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BEST OF THE BEST: PRESENTING SSI'S

INSTALLATIONS OF THE YEAR!

Inside Look at Hyundai Plant,
Golf Community Projects

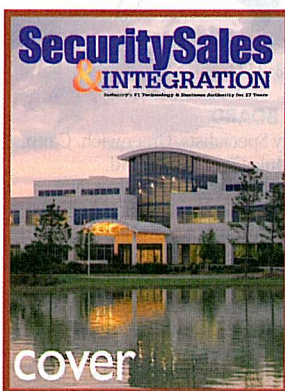
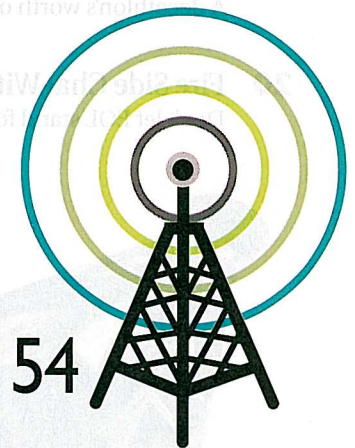
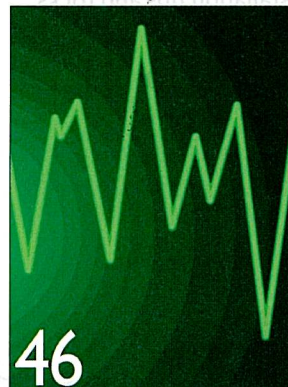
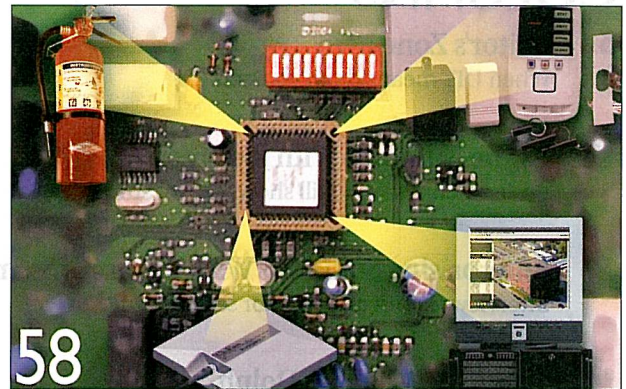
HEAR US NOW: WHAT'S NEW IN WIRELESS

All About Radio-Based Security Applications. Page 46

Analog Mobile Phone Service End Nears Page 54

CATCH THE NEW WAVE OF INTRUSION PANELS & SENSORS

Technology Tsunami Brings Better Integration,
Interfaces, Transmission



Cover photo by Bill Cash II

FEATURES

24 Prize-Winning Projects Approach Perfection

Birmingham, Ala.-based Vision Southeast and Ultrasafe Security of Norco, Calif., have reached the pinnacle of their profession by winning *Security Sales & Integration's* 5th annual Integrated Installation of the Year Awards. SSI takes you behind the scenes of these projects for an up-close look at what makes them so exceptional. *By Scott Goldfine*

46 Tuning Into Wireless Technology (Part 2 of 2)

The more security technicians know about the practical side of short-range wireless, the more likely their installations will be met with success. Learn how to identify and solve the issues that can adversely affect the radio signal transmitted by a wireless alarm, access control, camera or other security-related device. *By Al Colombo*

54 AMPS About to Become MIA

As many as a million alarm system owners stand to be compromised Feb. 18, 2008 when cell phone service companies will no longer be required to provide analog mobile phone service (AMPS). With the deadline looming, alarm companies should already be reevaluating and converting their security networks. *By Tom Kenty*

58 Burglar Alarm Systems Boring? Please!

With the emergence of access control, CCTV, biometrics and other exciting security technologies, plain old burglar alarm systems suddenly stopped being very sexy. Well it's no longer your father's control panel! The excitement is back thanks to advances evident in products boasting integrated capabilities, intuitive interfaces, new transmission methods and more. *By Bob Dolph*

PRIZE-WINNING PROJECTS

Approach Perfection



Vision Southeast President Barry Komisar (left) and Ultrasafe Security President Ron Lander proudly display their award plaques for, respectively, *SSI's* Integrated Commercial/Industrial and Residential Installations of the Year.

By Scott Goldfine

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AT A GLANCE

- Vision Southeast of Birmingham, Ala., and Ultrasafe Security of Norco, Calif., named winners of *Security Sales & Integration's* Integrated Installation of the Year Awards
- Vision Southeast received the Integrated Commercial/Industrial Installation of the Year Award for providing a 2-million-square-foot Hyundai Motor Manufacturing plant with an integrated video, access control and fire system
- Ultrasafe Security captured the Integrated Residential Installation of the Year Award for a Southern California gated community in which it installed video perimeter security, wireless security, vehicle gate controls, solar power for outdoor systems, alarm monitoring and a command center

Birmingham, Ala.-based Vision Southeast and Ultrasafe Security of Norco, Calif., have reached the pinnacle of their profession by winning *Security Sales & Integration's* 5th annual Integrated Installation of the Year Awards. *SSI* takes you behind the scenes of these projects for an up-close look at what makes them so exceptional.

Experience, expertise, ethics, finesse, dedication, patience, perseverance, teamwork. Vision Southeast and Ultrasafe Security possess these attributes in abundance, which is largely why they captured *Security Sales & Integration's* 2006 Integrated Installation of the Year Awards. Their winning entries demonstrated extraordinary skill and innovation in system design, engineering and installation.

As the biggest among many winners announced during *SSI's* SAMMY Awards ceremony in Las Vegas April 4, Birmingham, Ala.-based Vision Southeast and Ultrasafe Security of Norco, Calif., set themselves apart among several outstanding security contractors to take home special plaques for, respectively, Integrated Commercial/Industrial and Residential Installations of the Year.

In its winning installation, Vision Southeast integrated access control, digital video, fire detection and fiber optics systems for the 2-million-square-foot Hyundai Motors Manufacturing plant in Montgomery, Ala. The project, which included six buildings spread across 1,750 acres, was completed in four months.

Ultrasafe earned its residential recognition by installing a total perimeter fence, perimeter photoelectric beam, wireless CCTV, access control and command center systems for a 350-unit, Southern California golf-course community. The \$1 million project was completed in five months.

Both projects combine environmental aesthetics with optimal functionality, seamless integration and ease of use. Let's take a closer look at what makes these installations worthy of being recognized as the industry's gold standard.

Hyundai Plant Souped Up With SUPER SECURITY SYSTEM



WINNER AT A GLANCE

Company Name: Vision
Southeast Inc.

President: Barry Komisar

Location: Birmingham, Ala.

Years in Business: 5

Number of Employees: 25

Market Breakdown: Systems
integration (40 percent); CCTV
(25 percent); access control (25
percent); other (10 percent)

Vision Southeast Inc. is a Birmingham, Ala.-based systems integrator specializing in security system design and installation primarily for large corporate, government and health-care clientele. The firm was founded in 2000 by President Barry Komisar, who earned his stripes during an eight-year stint working for another integrator he now calls his competitor.

Vision Southeast is comprised of 25 employees, including Barry's wife, Kim Komisar, who handles marketing for the company. The integrator realizes 40 percent of its revenue from systems integration, 25 percent each from access

control and video surveillance, with the remainder coming from various electronic-based systems.

Vision Southeast, which does not install intrusion systems or provide monitoring, has put together an impressive client list that includes the Birmingham Jefferson Convention Complex (*see case study in the May 2003 issue of Security Sales & Integration*), the Colonial Mall in Brookwood Village (Ala.) and the Birmingham Early Learning Center.

As Barry Komisar states, "To us, it is about quality, not quantity." It was this approach and the company's mounting reputation that helped it obtain the Hyundai Motors Manufacturing Alabama (HMMA) plant in Montgomery.



1. A 940 GE Proximity reader works in conjunction with the magnetic locks on the glass doors to control access to the Hyundai showroom during hours when the facility is closed. The showroom is open to visitors during regular business hours.

2. Thousands of Hyundai employees enter and exit daily through access system-controlled turnstiles in freestanding guardhouses.

3. High atop the administration building, an 18x day/night Cyberdome and a KTC 2000 day/night camera monitor outside activity.

4. A Cyberdome Select camera catches all the comings and goings in the cafeteria within the administration building.

Mammoth Facility Calls for Powerful Security

Having begun production in March 2005, the facility is the first Hyundai plant to be opened in the United States. Situated on 1,750 acres, the complex encompasses six major buildings with 2 million square feet under roof. At full capacity, the \$1.1 billion factory will churn out some 300,000 Sonatas and Santa Fe SUVs a year. Hyundai saw U.S. sales grow by 9 percent in 2005, when it moved more than 400,000 vehicles.

When considering its effect on employment as well as serving as a catalyst for a host of local suppliers, the new Hyundai plant figures to have the greatest impact of any business enterprise ever launched in the central Alabama region. At peak, there are several thousand employees on site. In addition, the

facility welcomes many visitors, including vendors and tour groups from local schools and civic organizations.

The enormity of this operation, both in terms of productivity, people and assets, called for an equally substantial security system.

"The HMMA plant is a state-of-the-art automotive plant with proprietary manufacturing technology and innovative automotive designs on the drawing board. We have more than 3,000 team members and are dedicated to their safety and well being," says Larry Pugh, HMMA security/communications manager.

Integrator Befriends Other Trades on Project

In May 2004, Hyundai management signed on Vision Southeast to provide an innovative solution integrating

video surveillance, access control, audio and attendance checking from points several miles apart, and fire detection. Work began in late 2004 and was completed about four months later.

"The original purchase order was signed on May 10, 2004. The original installation was to take about 26 weeks. However, due to many construction delays, final acceptance did not occur until June 29, 2005," says Komisar.

In addition to Komisar, other key Vision Southeast personnel involved in the HMMA project included Larry Oliver, account representative; George Howard, engineer; Installation Manager Ivan Popov; Service Manager Scott Nolde; and technicians Rusty Chevyrev, Paul Gulledege, Ben Padilla, Chris Duncan and Jason Dyer.

2006 COMMERCIAL INSTALLATION OF THE YEAR

With a consultant serving as the liaison and system design advisor in a truly collaborative effort, Vision Southeast helped the end user make its security desires a reality.

"We obviously worked with HMMA in determining their needs — where they needed cameras, card readers, turnstiles, etc.," adds Komisar. "They had an idea of what type of security they needed, but our job was to lead them with our experience and design a state-of-the-art system."

The integrator carefully orchestrated the project's coordination with several other trades as well. The scope of the jobsite likened it to the construction of a small city.

Komisar continues, "We had to coordinate with someone at just about every phase of the project. We coordi-

nated with consultants, engineers and architects more during the design phase. Once the installation began, it almost meant coordinating with someone new on a daily basis — builders, electricians, glass installers, you name it."

63 Cameras, 135 Doors Pace Video, Access Systems

From its inception, Vision Southeast has been an advocate of the GE Security (Kalatel, Fiber Options, Casi) product line (*see equipment list on page 32*), and that did not change for the HMMA project.

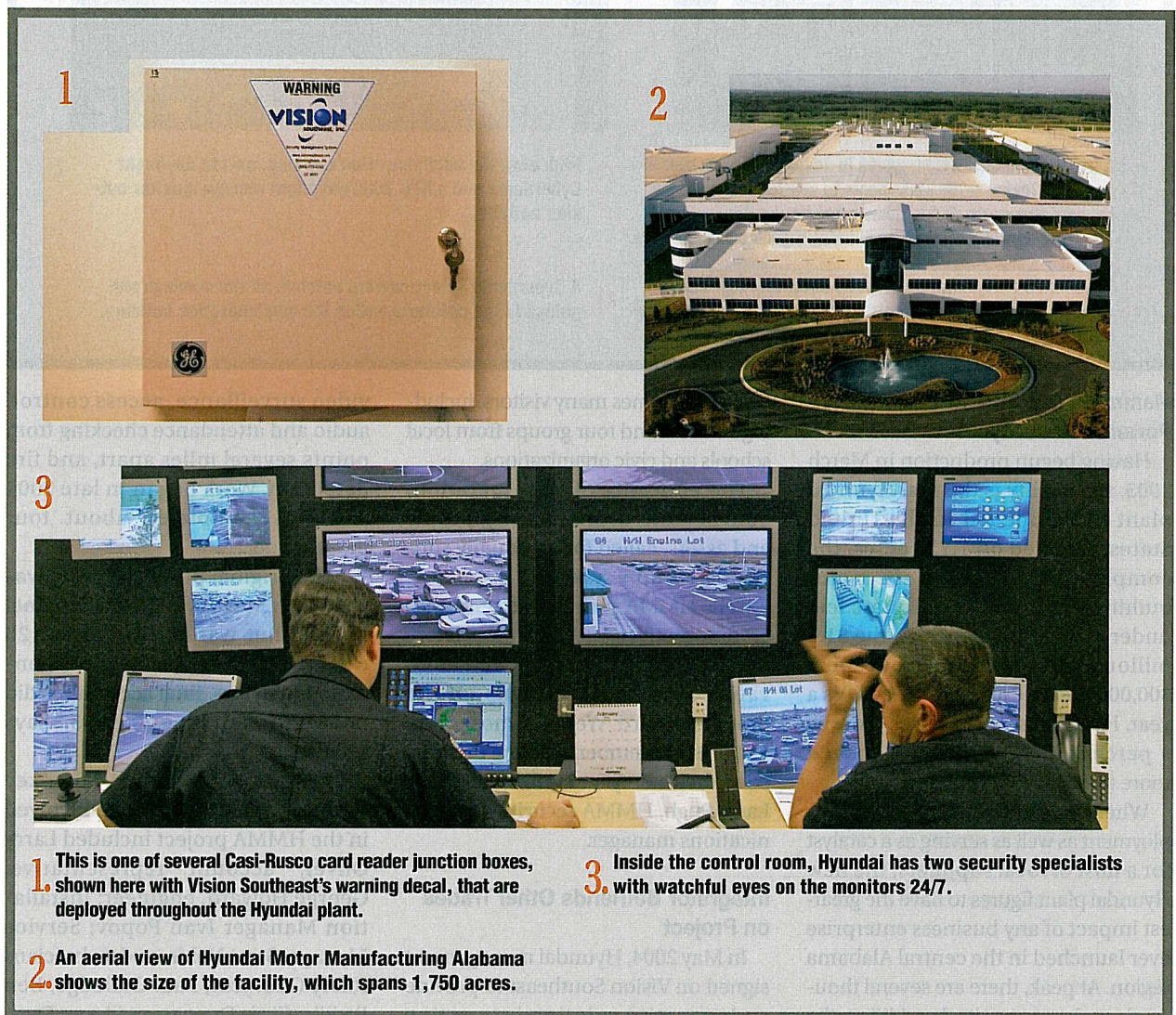
"From the cameras to the digital recorders to the access control system, all equipment was from GE," confirms Komisar. "We always lead with the GE product line and believed

it was the best solution for our client. Offering video, access control and fiber transmission equipment from a single source assured us of compatibility and availability of the product."

Regarding the video portion of the installation, miles of fiber-optic cable was run in order to connect all of the video to a single point. All camera signals and data for pan/tilt/zoom (p/t/z) control travel through the dedicated fiber network.

In total, the video system consists of 63 cameras — 17 fixed high-resolution, eight color Cyberdome Selects and 38 Cyberdome day/night units. It utilizes Fiber Options fiber transmitters and receivers on a private fiber backbone.

All video is fed to the security control room where it is recorded on six



1. This is one of several Casi-Rusco card reader junction boxes, shown here with Vision Southeast's warning decal, that are deployed throughout the Hyundai plant.

2. An aerial view of Hyundai Motor Manufacturing Alabama shows the size of the facility, which spans 1,750 acres.

3. Inside the control room, Hyundai has two security specialists with watchful eyes on the monitors 24/7.

2006 COMMERCIAL INSTALLATION OF THE YEAR

rack-mounted terabyte DVMRes. Live video is then sent to a GE Security matrix switcher and displayed in multiplexed and single images on four 42-inch plasma monitors, eight 20-inch GE LCD monitors and four 15-inch GE LCD call-up monitors located on a custom-designed security desk.

Security officers control all video display and p/t/z cameras with two GE KTD-405 keypad controllers. Video from a separate facility two miles away is also monitored live and controlled from this security desk using the same method.

Access control for the facility uses the computer network for communication and interfaces with the SAP system to allow managers to see which of their employees are reporting for work. "Hyundai requested this attendance-checking application, but at the time it did not yet exist. We brought in a GE consultant and created a program to perform this crucial function," Komisar says.

The access system consists of 135 doors, 144 proximity readers, 113 magnetic locks and numerous passive infrared readers (PIR) motion detectors and request-to-exit (RTE) buttons. Each door is secured by a 1,200-pound force maglock with a GE 940 prox reader, while major access points are cov-

ered by DR-1500 vandal-resistant, high-resolution color cameras.

All access control devices communicate to a dedicated access control server via the facility network. All access functions are monitored on a 15-inch LCD screen at the security desk. In addition, high security access points use the product's Swipe-n-Show feature to verify the cardholder's identity.

In addition, access system-controlled full-height mechanical turnstiles were installed at three points in guardhouses along the fence line to secure the foreign trade zone.

System Offers Unique Functions, Ease of Use

All access control points and video are integrated to provide real-time and recorded evidence. Any access rule violation results in an immediate alarm, with live and recorded video displayed on a spot monitor for observation and investigation.

All told, in addition to the aforementioned 135 access points and 63 cameras, the system integrates two separate fire systems, five 16-camera, terabyte DVRs and a Casi-Rusco enterprise access control system. All systems (video, access control, audio, attendance and fire) work together as one integrated

unit, allowing security officers to attend to the most urgent tasks without managing each system individually.

The Hyundai system is unique in its ability to monitor all security systems while sharing attendance information with the production managers. Currently, from a single station in the main control room, officers can check the status of doors, view activity in or out of the facility and see if any current weather or local events threaten to affect the plant.

The sleek-looking control room allows two operators to sit at a custom-built desk to view the mounted flat-panel, high-definition plasma and LCD monitors. "We have two specialists monitoring the system 24/7," adds HMMA's Pugh. "They're able to control the entire facility with it." Designed with growth in mind, the system will accommodate multiple monitoring stations.

Firm Becomes Hero to Client, Award Judges

The \$800,000 HMMA installation was not without its unique challenges.

"The greatest difficulty was just the size and scope of the job itself, and the deadlines we were required to meet," explains Komisar. "The greatest opportunity was to learn a little bit of the Korean culture and how to



1. A Cyberdome Select camera is used to monitor inside the administration building's front lobby.



2. A Cyberdome Select camera in the visitor center sees roughly 100 visitors daily. The Hyundai team store (far left) is open to visitors and employees alike.

2006 COMMERCIAL INSTALLATION OF THE YEAR

communicate an idea from two different perspectives."

According to Pugh, Vision Southeast did an outstanding job of contending with whatever curve balls were thrown its way. "Installation during construction caused problems as construction was changed," he says. "However, Vision Southeast made the changes to accommodate and overcome."

Once the system went online, little time was wasted before it began to allow management to record and address various incidents. In fact, it was basically a trial by fire as the system was counted on during HMMA's high-level grand-opening celebration.

Not only did many state and local dignitaries attend that event, but also on hand were former President George Bush Sr. and the chairman of Hyundai. Secret Service commanded the control room to keep watch over the ex-president (this was in addition to the sharp shooters they had on the rooftops). All concerned were quite impressed with the performance of the facility's system.

HMMA management has been so enthralled with the system and the work of Vision Southeast that a \$1 million second phase of security systems deployment is planned to commence this year.

"Currently, Phase 2 is in the planning stage," says Komisar. "The system will increase in size and include additional video, access control, digital recording and intelligent video monitoring for the facility perimeter."

The icing on the cake for Vision Southeast was winning SSJ's 2006 Integrated Commercial/Industrial Installation of the Year Award. Although the company had previously won one of the magazine's SAMMY Awards, the installation honor clearly represents something very special to the company's leadership.

"For a company as young as ours, it is a tremendous feat that we will use to help us grow," adds Komisar. "It's nice to get recognition from within the industry; it's validation. We'll definitely market the award, and we are extremely proud to have won."

Hyundai Manufacturing Plant Equipment List

Quantity	Manufacturer	Description
3	Aiphone	LEF-3L intercom masters with door release
5	Aiphone	LE-D intercom substations
5	Altronix	2416 camera power supplies
33	ATW	Door annunciators
16	Casi-Rusco	8RP reader interfaces
12	Casi-Rusco	16 D/Os with relays
11	Casi-Rusco	20 D/I boards
10	Casi-Rusco	Micro power supplies with backup
3,000	Casi-Rusco	ProxLite photo imaging cards
122	Casi-Rusco	940 reader with J-box
5	Casi-Rusco	SPK-X4X-CB-I four-door expansion kits
10	Casi-Rusco	Micro-5/PXN controllers
5	Casi-Rusco	DVS Option, 8 DVMRes
1	Casi-Rusco	DVS protection plan
1	Casi-Rusco	SPK-X2N 2-door expansion kit
2	Dortronics	4202 power supplies
16	Dortronics	4204 power supplies
84	Dortronics	1000 magnetic locks
29	Dortronics	1120 double magnetic locks
120	Dortronics	Motion detectors
117	Dortronics	Request to exit buttons
4	DSI	Double turnstile
16	DSI	Turnstile reader pedestals
6	Fiber Options	S735DVR-RST 8-video and 2-way MPDs
6	Fiber Options	S735DVT-RST 8-video and 2-way MPDs
4	Fiber Options	517R1 racks
2	Fiber Options	517EPS1 rack power supplies
7	Fiber Options	515R1 racks w/power
8	Fiber Options	S730DVR-EST1 fiber receivers
8	Fiber Options	S730DVT-EST1 fiber transceivers
8	Fiber Options	613P power supplies
1	GE	SP protection plan
1	GE	SP Enterprise
191	Honeywell	Door position switches
15	Kalatel	DR-1500VFA3 rugged high-res. color cameras
4	Kalatel	KTA-H4-H1 18x Cyberdome Select cameras
35	Kalatel	KTA-02-12 wall mount adapters
15	Kalatel	DR-WM wall mounts for DR-1500
4	Kalatel	KTP-24-8 power supplies
7	Kalatel	18x Select Cyberdomes KTA-H3-H1
2	Kalatel	KTC-2000DNs
2	Kalatel	KTL-5-50VA Lenses
4	Kalatel	KTA-F4-H1 18x Cyberdome Select flush cameras
31	Kalatel	KTA-HE3-D1 18x day/night Cyberdomes
29	Kalatel	KTA-25 corner mount adapters
9	Kalatel	Cyberdome power supplies KTP-24
5	Kalatel	DVMRe-16CT-IT DVR/Muxes
5	Kalatel	RK-6 rack mount kits
5	Kalatel	KTD-405 Keypads
8	Kalatel	20-inch KLC-20HS LCD monitors
4	Kalatel	15-inch KLC-15HS LCD monitors
1	Kalatel	KTD-4M-128X32 matrix switcher
2	Kalatel	KTA-26 pole mount adapters
44	Ultratek	Power supply batteries 14A hours
2	Winsted	Equipment rack stands



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