

Access Control Retrofit Proves Small Airport Security Can Equal Large Intl' Facilities

Consulting engineer and access control provider give Brownsville San Padre Island International Airport cutting-edge security retrofit.

For Immediate Release

Contact: Tracie Burton
Marketing Coordinator
Matrix Systems, Inc.
800.562.8749 x2891
<mailto:sales@matrixsys.com>

John Parris Frantz
J.P.F. Communications
(773) 871-2600
John@jpfcomm.com

Brownsville, Texas—(April 14, 2009) Thanks to today's state-of-the-art access control technology and a consulting engineering firm's value-engineered design, Brownsville-South Padre Island International Airport's (BSPIIA) newly-retrofitted security system is equal to any Category X airport with multi-million dollar systems.

Instead of outlaying hundreds of thousands for a brand new system, Ross & Baruzzini (R&B), St. Louis, Mo., a full-service consulting engineer firm that spearheaded the redesign and project management, provided BSPIIA with a retrofitted electronic access control system at a fraction of the cost. "Ten years ago it wouldn't have been possible, but today's advancements in high technology have afforded BSPIIA's access control software the same cutting edge functionality as a huge multiple-terminal facility such as Miami International Airport," said Theresa Smith, senior project manager, R&B.

Real time recording of an event is one example of BSPIIA's cutting edge functionality that's on par with any airport security system in the world. If a door is breached, for example, the Frontier access control system automatically activates the security system's closed circuit television (CCTV) and digital video recording (DVR) to record the event in real time, but also saves what was recorded several seconds before the alarm was triggered.

Another example of technology usually found only in larger airports is automatic email and cell phone notification. If an alarm is activated, the new access control software notifies BSPIIA executives, Larry Brown, airport director, and John Doude, airport operations supervisor, as well as other security staffers and administrators.

Retrofit Needed

A retrofit was in order because BSPIIA's previous electronic access control vendor was unable to eliminate intermittent disruptions that eventually forced the airport

to temporarily revert to its original manual keyed lock system to maintain tight security. Eventually the previous access control system was only used to make ID badges.

R&B was hired to not only establish an upgraded working electronic access control system, oversee the project and control costs, but to upgrade security to the latest TSA compliances. "Initially we presented a wide variety of system function possibilities they could choose from, which helped both of us prioritize and make value judgments prior to going into a formal design process," added Smith.

Additionally, R&B encouraged BSPIIA to request bids from a wide geographical and industry range of access control equipment, installation and aftermarket providers to make sure the system had single source responsibility. "A consulting engineer company should provide more than specifications, it should help the end-user put together a collaborative team and see the project through to the end," said Smith, who coordinated the project along with R&B colleagues, Jason Koob, senior project engineer, and Gary Warnock, senior security consultant. "Too many times a smaller client, such as BSPIIA gets the "C" team from a national installer. Or they get a local company that really doesn't have airport electronics experience. Brownsville already had a Fortune 500 company install the first system that didn't work up to standards. So our job was to set superior design specifications and make sure the winning bid company followed the criteria."

After reviewing many bids, Brownsville officials and R&B agreed on a contractor choice of Matrix Systems, a Dayton, Ohio-based turnkey access control and security solutions provider. Matrix's Frontier software system is both scalable and architecturally open to integrate existing BSPIIA equipment as well as a future ancillary component upgrades as they become available on the market.

Besides Frontier software, Matrix Systems' provided access control hardware consisting of a server, two networked workstations, one building controller, 10 reader control modules (RCM), and card readers for approximately two dozen doors, bag belts and Transportation Safety Administration (TSA) security gates.

R&B's value engineering strategy, combined with Matrix's software capabilities that allows integration of almost any type or brand of equipment, saved tens of thousands of dollars in both labor and materials. Instead of a 'tear-down and start from scratch' strategy many other engineering firms would have preferred, BSPIIA was able to salvage much of the American Dynamics, San Diego, Calif., CCTV and Ademco, division of Rentokil Initial, London, DVR equipment, a variety of existing magnetic door lock/card reader combinations and the bag belts.

Saving \$\$ by Integrating Existing Equipment

One example of R&B's value engineering and Matrix's equipment flexibility allowed much of the cable infrastructure to remain in place at a great savings to BSPIIA. Matrix's installation crew executed extensive integrity and signal speed checks and determined the majority of the 12-volt and 24-volt DC cabling could be reused in the re-design. "Many providers either don't have the capability to integrate existing equipment

or they don't want the liability of taking on another company's equipment, so they opt to replace everything and start from scratch, which in this instance would have increased the project costs significantly," said Richard Rao, regional sales manager-southwest region, Matrix Systems, that oversaw the installation work.

Equally challenging to retaining existing CCTV and cabling infrastructure, was the integration of the airports' three original circa 1950's bag belts. This equipment was perfectly functional, however it was manufactured long before microprocessors were used to control and monitor baggage handling equipment. Furthermore, original schematics on their electro-mechanical controls were no longer available, which made their integration into the new state-of-the-art access control software totally customized. "Replacing bag belts is a huge expense and bringing in additional contractors to solve the integration challenges would have raised the access control renovation costs significantly," said Brown.

The retrofit also required some unconventional access control set-ups as well. Unlike larger airports where TSA checkpoints are open 24/7, the infrequency of off-peak flights at BSPIIA often requires closing and locking TSA checkpoints. BSPIIA wanted accountability on which officers closed/open the gates and at what times, therefore Matrix outfitted the rolling overhead security grilles with special card readers so that the access control software could record the all of those events.

Additionally, R&B and the Brownsville, Texas office of HNTB Corp., an employee-owned infrastructure firm serving government, military and private clients with construction management services helped the retrofit project advance during peak airport hours without disruptions to security, staff or travelers.

Brownsville doesn't have a city aviation department like larger metropolitan areas, therefore hiring R&B to design as well as manage the airport security retrofit, plus using a turnkey contractor resulted in a successful project with single source responsibility.