



Jewish School

BY SCOTT GOLDFINE

A New York-based private school arms itself with an IP video surveillance system and a DHS grant to help pay for it. Despite some unusual pitfalls, the integrator perseveres to ensure the project pans out as planned.

Largely looked upon as safe havens just a few short years ago, school campuses have tragically and distressingly become the scene of multiple incidents involving violence and bloodshed. Whether it's a personal vendetta or act of terrorism, these heretofore hallowed institutions must now contend with this grim reality. These looming threats are additionally magnified at Jewish facilities, where hate crimes are also a major concern.

The latter 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, 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 risk factors lightly. Maintaining the optimal environment to ensure its students (as well as instructors, administration and everyone else associated with campus operations) remain focused on educational pursuits and their parents enjoy peace of mind is at the top of the priorities list. 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 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 integrator had to overcome the trials of both nature and man to bring the project to a successful conclusion.



KEEPING SCHOOL A 'SPECIAL PLACE'

Established in 1969, SAR spans nursery (the Early Learning Center), grade school (the Academy) and high school. The school serves almost 800 families and nearly 1,300 students and is one of the largest institutions

Converts to IP



of its kind in the New York metropolitan area (Westchester County, Manhattan, the Bronx and Bergen County, N.J.).

"This is a well-educated population, with school-aged 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, who reach thousands of additional families, are also involved with our school."

According to the school's Web site: "SAR is a special place. Our SAR families would describe that special quality

differently. Some might say SAR is special because the open environment perpetuates open attitudes and ideas; others would describe the love and care that every teacher shows to their students; yet others would speak to the building's



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.

architecture that makes each student feel part of a greater community."

Preserving the sanctity of this "special place" meant upgrading a 10-year-old 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. "Our goal was to make it secure for the students because the life of a child is priceless. Additionally, we wanted to protect the property, equipment and computers."

DHS GRANT OFFSETS 75% OF COSTS

With a clear vision of what it wanted to accomplish from a security and safety standpoint, and having been awarded a DHS grant to help finance it, SAR set about finding the right provider to fulfill its needs. Idesco, an expert in

schools (among other clients) and 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."

Established in 1943, today Idesco provides integrated security solutions including digital ID badging systems, access control, biometrics, turnstiles, digital video surveillance and visitor management. Major television networks, large municipalities and prestigious universities (a case study involving the firm's work at Adelphi University appeared in *SSI's* February 2009 issue; search "Adelphi" at www.securitysales.com) are among the thousands of customers that depend on Idesco to protect them.

"Our customers include schools and universities, governmental agencies, health-care facilities, commercial office facilities and religious institutions, among others," says Idesco General Manager Scott Etes. "Schools/universities and religious institutions have been growing the fastest, with DHS grants to not-for-profit institutions certainly aiding in this recent growth."

After learning about the bidding opportunity through the New York State

Office of General Contract, 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 customer," says Idesco Vice President of Strategic Sales Andy Goldstone. "Idesco had manufacturers and their representatives out to the facility to provide the customer 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 requirements."

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 of those the end user was determined to protect.

"The DHS grant allowed the school to purchase a system that would serve its desired purpose," says Goldstone. "The grant was helpful for us as the integrator because we were able to provide the customer with a system they otherwise would have possibly not been able to afford. Additionally, it allowed the customer to acquire a system



An Arecont's 180° megapixel dome camera mounted within view of one of SAR Academy's entryway/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.



Idesco Senior Project Manager Simon Vizgan adjust the focus of one of the more than 25 Arecont megapixel cameras installed throughout SAR's campus and two main buildings. The solution helps ensure the welfare of the facility's approximately 1,300 students.

that is truly state-of-the-art with the latest and greatest IP technologies.”

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, Idesco's solution consisted of installing Arecont Vision 1.3- to 5-megapixel cameras throughout the facilities along with Dell servers and OnSSI's video management software (VMS) platform. To maximize the cost effectiveness of the solution, Idesco also integrated some of the existing Sony cameras into the OnSSI VMS at the head-end.

Etes supplies more details: “The installation consisted of 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 Etes, 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 Etes 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 lightning is a serious issue in this particular area of the Bronx,” Etes 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 the integrator and client, the damaged cameras were re-

placed by the manufacturer free of charge. Now *that* is support.

“Anytime the welfare and safety of children are involved, there should be no compromises with security. Arecont Vision's megapixel cameras deliver the detailed resolution required to identify potential threats, and also to positively identify individuals — most importantly the children who attend SAR,” says Arecont Executive Vice President of Sales and Marketing Scott Schafer.

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.

“Despite the fact that the system resides on its own network, we feel it is important to work alongside the customer, in particular those who will be tasked with operating the system after the installation is complete,” says Etes. “The staff of SAR really took ownership of the system and its functionality. These are clearly people who are vested in the success of the system and



A pair of older Sony cameras remain in place above a new megapixel model from Arecont. The analog and IP units combine to cover all angles of this area for the school.

it is apparent that their motivation is the children's safety and security."

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 preexisting 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.



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

"There are a lot of outstanding features 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 anywhere, and greater storage capacity and ease of use are important as well."

As is often the case with today's robust video surveillance, even though it is likely just scratching the surface in the limited time its system has been online, 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 varied ways.

While the end user acknowledges there were some bumps in the road getting the system to work in strict accordance with

the specifications, Fadda says everything is now for the most part fully functional as anticipated. Easing any pain has been Idesco's responsiveness, which has resulted in SAR already recommending the integrator to similar organizations.

"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. n