



# SPRINGFIELD-BRANSON NATIONAL AIRPORT

## KEY INTEGRATIONS PROVIDE SECURITY

Springfield-Branson National Airport, located in Springfield, Missouri with a population of 400,000, recently underwent a large expansion project. Its six gate terminal was no longer supporting the increasing air traffic from its four airlines. The airport recently built a brand new terminal on the opposite side of the airfield. The new terminal currently has 10 gates with the capability of expanding to 50+ gates.

A new terminal required a new security management system. Randy Riley (IT Manager), Airport Director and Assistant Director of Operations for Springfield-Branson National Airport chose to install G4S Technology's Symmetry™ Enterprise Security Management System with Symmetry Video for its security platform. Symmetry Security Management System, integrated with several third party vendors to provide a sophisticated, yet easy to use system that met strict TSA requirements. Symmetry secured the main terminal building, its seven satellite buildings, the perimeter fence and 10 vehicle gates via fiber optic cable that surrounds the whole airfield.

The Springfield-Branson National Airport employs a police department that monitors security in the Airport Operations Center (AOC). Inside the AOC, which is furnished with Winsted consoles, sits two workstations that include three large monitors. One monitor graphically shows an overview of the entire airport. The police can see the whole building and zoom in on areas that are in alarm while a rolling count of who is swiping their card throughout the airport is displayed in real time. The second monitor displays camera views using the Symmetry video matrix. The third monitor is for alarms. When an alarm sounds, the camera associated with the alarm zooms in on the area. A trigger is set up in Symmetry so a

pop-up screen appears on the monitor to provide a closer look. That pop-up screen will also appear on a 50" wall monitor, normally used to display flight information, to provide a larger look at the area in alarm.

"The camera view is automatically tagged to its alarm," said Riley. "If the police want to go back and review the video, they can pull up the video on the screen to instantly view it."

The video is stored in an Intransa VideoAppliance™ for 30 days. The Intransa VideoAppliance holds 58 terabytes of video optimized, RAID protected storage, and eliminates the risk of lost video and downtime.

C&C Group installed the comprehensive security management system for the Springfield-Branson National Airport. They installed over 150 fixed and pan/tilt/zoom AXIS IP cameras that monitor all access controlled doorways, jet bridge doorways, general areas, and the holding room.

"If an alarm sounds in a jet bridge, the security staff can see two viewing angles," said C&C Group's Operations Manager, Martin Dowman. "They can see views from a fixed and PTZ camera. A person in the control room can move the PTZ to get a better view or follow someone throughout the terminal."

Indoor PTZ cameras are also positioned to view outside activity.

"At the end of a jet bridge in the turret is an emergency exit door," said Dowman. "That door leads to the tarmac and pilots walk through it to perform plane inspections prior to take-off. If someone passes through the door that does not



have access or someone breaks through the door, a delayed egress alarm will sound and a PTZ camera will swing around and begin recording through a glass wall to catch what's going on outside."

"I am very pleased with how the alarms and cameras are integrated and how the triggers operate," said Riley. "It's very smooth and does most of the work for us. When an alarm sounds, the cameras are automatically pulled up so we can view it. We aren't fumbling through video. It's very nice."

Utilizing G4S Technology's Symmetry XML Developers kit, an integration was developed with the police department's paging system. When an alarm sounds, all officers on duty are alerted through a page, including the sergeant. The airport found it beneficial to have all police officers notified simultaneously. Everyone is up to date, and the officer closest to the alarm can respond. In an emergency situation, all officers can respond and call for backup if necessary.

**Badging Requirements**

All personnel, contractors and vendors wear color coded badges to identify themselves and where they are allowed access in the airport.

TSA rules require that all commercial airport employees who need a badge must pass an online training test, and TSA and the FAA require a background fingerprint check to enter the Secure Identification Display Areas (SIDA) of an airport. Once they pass the background check, commercial airport employees are issued a badge that identifies they have access.

General aviation personnel only have access to non-commercial ramps, and their badge color reflects their access areas.

**Hot Swappable Protection**

All components of the Symmetry Enterprise Security Management System are connected to an NEC Express5800 Fault Tolerant (FT) server. NEC Fault Tolerant (FT) servers provide an innovative solution to address planned and unplanned downtime for these important security applications. The Express5800/300 series servers deliver continuous uptime through its fully redundant modular hardware which provides

continuous availability in all components: CPU, memory, motherboards, I/O, hard disk drives, and cooling fans. In the event of a failover with any server component, the NEC Fault Tolerant (FT) server automatically switches over to the redundant server and reports the failure through Symmetry to the police, for component replacement.

"The system runs on the primary set of computer boards," said Dowman. "If a board or component fails, they can change the board or component out and it starts working immediately. Thanks to NEC's FT server, the Symmetry system is capable of never losing control. The hot swappable capability is valuable; the IT Staff can handle a server failure and still continue to run the Symmetry system."

**Intercom**

Managing the flow of traffic on and off the airfield is managed by 10 vehicle gates surrounding the airfield. Each vehicle gate requires a card swipe to enter the airfield. If a service truck needs to gain access, TSA requirements demand a positive identification of all people entering the airfield. A Stentofon intercom provides a fast way for officers to speak with drivers. When the Stentofon intercom is activated, it alerts the Airport Operations Center via Symmetry and a camera zooms in on the driver. An officer can speak to the driver as well as verify identity and allow access.

"Stentofon intercoms are used when vehicles, such as trash trucks, need to enter the airfield," said Riley. "Trash trucks notify the AOC they need access, and the police meet them at the intercom and search the trucks prior to entrance. Once the truck passes a search inspection, they are escorted onto the airfield to pick up trash."

"This project shows how access control and video are strengthened with the use of high quality audio and voice for critical environments. The ability to hear and speak adds a major component to the integrated security mix that video and access control has to offer. In addition, utilizing the STENTOFON XE Communication platform provides unlimited expansion as the airport grows," said Dan Rothrock, Stentofon, Senior VP of OEM Global Sales.



"Symmetry is a far superior security management system"

Since the initial installation, the airport did build a rental car facility which added eight more Axis cameras to the Symmetry Security Management System and Symmetry Video Management System.

"G4S Technology's Symmetry is a far superior security management system," said Riley. "I have been impressed with the system. It makes my life easier, the police officer's lives easier and protects our passengers and employees."

**C&C Group**

Established in 1974, the C&C Group provides building automation, security, access control, fire safety and lighting control, raised floor applications, network solutions and emergency power generation to help its customers reduce operational costs, limit liabilities and improve work environments. C&C Group excels at staying at the cutting edge of emerging technology and practice.

- Symmetry Enterprise Security Management System
- Symmetry Video Management
- 84 – Symmetry M2150 multiNODE Controllers
- 115 Card Readers, HID iClass and RK40
- 150 Axis Cameras, PTZ and Fixed
- Stentofon IP Intercom
- NEC Express5800 Fault Tolerant Server
- Winsted Consoles
- Intransa VideoAppliance™ Server/Storage Appliance with 85TB
- InterPage Pager System



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