

A publication of the San Antonio Association of Building Engineer

December 2008

### Mark Your Calendar— JOIN US FOR OUR DECEMBER MEETING!

The next General Membership Meeting of the San Antonio Association of Building Engineers is set for 11:30 am on Wednesday, December 17, at the Embassy Suites Hotel (7750 Briaridge Drive—northeast corner of IH-10 and Loop 410). The meeting agenda includes board elections, our annual business meeting, and year end awards.

Please RSVP no later than Monday, December 15, at noon. Late RSVPs and walk-ins will be placed on a standby list, and we will ask you to wait in the lobby until we determine the number of no-shows.

PLEASE NOTE: If you RSVP and do not attend, you will be invoiced. If you must cancel your attendance, please call Laura Bray at 408-1699 prior to the meeting so we can cancel your meal.

Please make sure to check in at the front desk when you arrive.

RSVPs are REQUIRED, so we can be sure to have enough meals on hand! \*



# Don't Miss the SAABE Holiday Social!



Join us for the SAABE Holiday Social on **Friday, December** 12 from 5–7 pm at Dave & Buster's (at Crossroads Mall; in the Viewpoint 1 room). We'll have some good food to eat, a cash bar, and there will be some pool tables available (as well as the nearby arcade). We'll also have many **fabulous** door prizes, including gift cards and sporting equipment. Stop by and enjoy some good food and camaraderie with your fellow SAABE members.

# An RSVP is VERY IMPORTANT so we can make sure to have enough food!

Regular and associate members are free, and guests are \$25 each. Please invite others who may be interested in attending. <u>If you are coming, please email</u> <u>laurabray@braycommunications.com, or fax your RSVP to</u> <u>210-408-1799.</u>

PLEASE NOTE: If you RSVP and do not attend, you will be invoiced \$25 for the event. If you must cancel your attendance, please call Laura Bray at 408-1699 prior to the meeting so we can adjust the amount of food to order.

#### We hope to see you there!\*

#### A Message from the President

Twenty-five: I've always been fond of the number 25. It is a good rounded number easy to multiply, a great number to play on the roulette wheel, and there have been many professional sports players, race cars, etc. displaying the number 25. But, it also has a few other meanings that one may not realize.

SAABE's membership is now over 250, and 2009 marks the 25<sup>th</sup> snniversary of SAABE. Now, let's really get analytical. Twenty-five in basic decipher represents the second and fifth letters of the alphabet. The second letter, as we all know, is B. The fifth letter is E. Put them together retrospectively and you have BE. Did I lose anyone? 25 is also BE...you are the BE (Building Engineer)! Perhaps you as well now have a fondness for the number 25!

SAABE was created in 1984 by John Bolt/Towers Life and Jim Stallings/Cypress Towers along with Pete Felts. I know Pete is out there somewhere probably reading this article, and on many occasions, Pete has expressed to me that he is proud of where SAABE is today...I can't wait to hear from him when he finds out we are now over 250 members strong!

Though I've been in this industry for 31 years now, I've only been a part of SAABE for the past 18 years. I've enjoyed each and every year with SAABE and you, the members! I can tell you first hand, however, that back in the 90s, SAABE was in really bad shape. We barely had enough memberships to cover the postage when we transitioned the newsletters from facsimile to mail-outs. I still remember quite vividly how hard the SAABE Board worked back then. Many, many, thanks to Paul Thompson, Elena Morgan, Mike Halvorsen, Stacy Rumbo, Phillip Anderson, Mike Alvarez and yours truly for pulling SAABE out of that hole we were once in...to where we are today. Not to forget the most important factor...YOU! The SAABE members who have made all this possible! Thank you for your support!

Twenty-five years ago also marks the boom of many office buildings that were built in San Antonio. Bank of America, The Forum, IBC Centre, Northwest Center, Colonnade I, One Countryside, One Thousand Oaks, 10010 San Pedro, Corporate



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Square, Fountainhead and Tower West, among others, were completed or under construction 25 years ago! Let us also highlight that the Tower Life building will be 80 years old, and the Milam will be 81 years old in 2009! Does anyone know the life expectancy of the construction materials used in these buildings? I do! It is also due to your efforts that these buildings are still operational after all these years and not closed down like buildings in other major US cities!

Much of SAABE's success is due to the networking of members and with other organizations and governmental offices. SAABE is well established and portrays a courteous and professional image due to everyone's hard work. This has also opened a lot of doors and relationships that are held dearly. We've come a long way! Once again, thank you all for your work and support. P.S. I'll be back next month unless the elections tell differently!

Now going into something of infancy...so it seems. Anyway, this year is turning another page in the SAABE record books. The SAABE President, 1<sup>st</sup> & 2<sup>nd</sup> Vice Presidents and Treasurer offices are up for elections. Congratulations to those leaving and to those arriving!

Also, thanks to Preferred Landscape for the informative presentation on Oak Wilt at the November luncheon.

Finally, thanks to everyone that has been attending and sending RSVPs to the luncheons. The attendance this year has been phenomenal! Your efforts are greatly appreciated! Keep up the RSVPs, and thank you very much! ↔

#### by Charles Mikolajczyk, Jr., CBE-M

### Welcome New Members!

Welcome to the following new SAABE members! Please make sure to add their information to your 2008 SAABE Membership Directory.

Patrick Harris	David Juarez
Concrete Renovation	Travis Commercial
President	Building Engineer
6600 Randolph Boulevard	300 Concord Plaza
SA,TX 78233 • (210) 653-6120	SA,TX 78216 • (210) 241-2357
ptharris@sbcglobal.net	djuarez.contractor@tsocorp.com

Please make the following changes to this member's listing in your 2008 SAABE Membership Directory.

#### Allen Mangrum

Lashley South Texas

130A Interloop

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amangrum@lashleysouthtexas.com �

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# SAABE Going Green Forum/Group

For those engineers who are involved with or interested in the Energy Star Rating Program or have moved onto the LEED-EB (Leadership in Energy and Environmental Design for Existing Buildings), this is the group for you. This forum/group has engineers and vendors that have experience with these programs and are available to assist you in getting started, answering questions or explaining different aspects of these programs. They are also familiar with energy saving ideas for power, HVAC, landscaping and recycling.

The group has recently developed its mission statement and plan. They are below.

#### THE MISSION

1) To assist and educate SAABE engineers on the many energy saving and conservation programs for lighting, water conservation, and recycling systems available to upgrade and update properties for greater profitability.

2) To inform SAABE engineers of these programs already completed on the properties in the San Antonio area and to open access to the engineers who have initiated the projects, the details involved, and the payback numbers.

(Continued on page 11)



## **Vendor Rep Report**

#### by Allen Mangrum

I would like to thank once again all the vendors who have stepped up this year to provide an entire year with vendor sponsorship!!!!! Great Job. On that note, I would also like to thank all of the vendors who have committed for 2009.

Below is the proposed luncheon schedule for the first half of 2009:

Date	Topic	<u>Sponsor</u>
1/21/08	TBD	Voss Lighting
2/18/08	BEOTY Award	Computrols
3/18/08	"Computer Support"	Hays
4/15/08	TBD	Blackmon Mooring
5/20/08	"Hurricane Preparedness"	Redifuel
6/17/08	Summer Social/Picnic	N/A

In closing, please remember to RSVP!! I will also remind you that if you RSVP and do not attend without giving at least 24 hours notice, you will be invoiced.





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#### November Lunch Summary

During the November SAABE luncheon, Charlie Mikolajczyk, Mike Halvorsen, and Michael Copp attended the City of San Antonio Electrical Board meeting. Please thank them for all of the work that has been done to keep our Electrical Maintenance Technician registrations safe. Our Membership Chair Kendal Langenberg did a fantastic job filling in for our missing president.

Laura went away with so many toys for the Construct-A-Kids toy drive, sponsored by Construction News, that help was needed to get them all out of the door. Thank you all for contributing.

BEOTY nominations are now being accepted for 2008. Please visit <u>www.saabe.org</u>, for more details and a nomination form.

John Leifester with Preferred Landscape and Lighting was the luncheon speaker. Oak wilt is a fungus that affects the vascular tissue of oak trees. This is a fatal disease that will kill a tree completely in under a year. Besides losing the value of the tree, if you lose three trees around your house, you can expect to see a 17% increase in your electric bill. One of the first signs of oak wilt is that the veins of the leaves turn from yellow to brown, but the leaves themselves remain green. Oak wilt spreads three different ways: root grafts, contaminated tools, and through nitulid beetles.

To prevent oak wilt, hire a qualified contractor to trim your trees. If you decide to trim your trees on your own, trim annually and focus on branches that rub. Paint your cuts to

#### by Robert Andrews, Jr.

reduce the possibility of infection. Lastly, sterilize your tools. One of the common misconceptions of oak wilt is that it cannot be burned. Oak wilt is safe to burn, because the fungus dies at 100.3 degrees.

Treatment of infected trees is a very specialized service. A 20" tree should cost around \$110 to treat correctly. The contractor should dig a containment trench. This trench will vary in depth, but since 90% of oak wilt is spread by root graft, it is the most important. Depending on your location, the amount of money charged for this service will vary greatly.

John also mentioned some damage that can be caused by construction. One type of damage is compaction of the soil around the tree. This compaction of soil restricts air from making it to the roots and suffocates the tree. The solution to this problem is to use an air-spade excavation tool. There are only three companies in San Antonio that use this equipment.

For more information on how Preferred Landscape and Lighting can help you, call John at (210) 771-7081 or by email <u>jleifester@preferredlandsapetx.com</u>. To quote John, "Do it once. Do it right."

I hope to see you at the holiday social this year. It will be held at Dave and Busters on Friday December 12, from 5-7 pm. If hanging around your fellow SAABE members is not enough incentive to make an appearance, there will be plenty of door prizes to claim.  $\diamondsuit$ 







# Engineer Spotlight

#### by Jeff Turov



#### Jonathan Sosa

Building Engineer Cambridge Realty 700 N. St. Mary's, #405 SATX 78205 • (210) 271-9813

# • How long in the building engineer trade?

I have been involved in the commercial real estate building engineer field for

approximately one year. Prior to that, I worked in apartment maintenance for a year and a half. I have also worked for a flooring company that installed flooring nationwide for Wal-Mart. I have been a member of SAABE for one month.

• As a new member, how do you see SAABE benefitting you?

Through SAABE I feel that I will get a better understanding of how things work overall. I look forward to the educational presentations and networking with the other members.

• What is your strongest character trait?

Persistence would have to be it. I will not give up until I get what I want or have achieved a goal I have set for myself. "No" is not an answer I will accept for myself.

#### • Hobbies/what do you enjoy doing during off hours?

Spending time with my son tops the list. I enjoy taking him to Sea World where we can see the animals and watch the shows. Watching either college or professional football is another favorite pasttime and I am an avid Green Bay Packers fan.





#### • What event has most affected your life?

Watching my son come in to this world and being a father to him. Nothing has provided me with greater joy than watching him grow and being there to direct him down the right path. As a father I am a more responsible person.

#### • What is the most daring thing you have ever done?

A couple of years ago I bungee-jumped in to the Snake River Gorge in Idaho. This was about a 200' free fall. My heart did not slow down for what seemed like a couple of hours. It was quite a rush.



#### Tech Talk #8 IAQ—Staying Ahead of the Game by Charles Mikolajczyk, Jr., CBE-M

One of the more serious issues we are faced today is Indoor Air Quality. Before you say to yourself "another boring IAQ article," let me say this: "whatever you are doing is not going to be enough." The individuals that occupy your facility are more educated now than ever before. Even new leases are addressing the Outside Air issues, as well as IAQ issues. Documentation and tracking of IAQ is at an all time high. Even if you do not have any complaints or concerns, you should have the necessary documentation that actions and steps have been taken to ease the burden once they do arrive.

One of the first areas to go under examination is the temperature and humidity control. Hopefully you will have nothing less than excellent control of this area or "Katy bar the doors." The second area will be the control of Carbon Dioxide (CO2), which is the most cost-effective means of determining insufficient air circulation. The third area will be the HVAC system. If you think this area is mastered, and an examination will be inconclusive, think again! Quarterly PM consisting of washing the coils with city water, and an Annual PM cleaning with coil cleaner will not be an effective means of PM for IAQ. Have you ever seen the shows (20/20, Dateline, etc.), where they took swab samples from shopping cart handles, bubble gum machines and kiddy car rides? Then later in the show they reveal

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#### Tech Talk #8

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all of the different types of bacteria found. Well, that will not be anything compared to the report you will read after those same swab samples are taken from various areas of the coil surface, the drain pan, the "P" trap and the floor drain. Furthermore, "Johnny get my gun" if you remove the cover on the air handler and there is any standing water in the pan. "Any" standing water anywhere will get you on the "s" list. When you receive this report (which has probably already been reviewed by your tenant and everyone else), it's all over but the crying. After reading the report, it would seem that to have this amount of contamination, the coils should have visual evidence of contamination.

To lessen the pain of a bad dream, let me share some measures with you that *will be* beneficial to you at a later date. Nothing less than excellent temperature and humidity control will be accepted; this should be an easy task. If you are starting and stopping the HVAC system or the outside air fan(s) as close to business hours as you can, forget it! This report will accurately reveal start-up and shut-down times. The IAQ specialists recommend at least 2 hours *purge time* before and after normal business hours. Yes, that will mean around 25 extra hours of HVAC a week, but as always, to gain something you will always have to lose something.



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The first piece of equipment used by an IAQ specialist will be the old CO2 meter. Typically, this recorder will also chart temperature and humidity as well. Hopefully, you will already have records of the CO2 levels in all areas of your building. If not, you can purchase a simple CO2 meter starting around \$300.00 (more expensive units that can record ppm are available for around \$1,000). Having the equipment, demonstrating the ability to calibrate and operate the unit and proper documentation are extremely beneficial.

Traditionally, a large portion of the office buildings were built when 10% make-up of OA was the norm. As we all know, the current 20 cfm per person is far beyond the capabilities of most HVAC systems, especially if you block load using ASHRAE's suggestion of 150-200 sq. ft. per person. Additionally, the current trend of using open floor space with modular furniture far exceeds design limits. Basically if you are exceeding 1,000 ppm of CO2 in any occupied area, regardless of the situation or circumstances, you have insufficient air circulation and this will warrant additional air sampling (VOC, etc.). Again, extending the operating times to achieve around 350 ppm in the morning will help tremendously in *riding the curve* here.

If you are fortunate enough to have these areas covered, and believe it will be smooth sailing from here: "NOT." \*







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#### **SAABE TIMES**

#### SAABE Going Green Forum

#### (Continued from page 3)

3) To work with engineers who have begun the Energy Star program or the LEED - O/M (operation and maintenance) or - E/B (existing buildings) programs for assistance in, education with, and encouragement with their completion.

To cooperate and work in concert with the SABOMA 4) Green Committee to meet the 7 Point Challenge given by BOMA International with the first point a 30% reduction in energy consumption by 2010.

#### THE PLAN

1) Newsletter articles on areas of interest expressed to the Going Green Group.

Seminars to update and educate SAABE Engineers on 2) current issues and topics.

Survey the SAABE membership for energy saving 3) upgrades, lighting retrofits, water conservation programs, and other programs reducing energy consumption.

List engineers who have completed these programs along with details and payback for assistance to other interested SAABE engineers.

If you have any questions, please call Tom Lasater at 771-5824. For additional information visit www.energystar.gov www.usgbc.org. �

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# SAABE TIMES December Issue

#### Final Thought:

"Nearly all man can stand adversity, but if you want to test a man's character, give him power." - Abraham Lincoln

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# 2008 Board of Directors

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Robert Andrews, Jr. Secretary	822-8600
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Michael Copp Education Director	308-9888
Allen Mangrum Vendor Representative	349-3251
Bob Beal Past President	830-868-4749
Laura Bray Association Manager (laurabray@braycommunications.com)	408-1699

# December Membership Meeting: Wednesday, December 17

Board Elections/Year End Awards Embassy Suites Hotel (7750 Briaridge) 11:30 am

> Upcoming Program: Wednesday, January 21

The SAABE Times is edited by Bray Communications.