automating Part Marking & Traceability

Aerospace manufacturers are increasingly using high-memory RFID tags to mark specific components that require monitoring. High-memory tags can store 30 years of manufacturing and service history directly on component parts, and can be accessed by any partner in the value chain.



Applying and encoding the tags creates an additional step in the manufacturing process. Automated tag encoding streamlines part marking. It can also be used by the manufacturer to track work-in-process and to provide valuable documentation at final assembly.

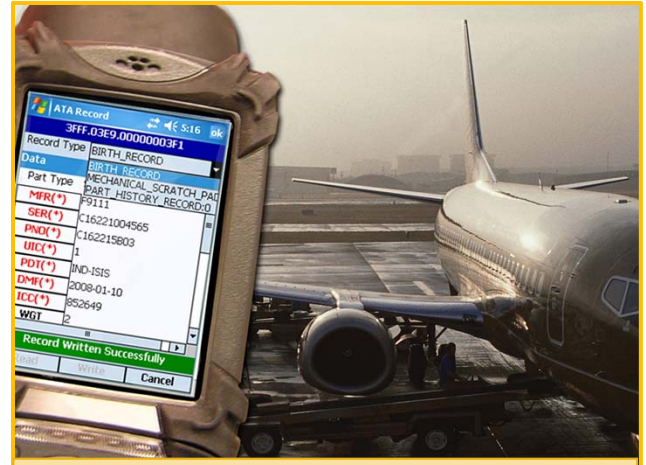
*“...while (RFID) tags won’t be used for maintenance and repair until the aircraft enter into service, they will be used in other processes by the suppliers when they build them, and by Airbus when we install the parts”*

- Carlo Nizam,  
Airbus

(As quoted in RFID Journal, May 2010)

OAT ATA Spec 2000 Solutions incorporate proven, automated processes for applying RFID tags to products within a production or distribution facility. The solutions incorporate RFID best practices, developed across hundreds of deployments. Solution packages include configurable processes for encoding, applying, and verifying RFID tags, with optional processes for ERP system integration, work-in-process tracking, materials management, kitting, shipping & receiving.


By providing accurate, reliable tagging and encoding at source manufacturing, OAT ATA Spec 2000 Solutions provide process efficiency along with downstream visibility. OAT solutions are built on the OAT Foundation Suite™ — the most widely-deployed RFID middleware platform, with built-in integration to enterprise applications.



*While servicing an aircraft, a technician retrieves the manufacturing and maintenance history of a component part, verifies the work order and updates the log once work is completed.*


## Optimizing Manufacturing Operations

Part marking with RFID provides benefits across the value chain. Aerospace suppliers can gain additional visibility into their own operations by tracking component parts through manufacturing and logistics, and by enriching data in ERP, WMS, MMS and Project Management systems. OAT ATA Spec 2000 Solutions provide options for basic tagging, systems integration and process optimization.




Automated part marking

### Compliance Pack




Real-time updates for ERP, WMS, MRO, MMS systems

### Integration Pack



Real-time process integration for manufacturing, logistics

### Value-Added Pack



OAT ATA Spec 2000 Solutions

*OAT offers three solution packages for ATA Spec 2000. Select a part marking solution based on your current requirements, extend functionality to inform enterprise systems and business processes, and to improve manufacturing efficiency.*