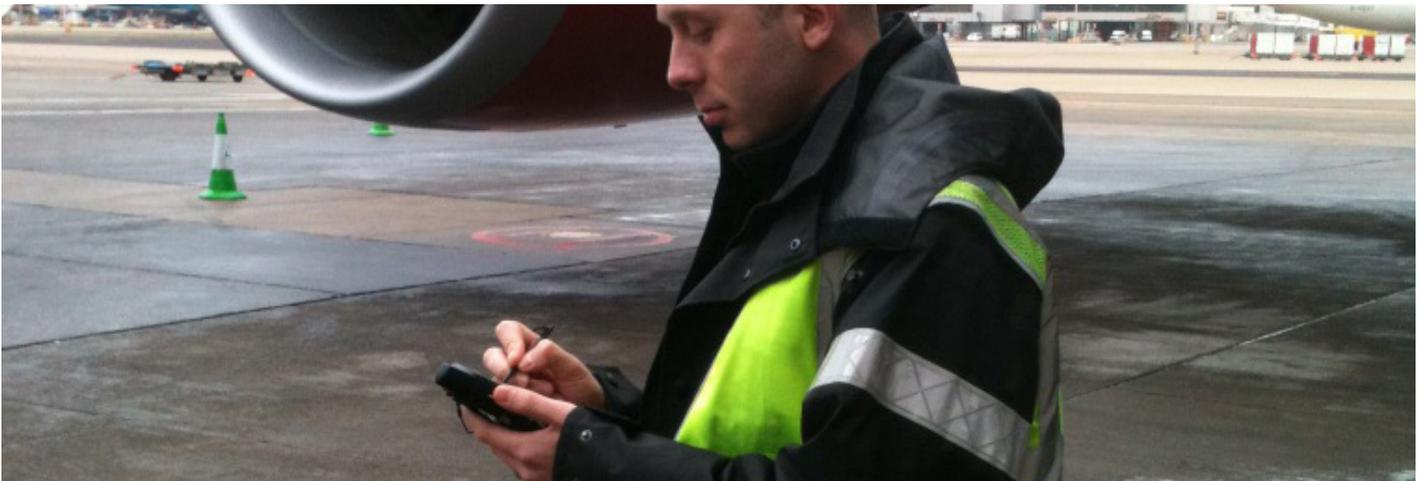# IMPROVING AIRCRAFT TURNAROUND TIMES

VIRGIN ATLANTIC DEPLOYS AVTURA'S REAL-TIME AIRCRAFT TURNAROUND TOOL (RATT™) TO LEAD ON PUNCTUALITY

VIRGIN ATLANTIC

Virgin Atlantic is one of the world's most instantly recognizable brands. Flying to North America, the Caribbean, the Middle East, Asia and Australia from London Heathrow, London Gatwick, Manchester and Glasgow airports it's the second-largest long-haul carrier operating from the UK.

Virgin Atlantic is renowned for pioneering new services and technology to improve performance. This drive was behind its desire to improve the way aircraft are turned around. When a plane lands, a complex array of services must come together quickly to ensure an on-schedule departure. Traditionally, the industry has relied on paper-based processes to manage turnarounds. But this caused inefficiencies, with the dispatcher often having to leave the aircraft side – where he or she really needs to be – to send important messages from a PC at the gate. In addition, central dispatch teams had no real-time view of aircraft status.

Virgin Atlantic has transformed the way it manages turnarounds by deploying Avtura's real-time turnaround system. Its dispatchers access the software via handheld computers for pro-active coordination of turnaround services and provide a real-time view of status to central teams. The easy-to-use technology is improving productivity by allowing dispatchers to be at the heart of the action and contributing to enhanced on-time performance (OTP) and lower delay costs: Over the last 24 months, Virgin Atlantic has achieved a 30% reduction in the proportion of flights delayed by over 15 minutes. As a result Virgin Atlantic's OTP is routinely ahead of its key competitors, making it the most punctual Heathrow-based airline.

CUSTOMER PROFILE
Organisation
Virgin Atlantic

Location
The UK

Industry
Airlines

Partner
Avtura

Motorola Solutions' products
- 18 MC65 rugged handheld computers
- 3 ES400 rugged handheld computers

Applications
The pro-active coordination of aircraft turnaround services with time alerts if any service is running behind schedule. The system also provides messaging and reporting functionality to provide a real-time view on an turnaround status

> "On-time performance is a key metric for any airline. Research tells us that customers' top priority is to depart and arrive on time and get their bags quickly. This is why we deployed Avtura's real-time automated turnaround software as part of our drive for improved punctuality. Working with Avtura we reviewed the critical elements in our turnaround process and mapped these to its RATT software. The technology, which converts a complex set of tasks into an intuitive application for dispatchers, has helped us embed a step-change in our on-time performance, improving our service to customers and having a knock-on benefit on costs."
>
> Joe Thompson, General Manager, Airport Operations, Virgin Atlantic

CHALLENGE

Managing the turnaround of a wide-bodied passenger jet requires the complex and timely synchronization of an array of tasks and services. Traditionally, airlines have used paper-based processes to manage turnarounds. But this caused inefficiencies. The sending of key messages required dispatchers to leave the aircraft and run to the gate – losing valuable time. Also, the central dispatch team could not see a real-time status of their turnaround operation. With these issues in mind, Virgin Atlantic looked to deploy a new mobile computing system to coordinate turnaround. It also wanted to ensure that, with airport authorities looking to better share information between air traffic controllers, airlines, and the airport management, it was in a position to provide real-time status information to these partners.

SOLUTION

Virgin Atlantic was part of a trial of Avtura's RATT undertaken by the Heathrow Airport Limited (HAL). Its favorable impression of the solution led it to deploy the technology to manage its turnaround operations. RATT is a Software-as-a-Service solution, with a series of pre-configured applications available to customers. These were customized to Virgin Atlantic's requirements with new features also added.

The dispatchers are the focal point of the turnaround operation at the main base airport. RATT provides them with details of each service that their incoming aircraft needs, together with a precision "critical time path" of when each has to be completed. If a service is running behind, RATT prompts them. They can then use their handheld computer to call suppliers without leaving the aircraft. They can also use their computer to message controllers — e.g. sending important load information to the team that calculates take-off parameters — and confirm in real time when each service, from cleaning to refueling, catering, and more, is completed. The system also provides details on incoming aircraft — e.g. the location of cargo and the baggage of premium passengers to prioritize unloading. And dispatchers can use the computer's camera to record images such as damage to the aircraft interior, exterior, or cargo to attach to safety reports.

Users visited Motorola Solutions' Training Center to trial the handheld computers recommended by Avtura. The key criteria for the computers were that they should be rugged and durable, provide a simple interface, integrate a phone, and offer accessories so that individuals could select the best way for them to carry the device. Dispatchers chose Motorola Solutions' MC65 and Duty Managers chose Motorola's ES400 rugged PDA.

BENEFITS

As RATT is a SaaS solution it requires no integration with the back office and was rolled out quickly. It enables proactive management of the turnaround process. Dispatchers spend more time with the aircraft, with live prompts on their computer alerting them to potentially late services. All data captured by dispatchers on their handheld computer is available to the business in real time so dispatch can view a live dashboard showing the status of all operations – offering assistance if any red flags are showing.

RATT put Virgin Atlantic ahead of the game at London Heathrow when it came to sharing its turnaround status with airport authorities, as part of a wider drive to improve airport performance. It's similarly ready – ahead of peers – to provide the same information at London Gatwick when their new system rolls out this year.

But the key benefit lies in the fact that, over the last two years, Virgin Atlantic has embedded a step-change in its punctuality, reducing the number of flights delayed by more than 15 minutes by over 30%. This is a huge gain when perceptions of customer service are so tied to punctuality. It also reduces costs – improving punctuality means that the cost of delayed baggage and, accommodating delayed passengers, is cut significantly. Virgin Atlantic expects that there's more to come too: it will use data captured by RATT to identify performance trends and drive further improvements.

Benefits
- Improved On-Time Performance (OTP): Virgin Atlantic is the leading base carrier for OTP from London Heathrow (based on Feb12-Jan13)
- Reduced costs: Delay costs such as baggage delivery and overnight accommodation for mis-connected passengers are falling
- Real-time view: Dispatchers can intervene and provide assistance if red flags are indicating problems with a turnaround
- Ongoing efficiencies: Data collated by RATT can be analyzed to identify process improvements

For more information on how Motorola Solutions' rugged handheld computers can improve the efficiency of your turnaround operations please visit us on the web at www.motorola.com/Business/XU EN/Business+Solutions/Industry+Solutions/Transportation or access our global contact directory at www.motorolasolutions.com/contactus

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