

# SAABE TIMES

frade Show on Earth

A Publication of the San Antonio Association

of Building Engineers

October, 1999

# The Greatest

Síep inside if you dare

to see the most amazing

**Building Engineers** 

under the Big Top!



When:

Thursday, October 14

Where:

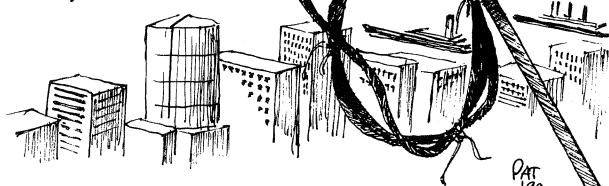
Airport Convention Center

Time:

4:30 - 8:00 p.m.

Cosí:

**Absolutely Free!** 



Free Buffet!

Cash Bar!

Door Prizes!

# **Above the Ceiling**

### Working Without a Net

It's that time again; if there's a nip in the air, October's here and so is the SABOMA/SAABE Trade Show. Thursday, October 14th from 4:30 p.m. to 8:00 p.m. at the Airport Convention Center, so come on down! Like always, there will be a lot of vendors on hand spanning the building maintenance spectrum, lots of good food, drink, entertainment, etc. At the SAABE booth, all paid members will be able to pick up the latest in our ongoing line of sportswear — the blue denim monogrammed shirt. But my favorite reason for attending the show has always been the people. It's like that old "Cheers" line — "where everybody knows your name." It's like family.

The theme for this year is the circus. If a Building Engineer had an act, what would it be? Would it be the clown, running around with a bag of tools in one hand and a plunger in the other? Some may see us this way (what do these guys do besides unplug toilets and change light bulbs, anyway?). Maybe the lion tamer trying to keep all the vicious building systems under control? Or the high-wire artist, working your act high above it all with no net? Maybe the Ringmaster trying to keep the whole three-ring circus going? Chances are, you've worked all the acts at some time or another — it's what we do. What we don't have to do is do it alone.

When you walk the aisles in the Trade Show, or come to a general membership meeting, the people you will meet are all building trades professionals, whether it's other building engineers, vendors or building managers. These people have been there, done that. Just the networking resources alone are an incredible help. These people can help you to find the answer to a difficult problem, share similar experiences, help with code questions, recommend resources and help you to set the bar higher.

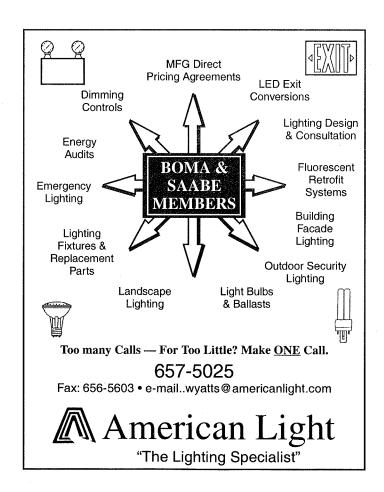
If just anyone could do the job, we wouldn't be getting paid the big bucks, right? But how do you get there and how do you prove it to others? At the last general membership meeting, we discussed the SAABE CBE (Certified Building Engineer) program. Check out the enclosed letter from Robert Andrews, SMA (last year's Building Engineer of the Year) and read what he says on the subject. Phil Anderson, SMA, FMA, CBE (former BEOTY, past president of SAABE and the very first person to be awarded the CBE) made a number of valid points, among them:

- The designation has earned the respect of Building Managers.
- SAABE has built our reputation on a higher level of education which the CBE represents.

- The Association will hurt its reputation if they drop the CBE and...
- The belief that we should still pursue a license with the city it will only upgrade the profession.

During the meeting, a number of points were brought up, but surprisingly (to me, at least) no one came out against the CBE. Some issues discussed were contradictions or vagueness in the application, the possibility of grandfathering and how to deal with possible liability issues.

So...we'll carry on with the CBE revision, clean up the application, deal with the legal issues (grandfathering, etc.) and hopefully be able to start taking applications within a few months. And we'll keep you all better informed on what's going on — if last month's meeting didn't teach me anything else, it's that everyone needs to know what's going on. We're all in this together, there's no sense in working without a net.



## **Education Corner**

By Mike Lusk

Last month I told you about HVAC courses available at St. Philips. I have a couple more things for HVAC this month.

The local ASHRAE chapter has begun teaching Fundamentals of HVAC Systems. Although the current course will have started by the time you read this, they will likely have more of them in the future if the demand is there. It is an evening course, 10 weeks in a row once a week, for three hours. I have a summary sheet on it, or you can call Robert Gleeson at 646-8661 if you are interested and want to put your name on a waiting list.

Refrigeration and Air-Conditioning, NTT, San Antonio, Nov. 16-18, \$985.00. 1-800-922-2820.

Johnson Controls Institute, Centrifugal Chiller Operation and Maintenance, Houtston, TX Nov. 15-19. \$1095.00. 1-800-524-8540. They also have several control courses (METASYS) coming up. Call me if you need info on those.

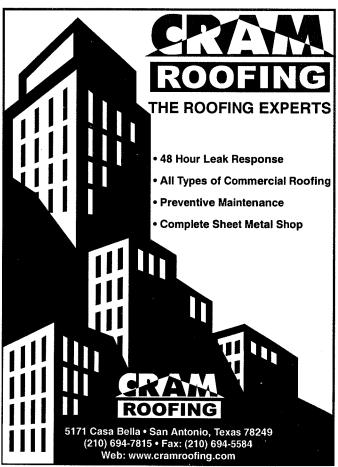
Now for the information on St. Philips ELECTRICAL TRADES. Two programs are available. The one-year program results in a Certificate of Completion, while the two year course results in an Associate of Applied Science degree. Upon completion of the degree, the graduate will be awarded 2,000 hours towards the journeyman license through the City of San Antonio Electrical Board. The programs prepare the student the enter the field of apprentice residential electrican, commercial electrician, industrial electrician, maintenance electrician, utility wireman and apprentice lineman. Special emphasis is placed on adherence to the National Electrical Code and safety. Cost is \$450.00 per semester. For more information and details, the phone number is (210) 921-4850 at the southwest campus.

Upcoming IEC classes for ELECTRICAL LICENSE RENEWAL are October 16, November 20 and December 18. For more information or to register, call Charles or Arlene at (210) 736-4567.

North Carolina State University, Facilities Engineering Management I. December 6-10, at the campus in Raleigh, NC. Sessions II and III are in 2000. \$1495.00. Call (919) 515-2261. If you are interested, I suggest you call me first and I will fax you a copy of the brochure.

Do you know why the chicken crossed the road? To prove to the armadillo that it *could* be done.





## When the H<sub>2</sub>O Has Got to Go!

SAABE invites its members and guests to an educational seminar in conjunction withthe upcoming Trade Show. Please join us for a half-day seminar which will feature two segments:

### Are You Prepared?

Do you know what to do when...pipes break, sprinklers go off, floods happesn, tornadoes or other weather catastrophes storm through, fire ravages? Tim Young of Munters Moisture Control is an expert on disaster recovery procedures and will share information on how to recover items such as carpet, sheetrock, insulation, wood floors, computers, office furniture and equipment, microfilm, x-ray, documents, books and more.

### Up On the Roof

Every building engineer should have a solid understanding of how a roof is constructed. David Webb of Cram Roofing will present this informative and interactive session, which will feature lots of pictures and samples. Topics will include the types of felts, surfacing alternatives, insulation boards and single ply roofing membranes, as well as a discussion of urethane coatings for concrete structures and how to maintain them.

Date:

Thursday, October 14, 1999,

1:00 - 4:15 p.m.

Time:

Sign In 1:00 - 1:30 p.m.

Are You Prepared?:

1:30 - 2:45 p.m.

Break:

2:45 - 3:00 p.m.

Up On the Roof:

3:00 4:15 p.m.

4:30 - 8:00 p.m.

Trade Show:

(at Airport Convention Center)

Where:

Alamo Towers West, classroom facility of CPA Foundation 901 NE Loop 410, Suite 420

(the tower closest to Rooty's)

On access road between Broadway and Nacogdoches,

outside the Loop

Cost:

\$10.00 per person

# Warning: Disabling That **Alarm Can Be Costly**

Courtesy of Hartford Steam Boiler Insurance & Inspection Co.

Warning devices are an important feature of any type of equipment or system. Correct procedures must be followed to ensure that alarms and back-up systems are operating properly and not disabled or cirumvented when performing maintenance or repairs. A recent claim for damage to a wood finishing company's boiler shows what can happen when those procedures are forgotten or ignored.

### **Low Water Damage**

An investigation by HSB revealed damage to the sole 750 hp, hand-fired boiler. The boiler had a low water condition, signified by the tell-tale melting of the fusible plug. Damages included 48 of 79, 3.5-inch tubes sagging and leaking at the tube ends of the rear tube sheet. Also, seven rivets for the diagonal stays in the rear shell to the tube sheet reinforcement were leaking. Repairs included rolling, beading and seal welding of the 48 tubes, and seal welding of the seven rivets.

### **LWCAs Fully Operational**

The boiler was equipped with two low water cut-outs (LWCOs). The first unit actuated the feed pump; the second actuated the alarm. Both controls and the feedwater pump were fully operational. Due to a feedwater control problem, the boiler operator found the boiler and system flooded when he came to start up the unit on the morning of the incident. When he tried to drain the water through the bottom blow-down line, the line was stopped up.

#### **Lessons Learned**

What happened next illustrates how important is it that equipment operators and maintenance workers understand the critical role of alarms and other warning and backup devices — and the results of ignoring or disabling them. The boiler operator shut off the bottom drain and released the water through the two LWCO drains. As he opened the drain valves, the feedwater pump ran and low water alarm sounded as intended. Ignoring procedures, he silenced the pump and alarm by securing them at the respective circuit breakers. He then continued to drain the boiler as he started the fire inside the firebox. The operator forgot to close the drain valves with the alarm and pump secure — ultimately dry-firing the boiler.

Source: The Steamer, October, 1999 issue of the West Texas Boiler Safety Association's Newsletter.

# What Goes Down, Also Goes Back Up! (Part Two of Two)

# Fascinating Features of Vertical Transportaion

With all of the use of micro processors, the available features whether standard or options, are fascinating. These range from the common elevator recall, to elevators that can actually "almost think on their own". Besides the talking Elevonics, which by the way, often do have people talk back to them, the technology being used today is remarkable.

### Zoning

This is a feature that is either manually entered, or is an automatic function of most elevators. What zoning does is park an elevator where a high amount of start/stops (one person X one stop = one start/stop), is encountered. This can be anywhere from the lobby, to a floor of high occupancy. Additionally, there are controllers which can actually determine which floor at what time will have a high usage rate. There are even functions which the controllers "talk", to each other and send multiple cabs to the floor of high use, such as the reentering the building after a Fire-Drill. In this instance, after X amount of cabs leave the same level at a specific amount of capacity, other cabs will arrive without pushing any call buttons! They will automatically go to the floor, open their doors and wait to be loaded.

### **Automatic Weighing**

What is this? Well, some manufacturers controllers can actually tell how much weight is placed inside the cab. Yes, that's right ladies! If I were connected to a controller and seen you enter a cab, I could tell you your weight! Actually, weighing is not used for that (even though you can) it is used in multiple calculations used throughout the day. The controller is also smart enough that when a pre-set value is reached, the elevator will not operate!

### Annoyance Feature

Have you ever entered a cab only to find that someone has pushed a bunch of the floor buttons and exited the cab #^%#\$&^%. With the annoyance feature, the controller can

determine how many persons (by weight, see above), are in the cab. A preset amount of floor buttons which can be pressed by only one individual can be set. What this enables is if someone starts to push more than say three floors, and is the only person in the cab, once they press another floor button, all previously pressed floor buttons are rejected. The only problem encountered with this feature is usually when a couple of feather weights can't determine which floor they need to go to. Once three floors are selected, the elevator is assumes there is only one person in the cab, and the floor buttons cancel out.

### Sleep Feature

Another interesting feature is the sleep mode. This is where in an instance of low usage, the cabs waiting on a call, will actually turn off their own lights and the fan.

### **Maintenance Features**

Some of the features now available on controllers is that they know when their last PM was performed and how much longer there is before another is due. I'm not sure whether they will shut down if date for PM is surpassed, but this feature sure has a lot of Y2K consultants worried. More additional features include monitors which can make different actions. The first is a low priority message of which can be identified and documented in a service log off site. The second, is a medium priority message of which a service call will be logged and an technician paged. The third and highest priority, is an automatic notification and dispatching of a technician due to a failure.

*Next Month:* TWO AND A HALF YEARS and STILL TICKING!

(Well it's only April right now, I'm sure something will come into mind by November)

Closing Thought! Have you ever wondered why we park in a driveway, but we drive on a parkway?

"Just a Maintenance Man"



San Antonio Association of Building Engineers P.O.. Box 691861 San Antonio, TX 78269

# SAABE TIMES October Issue

# See you at the "Greatest Trade Show on Earth"

## 1999 Board of Directors

Paul Thompson, SMA President	524-9285
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Mike Lusk  Education Director	340-2533
Mike Alvarez Vendor Representative	824-9581
Lynn Forester	(830) 981-5223

Association Coordinator

## Membership Luncheon October 20, 1999

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

**Location:** Tex's Restaurant in the Airport Hilton

**Topic:** Mystery Presentation

Sponsor: Ward Systems

### **Upcoming Events**

October 14: Seminar and Trade Show November 17: Membership Luncheon

The SAABE Times is produced monthly for the San Antonio Association of Building Engineers by:



210-340-5454 email: inkspot@onr.com



September 15, 1999

Mr. Paul Thompson, SMA Pyramid Building San Antonio, Texas

#### Dear Paul

Unfortunately, due to an illness in my family, I will not be able to attend the engineers meeting today, so I am writing this letter to input my two cents on the CBE certification. I have jumped through the hoops, as have several others in our organization, to acquire my CBE because we had the understanding that this is what the city of San Antonio's requirements may be if and when there was a city certification. It was important to myself and others, then and now, to have our CBE to show the city that we are well trained and certified by the San Antonio Association of Building Engineers to perform our jobs to the best of our ability. Now, from my understanding, because there is the threat that our organization could be sued in court if one of our CBEs were to make a mistake, we are having second thoughts of the importance of learning our profession and becoming certified.

Any time money can be made from any kind of mistake or tragedy in life, there is going to be an attorney with a hand out and a way to get it. It doesn't matter if you call yourself an SMT, an SMA, FMA, RPA, a building engineer, or whether you are certified or not, there will always be lawsuits. I feel that in order for our organization to grow and take a place in the community, we need to go forward with education and certification for our members. SAABE is not saying that if you have a CBE that you are a genius or that you will never make a mistake. They are merely stating that the individual that has their CBE was certified by our organization and has completed the required courses and training to acquire it. Much the same as BOMA has for their property managers. We need to continue to stress the importance of certification for the engineers in San Antonio to our members and city council. I feel that without it, our industry is doomed. As for the fee that may have to be paid to the city for an additional license — who cares? Most employers will gladly pay for any license that their engineers hold. The more the merrier.

It's to management's advantage that their engineers have all the training they can get. If this means having a license for maintenance electrician, HVAC, plumbing, or whatever, they'll pay it because this means they are getting qualified engineers. If you were a building owner, who would you place in charge of your major investment including life safety issues — someone with minimal skills and training, or someone that has devoted their time and efforts to have obtained their certification from SAABE? Place me on record as being for the CBE certification.

Best Regards,

Robert Andrews, SMA, CBE