



Airport Secure to the Perimeter with GTSI Video Surveillance

Airports have been diligent in adding new security measures since 9/11. The importance of deploying commercially available technology to protect the interior and exterior areas of an airport was heightened in June 2007 by the discovery of a plot to bomb JFK airport's fuel tanks.

As early as 2004, one U.S. airport recognized that it could not continue to rely on live patrols and solid barriers to provide the high degree of security required to protect its fuel farm. The 3,000 acre facility, which supplied fuel for 200,000 domestic and 160,000 international flights each year, was located in an isolated area surrounded by a canal, a road, and railroad tracks. The airport's security authority determined that installing a video surveillance system around the fuel farm perimeter was the best option for protecting the area from attack and intruders.

Creating a tactical advantage with wireless IP-based networks and video systems

An assessment of the airport infrastructure found that the long distance between the cameras installed at the fuel farm and the monitoring stations located in the terminal made it prohibitively expensive to install new fiber conduits. It was determined that the most cost-effective and efficient approach would be to capitalize on the airport's existing fiber LAN, although it did not extend to the fuel farm perimeter, and install a WLAN at the fuel farm. A team of video surveillance experts recommended a wireless,

IP-based video surveillance system that would capture real-time, digital images and transmit them over the WLAN to the airport's Ethernet LAN, which would then carry the camera feeds to the monitoring stations.

GTSI was contracted to build an 802.1x wireless network with 6 cameras installed on a wireless link around the perimeter of the fuel farm and 30 fixed cameras dropped at key access points on the airport's fiber LAN. A team of GTSI network specialists selected the wireless network equipment and configured the network switches and other components for smooth interoperability between multiple vendor devices. After determining signal strength and key access points, the team verified the WLAN supported real-time video transmissions and validated that the network and signals remained secure.

Keeping an eye on areas away from the public eye

Despite various obstacles, such as a hurricane that wiped out a critical gate, when GTSI completed the network installation and turned up the surveillance system, the camera images were transmitted without distortion or error right from the start. With the IP-based cameras connected to the WLAN, video images from monitored areas around the fuel farm now are securely transmitted and viewed from any of the airport's security stations.

Fully satisfied with GTSI's design and installation of the IP-based video surveillance system, the airport security authority awarded GTSI a second project. This involved the installation of approximately 200 fixed cameras, outfitted with control cables, at the baggage terminals and security checkpoints and integrating the new security system with the airport's current video surveillance system. GTSI's design allows the airport to easily replace any of the fixed cameras with pan/tilt/zoom (PTZ) cameras by plugging them into the control cables.

The airport was able to procure both the systems through the GTSI-held U.S. Communities contract, which eliminated the need to put the projects out to bid.