

# Video System Enhances Operational Efficiencies

## New Zealand Airport Discovers Multiple Uses for March Networks Technology

Safety and security may have been the primary reasons for the acquisition of a video surveillance system at Christchurch International Airport in New Zealand, but today it's equally important as a means of enhancing operational efficiencies.

In addition to monitoring the terminal itself, Christchurch Airport keeps an eye on the airfield, the automated baggage conveyance system, taxi stands and carparks. Cameras positioned along the hundreds of meters of conveyor belts alert baggage-handling staff to mechanical malfunctions and taxi drivers in a marshalling area a kilometer away monitor the parking stands in front of the terminal to know when to pull up.

Management kept on coming up with more and more uses for the airport's state-of-the-art March Networks® video surveillance system. Airport staff use the system to make gate allocations for arriving flights and carpark staff remotely assist motorists experiencing problems with the unattended payment machines.

Christchurch Airport started looking for a new video surveillance system in 2009.

“We were about to begin building a new terminal and the system we had at the time didn't have the scalability we required,” said Operations Manager Tim Morris. “It wasn't user-friendly, the options for cameras were limited and it crashed a lot.”

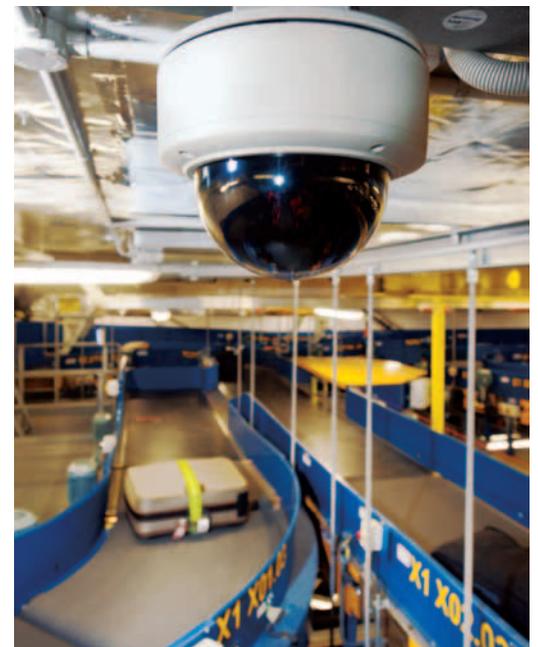
The airport assembled a project team with representation from several departments, including IT, and went to tender.

“It was a very rigorous tendering process,” said Morris. “We narrowed it down to three or four systems, put them to the test and March Networks came out on top.”

Everyone on the project team brought a different perspective to the table. Morris, for example, who oversees staff at the airport's 24/7 Integrated Operations Centre, paid special attention to the look and feel of the systems, insisting on a user-friendly interface, while IT focused on reliability and scalability.

Christchurch Airport's video surveillance system consists of 250 analog and IP cameras, three servers running March Networks Command™ Video Management Software and a handful of NVRs.

The analog cameras and NVRs are used in the airport carpark because of the cost of equipping the facility for IP connectivity. Otherwise, the airport relies on 230 assorted March Networks MegaPX, MiniDome and PTZ cameras.





## Christchurch International Airport

Christchurch International Airport Ltd. is New Zealand's second busiest airport. Serving the South Island city of Christchurch (population: 365,000), the airport recorded six million passenger movements from July 1, 2009 to June 30, 2010. Several domestic and international carriers fly into and out of the airport, including Air New Zealand, JetStar, Singapore Airlines, Emirates and Air Asia X, with flights to and from Tokyo, Kuala Lumpur, Singapore, Bangkok and several destinations in Australia, New Zealand and the South Pacific. [www.christchurchairport.co.nz](http://www.christchurchairport.co.nz)

"We spent a lot of time looking at our camera options," said Morris. "We knew we didn't necessarily have to go with March Networks cameras, but we have a great relationship with our systems integrator, ECL Security, and that's what they recommended."

"The March Networks cameras haven't missed a beat, whereas over the years we've had a number of cameras from other manufacturers that haven't proven to be as reliable," he remarked.

The March Networks cameras withstood a violent, 7.1 magnitude earthquake in September 2010 and a 6.3 magnitude earthquake in February 2011.

"We lost a few seconds of video from some cameras during the worst of the shaking," said Morris. "Otherwise, the system was live the entire time."

The February 22 event in the city of 365,000 resulted in 184 fatalities and caused an estimated NZ \$30 billion in damage.

However, aside from some dislodged ceiling tiles, Christchurch International Airport came through unscathed.

It was a good thing, too, because in the aftermath of the quake, the airport served as a transportation hub for rescue helicopters, medical evacuation flights and search and rescue teams from all over the world.

"It was incredibly important that we were operational," said Morris.

Despite being off the beaten path and "tucked away down here all by ourselves at the end of the world," as Morris puts it, Christchurch is not immune to the forces that have accelerated CCTV adoption since 9/11.

"CCTV used to be something that was nice to have," said Morris. "If you had a bit of money left over at the end of the year, you might buy another four cameras. Now, it's a must-have."

Christchurch went from 20 cameras to more than ten times that number in

a relatively short period of time, but operational efficiencies have gone a long way toward offsetting the cost and providing a return on investment.

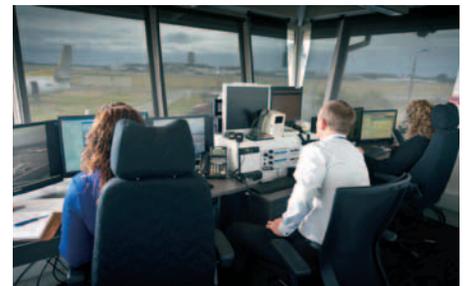
The airport's baggage handling team, for example, is convinced the surveillance system does the work of two or three people, who would otherwise have to physically monitor the hundreds of meters of conveyor belts.

"The baggage system is a very complicated piece of equipment and there are several things that can go wrong with it," explained Morris. "We have an integrated check-in facility for international and domestic flights. Passengers can check their bags at any counter and can be flying anywhere in the world. The conveyance system has many twists and turns, along with barcode readers and a series of diverters — big mechanical arms that come out and direct the bags to where they need to go."



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— **Tim Morris**  
Operations Manager,  
Christchurch International Airport



Baggage handling staff keep an eye on camera views of critical points along the system and are able to respond to malfunctions in a timely fashion.

“The March Networks system plays a huge role in making sure the bags get to the right place,” said Morris.

Additional efficiencies are achieved by using the video system for gate allocations, taxi marshaling and carpark payment inquiries.

The risks faced in Christchurch have more to do with plate tectonics and earthly upheavals than anything else, but staff in the airport’s 24/7 monitoring centre still have to keep a watchful eye on the terminal and carparks.

In one case, a passenger who was about to board an international flight reported her handbag missing, recalled Morris. Security staff zeroed in on the culprit, tracked his progress through the terminal to a washroom and had a police officer standing outside the

door as he exited. The passenger was reunited with her handbag and passport in plenty of time to board her flight.

“We don’t see a lot of that here, but it does happen,” said Morris. “We work very closely with government agencies, so hardly a week goes by when there isn’t some review of video footage.

“We’re very happy with how the March Networks system has performed for us. It gives us the scalability, ease of use and reliability we were looking for — and it’s much more than just a security system.”

An upgrade to March Networks 7532 NVRs for the airport’s carpark and integration with the facility’s access control system are planned for this year. Also in the offing is an upgrade to Command Enterprise, designed for multiple server environments and support for up to 128,000 cameras. ▼

## The ECL Group

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