



IP VIDEO THWARTS THREATS AT RELIGIOUS SCHOOL

A DHS grant enables a New York-based private school to arm itself with IP video surveillance.

By Scott Goldfine

With the looming threats of violence and terrorism around the nation, it seems as if those issues are even more magnified at Jewish facilities where hate crimes are also a major concern. That point was reinforced in May of 2009 when the FBI and New York Police Department foiled the plot of four men to deploy car bombs to blow up two synagogues in Riverdale, N.Y. The temples are located near SAR Academy, a modern Orthodox yeshiva (Jewish day school that provides secular and religious instruction), where congregation members likely send their children.

SAR does not take such risks lightly. That's why in December 2008, SAR's stakeholders decided it was time to upgrade the facility's existing video surveillance system with the latest advances in electronic security can offer.

Making the most of a grant from the Department of Homeland Security (DHS), SAR enlisted Idesco, a New York-based systems integrator, to design and deploy an IP video solution featuring megapixel cameras. The campus and integrator had to overcome the trials of both nature and man to bring the project to a successful conclusion.

UPGRADES MAINTAIN OPEN ENVIRONMENT

Established in 1969, SAR includes a nursery, grade school and high school. The facility serves almost 800 families and nearly 1,300 students. It is also one of the largest institutions of its kind in the New York metropolitan area.

"This is a well-educated population, with school-age children," says Nick Fadda, facility manager for SAR. "Their extended families, including grandparents and relatives, are located throughout the metropolitan area, Florida and Israel. We have hundreds of alumni and their families who proudly support SAR. Several area synagogues in the New York metro area that reach thousands of additional families are also involved with our school."

With so much community involvement, campus officials wanted to maintain the school's open environment, which makes the institution so special for students, alumni and families.

Preserving the sanctity of this special place meant upgrading a 10-year-old

The SAR project's engineering team of (l-r) Andy Goldstone (Idesco), Simon Vizgan (Idesco), Les Heine (Security Service Group, a subcontractor on the job) and Tom Lally (Arecont Vision), discuss how the cameras will be deployed.





Idesco Senior Project Manager Simon Vizgan adjusts the focus of one of the more than 25 Arecont megapixel cameras installed throughout SAR's campus and two main buildings.

analog video surveillance system that augments the campus' fire and security systems. Although still functioning, the video system had become a bit of a relic given technological progress. Specifically, the school sought to improve the efficiency, images, playback, zoom and storage capacity so as to more effectively monitor students, staff, parents and anyone coming onto the property.

"We wanted to secure the school, and get a visual on people who come in and go out," says Fadda.

DHS GRANT OFFSETS 75% OF COSTS

With a clear vision of what they wanted to accomplish from a security and safety standpoint, and having been awarded a DHS grant to help finance it, SAR officials set about finding the right provider to fulfill the school's needs. Idesco, which has expertise in school safety and is an approved DHS vendor, fit the bill.

"We found out about them through the Department of Homeland Security as one of their vendors that may be used for work done pursuant to our DHS grant," says Fadda. "We contacted them in December 2008."

Idesco offered SAR a demonstration at the end of March 2009 and won the contract during the late spring-early summer timeframe.

"The technology was selected after we presented numerous options to the [campus]," says Idesco Vice President of Strategic Sales Andy Goldstone. "Idesco had manufacturers and their representatives out to the facility to provide SAR with a demonstration of their equipment. We then reviewed the alternatives with SAR and jointly decided on which equipment best met the school's specific re-



Five-megapixel cameras were situated to cover all angles, providing comprehensive surveillance for the school.

quirements."

Given that the area and two large buildings (each an estimated 30,000 square feet) requiring video surveillance was quite sizable, Idesco was mindful to recommend products that would keep costs in check without sacrificing the quality of imagery or safety.

With 75 percent of the \$100,000 project courtesy of DHS, SAR was responsible for the \$25,000 balance. The installation commenced in August 2009 and continued through the end of the year in the interest of maximizing the system's performance.

SYSTEM WEATHERS THE WORST

After blending together all the aforementioned critical factors, the solution consisted of installing Arecont Vision 1.3- to 5-megapixel cameras throughout the fa-

Idesco's Simon Vizgan trains the SAR security staff on system usage. The solution provides the school better efficiency, images, playback, zoom and storage capacity.

cilities along with Dell servers and OnSSI's video management software (VMS) platform. To maximize the cost effectiveness of the solution, some of the existing Sony cameras were integrated into the OnSSI VMS at the head-end.

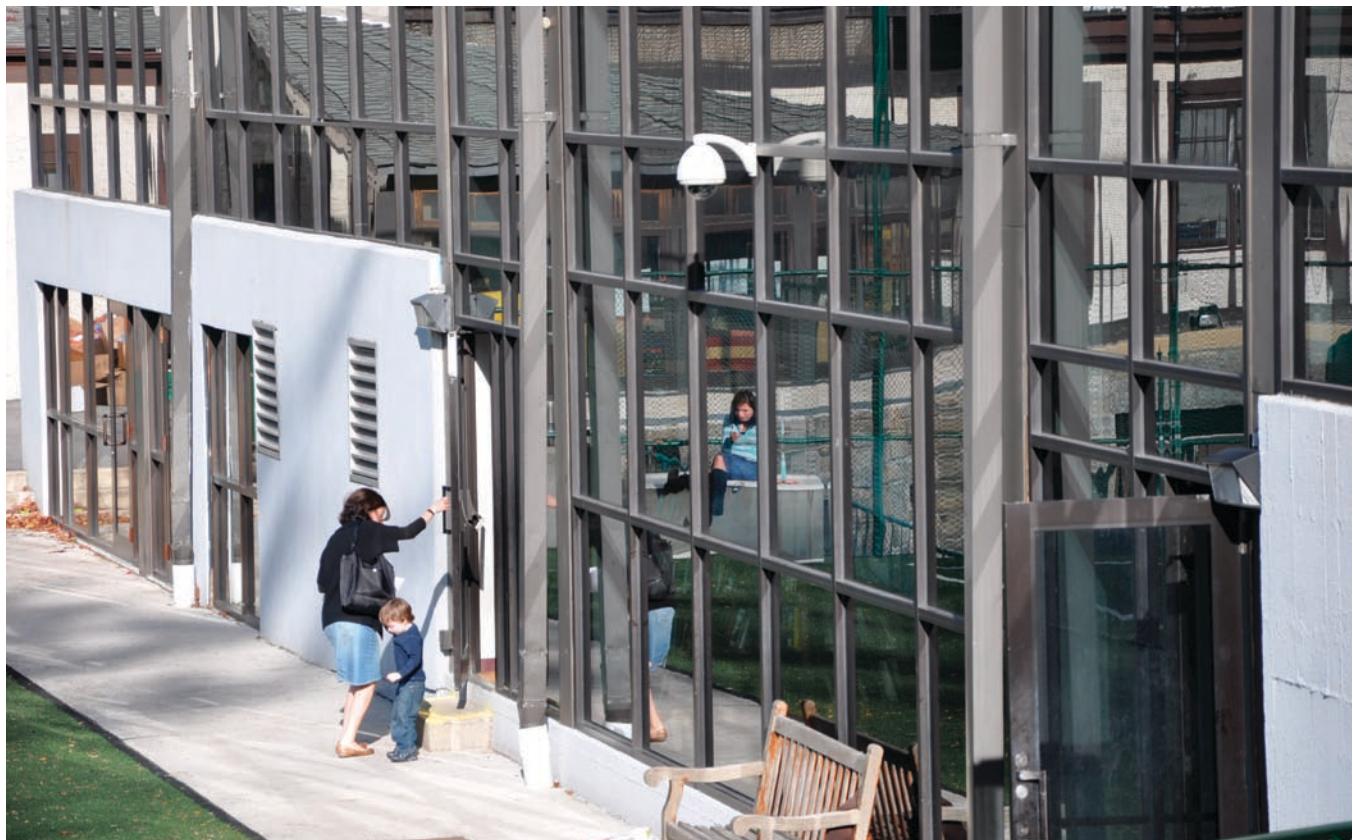
Idesco General Manager Scott Etess supplies more details: "The installation consisted of more than 25 indoor and outdoor cameras," he says. "Each building has its own server running OnSSI. Guard booths and certain individuals have the ability to view the cameras. All cameras are fixed as the need for pan/tilt/zoom cameras was eliminated by 180° cameras from Arecont. Most of the cameras utilize H.264 compression."

That last element, according to Etess, was the only unexpected technical issue associated with the installation. One of the cameras was not properly processing the H.264 compression, which resulted in decreased amounts of video retention and some minimal bandwidth issues. Fortunately, the issue was resolved and that particular camera is now able to comply with the intended compression scheme.

However, as Etess recounts, there were some other unforeseen and unusual hitches related to the project that were for the most part beyond the integrator's control. The first of which involved the human element — and a motor vehicle. "A truck hit a camera that was designed to capture images of license plates as they approached the main entry area to the lower school," he says. "The camera has since been relocated to make certain that this does not occur again."

The second situation arose thanks to Mother Nature — and the region's propensity for electrical storms.

"We learned the hard way that light- ▶

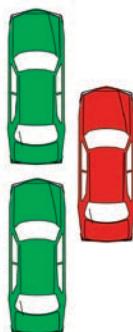


Arecont's 180° megapixel dome camera mounted within view of one of SAR Academy's entrances/exits. The project included the installation of more than 25 new 1.3- to 5-megapixel cameras, which greatly enhance images when compared to the old analog system.

ning is a serious issue in this particular area of the Bronx," Etess says. "A total of five cameras were affected by lightning. Surge protection has been added at both the camera and server levels, and since its installation, we have not had a reoccurrence."

Fortunately for SAR, the damaged cameras were replaced by the manufacturer free of charge. Now that is support.

With its suppliers backing it up all the way, Idesco ensured the project was as seamless as possible by closely coordinating its efforts with SAR's IT staff and facilities department.



of the new system," says Fadda. "The main thing is how nicely the software functions. It's the image quality, the ability to zoom in and out, as well as adjust the sensitivity on where one wants to record. A PDA can be used to view video

As with so many educational facilities, the campus has very limited space for vehicles. Thus, double parking has been a problem, but now it is easy to keep track of who is leaving cars where and to track drivers down if necessary.

anywhere, and greater storage capacity and ease of use are important as well." For its part, SAR has already discovered its new solution provides value beyond security.

For example, as with so many educational facilities, the campus has very limited space for vehicles. Thus, double parking has been a problem, but now it is easy to keep track of who is leaving cars where and to track drivers down if

necessary. The system has also proved helpful as an additional set of eyes during recess and throughout the day in many ways. While Fadda acknowledge there were some bumps in the road getting the system to work in strict accordance with

the specifications, he says everything is now for the most part fully functional as anticipated. The integrator's responsiveness has helped ease any difficulties associated with the project.

"Idesco has been and remains committed to making sure SAR is satisfied with the product, and that it meets the needs of the school," says Fadda.

As it says on its Web site, "SAR is a place where learning and life come together." Now, thanks to the power of megapixel video, safety and security can rightfully be added to that description. **CS**

KINKS WORKED OUT, VALUE EVIDENT

How dramatic of a difference does the latest in video surveillance technologies make? It is easy to see since much of the pre-existing analog system continues to function in support of the new IP system. Dual monitors behind the lower school's guard desk display both systems, and the side-by-side comparison makes the disparity in image quality obvious.

"There are a lot of outstanding features

SCOTT GOLDFINE is the editor of Security Sales & Integration magazine.

 For additional coverage of this and other healthcare and educational safety and security topics, visit CampusSafetyMagazine.Com