

Success Story

John Glenn Columbus International Airport



Introduction

The John Glenn Columbus International Airport is the largest passenger airport in Central Ohio with 140 daily flights. Spread over acres, the airport has buildings throughout the grounds with active runways in between many of the buildings. These buildings while remote still require high speed connectivity and voice services.

Challenge

The Shipping and Receiving building is located a half mile away from the main terminal and on the opposite side of active runways. The existing wireless system that was installed was suffering from a lack of capacity as well as serious Rf congestion as a result of operating in the 5GHz bands. Laying a fiber connection was problematic to say the least. In addition to the cost and time to trench a path to the remote building, it would have had to traverse the runways disrupting daily operations – an approach that was not considered viable.

“There was no infrastructure to support a fiber connection so it would have been extremely costly and time consuming to run a pathway for conduit and for the fiber, as well,” said Kristina Baker, PMP, Project Manager for Technical Services, with the Columbus Regional Airport Authority. “It’s a very busy building and we needed reliable network connectivity to process shipments received or shipments going out.”

Additional considerations revolved around not just airplane traffic in between the terminal and the Shipping and Receiving building, but other airport vehicular traffic on the aprons and runways.



Solution

Convergint Technologies served as the systems integrator for the project and proposed a Siklu mmWave wireless fiber solution. The company installed two point to point EH-1200FX 70/80GHz Gigabit radios. Transmitting high bandwidth information across secure wireless networks, the radios as deployed are providing interference free connectivity with 99.999% availability. This is achieved by leveraging the narrow mmWave beams which are immune to heavy Wi-Fi signals within the Airport. Simple to install, the radios can stream many different applications, including voice, HD and 4K video cameras and other IoT sensors.

Result

The radios were tested in heavy rain and inclement weather and were found to work perfectly with no degradation in performance. The installation at John Glenn Columbus International Airport took only two days to complete, according to Mazen Moghannan, Account Executive from Convergint Technologies, a relatively simple process even though it was their first time installing Siklu radios. "My foreman and lead technician were very pleased because of the ease of installation of the Siklu radios and the ease of working with the airport."

The airport, which is currently testing the use of high-definition cameras on the Siklu mmWave network, is considering adding cameras to the network in the future.