Being different is good

The view from the tower – an ATCO perspective

The National Air Traffic Controller Association (NATCA) has been involved in testing digital tower solutions for the past eight years. Not only the solution from Frequentis, but other vendors who started the process and ultimately did not continue. The FAA set the bar very high for operational video requirements, and this is an area where Frequentis reworked their software and ultimately exceeded them. As a result, we have a system that NATCA supports.

Frequentis spoke with Adam Rhodes, NATCA National Representative at the FAA for NextGen to gain the view of air traffic controllers (ATCOs) about digital tower. He is the national representative for all ATCOs in the NAS. He represents the people.

What was your first impression of the digital tower concept before seeing it?

I've always been a fan of technology, so I was cautiously optimistic. There's always a use for modern technology, but the key is to determine how and where the best fit is.

How has this changed after interacting with the technology?

There was a wow factor! When you sit down in front of it, it's very different. The basic job of an ATCO doesn't change; this gives you different tools to do it. This means you might do the job in a different way than before.

Can you share some feedback about questions you've been asked about using digital towers?

There's a lot of misunderstanding around digital tower and this results in questions being asked that seem out of context. As a result, it's important to answer every question that is asked regardless of what it is to provide a sense of security in the technology.

What are the most important topics to stress with ATCOs when considering this technology?

This isn't a less safe solution. The controllers need to feel confident that the digital tower solution addresses all the tasks they work on

NATCA is a labor union and aviation safety organization in the United States that represents nearly 20,000 highly skilled air traffic controllers, engineers, and other aviation safety-related professionals. NATCA was certified in 1987 by the Federal Labor Relations Authority to be the exclusive bargaining representative for air traffic controllers employed by the Federal Aviation Administration (FAA).

in their daily job today. Digital tower needs to be as safe and resilient as today's brick-and-mortar solution. You need to show them the additional tools the system has in conjunction with the primary display. This will make my job easier. The solution was built for us to enable us to do what we do best.

Address the fear of being moved to a remote center, they don't want to move where they live and work. The term 'remote' is something we should shift away from as this can cause unnecessary concern about the future. ICAO has already made this move and is using digital air traffic services/aerodrome.

What do you like best about digital tower technology?
The technology! When you digitize images, you can do a lot that you couldn't before. The PTZ cameras provide a level of granularity that just isn't possible with binoculars. It enables things you can't do today. There are about 30 towers in the US that have no clear line of sight. This is easily solved with the addition of another camera.

How do you see digital towers impacting the quality of life at work for ATCOs?
It's nice to have the opportunity to sit in a more comfortable environment, not a hot control tower. There are also no broken elevators that result in climbing 20 flights of stairs to get to where you work.

What advice would you give to an airport operator considering whether to adopt digital tower technology?
Do your homework to understand what it is and what it isn't. Understand the impact of digitization and what that decision entails. Where is the facility where the ATCOs sit going to be located. Is it at my airport or somewhere else? How does this impact my level of service if I move ATCOs to another location?

Financially, this is more affordable for local governments to provide the funding for air traffic services with digital tower vs a brick-and-mortar that has to be constructed from the ground up.

Don't decide against digital tower because you are worried about the technology. It is sound. It is safe. You can be very confident in the level of service that can be provided. There's a lot of narrative out there that isn't portraying the truth about digital tower.

What surprised you the most about using digital tower technology?
How much people don't understand what a digital tower is. It is not a voice communications system; it is not a radar. Other pieces of technology continue to play their role. We're not changing everything. We're just changing what the ATCOs sit inside of.

"A digital tower is your brick-and-mortar tower with windows on all sides. Just digitized."