



**Mechanical
Contractors
Association**
of South Carolina

The Tool Box

Serving the Electrical, HVAC & Plumbing Industries Since 1912

Volume 5, Issue 101 December 1, 2008

Robert Hooke

By: Tom Frisby - www.frisbygroup.org

When you push down on something and it springs back, the bounce back is a function of the force of the push down. It is not the “law of elasticity” by Robert Hooke that fascinates me; rather that it was developed before computers. It is not that the Empire State Building was constructed in around 12 months, but that it was scheduled and constructed before computers and Prima Vera software systems. And Dmitri Mendeleyev said: “It is the function of science to discover the existence of the order of nature and causes governing this nature” and then went on to put together the periodic tables . . . without the benefit of a computer or even a calculator. And so for me it is not so much the wonderment of this discovery that fills me with awe, but that Mendeleyev used what the other great scientists (such as Einstein, Leonardo and Galileo) used, and that was their minds.

And as I hear about our educational process failing when we have more computers per classroom and student than any other country in the world, I wonder what we are teaching. How to think or how to use a keyboard? When I was in grade school, I was never taught the alphabet, but I was taught how to sound out words and their meaning. I was taught how to figure out what a story was all about, but not memorize dates and names. I still stumble over the alphabet and my rote memory is not red hot.

We read the Bible at the supper table and discussed what we read; and thereafter when I took English in college, figuring out what the dickens Shakespeare was talking about wasn’t too difficult. I went through undergraduate and law school and never took an objective (true/false or multiple answers) test, but had to narrate my answer in a coherent, logical manner. All through school, my teachers challenged me, and taught me thereby to “think” about my response. I had only my wits, my Big Chief red tablet and a number two yellow pencil as my tools. So did my classmates.

I mention this for two reasons: the first is that I believe our educational system is not as horrible as the pundits would have us believe, but I believe it is deficient because it is not developing the most important resource we have – our minds. Our creative minds. The mind that enabled the caveman to figure out how to communicate through the use of the petroglyph, Leonardo to figure out how to make machinery and tools to improve productivity, Jefferson to figure out how to develop a system of government unlike any the world had ever seen and for Roosevelt to figure out how to beat the despot that would try to destroy that government.

And second, coming back to the industry I know and love . . . the construction industry . . . I too often see projects being “managed” by the computer, “scheduled” by the electronic software often so complex no one inside the company can truly use it and therefore must “outsource” the company’s “thinking” to a scheduling consultant. In the case of the Empire State Building, that project might still be going on if the builder had relied exclusively on the computer. Instead, the partners got together and “used their heads” to figure out how to incorporate the steel and brick suppliers into the

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Have
A
Merry
Christmas
And
A
Happy
New Year!!



“Tool Box Talks” - Safety Tip**BATTERY CHARGING SAFETY**

Battery charging operations deal with some common hazards, such as burns and back injuries. But fortunately, there are many simple precautions that can be taken to combat these dangers. Battery charging should be accomplished in areas devoted exclusively to this type of activity, and there's a good reason for this. Hazards common to this type of work can be isolated from employees not engaged in battery charging.

Wood-slat floor boards or rubber mats should be utilized in the area to minimize slips and falls and the danger of electric shock.

Ample ventilation to disperse fumes is necessary, and water for prompt flushing of spills of electrolyte on the floor is another important safety factor. Availability of water is also important for fire protection. Fire doors should be installed between the charging area and areas where flammable liquids are located.

Only trained personnel should charge or change batteries, so don't attempt to do any job you aren't authorized to do. No-smoking regulations must be observed.

Back injuries are a common problem, so handling of batteries should be done on roller conveyors or chain hoists to avoid back strains and hernias. Use a handcart to transport batteries. If it is necessary to lift a battery manually, it should be done in accordance with safe lifting procedures—by using your leg muscles, not your back muscles. Squat close to the load, hold it close to your body, and lift by gradually straightening your legs. Don't try to handle a tough lifting job alone. Ample help should be used for all lifts.

Never place metal tools on top of batteries, and never put them in a spot where they might fall on a battery and cause a short circuit. This could result in an explosion or serious burns.

If you're charging or changing the battery for an industrial truck, make sure the truck is correctly positioned and the brakes set. When jump charging a dead battery, connect the red clamp to the positive terminal of the good battery first. Then connect the other red clamp to the positive terminal of the dead battery. Next, connect the black clamp to the negative terminal of the good battery and connect the other black clamp to the frame or ground of the dead vehicle away from the battery.

Safety Reminder: Check the fluid level of batteries regularly.

RSS Safety, LLC

1122 Industrial Drive, Suite 113, Matthews, NC 28105

Telephone (704) 844-2519 Fax (704) 844-0291

Happy Anniversary

Mr. & Mrs. Lewis Caswell - 12/20

Mr. & Mrs. Randy Harley - 12/21

Concerns

Rhett Leake - James M. Pleasants Co., Charlotte

Condolences

Mr. Jason Flynt, Mr. Ryan Flynt & Family

On the loss of their father

**Mr. Ray Edward “Eddie” Flynt
White Crane Company, W. Columbia**

Welcome New Members

**Joe Schelble - McGill Airflow LLC
Irmo, SC**

**Josh Kilcoyne - Upstate Plumbing, Inc.
Greer**

**Sara Cox - Blanchard Machinery/Power Systems
Summerville**

**John Whatley - Greenville Mechanical, LLC
Greenville**

**Robbie Bass - Southern Piping Company
Greenville**

(continued from page 1)

project, how to handle the traffic and material handling on the very narrow and busy streets of New York City. Like the new bridge in Charleston, the “team members” got together and continued to look ahead, figure out the best way to do things, to improve things. The operative terms were “got together” and “figure out”.

They did what Hooke did, or Mendelejev did. They used their heads. And on too many projects, I see General Contractors or Construction Managers who “tell” their subcontractors what to do, rather than to discuss the best and most productive way to do it. In Japan, there is a concept called “decision-thinking” by which the foreman and his crew plan out all new activities. I call it a “democratic dictatorship” there is input from the troops, but at the end there is the authoritarian who must direct and control. The concept of the three step quality program (P-I-F) is exactly that: the foreman, superintendent and owner’s representative sit down before new activities, review the plans and specifications, material handling requirements, quality requirements and resources . . . before the crew begins the activity. This is what Leonardo would do: think about it, figure it out, try to come up with a better approach, make sure that everyone involved had ownership and accountability.

This is what the builders of the Empire State Building did. And the new bridge in Charleston.

A computer comes in handy. If we use our minds before we use the keyboard.

Upcoming Events!!!

5th Annual MCASC
Statewide Meeting & Barbeque
Wednesday, March 25, 2009
Guest Speaker Senator Glenn F. McConnell
The Coop, Columbia, SC

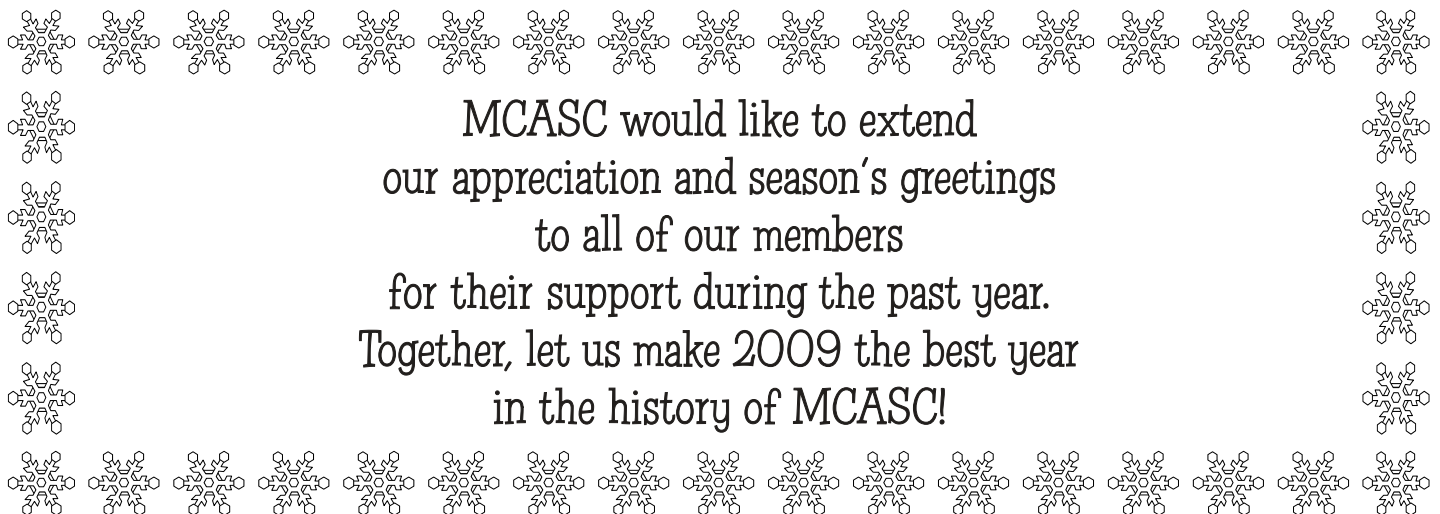
3rd Annual Piedmont Area
Clays for College
Friday, April 24, 2009
Harris Springs Sportsman’s Preserve
Waterloo, SC

21st Annual George W. Bryce, Jr.
Memorial Golf Tournament
Friday, May 1, 2009
Oakdale Country Club, Florence, SC

1st Annual Coastal Area
Inshore Fishing Tournament
Tentative Date
Saturday, May 16, 2009
TBA

18th Annual MCASC
Santee Scholarship Tournament
June 5-7, 2009
Quality Inn & Suites
Santee, SC

MCASC Summer Convention
August 6-9, 2008
Ginn Hammock Beach Resort
Palm Coast, Florida



MCASC would like to extend
 our appreciation and season’s greetings
 to all of our members
 for their support during the past year.
 Together, let us make 2009 the best year
 in the history of MCASC!



South Carolina Department of Labor, Licensing and Regulation

Mark Sanford, Governor
Adrienne Riggins Youmans, Director



Synergy Business Park, Kingstree Building
110 Centerview Drive
Post Office Box 11329
Columbia, SC 29211-1329
(803) 896-4300
FAX: (803) 896-4393
www.llr.state.sc.us

For Immediate Release

Contact: Jim Knight (803) 896-4374

Nov. 13, 2008

State Offering Training in Your Community on New State Illegal Immigration Law

The South Carolina Department of Labor, Licensing and Regulation (LLR) has scheduled training sessions at technical colleges across the state in December and January to help employers understand and know how to comply with the new state immigration law.

Governor Mark Sanford, on June 4, 2008, signed into law the "South Carolina Illegal Immigration Reform Act". In addition to complying with I-9 requirements, all employers are required to verify the legal status of employees. One way to do so is through the Department of Homeland Security's online database called E-verify; another is to determine that the employee has a South Carolina driver's license or other government issued identity document. The statute also sets penalties, including fines and loss of business licenses, for failing to get verification and for knowingly hiring an illegal immigrant.

LLR will investigate complaints and randomly audit companies. However, according to the provisions of the law, the agency cannot accept and investigate complaints or conduct audits until July 1, 2009, at businesses employing 100 or more workers, and July 1, 2010, at businesses employing less than 100 workers.

A Web site, www.llr.state.sc.us/immigration, is available to assist employees, employers and others affected by the law. Visitors can review the law, get updates as regulations are drafted, review frequently asked questions and learn about future training in their area. There are also links to other state agencies with responsibilities under the law.

Seating will be limited at each technical school, so LLR is asking employers to consider sending only one representative.

December 2008 Training - All Training Will Be 10 AM To Noon

- Dec. 2 **Piedmont Technical College**, 620 North Emerald Road, Greenwood, Continuing Education Building, Room 136-B
- Dec. 3 **Greenville Technical College**, 506 South Pleasantburg Drive, Greenville, J. Verne Smith Technical Resource Center, Building 102
- Dec. 4 **Tri County Technical College**, 511 Michelin Boulevard, Anderson, Multi-Purpose Room
- Dec. 5 **Spartanburg Community College**, 800 Brisack Road, Spartanburg, Tracy Gaines Learning Resource Center Aud.
- Dec. 9 **Trident Technical College**, The College Center, 7000 Rivers Avenue, Charleston, 920 Building at the complex for Economic Development
- Dec. 10 **Technical College of the Low Country**, 921 Ribaut Road, Beaufort, Building 12 Auditorium
- Dec. 11 **York Technical College**, 452 S. Anderson Road, Rock Hill, Barnes Theater

January 2009 Training - All Training Will Be 10 AM To Noon

- Jan. 5 **Florence-Darlington Technical College**, 2715 W. Lucas Street, Florence – Fred C. Fore, 400 Building
- Jan. 6 **Horry-Georgetown Technical College**, Conference & Business Ctr., 950 Meyers Avenue, Myrtle Beach, Bldg. 600
- Jan. 7 **Midlands Technical College**, Airport Campus, Academic Center, 1260 Lexington Dr., West Columbia, Aud. 116
- Jan. 8 **Orangeburg-Calhoun Technical College**, 3250 St. Matthews, Road, Orangeburg, Auditorium in Building R
- Jan. 9 **Central Technical College**, 506 North Guignard Drive, Sumter, Industrial Technology Building 400, Room 401
- Jan. 12 **Northeastern Technical College**, 1201 Chesterfield Highway, Cheraw, Hampton Hall, Building 200
- Jan. 15 **Aiken Technical College**, 2276 Jefferson Davis Highway, Graniteville, Amphitheater in Building 700, Room 736

MCASC 2008 COURSE REGISTRATION

COMPLETE AND FAX OR MAIL TO MCASC
 P.O. BOX 384, COLUMBIA, SC 29202
 TELEPHONE #: 803-772-7834 FAX #: 803-731-0390
 EMAIL: mflowers@mcasc.com WEBSITE: www.mcasc.com

NAME: _____

COMPANY: _____

ADDRESS: _____

PHONE: _____ **FAX:** _____

CITY: _____ **STATE ZIP** _____

EMAIL ADDRESS: _____

NAME ON LICENSE: _____

LICENSE NO.: _____ **STATE:** _____

Payment Method

- Please Invoice
 Check Enclosed for \$ _____

NOTE:

All Courses Will Be Held At
 The MCASC State Office
 Training Facility
 1504 Morninghill Drive

NOTE:

WE OFFER A DISCOUNT
 IF YOUR COMPANY REGISTERS
 THREE (3) OR MORE
 FOR THE SAME COURSE.
 SEND 3...THE 4TH IS FREE

NOTICE:

ANYONE FAILING TO WITHDRAW FROM A COURSE
 TWO WEEKS PRIOR TO ITS START WILL BE BILLED
 FOR THE ENTIRE COST OF THE COURSE.

PLEASE PLACE A CHECK BESIDE EACH COURSE YOU WISH TO REGISTER FOR:

NC, GA & AL APPROVED

- Piping Tips For Better
 Hydronic Systems
 NC License Types: H-1-I, H-1-II
 October 15, 2008 - Columbia
 Time: 9:00 AM - 4:00 PM
 Member: \$175.00 Non-Member: \$225.00

NC, GA & AL APPROVED

- Nuts & Bolts For A Profitable
 Service & Replacement Business
 NC License Types: P-I, P-II, H-1-I,
 H-1-II, H-2, H-3-I, H-3-II, FS, FP, IC
 November 12, 2008 - Columbia
 Time: 9:00 AM - 4:00 PM
 Member: \$ 175.00 Non-Member: \$ 225.00

NC, GA & AL APPROVED

- Surviving An OSHA Inspection
 NC License Types: P-I, P-II, H-1-I,
 H-1-II, H-2, H-3-I, H-3-II, FS, FP
 December 10, 2008 - Columbia
 Time: 9:00 AM - 4:00 PM
 Member: \$175.00 Non-Member: \$225.00

NC, GA & AL APPROVED

- 9 Keys For Successful Service &
 Contracting Businesses
 NC License Types: P-I, P-II,
 H-1-I, H-1-II, H-2, H-3-I, H-3-II
 October 29, 2008 - Columbia
 Time: 9:00 AM - 4:00 PM
 Member: \$175.00 Non-Member: \$225.00

NC, GA & AL APPROVED

- Gaining Life-Time Customers
 NC License Types: P-I, P-II, H-1-I,
 H-1-II, H-2, H-3-I, H-3-II, FS, FP, IC
 December 3, 2008 - Columbia
 Time: 9:00 AM - 4:00 PM
 Member: \$175.00 Non-Member: \$225.00

NC, GA & AL APPROVED

- Collections In The
 Construction Industry
 NC License Types: P-I, P-II, H-1-I,
 H-1-II, H-2, H-3-I, H-3-II, FS, FP
 December 17, 2008 - Columbia
 Time: 9:00 AM - 4:00 PM
 Member: \$175.00 Non-Member: \$225.00

**Associate Member:
OGLETREE, DEAKINS, NASH, SMOAK & STEWART, P. C.**

Ogletree Deakins, the largest labor and employment law firm in South Carolina, has been representing employers for over 30 years. The firm has grown to over 430 attorneys in 33 offices across the country and serves management exclusively. The firm has more than 60 lawyers working in its three South Carolina offices located in Greenville, Columbia, and Charleston.

Ogletree Deakins represents small, medium, and large employers across South Carolina in a variety of industries, including the construction industry. In addition to handling labor and employment law matters, the firm has thriving practices focused on business immigration, employee benefits, and workplace safety and health law. The three South Carolina offices hold regular briefings for clients and friends to keep them updated on developing issues or changes in employment and labor law. The firm also provides updates via e-mail to those requesting timely information on issues of interest to employers.

Ogletree Deakins is committed to partnering with business owners, managers, and those responsible for the human resource function in your organization to deliver timely, client-centered representation and business solutions to legal problems. The firm understands the twenty-first century workplace and the wide array of state and federal employment laws and regulations with which employers must comply and remains dedicated to providing South Carolina employers with assistance in resolving the workplace issues of the day.

Ogletree Deakins is committed to personalized attention, innovative solutions, and old-fashioned hard work and is ready to serve your legal needs.

For more information about Ogletree Deakins, please visit our website at www.ogletreedeakins.com or contact one of our South Carolina offices.

<p><u>Charleston</u> <i>Eric Schweitzer</i> <i>211 King Street</i> <i>Suite 200</i> <i>Charleston, SC 29401-1384</i> <i>Phone: 843.853.1300</i></p>	<p><u>Columbia</u> <i>Ted Speth</i> <i>1320 Main Street</i> <i>Suite 600</i> <i>Columbia, SC 29201-3266</i> <i>Phone: 803.252.1300</i></p>	<p><u>Greenville</u> <i>John Creech</i> <i>300 North Main Street</i> <i>Suite 500</i> <i>Greenville, SC 29601-2159</i> <i>Phone : 864.271.1300</i></p>
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Congratulations to our next Associate & Mechanical Members who will be highlighted in the upcoming issue of "The Tool Box":
Kudzu Staffing, Inc., Piedmont - Associate Member
Transworld, Inc., Charleston - Mechanical Member

DECEMBER 2008 MONTHLY AREA MEETINGS

MIDLANDS AREA

Thursday, January 8, 2009 @ 6:00 PM
 Location: MCASC State Office, 1504 Morninghill Dr., Columbia
 Sponsored By: Energy Pro of S. C.

**No Meeting or Event Planned
For December**

PIEDMONT AREA

Wednesday, December 17, 2008 @ 5:30 PM to 7:30 PM
 Location: Wild Wing Café, 15 W. Washington St., Greenville
 Sponsored By: Dixon Hughes, PLLC
 Joint With ABCC, CFMA, MCASC, NAWIC, & PCEA

**Upstate Holiday Collaborative
Bring An Unwrapped Toy For
Toys For Tots**

PEE DEE AREA

Thursday, January 15, 2009 @ 6:30 PM
 Location: 933 Santiago Drive, Florence
 Sponsored By: City Plumbing Company of Florence

**No Meeting or Event Planned
For December**

COASTAL AREA

Tuesday, December 13, 2008 @ 7:00 PM-11:00 PM
 Location: 122 East Bay Street, Charleston
 Sponsored By: Charleston Contractors Association,
 Charleston Electrical Contractors Association,
 MCASC, & NAWIC

**Annual Holiday Gala
Bring An Unwrapped Gift For
My Sister's House**



P.O. Box 384, 29202
1504 Morninghill Drive
Columbia, SC 29210
Phone: (803) 772-7834
Fax: (803) 731-0390
E-mail: mflowers@mcasc.com
www.mcasc.com

*Serving mechanical contractors in
South Carolina since 1912.*

MCASC Executive Board & Staff

Chris Cullum, President
Richard Miller, Jr., Vice-President
Jim Brewer, Treasurer
Henry Poplin, Secretary
Bob Jacques, Associate President
Mona Flowers, Managing Director

Mechanicals make it happen -
Be part of the best!

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MCASC Vision Statement

The Mechanical Contractors Association of South Carolina (MCASC) will be the leading construction association in South Carolina for specialty contractors and suppliers in the electrical, mechanical (HVAC), and plumbing fields by serving its membership, the industry, and the Community in a vibrant and harmonious fashion.

MCASC Mission Statement

The Mechanical Contractors Association of South Carolina (MCASC) will provide its membership with:

- current business/technical information and support
 - a proactive political/legislative agenda
- a joint industry collaboration to improve relative business practices
- an ongoing effort to offer training opportunities for both professional and craft personnel
 - educational scholarships for deserving students
- the development of industry related career opportunities

The Association's objective for this mission is to enhance the future of the Construction Industry in South Carolina.