

IP-based security takes off at Montana airport with Axis.

Bozeman Yellowstone Airport chooses Axis cameras and exacqVision video management system (VMS) software for terminal expansion security solution.



Organization:

Bozeman Yellowstone International Airport

Location:

Belgrade, Montana, USA

Industry segment:

Transportation

Application:

Airport safety and security

Axis partners:

Video and Sound Service, Inc., exacqVision

Mission

Bozeman Yellowstone International Airport in Belgrade, Montana connects travelers with southwestern Montana, Yellowstone National Park and Big Sky ski resort. In the midst of record growth, the airport launched an expansion and renovation project. At the time of the expansion, they relied on analog technology for video security, but they were driven to upgrade to an IP-based system to complement the forward-thinking redesign.

Solution

Jacksonville, Florida-based infrastructure design consultant RS&H recommended Axis network cameras to complement the exacqVision Enterprise VMS software and RS2 Technologies access control being installed by Illinois-based systems integrator Video and Sound Service, Inc. The Axis cameras were chosen because of their ability to seamlessly integrate with the VMS and access control, as well as their high quality images, solid construction and high reliability.

The airport installed AXIS P3344 Fixed Dome Network Cameras over entryways, outdoor-ready AXIS P1344-E and AXIS P1347-E Network Cameras for external security, and AXIS 233D pan/tilt/zoom (PTZ) Network Cameras for support in the terminal and other areas.

Result

With the launch of the IP video security solution, Bozeman airport has set a course for the future. The IP-based system makes it easy for the public safety officers to monitor multiple feeds at once and keep watch over the entire airport, indoors and out. The airport is able to use its resources more effectively, and it has greater control over video and who can access it. The system has helped make the airport more secure as it continues to grow.

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Andrew Lee, Senior Aviation Designer, RS&H.

Redesigning airport security

Starting in 2010, Bozeman Yellowstone International Airport in Belgrade, Montana began setting new passenger records each year, and they soon became the most visited airport in the state with almost 900,000 passengers coming through from June 2012 to May 2013. In the midst of this boom, the gateway to western Yellowstone National Park, Big Sky Ski Resort and southwestern Montana launched a \$42 million terminal expansion project to add another three gates, 125,000 square feet of new space, and a host of other amenities.

As part of the expansion, Bozeman decided to overhaul its outdated security system. Previously, they relied on analog cameras and DVR-based storage, but Illinois-based systems integrator Video and Sound Service, Inc. and infrastructure design consultant RS&H developed a plan to upgrade the entire analog system to state-of-the-art IP-based technologies.

They took advantage of the open API platform offered by Axis cameras to create a fully integrated IP solution with exacqVision Enterprise VMS software and RS2 Technologies access control.

“IP cameras and IP-based video management are essential to the needs of a modern airport facility,” said Andrew Lee, Senior Aviation Designer for RS&H. “IP-based systems allow different users the ability to access and utilize the system, as well as provide quality, high resolution images.”

IP on the ascent

From their command control center, the public safety team led by Public Safety Chief Bill Dove can keep a vigilant eye over all areas of the airport, indoors and out. HDTV 720p-quality AXIS P3344 Fixed Dome Network Cameras with WDR and digital zoom were installed overlooking all locked entryways inside the airport.

Outdoor-ready AXIS P1344-E and AXIS P1347-E Network Cameras were chosen for external security at the Rocky Mountain-area airport. Both can withstand temperatures as low as -40°F/C and are built to resist rain, sun,

snow, and dust. They both offer automatic day/night functionality and AXIS P1347 cameras leverage P-Iris technology to provide better contrast, clarity and depth of field in up to 5 MP/1080p HDTV resolution. AXIS 233D pan/tilt/zoom (PTZ) Network Cameras with 35x optical zoom were installed throughout the terminal, airport apron and parking facilities to provide additional support for the public safety team.

“We can zoom in even from a distance, and still have a clear, sharp picture,” Public Safety Chief, Bill Dove said. “We can also put [the Axis camera] on guard tour and sweep an area if we choose.”

User-friendly software support

In total, the airport has installed 150 IP cameras throughout the facility. The feature-rich exacqVision client provided the perfect complement to the crisp, high resolution images produced by the Axis cameras. With exacqVision, safety officers can view multiple streams at once, and the VMS is set to automatically display the video feed when cameras' monitoring the doors detect motion through the exacqVision video wall virtual matrix switching. Video can be easily extracted and shared with airport administrators and law enforcement officers, and safety officers can set access privileges so airport officials and members of the Transportation Security Administration (TSA) can view specific footage directly. The free exacq Mobile app allows safety officers to view and search video on their smartphones anytime.

The video even helps passengers locate lost or misplaced luggage. In one instance, two passengers noticed they had the wrong laptops after being screened by the TSA. Public safety officers were able to quickly determine they had switched bags after reviewing the video. The video support also helps the airport use their staffing resources more efficiently.

“We can determine whether a response is necessary or not,” Dove said. Overall, the system “is a far cry above what it was.”

