



RFID tracks vital aircraft kit in an instant

Having successfully deployed Fujitsu RFID on its production line to track components, Airbus and Fujitsu joined forces to co-create the Emergency Equipment Management (EEM) Smart Check solution, which uses the RFID tags to enable flight crew to easily scan essential equipment pre-flight. That process now takes just 90 seconds rather than upwards of an hour and doesn't involve the grueling physical checking under seats as was previously necessary.

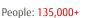
About the customer

As a proven leader in the global aerospace sector, Airbus designs, produces, and delivers innovative solutions with the aim of creating a better-connected, safer, and more prosperous world. These cutting-edge products and services – which span the commercial aircraft, helicopter, defense, security, and space segments – benefit from the company's wide-ranging expertise and continuing emphasis on innovation.













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Patrice Marin, IoT & RFID Services Director, Airbus

Challenge

Airbus wanted to launch an automated, RFID-enabled Emergency Equipment Management (EEM) solution for its customers. It joined forces with Fujitsu to co-create an end-to-end digital platform.

Solution

 EEM Smart Check, built on Fujitsu GlobeRanger

Outcomes

- Time for pre-flight checks reduced by 95%
- Physically demanding tasks eliminated
- License per aircraft per year, so there is no significant upfront investment
- No need for expensive retrofitting of RFID tags for new build aircrafts

90

seconds for Airbus crew to perform critical pre-flight checks

In collaboration with



Introducing RFID to manufacturing

Back in 2014, Airbus wanted to modernize its production processes and eliminate all the paperwork associated with equipment installation. Instead, the company wanted to introduce RFID tags on each component at the point of production, enabling it to be tracked through its lifecycle. After an RFP, Airbus selected Fujitsu, which successfully integrated RFID into the manufacturing chain.

Following this success, Airbus received over 50 requests from customers as to whether they could also take advantage of the RFID functionality. Specifically, if it could be used to replace manual and visual checks of essential equipment. Normally, at the start of every day, crew members must check every lifejacket, oxygen bottle, and fire extinguisher, among other critical kit. This process can take up to an hour depending on the plane model.

"Our customers saw our RFID project in the media and realized they could leverage it to transform what is a very tedious yet essential task," explains Patrice Marin, IoT & RFID Services Director at Airbus. "We and Fujitsu were delighted to oblige."

Transforming vital pre-flight checks

Together, Airbus and Fujitsu have co-created the Smart Check Emergency Equipment Management (EEM) platform, based on customer requirements. GlobeRanger software is remotely installed at the customer site and RFID readers are deployed to the crew. These devices can easily and accurately detect the tags that were originally installed by Airbus back in the production phase.

Now, crew members simply walk the length of the airplane, registering each critical component with the RFID reader and confirming the plane is ready for take-off. This process now takes 90 seconds rather than upwards of an hour. Customers buy a license per aircraft per year, so there is no significant upfront investment and no need to retrofit the RFID tags.

"We have already deployed Smart Check to global airlines; however, the impact of COVID-19 has certainly affected the industry and investment severely," continues Marin. "The airlines have been impressed by the fast deployment, ease of use, and speed of the process itself."

A faster, less painful, and contactless process

Needless to say, crew members are delighted to have automated such a mundane – but essential – task. Not only does it save time during technical inspections, but it also saves them from having to bend down at every seat to check the lifejackets, which can be a painful way to start the day. This leads to a happier and healthier crew while saving considerable costs by speeding the process.

In this time of COVID-19, the RFID approach eliminates the need to physically touch each piece of equipment, making the process safer. And the entire, once-manual process is now digitized end-to-end, making all critical data available at the touch of a button.

"This is a seamless, cost-effective way to streamline crucial checks and remove human error while making the crew's lives much easier," concludes Marin. "Such has been the interest in this solution that we – and Fujitsu – are looking at other areas where RFID might play a role, such as in luggage tracking. It has the potential to transform so much of the airport experience for the better."