



## Rockwell Collins' airport solutions transform terminal operations at Noi Bai International Airport.

Do you know what it takes to become the 'World's Most Improved Airport'<sup>1</sup>? The officials at Noi Bai International Airport Terminal 2 do, as it has steadily climbed into the ranks of leading international airports since it began operations in 2015.

Noi Bai, one of Vietnam's busiest international and domestic gateways, saw 14.3 million passengers in 2014, well in excess of its annual passenger capacity of 9 million. Airport officials recognized that the overcrowding was having an impact on its ability to provide the level of service and amenities it wanted for its passengers. The airport authority built Terminal 2, which opened on January 4, 2015, to relieve the overcrowding of Terminal 1 and reverse the decline in service quality its passengers were experiencing.

The strategy worked. Not only did the airport earn the prestigious award for improvement, but it was also recently ranked #83 on the list of '100 World's Best Airports,' up an amazing 136 spots from last year<sup>2</sup>.

### CHALLENGE:

- > Overcrowding and outdated technology was negatively impacting customer service.

### SOLUTION:

- > Airport officials teamed with Rockwell Collins to support the airport's objective to improve each passenger touch point – from check-in to boarding – to create a seamless, end-to-end passenger journey.

### RESULTS:

- > Implementation of Rockwell Collins' airport solutions in Terminal 2 have significantly reduced crowding and congestion, reduced operational inefficiencies, improved security and enhanced the passenger experience through faster processing time and modern passenger facilities.



*The new systems have significantly reduced crowding and congestion, improved service quality and enhanced the passenger experience through faster processing time.*

What was the key to Noi Bai's remarkable turnaround? Government officials from the Civil Aviation Administration of Vietnam and Edward Plaisted, Skytrax chairman, credited the improvement at Noi Bai to its new international terminal – Terminal 2.

Airport officials developed a strategic relationship with Rockwell Collins during the development of Terminal 2. To support the airport's ambitious objectives, Rockwell Collins implemented a suite of synchronized and resilient solutions that facilitate fast travel, reduce operational inefficiencies, improve security and enhance the passenger experience. These solutions are more critical than ever with Noi Bai expected to continue its aggressive growth trajectory. Vietnam continues to be one of the seven fastest growing aviation markets in Southeast Asia, according to IATA's forecast<sup>3</sup>.

#### THE IMPORTANCE OF PASSENGER TOUCH POINTS

The IT strategy deployed by Noi Bai in conjunction with Rockwell Collins reflected a true understanding of all puzzle pieces necessary to improve each passenger touch point (from check-in to boarding) and created a comprehensive, reliable solution that ensured a seamless end-to-end passenger journey. Since the implementation, the new systems provided by Rockwell Collins have significantly reduced crowding and congestion at Noi Bai, improved service quality and enhanced the passenger experience through faster processing time and the provision of modern passenger facilities.

Spanning four floors with a total size of 152,153 square meters, the \$900 million Terminal 2 now features 96 check-in counters, 10 self-service kiosks, 17 boarding gates and 283 information display systems implemented by Rockwell Collins at crucial areas. Passenger services include customs and immigration counters, first and business-class VIP rooms, while aviation facilities include baggage handling, control room, airport security (with five-level screening) and flight information displays.

With the suite of Rockwell Collins' airport technologies implemented, here's how Noi Bai accomplished its goals:

› **Efficient operations**

Behind every successful airport lies a robust airport operations database and resource management system, such as Rockwell Collins' ARINC AirDB™ and ARINC AirPlan. At Noi Bai, ARINC AirDB serves as the backbone of airport operations, allowing staff in the control room to manage all of the airport's operations – such as airport security, flight information and airport resources. Playing a complementary role, ARINC AirPlan allocates airport resources such as check-in counters, boarding gates, aircraft parking stands and baggage carousels. Together, these two key systems act as the foundation for Noi Bai's seamless day-to-day operations, as well as enabling a rapid response to airport contingencies and emergencies.

› **Check-in made easy**

Given its increasing passenger traffic, Noi Bai realized the importance of having a dynamic passenger processing solution which could be easily accessed from any workstation, as well as having a self-service check-in solution to reduce waiting and processing times for an improved passenger experience. Rockwell Collins' ARINC vMUSE™ provides a seamless passenger experience and increases security by incorporating identity management validation. Its cost-effective and open design allows it to be integrated with existing airline systems and other peripherals including baggage systems, operational databases, resource management and flight display information systems. And for Noi Bai, a key benefit of ARINC vMUSE lies in its scalability, which will allow the airport to expand Terminal 2's capacity to 15 million passengers – smoothly and hassle-free.

› **Baggage that arrives at your destination**

Arriving at their destination without their checked baggage is a major inconvenience for passengers and costs airlines money. Operational inefficiencies at Noi Bai are avoided with Rockwell Collins' ARINC BagLink™, a baggage messaging server that enables bags to be sorted and routed remotely to save time, decrease costs and most importantly – minimize errors. Scalable and easily integrated, ARINC BagLink works perfectly with Noi Bai Terminal 2's vMUSE gateways to send and receive messages, ensuring bi-directional delivery between host and sortation systems. For passengers traveling or transiting into Noi Bai, this means a stress-free experience. ARINC AirDB captures inbound and transfer information, which is reflected in the system, checking and tallying bags with corresponding flights and handling any discrepancies ahead of time. With automatic verification of bags and their destinations, it provides peace of mind for Noi Bai and its passengers.



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› **Simplified screening – fast yet secure**

Noi Bai, as the only international airport serving the capital city, recognized the need to balance security with speed to accommodate its high number of passenger transactions. Rockwell Collins' ARINC VeriPax™ allows the automation of passenger screening using 2D boarding pass scanners. Given its flexibility and scalability, ARINC VeriPax is designed to handle large passenger volumes while performing fast, efficient verifications of flight and boarding pass information. For baggage security and custom checks, ARINC VeriPax works in tandem with the airport database (ARINC AirDB) to reconcile passengers with their baggage. Most importantly, it serves as a check-and-balance system that prompts alerts to agents when necessary. With ARINC VeriPax, Noi Bai is able to expedite its constant, high passenger volumes without compromising security.

› **Getting on track with digital signage**

To ease airport congestion and keep people moving, Rockwell Collins' ARINC AirVue™ flight information display system (FIDS) lets passengers view real-time flight information in the airport, keeping them up-to-date on flight movement and status. ARINC AirVue FIDS is a comprehensive, easy-to-use toolset for supporting all aspects of information presentation. It allows data to be accepted from a wide variety of sources, such as ARINC AirDB, displaying it on any type of device should Noi Bai decide to have other FIDS configurations. In Noi Bai, ARINC AirVue is utilized at baggage drop off and arrival. It's also used as a baggage handling guide for ground handling personnel as well as for information counters, departure and transit. In addition, it transmits flight information to passenger boarding bridges (PBB).



## NOI BAI'S SUCCESS STORY

Noi Bai's relationship with Rockwell Collins has led to a successful turnaround. The airport clearly understood its objectives and, together with Rockwell Collins, created a robust, comprehensive IT strategy tailored to meet its needs. As a result, Noi Bai is experiencing operational success in the processing of its passengers while maintaining high standards of security and service quality in each of its critical touch points. Now that's a success story.

### Notes:

- <sup>1</sup> Van, Pham (2016, March 18). "Noi Bai world's most improved airport." VN Express International. Retrieved August 2017 from <http://e.vnexpress.net/news/travel-life/travel/noi-bai-world-s-most-improved-airport-3371830.html>
- <sup>2</sup> SKYTRAX (2017). *The World's Top 100 Airports in 2017*. Retrieved August 2017 from [http://www.worldairportawards.com/awards/world\\_airport\\_rating.html](http://www.worldairportawards.com/awards/world_airport_rating.html)
- <sup>3</sup> Tyler, Tony (2014, August 27). "Aviation in Vietnam." Remarks made at the International Air Transport Association (IATA) Vietnam Aviation Day, Hanoi. Retrieved August 2017 from <http://www.iata.org/pressroom/speeches/Pages/2014-08-27-01.aspx>

### Building trust every day.

Rockwell Collins delivers innovative aviation and high-integrity solutions that transform commercial and government customers' futures worldwide. Backed by a global network of service and support, we are deeply committed to putting our solutions to work for you, whenever and wherever you need us. In this way, working together, we build trust. Every day.

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