



Mexico - Pacific Airport Group

Tyco Security Products, chosen by 12 airports in Mexico to offer a safer environment for operators and travelers

The Pacific Airport Group, an entity that administers five of the busiest airports by passenger traffic in Mexico, and among the country's 10 more crowded terminals, integrated the CCTV and access control programs at each terminal using American Dynamics and Software House for that purpose.

Access Control, Video, Location-Based Tracking and Intrusion. UNIFIED.

CASE SUMMARY

Location:

Mexican Pacific Coast

System Installed:

Software House

C•CURE 9000 access control
iSTAR and apC controllers

American Dynamics

SpeedDome Ultra

Illustra 400 MiniDomes

Illustra 400 Bullet Cameras

Intellex IP

VideoEdge NVRs

HDVR Hybrid Video Recorders

Introduction

The Pacific Airport Group (NYSE: PAC) is one of the four airport groups in Mexico. As its name indicates, the PAC manages 12 airports located near the Pacific Coast of Mexico, specifically in the cities of Guadalajara, Tijuana, Los Cabos, Puerto Vallarta, Hermosillo, León, La Paz, Mexicali, Morelia, Aguascalientes, Los Mochis and Manzanillo.

The PAC's role is to manage the airports ensuring their operation according to international regulations with the latest technology standards, while offering employees and travelers the highest standards in security. The PAC obtains its income from the passengers and the lease of commercial spaces to different businesses such as food vendors and retail stores.

Together, the 12 airports recorded nearly 21.3 million passengers travel through the terminals managed by PAC in 2012. In 2006, the stocks of the PAC started to be traded at the New York Stock Exchange and at the Mexican Stock Exchange.

With such characteristics, the security was a priority for the PAC. The end user commissioned Mexican-based security systems integrator IR Systems to upgrade the security systems at several of the airports it manages and to install new electronic security technology at the others, so they could have all the airports protected by state-of-the-art security solutions that integrated surveillance and an access control system.

Challenges

With more than 21 million passengers and an annual income of around \$500 million (2012), high security for employees and travelers was a priority for the PAC. Some airports had previously installed standalone security solutions, many of them manufactured by Tyco Security Products, but their growing need was to upgrade existing technology and to install new equipment in those terminals that previously did not have as many security systems in place.

While the PAC needed to upgrade surveillance capabilities throughout all of its airports, none of the airports had a standardized access control system so the immediate need was to provide all terminals with a standardized system. The integration of cameras, recording devices and video management software with the access control system was also a priority at each terminal since the objective was to have sufficient information at a moment's notice in case an unauthorized individual crossed a critical access point. The perimeter security system needed to be updated, as well.

“Our objective was to develop a security program to obtain a synergy between all the systems, also to integrate in a single platform all the efforts that were being done by the authorities at each airport,” said Juan Martínez, Chief Information Officer at PAC.

Based on solutions from the American Dynamics and Software House brands, the PAC was about to implement a new security infrastructure to increase the security for visitors and employees at these airports.

The Solution

The business relationship between IR Systems de Mexico and the PAC started many years ago. The company had installed the security system that had previously been in place and was invited to present a proposal to update the surveillance and the access control to integrate both systems to enable the operators of each airport to have control over every single security issue that could arise. The project started in 2011 and was finished in 2012, according to Martínez.

Some of the airports had installed surveillance systems manufactured by the American Dynamics brand, of Tyco Security Products, but it contained a mix of systems with some manufactured by other brands. Some of the solutions installed previously included Intellex recording units and SpeedDome Ultra cameras. At the airports with a previous surveillance solution, Mexico's IR Systems installed IP-based cameras which tie in with victor 4.1 as its unified video management solution.

According to Ernesto Ibarra, Director at IR Systems de Mexico, the installation included several different types of cameras to address specific needs of each area being monitoring. The project included Illustra 400 mini domes (93 units), Illustra 400 bullet cameras (31 units) and Speed Dome IP (83 units). Two airports, Los Cabos and Puerto Vallarta, required perimeter cameras (SpeedDomes) to transmit the images wirelessly to the control room. The power is obtained from solar panels.

“Los Cabos International Airport is the airport with the largest surveillance component, with 11 Intellex DVRs, 77 fixed cameras, 46 domes, and 14 cameras installed

outside the airport, at the perimeter. A second phase added 108 cameras,” Ibarra said.

And Ibarra added that in total, combining the new American Dynamics-manufactured cameras that were added, with the ones that were previously installed, as well as the units developed by other brands, the GAP airports sum 910 cameras installed at their locations. Such capacity to integrate hardware from different manufacturers is what makes of this project an integral solution that brings a lot of value for the end user.

Recorded video is managed using Intellex IP and VideoEdge video recorders. In total, at the 12 airports the integrator installed 13 Intellex IP units (1 Tb each), four VideoEdge recorder powered with victor VMS (5 Tb), plus the hybrid recorder installed at the airport in Hermosillo (2 Tb).

The access control component of the project is built around the C-CURE 9000 event management system from the Software House brand. None of the airports had installed an access control solution before, but the integrator presented a proposal that showed the advantages of the integration between the CCTV and the access control systems.

The integrator used a combination of iSTAR Pro readers and apC Controllers that when combined with iClass smart cards enabled the airports to use the same access control credentials for its perimeter access control and guard tour solutions. The advantage provided by these cards is that it did not require electrical power or network cable to connect each and every control points with the system because the information is stored in the card.

The project included 357 readers to control doors and pedestrian access points, as well as vehicular access. The vehicular readers which can operate in distances up to 13.12 feet (4 meters) by reading tamper-proof vehicular tags. This avoids the tag to be taken off from one vehicle and placed in another vehicle.

The surveillance systems is managed from independent control centers located at each airport, with either one or two operators, depending upon the needs of each terminal, to manage the system on a daily basis.. Typically, each control center has two displays and one joystick ADTTE. Some airports, as Los Cabos International Airport, the command center includes six screens, while the Guadalajara International Airport has eight 40” screens that form two video wall.

“With this system we obtained integration and synergies for each aspect, savings and what is more importantly scalability,” said Martinez. “At the end of the day we have some larger airports that need more devices and equipment to its system, but at the same time we have smaller airports which do not need that many cameras and devices. What matters is that all the airports use the same platform.”

The Future

The security systems installed at the 12 airports managed by the Pacific Airport Group allow the terminals to operate according to domestic and international standards. Airports are critical services where security plays a fundamental role and definitely this integration between CCTV and access control is offering a safe environment for employees and travelers.

Since the project was completed, the end user and the integrator have continued to work closely together to identify possible expansion at the system based on future needs. Currently the administration of the security system is independently managed at each airport, but the PAC is considering developing a central location to have control all 12 airports.

Martínez, from the PAC IT Department, said a critical aspect about the way the security project was structured is that it allows for future enhancements based upon the security needs of each terminal.

The Customer - Pacific Airport Group

The Pacific Airport Group (NYSE: PAC), known as GAP, was incorporated in 1998 as part of the Mexican government's program for the opening of Mexico's airports to private investment. The PAC holds concessions to operate, maintain and develop 12 airports in the Pacific and Central regions of Mexico. Each one of these concessions has a term of 50 years. The corporation is a federal-owned corporation and is headquartered in Guadalajara, Jalisco.

The Solutions Provider – Tyco Security Products

Tyco Security Products is a unified group of the most comprehensive world-leading premium access control, video, location-based tracking and intrusion solutions in the security industry. Tyco Security Products conducts business in over 177 countries around the world, in multiple languages and employs over 2,800 employees globally, including research and development, marketing, manufacturing, sales, service and logistics teams in the Americas, Europe, the

Middle East, Africa, and Asia Pacific. Our products, built by developers from all product disciplines, consistently allow customers to see more, do more, and save more across multiple industries and segments including healthcare, government, transportation, finance, retail, commercial and residential. Worldwide, Tyco Security Products helps protect 42% of Fortune 500 companies, transportation systems on five continents, 37% of the world's top 100 retailers, over two million commercial enterprises, thousands of students in more than 900 educational facilities, and over five million private residences.

The Integrator – IR Systems de Mexico

IR Systems de Mexico is a privately owned company with more than 15 years of experience in the electronic security business. During these years, the company has successfully participated in more than 300 security projects, providing their services mainly for airports and other vertical markets. The company has integrated security systems in more than 25 airports in the entire country. Its staff comprises of around 40 people working in areas such as management, engineering, technical and installation.