



Protecting the Perimeter

Cutting-edge fence sensor system performs impressively at McAllen-Miller Airport

McAllen-Miller International Airport has to deal with perimeter security issues just like any other airport. However, the facility's close proximity to the U.S./Mexico border adds a whole new level of complexity and necessity.

In mid 2009, a fiber optic fence sensor system was installed on the airport's perimeter fence. The system, known as Secure Fence, was developed by Future Fibre Technologies and, one year later, the airport's security department reports the system has performed impressively.

According to Donald "Buck" Taft, Airport Security Coordinator at McAllen-Miller

International Airport, the system was installed in response to security concerns over the number of commercial flights and the airport's proximity to Mexico. "Overall, the Secure Fence system has provided an excellent enhancement to our physical security," Taft says. "The solution is ideally suited to airport perimeter protection because of its ability to detect the location of intrusions anywhere on the airport's entire perimeter."

The Secure Fence system consists of a single pass of fiber optic cable along the fence fabric for the entire protected perimeter. This passive sensor requires no maintenance and is completely immune to EMI, RFI and lightning. The system map identi-

fies any security event location with user-defined zones along with GPS coordinates. "Installation was simple — the vendor simply zip-tied the cable onto the fence and connected it to a single head-end controller in a central location," Taft says. "It took around two weeks to install and required very little construction — just a few hand holes for fiber splices along the fence."

The McAllen-Miller International Airport is located in the center of Texas' Rio Grand Valley, close to the U.S.-Mexico border. "The Rio Grande Valley is located at the southern tip of Texas and is subject to heavy winds, high humidity and extremely hot temperatures," Taft says.

In fact, hurricanes and tropical storms have hit the area three times in the year and a half since Secure Fence was installed. "In spite of these extreme weather conditions, the system has operated successfully without nuisance or false alarms," Taft says.

The system features a rain mitigation algorithm that accurately detects the location of an intrusion, regardless of weather conditions — effectively transforming the standard chain link fence surrounding the airport into an intelligent sensor that detects intruders automatically.

Following the successful installation of Secure Fence, the airport has plans to integrate the supplier's FFT CAMS Central Alarm Monitoring System in the near future. ■



The Secure Fence system consists of a single pass of fiber optic cable along the fence fabric for the airport's entire protected perimeter. The sensor then sends any breach information to the system map, which identifies any security event location with user-defined zones along with GPS coordinates.