



Multi-layer intrusion detection solution creates one of Senstar's largest ever single-facility projects

Senstar was able to deliver the perfect perimeter security solution for one of North America's largest cargo airport's unique perimeter security requirements.

Complicating security of the airport's 26,400 ft (5 mi) perimeter is a busy road that includes several bus stops. Many people use the fence as a resting place while waiting for the bus, which, from a perimeter intrusion detection perspective, is a nuisance alarm rate (NAR) nightmare! The airport's previous experience with perimeter intrusion detection (PIDS) had demonstrated this, as a video surveillance and analytics system installed along the perimeter fence in the mid-2000s was shut off after only a couple of weeks because of the hundreds of false alarms being received. When combined with poor quality video images that made distinguishing what was causing an alarm virtually impossible, the system was basically unmanageable. (Video surveillance and analytics technologies have come a long way in the past 10 years. These systems are currently very viable and successful solutions for perimeter intrusion detection.)

Customer Profile

One of North America's largest cargo airports featuring a 26,400 ft (5 mi) perimeter.

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Airport 's project lead

As well, in initial research for this project, the airport had consulted with other local facilities with long perimeters who used older generation intrusion detection systems and the feedback wasn't very positive. Primarily due to the wide variety of weather conditions in the area, the facilities were constantly dealing with high NAR.

“We were hesitant to move forward with any PIDS solutions,” said the airport's project lead. “We had no confidence because of our own experience, and we'd heard horror stories of huge amounts of money and high NARS from others.”

The airport enlisted A&E firm Faith Group LLC to find a suitable system that could effectively protect the long perimeter while addressing NAR. Faith Group concluded that the site needed multiple technologies, comprised of

both fence-mounted and buried solutions. The idea is that an alarm on any one technology is not enough to trigger a response, but, if alarms from multiple detectors are received, the threat is deemed to be real and a response is initiated.

“We knew a multi-layer system was needed from the get-go,” said Paul Koebbe, Sr.

Systems Consultant with Faith Group. “Single sensing with the fence being so close to a public space and public transportation was just too challenging.”

Faith Group looked at various system options, and fiber optic fence-mounted intrusion detection combined with buried detection proved to be best solution. Critical to the design was a need for cut immunity to provide for continued operation in case of random system damage.

In accordance with standard business process, an RFP was issued and integrator/installer Standard Electric was selected to execute the project with Senstar systems. The solution’s operational characteristics, including its ability to manage alarms from the multiple systems and Senstar’s Network Manager software’s Alarm Logic Engine feature, aided in the selection.

While the ability of fence-mounted and buried systems to combine into a comprehensive security solution was key to this project, it was also their differences that make this multi-layer solution a success. Using different technologies to detect intrusions, the systems have different vulnerabilities, meaning something that may affect the function of one system, won’t affect the other. For example, extreme weather can cause fence-mounted sensors to false alarm, but buried sensors are unaffected. On the other hand, buried sensors can occasionally be affected by lightning, but fiber optic sensors are immune. These

different vulnerabilities help to ensure at least one layer of security is functioning at all times,

providing peace of mind to airport officials.

The multi-layer intrusion detection system has been successfully up and running for several months with a very low NAR, and the airport has high praise for Senstar and Standard Electric.

“It was an excellent experience,” said the airport’s project lead. “Standard Electric was very confident in the (Senstar) products. They told us to ‘Relax. We are going to do this right and you’re going to be extremely satisfied.’ And we are.”

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Paul Koebbe
Sr. Systems Consultant, Faith Group LLC

Technology

- A multi-layer solution consisting of fiber optic fence-mounted and buried intrusion detection systems
- Senstar’s Network Manager software to manage alarms from the multiple systems

Outcome

- Solution has been in use for several months
- Successfully operating with very low NAR
- Customer is pleased with results