NEWS around the

Solar Traffic Controls completes flashers and automated radar speed detection for New Mexico DOT U.S. 70 Hondo Valley project

Deer crossing warning flasher in Hondo Valley, NM.

Made possible by a joint effort of the New Mexico Department of Transportation (NMDOT) and the Federal Highway Administration (FHWA), the U.S. 70 Hondo Valley project started construction August, 2002. In southeast New Mexico from Ruidoso Downs to Riverside, a two-lane highway has been widened to four lanes with wide shoulders and turning lanes to help reduce accidents and improve traffic flow.

The area is frequented by heavy traffic: 4,000 to 6,000 vehicles per day resulting in a high rate of accidents and fatalities averaging 10 to 12 deaths a year. With 350 private entrances exiting onto U.S. 70, residents turning off and on the highway to access facilities and services along the route were exposed to the dangers of a narrow two-lane, winding roadway with no turning lanes.

Funds were allotted for public safety upgrades. roadway Design Engineer, Jim Berrera of URS, part of the project’s design-build team, determined that one of the major problems on U. S. 70 was speeding. This was a concept project for Berrera; he had to find a company which had done similar systems and could work within the constraints of preserving historic “acequias” or hand-dug ditches along the route, archeological sites, Native American folklore and environmental issues.

“Based on our previous experience with solar power systems and radio activated systems” said Joe Wise, president of Solar Traffic Controls (STC), “our proposal was chosen for the project. STC was given the order to produce deer crossing flashers and traffic calming systems employing radar speed signs and flashing beacons along the 38-mile Hondo Valley portion of US 70.”

Twenty-two STC units were sold and installed by Bixby Electric of Albuquerque. Two of the units were deer crossing warning flashers, basically school zone flashers designed to run 7 days a week: 4 hours in the morning and 4 hours in the evening as deers are diurnal, i.e., active two times a day-morning and evening.

An STC-designed time clock was incorporated into each unit enabling adjustment on a month-by-month or quarterly basis to compensate for the time shift in sunrise and sunset. The units turn on every day, 2 hours before and 2 hours after the official sunrise and sunset.

Of the remaining 20 systems installed, 10 were radar speed controls and 10 radar-activated flashers constituting a set of devices for traffic calming. These devices advise approaching drivers their speed using the radar feedback. If they are speeding, the unit “radios” 500 feet down the road and activates two, 12-inch solar-powered flashers with the posted speed limit so drivers will decrease their speed. Every town along the route received a radar speed display on the entry of each side of town coupled with a solar-powered flasher.

IMSA member Joe Wise, B.S.E.E. is CEO and founder of Solar Traffic Controls, LLC, www.solar-traffic-controls.com, an engineering firm which designs and manufactures solar-powered traffic control products. You can reach him by e-mail at joe.wise@solar-traffic-controls.com or by phone at 480-449-0222 in Tempe, AZ (MST).

Solar Traffic Controls Adds Engineering Staff

Faustino “Tino” Rosas has been promoted to an engineering position after earning his B.S.E.E. from Arizona State University in May 2005. Tino worked as a technician for Solar Traffic Controls while he was attending school. In addition to customer support, he will manage final testing and quality control in the fabrication area.

Tino is bilingual and resides in Tempe, Arizona. He is a native of San Luis, Arizona.
Maricopa County (Arizona) Orders High Water Flashers from Solar Traffic Controls

Maricopa County DOT (MCDOT) which encompasses the Phoenix, Arizona area, has launched a high-water flasher program to warn motorists of dangerous conditions at un-bridged wash crossings. Manufactured by Solar Traffic Controls (STC), the solar flasher systems are designed to interface with the ALERT flood control radio network. Flashers will be turned on and off remotely, based on stream flow and depth data received at the Maricopa County Flood Control management center. The flashers include interface capability with the radio which will provide feedback on the status of the system including alarms for low battery and open door.

The flasher system includes four lamps; the lower set indicating the possibility of flooded conditions. The upper set of lamps are activated to indicate conditions are unsafe for crossing. The systems include controls which feature an LCD screen enabling the user to determine the current status of the equipment.

For more information, please call Solar Traffic Controls at 480-449-0222. You may also visit our web site: www.solar-traffic-controls.com.
**Optelecom, Inc. Announces Name Change to Optelecom-NKF, Inc.**

Optelecom, Inc. (Nasdaq:OPTC), a global leader in the video surveillance and intelligent transportation markets, today announced that it has changed its corporate name to Optelecom-NKF, Inc. The change strengthens the Company’s corporate identity by aligning its name with its two strong brands: Optelecom and NKF Electronics.

“We combined two strong product lines and two sales units with little geographic overlap when we acquired NKF Electronics B.V. last month,” commented Edmund Ludwig, Optelecom-NKF’s president and CEO. “Our new name underscores our global market reach and reflects our commitment to support and enhance both well-known brands with superior customer service and a new product stream built from superior technology.”

Shares of Optelecom-NKF, Inc., will continue to trade under the ticker symbol “OPTC.” The change of the Company’s name will not affect, in any way, the validity of currently outstanding stock certificates, nor will it be necessary for the Company’s stockholders to surrender or exchange any stock certificates that they currently hold as a result of the name change.

You can learn more about Optelecom-NKF at [www.optelcom-nkf.com](http://www.optelcom-nkf.com).

**Grounding Versus Bonding Text Based on the 2005 NEC Now Available**

Mike Holts new Grounding versus Bonding textbook based on the 2005 NEC is loaded with detailed color-coded graphics so you can easily differentiate between grounding and bonding. This text gets to the root of all problems associated with grounding and bonding. Subject includes: Circuit and System Grounding, Grounding Electrode System and Grounding Electrode Conductor, Enclosure, Raceway, and Service Cable Grounding, Bonding, Methods of Equipment Grounding, Direct-Current Systems, and Grounding of Systems and Circuits.

Table of Contents

Sample Pages

Sample Graphic
http://www.mikeholt.com/instructor2/img/product/sample/1094144055.jpg

Product Code: 05NCT2

Available June, 2005
Call 1-888-NEC-CODE to order, or [www.mikeholt.com](http://www.mikeholt.com)

Here is a letter from a department of transportation technician regarding this material:

**Mike,**

Just a quick note to thank you for the fine work you and your staff are doing in providing accurate technical information to field personnel. I am a Senior Service Technician with the Department of Transportation, and part of my duties pertains to illumination of our interchange locations across our state.

After reviewing our lighting standards and current installation practices, it was apparent that these standards did not conform to NEC, and they needed to be changed. The problem was that we only provided two conductors out to our 480V tower lights. We did not provide a low impedance path with the capacity to safely carry the maximum ground-fault current likely to be imposed on it [110.10]. But we did drive ground rods next to each of the metal light poles.

Needless to say, this system would not clear a ground-fault and not open the circuit overcurrent protective device. These were changes that needed to be made not just for code compliance, but the real life issues of maintaining a safe 480V system in a wet location.

Armed with your Grounding and Bonding book, and a copy of the NEC, I met with the Traffic Engineering Section. We covered the relevant code sections and looked at the illustrations provided in your textbook. Then the picture became clear to all what we needed to do.

We revised our standards, practices, and inspections so that our installations now conform to NEC, and allows our maintenance people to safely work on these systems. I want to thank you and your staff once again.

I’m grateful to have the problem resolved and I felt it was important to write to you and let you know that your efforts are far ranging and considerable.

Mike’s Comment: I’m pleased to see that my effort regarding the difference between bonding and grounding is actually making a difference, and maybe it will save a life or two. There are way too many unnecessary deaths caused by people contacting energized metal...
Continued from page 64

Grounding Versus Bonding . . .

parts that have been grounded to a ground rod, but not bonded to an effective ground-fault path [250.2 and 250.4(A)(5)].

Much of this confusion between grounding and bonding lies with the NEC’s definition and use of the term ‘ground,’ when in fact the application is bonding to an effective ground-fault current path [250.2(A)(3)]. For example, the NEC in 250.86 requires all metal raceways and enclosures to be grounded. Naturally the NEC does not want us to ground the metal parts to the earth to clear a fault.

Leotek Electronics Corporation Announces New Canadian Distributor Agreement

Leotek Electronics Corporation announced on April 29th, 2005 an agreement with Electromega Ltd of Candiac Canada for the distribution of LED Traffic Signals and other LED lighting products throughout Canada. Electromega will act as Leotek’s distributor for our Traffic Products Line and other lighting products throughout Canada.

“This agreement is a win for Leotek, for Electromega and for our customers,” said John Adinolfi, Director of New Business Development for Leotek. “Electromega is the leader in providing high quality traffic products and services within Canada and bring over 30 years of excellence in customer satisfaction”, “The Canadian provinces will benefit from Electromega’s long history of service and support and from Leotek’s proven products and state of the art designs”.

Product is available immediately and you can visit Electromega’s website at www.electromega.com to learn more about the Leotek products offered. For more information on Leotek Electronics call 1-888-806-1188 or visit www.leotek.com. For more information on Electromega call 1-800-363-7481 or visit www.electromega.com.

Wavetronix and ASIM Technologies Announce Cooperative Effort

ASIM Technologies, Inc. and Wavetronix LLC have announced plans to integrate ASIM’s non-intrusive traffic detectors with the Wavetronix CMD DataCollector™.

Wavetronix will add the TT 290 sensor series protocol to its flexible, expanding library of device drivers. Sen-September/October 2005 sor-specific drivers enable the DataCollector to collect, manage and distribute real-time traffic information from a wide range of traffic sensors and cabinets.

ASIM’s TT 290 series uses three technologies (Doppler radar, Ultrasound and Passive Infrared) to detect vehicle speed, headway, occupancy and classification data.

“We are very excited to integrate our products into the DataCollector system,” says Andreas Hartmann, president of ASIM Technologies, Inc. “We believe this integration will benefit both companies because a more flexible offering can better address the greatly varying detection needs of DOTs and other customers.”

The Wavetronix CMD DataCollector is an enterprise-level data management solution that can integrate a range of traffic monitoring devices into any ATMS environment. DataCollector’s web browser supports multiple users simultaneously, and the system is scalable, so there is no limit to the number of sensors DataCollector can manage in a network.

For more information about ASIM Technologies, Inc. visit www.asim-technologies.com for more information about Wavetronix visit www.wavetronix.com.


Eberle Design, Inc. (EDI), recognized worldwide as the leader in traffic control signal monitoring, vehicle detection, and other mission critical traffic control component products, announced April 12, 2005, that it has successfully achieved the esteemed ISO 9001:2000 certification for sales, marketing, customer service, engineering and manufacturing processes.

Moody International Certification, Inc. (MCI), an internationally accredited registrar, awarded EDI certification following a comprehensive audit encompassing documented procedures and implementation of processes across all departments, focusing on customer satisfaction and continual improvement. The certification recognizes that EDI operates a world class Quality Management System (QMS); semi-annual audits ensure continued maintenance and encourage improvement on the exacting standards set forth by the program.

“The ISO 9001:2000 certification is part of our goal to promote even more customer confidence in our products and services.” says Quality Assurance Manager, Steve Schoen. “We are always looking for ways to improve on our successes at EDI.”
The International Standards Organization (ISO) is a worldwide industrial association that provides the criteria, the testing and the maintenance procedures for high quality manufacturing. The ISO 9001 designation, which is administered in the United States by the ANSI-ASQ National Accreditation Board (ANAB), contains requirements for quality assurance in product design, development, production, installation and servicing. For more information on ISO and the certification process, please go to the following web site: www.ISO.org.

For additional information, please contact Carl Zabel at 602-437-1955.

**Eberle Design, Inc. Receives ISO . . .**

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**Econolite is Awarded State of Hawaii Traffic Monitoring Data Collection Project**

Econolite Control Products, Inc. is pleased to announce that it was awarded the bid for Federal-Aid Project No. SPR-0010(27) W.O. 887 CTM, “Continuous Traffic Monitoring Data Collection Goods and Services-Statewide.” Econolite is well positioned to provide a system and service that meets and exceeds the State of Hawaii’s stringent specifications. Econolite and its business partner TrafficWerks Systems, Inc., will provide a web-based system to manage designated traffic data collection sources by utilizing Econolite’s Data Collection and Management Service (DCMS). DCMS will poll and retrieve traffic data via the Internet to a common database and integrated traffic data network. DCMS was created with the idea of providing a system to manage traffic information from multiple data collection sources.

In the first year of service, the DCMS system will be connected to a series of sixteen (16), permanent HDOT Continuous Traffic Monitoring (CTM) Data Collection Sites allowing for the collection, analysis, summary, and retention of vehicular traffic data, including the development of a Federal Highway Administration (FHWA) traffic reporting tool. This will provide HDOT the ability to better manage the review, submittal, and administration of data reflecting the amount of vehicle usage and vehicle characteristics on the state highways network.

Doug Henderson, Director of DCMS Business Development remarked, “The DCMS solution gives HDOT a 24 hour/7day data service, supplying tools that not only evaluate traffic conditions over time, but also allow real-time data to be shared with other agencies throughout Hawaii and the FHWA. HDOT and approved agencies are able to view live data via a web browser. The data is presented in a spreadsheet, both graphically and numerically, giving HDOT complete flexibility as to how they manage the data. Ultimately, DCMS will save HDOT countless hours of manual operation by automating its real-time and archived traffic data management process.”

Jeff Spinazze, Senior Vice President, noted, “Econolite’s Data Collection Management Service enables many agencies to share live and historical data cost effectively. DCMS assembles data and transforms it into information to assist HDOT in improving mobility, reducing accidents and improving air quality through reduced traffic congestion.”

To find out how DCMS can work for you, contact the Econolite representative in your area or visit www.econolite.com.

**New Report Card on Nation’s Traffic Signal System**

The National Traffic Signal Report Card gives the nation’s traffic signal system an overall grade of D-minus.

It was based on survey responses from 378 agencies from 49 states. It was prepared by the Federal Highway Administration, the American Association of State Highway and Transportation Officials, the American Public Works Association, the Intelligent Transportation Society of America and the Institute of Transportation Engineers.

The report card includes the following categories:

-- PROACTIVE MANAGEMENT: Survey found that the majority of respondents have no documented management plan for their traffic signal operation or they only respond to problems as they arise. Most agencies do not have staff for periods outside typical working hours.

Grade: F.

-- COORDINATED SYSTEMS: More than half of respondents said they do not conduct routine reviews within three years or they only review when problems arise. In most communities, it took more than 1 1/2 years to update the timing of a signal once a need had been identified.

Grade: D-minus.

-- INDIVIDUAL INTERSECTIONS: The majority of agencies showed little or no process for triggering routine timing reviews on individual intersections. Less than half said the regularly considered factors such as...
turning movement, pedestrian counts, crash histories and field observations when reviewing traffic signal timing.

Grade: C-minus.

-- DETECTION: About one-third had no regular process for collecting traffic data to support traffic signal retiming.

Grade: F.

-- MAINTENANCE: Many agencies reported problems maintaining minimum levels of traffic signal functions because of minimum staffing levels.

Grade: D-plus.

-- OVERALL GRADE: D-minus.

Fire Control Instruments Introduces New System Sensor Reflective Beam Detectors

**Newest and Most Advanced 4-Wire Conventional Reflected Beam Smoke Detector on the Market**

Fire Control Instruments (FCI) is a performance and technology leader in the emergency evacuation systems industry for commercial, industrial and educational applications worldwide. FCI introduces the System Sensor BEAM1224 Series Reflective Beam Detectors, designed as a cost-effective and powerful alternative to traditional, old-style projected beam smoke detectors.

Capable of sensing smoke where spot-type detectors are difficult to install and maintain, the BEAM1224 Series is ideal for use in open areas with high ceilings. Additionally, the beam detectors are listed for operation from -22 to 131 degrees Fahrenheit, making them well-suited for garage and warehouse applications and other hostile environments where temperature extremes exceed the capabilities of spot-type detectors.

The single-ended reflective design allows for one-person installation that is far simpler than the traditional transmitter and receiver types of beam detectors. What’s more, alignment is swiftly accomplished using an optical sight and a two-digit signal strength meter incorporated into the product.

**2- BEAM1224 Series**

The BEAM1224 series consists of a combination transmitter/receiver unit and a reflector, and has four standard sensitivity selections along with two Acclimate settings. Additionally, the BEAM1224S model is equipped with an integral sensitivity test feature that helps meet the annual maintenance and test requirements of NFPA 72.

Fire Control Instruments (FCI) is part of the Honeywell (NYSE: HON) Life Safety Group, an industry leader in providing commercial fire alarms, advanced detection and notification products, and home patient remote tracking.

For more information visit [www.firecontrolinstruments.com](http://www.firecontrolinstruments.com).

**Tomar nets ‘A’ rating in Florida DOT eval**

Tomar Electronics, a Gilbert, Ariz.-based manufacturer of traffic products and emergency lighting systems, received an ‘A’ rating for its quality assurance program. According to a recent Quality Assurance (QA) Status Report developed by the Florida Department of Transportation (FDOT), Tomar was one of only 17 signal device manufacturers to earn the highest grade.

FDOT’s evaluation, which supports a state-wide initiative to improve the quality of approved traffic control products, focused...
Tomar... on Tomar’s popular traffic preemption system, “Strobecom II.” That system, already employed by emergency response teams to clear intersections in several Florida cities and throughout the U.S., has been included on the FDOT Approved Product List of Traffic Control Devices for years.

Bob Griner, Equipment Evaluation Coordinator for FDOT in Tallahassee, Fla., said Tomar’s submission package, which included an in-depth questionnaire, a QA manual and detailed videotape showing the manufacturing processes, capabilities, and experience; offers an excellent example as to what manufacturers should submit to comply with Florida’s strict QA standards.

“Of approximately 100 manufacturers who applied to become qualified manufacturers here in Florida, only 17 were approved by FDOT with an ‘A’ rating,” said Griner.

“Tomar’s high rating was no surprise here,” admitted Griner. “We knew as early as November, following discussions here with Tom Nielsen (Tomar’s quality manager) and with the rest of the Tomar delegation, that they would likely garner impressive scores. They appeared solid and professional and asked the right questions.”

Nielsen, who managed Tomar’s effort to acquire certification, admitted that, while the Tomar staff is pleased with the rating, they understand the scope of things to come.

“We take quality very seriously around here,” said Nielsen. “Customer focus must be our strength in serving the customer and we’re committed to that vision.”

The company will be re-evaluated in two years. With that re-evaluation, a survey of Tomar products sold in Florida will be conducted to determine the level of customer satisfaction. Also, FDOT guidelines allow for on-site audits to be performed on a random basis to verify that documented and referenced procedures are being effectively implemented. For additional information contact Rex Stout at 1-800-338-3133.

Silent Knight to Feature IntelliKnight Series of Products

Silent Knight offers industry-wide compatible fire alarm solutions for small to mid-size institutions and commercial sites. Silent Knight is proud to feature their IntelliKnight Series of products.

The IntelliKnight Series makes available the most suitable and most economical fire alarm solution for the institution or commercial site. Applications ranging from a small daycare or office building to a large campus environment in an industrial complex or a university campus can now benefit from the advanced features of one of the IntelliKnight fire systems. The IntelliKnight line of products features three control panels, the 5700 for smaller applications, the 5808 for medium size applications and the 5820XL for larger applications. Each of these innovative fire systems delivers state of the art capabilities in a cost-effective package.

No twisted or shielded cable is required to install any of the products in the IntelliKnight line. Standard wiring helps reduce installation costs on new installations and greatly speeds retrofit jobs where cable has already been run for an existing system. This means that users can upgrade an older conventional fire system for less money and with less hassle.

2-IntelliKnight Family

All products in the IntelliKnight series features drift compensation to maintain detector sensitivity at the proper level and to reduce the occurrence of false alarms due to dirty, dust-contaminated smoke detectors. Due to drift compensation, the products can pinpoint detectors that are approaching the limits of normal operation before a false alarm occurs by alerting the user of the problematic detector with pinpoint addressable accuracy. The alert is sent on-site via a trouble indication, or remotely via the built-in digital communicator.

For more information visit www.silentknight.com.