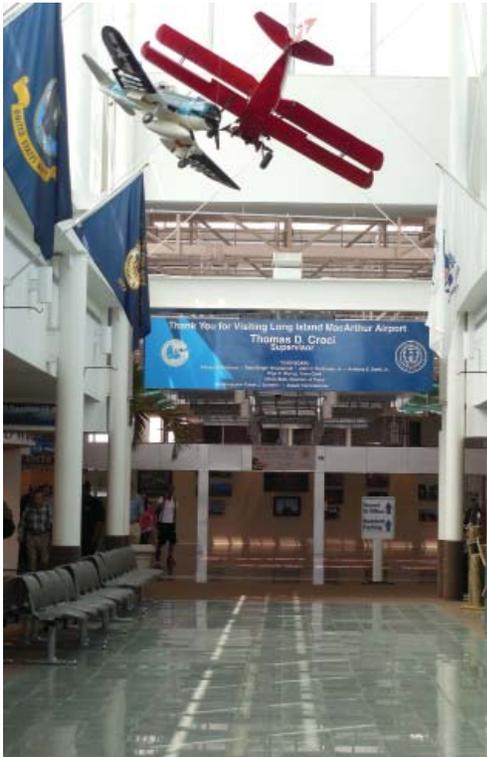


# Long Island MacArthur Airport



## Long Island MacArthur Airport

Interior spaces within Long Island's only commercial service airport pay tribute to the Island's significant role in aviation history.

### Overview:

As Long Island's only commercial service airport, Long Island MacArthur Airport (LIMA) is a busy regional hub, serving close to 1.3 million commercial passengers in 2013. Set on 1,310 acres in Suffolk County, New York, it is a public facility owned and operated by the Town of Islip. Built in 1942, LIMA's airfield originally featured three 5,000-foot runways and three ancillary taxiways. The airport was expanded in 1966 to include a second passenger terminal and, when the Federal Aviation Administration (FAA) designated LIMA as a New York Metro Airport in 2011, the opportunity for expanded air service and passenger growth presented itself again. With the demands of hosting a significant volume of commercial traffic, as well as housing about 250 private and general aviation aircraft, LIMA sought to upgrade its existing analog surveillance system recently to include more advanced digital IP-based High Definition (HD) video technology. They chose regional systems integrator, A+ Technology & Security to handle the assignment, and IPVideo Corp.'s SentryVMS™ as their surveillance platform. And with good reason.

### Challenges & Objectives:

Because LIMA had already invested in a substantial number of analog cameras, the goal was to add IP-based HD cameras and video technology to the system they already had in place and also expand into other areas of the airport that weren't yet under surveillance. These included a new Southwest Airlines terminal and its gates, as well as the perimeter gates around the entire airport, and the airport's new FAA tower. The primary objective was to unify all the cameras onto one platform and improve the ability of airport investigators to access any needed video recorded for forensic purposes. By doing this while utilizing the existing assets already in place, LIMA could manage the costs of an upgrade while also allowing flexibility for additional system expansion in the future.

### Solution:

The airport chose the IPVideo SentryVMS™ solution, and was able to capitalize on their existing investment in CCTV, using Axis Video

Encoders to convert their analog cameras over to the IP based SentryVMS™ platform. A+ Technology & Security Solutions fully integrated new and existing surveillance cameras under a central video management system, which enabled LIMA to take full advantage of new digital video technology. The system is providing enhanced features that address the specific needs of airport operations, including HD cameras that capture facial details to aid officers in identifying persons of interest and resolve incidents. In addition, the system's timeline feature improves overall customer service, allowing law enforcement to quickly and easily review video, help travelers find lost property and locate cars in the parking lot. System Configuration: The new system consists of a network of hundreds of cameras, two-thirds AXIS IP and one-third analog, with most of the IP cameras delivering megapixel resolution. A new 30-foot central command center was constructed with an advanced security console, consisting of six 22-inch monitors at 45 degrees and two 42-inch articulating monitor, with a large work area. IPVideo's SentryVMS and AXIS video encoders were used to connect existing cameras, saving over \$200,000 in the process and tremendously improving efficiency and work flow. At the recommendation of the integrator, James Adikes, Senior Project Manager at A+, two AXIS megapixel cameras were installed to further enhance fire, rescue, safety and security. The system, an airport- approved Motorola wireless system, is built on Alcatel Lucent switches and a dedicated parallel network. The IPVideo team effectively met the challenge of working with LIMA's existing older wire infrastructure through its proprietary technology.

### System Configuration:

The new system consists of a network of hundreds of cameras, two-thirds IP and one-third analog. A new 30-foot central command center was constructed with an advanced security console, consisting of six 22-inch monitors at 45 degrees and two 26-inch articulating monitor, with a large work area. IPVideo Sentry VMS and AXIS video encoders were used to connect existing cameras, saving over \$200,000 in the process and tremendously improving efficiency and work flow. At the recommendation of the integrator, James Adikes, Senior Project Manager at A+, two high Mega Pixel cameras were installed to further enhance fire, rescue, safety and security. The system, an airport- approved

***"The (upgraded surveillance) system has been working very well and we're completely satisfied with it and the support that A+ Technology Solutions provided. The system has made our lives easier and, most importantly, more secure for all who travel through and operate in our airport."***

***Greg DeCanio, Chief of Law Enforcement at Long Island MacArthur Airport***

Motorola wireless system, is built on Alcatel Lucent switches and a dedicated parallel network. The IPVideo team effectively met the challenge of working with LIMA's existing older wire infrastructure through its proprietary technology along with a Balun, an electrical device that converts between a balanced signal and an unbalanced signal to connect the two systems.

## Overcoming Obstacles:

In keeping with the philosophy of "There are no problems, only solutions," Adikes and his team at A+ Technology Solutions tackled some obstacles to make the install the tremendous success it is. "The largest challenge the A+ engineers faced was converting the existing Unshielded Twisted Pair (UTP) wiring of the analog camera system. There wasn't a data network infrastructure in place capable of supporting the tremendous amount of bandwidth needed to span the entire length of the airport and support the high definition cameras being installed throughout the entire airport property. A+ Engineers designed an enterprise level parallel network robust enough and secure enough to satisfy the needs of the airport and support the cameras independent of the airport network with all routing taking place at the airport's network core, allowing access from their network," he explains.

"IPVideo Corporation's Sentry VMS solution allowed us to achieve LIMA's goals of having a centralized system with more cameras and a fully integrated, easy to use, higher quality (HD), live video surveillance, video management and video archiving system," Adikes adds. "Because of Sentry's amazing capabilities as a complete video management system with a centralized architecture,

LIMA was able to upgrade its existing system and take full advantage of advances in digital video technology to significantly upgrade the level of security they have in place."The new system is also easily expandable, allowing for the installation of hundreds more cameras to accommodate future airport expansion.

## Cost Effectiveness:

An affordable, value-priced solution, IPVideo's Sentry VMS solution enabled LIMA to save roughly \$200,000 in taxpayer money for this significant security upgrade. Airport security demands have created a need for innovative, budget-conscious approaches to IP surveillance. IPVideo's Sentry VMS is a popular solution for airports and transportation companies since it provides an easy to use, reliable and proven security data management solution, which includes software, hardware and storage. Its purpose-built hardware platform is custom designed to withstand the data demands of 24/7 IP security applications. Increased redundancy, performance and simplicity are provided using RAID-1 storage. Sentry VMS supports all megapixel and HTDV video resolutions. The solution also offers system health monitors that send an alert if the system is impacted by power outages, cameras going offline, or temperature going out of range,

## All This And A New Command Center, Too!

In addition to enhancements made to its existing security system, LIMA also benefitted from this project with the addition of a new 30-foot Security Operations Center (SOC) that was constructed with an advanced security console, consisting of six 22-inch monitors at 45 degrees and two "42"-inch articulating monitors, with a large work

area. It was markedly different from what LIMA had in place before, which was a makeshift console that consisted of a desk and two monitors that could only support one user. All previous investigations had to be performed in this security office. The new console affords enough work space to support up to five officers simultaneously with enough monitors to view all of the critical areas of the airport at the same time. LIMA investigators and all its officers received specific training from IPVideo and A+ on the software according to their departmental needs determined by airport management. This new command center has significantly improved airport security personnel's ability to monitor all activities, both live and archived. The new IP-based system is also now accessible on the airport's data network, enabling all authorized personnel to utilize all the features of the system anywhere on the local area network (LAN) and connect to the system from a Web browser or Smart Phone anywhere in the world.

## Results, Results, Results:

The Chief of Law Enforcement at Long Island MacArthur Airport, Greg DeCanio, is loving the new, upgraded security system. "Sentry VMS gives us fuller coverage than we ever had before, providing us with an extra set of eyes to help protect the traveling public," he reports. "We are very pleased with the new system's ease of installation, and comprehensive flexibility, which allows us to expand as we grow our operations. The system also provides us the ability to access video at our computers, making us more efficient and letting us monitor activity for security and law enforcement purposes at the touch of a button."

"The system has been working very well and we're completely satisfied with it and the support that IPVideo and A+ Technology Solutions provided," he adds. "The quality of the HD video with the panning and zooming features of the cameras have been so helpful in our security efforts. There have been multiple cases when we have needed to go to the video archives and IPVideo's solution has assisted us in successfully completing investigations. We have been able to go back to these archives and quickly find what was needed. The system has made our lives easier and, most importantly, more secure for all who travel through and operate in our airport."

*A+ Technology & Security provides integrated, IP-based technology solutions to major school districts and universities, municipalities, Fortune 500 companies, healthcare campuses, utilities and many other types of public and private entities. The company's expertise in security technology, security infrastructure and professional A/V systems enables it to deliver comprehensive solutions that all harness the power of network connectivity. It is the largest provider of security solutions for K-12 districts in the metro New York area.*

*Founded in 1989 by David Antar, the company is currently headquartered in Bay Shore, NY. It is licensed by the New York State Department of State, license #12000276317.*

