



# SAABE TIMES

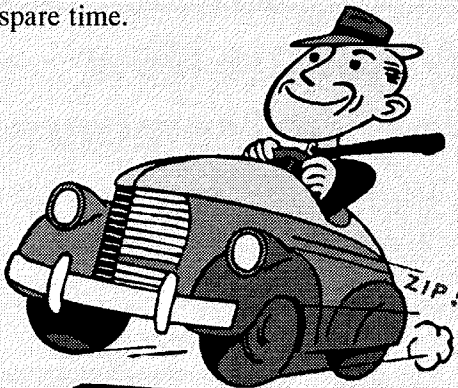
A Publication of the San Antonio Association of Building Engineers

April 2002

## Mark Your Calendar — **TXDOT Construction Update**

Please join us April 17, 2002 at the Old San Francisco Steakhouse for our monthly membership luncheon. Maggie Rios with the Texas Department of Transportation will be the featured speaker. Her presentation will consist of an update on the current and upcoming construction activities in the San Antonio area. Major projects include construction expansion on Loop 410, Loop 410 at Culebra and construction plans for US 281.

Maggie Rios has been employed by the Texas Department of Transportation for 22 years. She transferred to the Public Information Office 11 years ago and worked mainly behind the scenes as editor of the employee newsletter, responding to citizens' complaints and writing media releases. Currently, she is pursuing a degree at UTSA in her spare time.



## Education Corner

by *Kenny Aguilar*

### York International Corp.—Johnson Supply Training Course

Microprocessor Based Chiller Class York Model YCAS Air Cooled Screw

Topics Include: Chiller layout and description, refrigerant flow cycle, Compressor theory and operation, Component descriptions, Micro-panel service procedures, Logs and maintenance, Troubleshooting.

April 12 and May 10 from 8am to 4:30pm. 11750 Clay Road, Houston, TX 77043. Cost is \$250 per person. Space is limited. To enroll call 832-204-9504 or 832-204-9550 FAX.

### Inscos Schools—Spring 2002

Each class is one day 8am to 5pm. Cost is \$135 per person per class, includes work books, service books and CD ROM

R410A Certification plus Subcooling and Superheat

April 18, 2002: Split System A/C Electrical Characteristics and Troubleshooting

April 23, 2002. Registration: Confirmation and registration of dates and classes can be done at any Inscos store location. Call Stan Soulaitaire at 210-828-9981 to confirm the date and class selection.

### EPA Certification “Power review” and “Speedscore”

Friday, April 26, 2002—8.30am, Johnson Supply, 1050 Arion Parkway #106, San Antonio, TX 78216. 210-495-9675. Review and Exam \$85.00, results in 2 hours—retesting available same day.

Seating is limited, call the above number for more information.

### Fiber Optic Training

Become Certified in Fiber Optics \$1199.95, 8am—4:30pm

This 3-day seminar is designed for you to take control of your communications optic networks. The objectives are accomplished by using state of the art test equipment. Instructors utilize real-world installation experience to teach the latest in fiber optic based communications technology.

Location: Howard Johnson Inn, 7401 Wurzbach, San Antonio, TX 78229. For more information contact NTT at 800-922-2820 or [www.nttinc.com](http://www.nttinc.com).

# A Message from the President by Elena C. Castillo

## School's Out!

With school ending within the next couple of months, kids of all ages will be out spending more time on the sidewalks, streets, parks and playgrounds in our neighborhoods. This means that they will be out and about from morning til night: bicycling, walking, jogging, motorcycling, even in-line skating and skateboarding, as well as driving.

With so many people on the move in so many ways, we all need to be alert and be on the lookout for others, no matter how they – or we – are traveling.

So share the road, and heed these summer safety messages below:

Motorists should watch out for pedestrians, bicyclists, and motorcyclists. Sometimes they are not as visible, as we are most likely looking for other cars. Watch out for children playing near the streets. They often don't think before crossing the street and may dart into the roadway without warning. Never drive around a crossing gate at a railroad crossing. If the arm comes down, then more than likely a train will be crossing. Avoid aggressive drivers and speeders. Aggressive driving is one of the leading safety concerns of U. S. drivers. This kind of aggressive driving is driving behavior that endangers or is likely to endanger people or property. Aggressive drivers are more likely to speed, tailgate, fail to yield, weave in-and-out of traffic, pass on the right, make improper and unsafe lane changes, and run stop signs and red lights.

Discourage aggressive driving by slowing down. For example, parents who pick up children from day care may rush from work to avoid late charges. But if your company requires a parent to stay past their normal departure time, reimburse them for the late charge. Result: one less frazzled employee who is more likely to drive safely and calmly. If you are tense and tired, you are more likely to speed and drive aggressively.

Motorcyclists and Bicyclists should resist the urge to "feel" the open road. Other drivers may not see you as easily, especially if you're "flying" in and out of traffic. Stay alert at all times on your bike. Dress to be seen – wear light colors during the day and reflective materials at night. Wear your helmet – it is an important piece of safety equipment and may save your life. Obey the rules of the road.

If you're planning a vacation, don't leave safety and common sense behind. Create a checklist for you and your family before you leave and when you get to your destination.

Before you go, check your car or have it serviced before any long trip (battery, tires, belts and fluids). Check your

car and have a qualified technician check the air conditioner. Check your oil. If you will be towing a trailer or boat, or driving in the desert, switch to a motor oil with higher viscosity. Pack an emergency kit that includes water, jumper cables, flares, a flashlight, equipment to change a tire, and a first aid kit. Fill up your gas tank at night or early in the morning to minimize damage to the ozone layer. Make sure your child safety seats and booster seats are properly installed.

On the road, require all occupants to buckle up, with children in the back seat. Obey speed limits and all roadway signs. Drive calmly and avoid entanglements with aggressive drivers. Pack non-perishable snacks and plenty of juice and water (individual water bottles for each family member helps you monitor intake to avoid dehydration). Take frequent breaks – at least every two hours – and avoid driving when tired. Be especially careful around railroad crossings. Avoid driving in the "No Zone" around trucks. If you cannot see the truck driver in the truck's mirror, the truck driver cannot see you. Slow down in work zones, obey all signs and flaggers and pay attention to the vehicle in front of you (most work zone crashes are rear-end collisions due to an inattentive driver).

When arriving at your destination, don't leave children alone in a car. Do not leave children or pets in a car with the windows rolled up even for a few minutes. A sunshade can help keep the car from becoming dangerously hot. Cover up seat belts and child safety seats with a towel or blanket while the car is parked (on a hot day, the plastic and metal parts can get hot enough to burn). Review safe pedestrian practices with children. Taking or renting bikes? Be sure to pack your bike helmets. Have a planned meeting site in case someone gets lost.

Above all – take it easy! Vacations should be enjoyable.

<http://www.nhtsa.dot.gov/people/outreach/safesobr>

## Welcome New Associate Members

**Hutchison Supply Co.**  
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Frank Hernandez  
2425 Brockton #103  
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Phone: 210-826-6616

**TIES**  
Jeff Schorr, IAQ  
Consultant  
2121 Cee Gee  
SATX 78217  
Phone: 210-832-9494

# Strategies For Finding and Keeping Skilled Workers

by Kelly Patterson, Associate Editor  
Maintenance Solutions Magazine

Good help is still hard to find. For maintenance and engineering managers, obstacles both old and new make the recruiting game more challenging than ever. Increasing technology within facilities demands more technically adept workers. In addition, competition from other markets and even within their own markets for the most highly skilled employees is keeping many maintenance departments from finding, hiring and retaining the best workers.

Even within maintenance departments with the most stability and lowest turnover, the task of finding workers with the right skills is tough. It is hard to find workers who have both business and technical savvy.

Increasingly, the pool of workers with a variety of technical skills is diminishing. For example, a potential employee might have training on or experience with certain types or brands of chillers, but an organization's facilities might have an array of chillers. In such cases, organizations have to invest in training.

The recruiting challenge is not apt to get easier anytime soon. Demographics show that this industry has an aging experienced work force. The youth of today aren't going into the maintenance field. Engineers have to get in to high schools on career day and show the youth of today they're proud of the industry. They have to tell them that this is an attractive industry that pays well, that every time you go out and fix something, you feel good about it. There are rewards every single day.

As a result, managers who win the recruiting game are likely to be those who can create attractive work environments, offer competitive pay and benefits, and get the word out any way they can that maintenance and engineering departments are rewarding places to work.

Source: [www.FacilitiesNet.com](http://www.FacilitiesNet.com).

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## Alamo Controls Inc.

presents

### The talk around town!

Questions people ask me, and my answers.

By Dan Marsh  
658-0900

1. I heard your Automated Logic Controls can display different languages on the monitors.  
**Response:** Yes, with "WebCTRL" The Web Control version sure does — and Spanish is the obvious choice here in South Texas. We have had a wonderful response to this option. WebCTRL also has Chinese, and French.
2. Dan, What are some other services offered at Alamo Controls?  
**Answer:** We have a Test & Balance department, NEBB Certified!, a Vibration Analysis department, a full service Mechanical department and of course we sell, install and service the best DDC Control System out there. "AUTOMATED LOGIC CORP."
3. What is your sales area?  
**Answer:** I travel from Waco to Brownsville and from Del Rio to Corpus Christi. If you know anyone in this area interested in Automated Logic Controls, please have them call me.

Please send any questions or comments to, Alamo Controls Inc.  
Dan Marsh - Service Sales Manager  
848 West Byrd Blvd. • Universal City, Texas 78148



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# DAYLIGHTING (Lighting Naturally)!

## (Part One of Two)

The sun is the earth's source of free, abundant light and our oldest reliable source of light. Daylighting is the method of lighting building interiors, which attempts to use this diffused light from the sky.

The use of natural light to illuminate the interiors of buildings is not a new architectural skill. Some of the most dramatic uses of daylighting can be found in the stained glass used in the European cathedrals constructed in the middle Ages. Daylighting was also used effectively in industrial facilities, schools, and office buildings in the early 1900's.

Modern electric lighting, cheap electricity, and the interest in fully conditioned environments are responsible for the transition to a situation where daylighting has often been ignored in contemporary office design. However, with recent advances in microelectronics, high performance glazing, electro-chromics, and fabrics, there has been a renewed interest in active daylighting.

Daylighting is feasible now, and potentially cost-beneficial when coupled with controls. Many end-users are rediscovering the benefits of natural lighting. In addition to the energy-efficient benefits daylighting can provide, the use of natural light can enhance the interior aesthetics of a building and foster a healthier working environment for occupants.

### Potential Benefits

Daylighting and controls create an ideal match to maximize peak electrical demand savings from lighting systems at reduced power and the associated reduction in chiller plant power. The demand savings are more important than energy savings since daylighting provides energy reduction at the most important time; during peak electricity use when daylight availability is greatest.

In addition to energy savings there are many other benefits of daylighting. A connection with the outdoors in

now understood to be important to our well being. Sunlight interplays in buildings, adding variation and excitement to interior spaces, and it can enhance occupant comfort. Natural light provides the best color-rendering index (CRI) at 100 percent, and has been used in printing companies and machine shops. Some amount of daylight is essential in the patient rooms of hospitals. Some schools use passive daylighting to light classrooms, where both teachers and the community like the overall lighting uniformity.

### Considerations for Daylighting

Daylighting is not a total substitute for electrical lighting. Electric lighting is needed at night and when daylight levels are too low to provide general ambient and task lighting. The amount of available daylight varies over the day and by season. Geographical locations and local conditions determine the extent to which daylighting can be implemented. Geographical considerations include proximity to the equator and the orientation of the building.

Overheating from solar gain and heat loss because of insufficient thermal insulation has to be considered when evaluating daylighting potential. It is important that the daylight design minimize the affects upon the HVAC system.

One of the challenges of daylighting design is to provide a uniform distribution of light. Those closest to the daylight source may have adequate light, but people located in areas farther away may not. The design should either light the space evenly or compensate through shading devices or controlled electrical lighting.


Next Month: Daylighting Techniques

**CHARLIE'S LAW:** If you can stay calm while all around you is chaos, you probably haven't completely understood the situation!

JUSTA MAINTENANCE MAN

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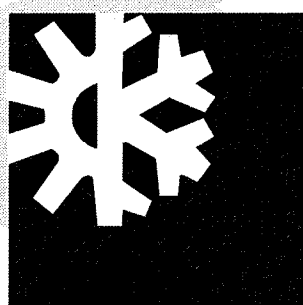
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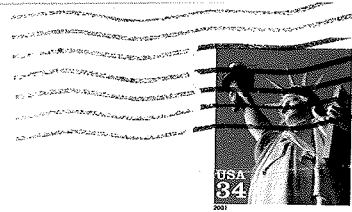
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## SAABE TIMES April Issue

### *Final Thought* —

When everything is coming your way, you're in the wrong lane.

### 2002 Board of Directors

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Lynn Forester (830) 981-5223  
Association Coordinator ([lynnfor@mindspring.com](mailto:lynnfor@mindspring.com))

## Membership Luncheon April 17, 2002

**Time:** 11:30 a.m.

**Location:** Old San Francisco Steakhouse

**Program:** Highway Construction  
Update from Texas Department  
of Transportation

The SAABE Times is produced monthly for the San Antonio  
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