

RES Retired Engineers & Scientists of Cincinnati

Luncheon Meeting -Tuesday, March 16, 2010 @ 11:30 am
Evergreen Retirement Community
230 West Galbraith Road, Cincinnati, Ohio 45215
visit us at www.resc.org

Building the Future, Cincinnati's Tallest Building

Queen City Square Tower Project

By: Bob Grace, Turner Construction
Ohio P.E. CPD Credit



Bob Grace will discuss the new tallest and most environmentally sensitive office building in the Cincinnati Business District. The dramatic design of the Great American Tower topped by the spectacular tiara will create a defining image for the City of Cincinnati skyline.

A project of this magnitude presents a number of design and construction challenges. Mr. Grace will discuss design, construction, building systems, economic impacts, and sustainable efforts (LEED) for the Great American Tower at Queen City Square, currently under construction.



Queen City Square integrates the building and parking garage of Phase I of the Queen

City Square, known as 303 Broadway, a 17-story, 188,500 SF office tower completed in 2006. In total the Queen City Square project will provide nearly one million square feet of office space and over 2000 parking spaces.

Bob Grace, Commercial Account Executive, is responsible for growing and managing Turner's commercial market in Cincinnati. He also serves as a project executive responsible for all operations on a given project including contract negotiations, client services, project quality, schedule and profitability. He currently holds this role on the \$250 million Great American Tower at Queen City Square, which will be Cincinnati's largest, tallest and "greenest" office building upon its 2011 completion.

NOMINATIONS FOR 2010 – 2011 OFFICERS OPEN ON MARCH 16

The RESC Control Board recommends and nominates Gene Gardner for Vice President, Joe Rave for Secretary, and Jim Bohren for Treasurer for the upcoming 2010-2011 season. Joe is completing a two year term and has agreed to continue serving as Secretary while Gene and Jim are highly qualified for the two open positions.

Members will have the opportunity to make nominations from the floor at the March 16 and April 20 Luncheon Meetings. Members attending the April 20 Luncheon Meeting will vote on the nominees.

MARCH TOUR

Newport Aquarium

Behind the Scenes - Scientific Tour

WHEN: Wednesday, March 24, 2010

WHERE: Newport Aquarium on the Levee

TIME: Doors open at 10:00 am (tour begins @ 10:15 sharp)

Lunch: Claddagh's Irish Pub on the Levee. (Walk from the Aquarium)

Parking \$2.00 under the Levee

Map & Directions on the web site

Ohio P.E. CPD Credit 1 hr

Reservations: Call John Gilman 513-541-1147 or e-mail TOURS@RESC.ORG

Sea life and water, yes, they have that, but did we mention the tremendous amount of science going on behind the scenes? Don't miss this specialized tour organized especially for RESC. Experts on staff are biologists, engineers, water quality specialists, veterinarians, vet techs and dive safety officers

PROGRAM SURVEY 2010-2011

A program and tour survey was taken at the luncheon on February 23rd for future consideration. If you missed that survey and have some suggestions please call Gene Gardner at (513) 681-2794 or email Gene at GeneGard24@aol.com.

WORLD WIDE PARTICIPATION IN STANDARD FOR NEW ELECTRIC GRID LOADS

The Electric Car and Electric Mass Transportation

According to the IEEE the existing power grid in the United States can only support the charging of a few hundred thousand additional electric vehicles at one time. To solve that problem the IEEE Standards Association (IEEE-SA) is launching a groundbreaking electric sourced transportation infrastructure initiative for the power engineering and transportation industries with the creation of The IEEE Standard 1809 Guide for Electric-Sourced Transportation Infrastructure.

The IEEE-SA P1809 guide will provide a knowledge base for understanding and defining the electric grid infrastructure requirements to support various forms of electric sourced transportation. It will include both vehicle and mass transit. The P1809 project is being sponsored by the IEEE-SA Standards Coordinating Committee 40 (SCC40).

In an opening kickoff webinar on February 18, representatives of more than 15 International Groups expressed their interest and support. The six hour session ended with an appeal for experts from related fields to join the WG.

RESC PROPOSED GOLF SCHEDULE FOR 2010, APRIL THRU SEPTEMBER

- | | |
|---------------------------------|-----------------------------|
| 1. FAIRFIELD GREENS NORTH TRACE | 2. LITTLE MIAMI GOLF CENTER |
| 3. AVON FIELDS | 4. TWIN OAKS SOUTH |
| 5. FAIRFIELD GOLF COURSE | 6. GEEAA GOLF PARK |

Send comments to Enos Hayes (513-248-0973 or email zenos@fuse.net) or to Dick Hertzog (513-624-9153 or email bigzig@prodigy.net)

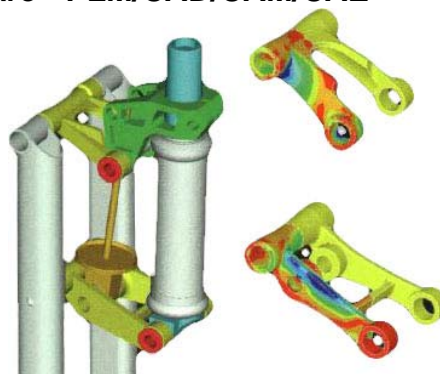
WMKV FM HOSTS RETIRED ENGINEERS & SCIENTISTS OF CINCINNATI

RESC thanks Station Director George Zahn for allowing Bob Haas and Lee Hite to tell listeners who we are and discuss RESC programs, activities and membership requirements on a 25 minute live interview, February 5. A recording of the interview is posted on www.resc.org. WMKV (89.3 FM) depends on donations for their operations.



RESC Tours Siemens Product Lifecycle Management Software - PLM/CAD/CAM/CAE

At the worldwide birth place for CAE "Computer Aided Engineering", Tom Rocklin and Mark Lawry from Siemens, Milford, Ohio provided RESC an outstanding presentation on Wednesday, February 24, 2010. Formerly SDRC, the corporation evolved through several owners and has landed with Siemens as the current owner. Mr. Rocklin reviewed the progression for the invention of CAE from the University of Cincinnati out to private industry and beyond. SDRC embraced the concept early and grew at a rate typically reserved for California internet companies.



Mr. Lawry demonstrated the process of product design from initial concept thru manufacturing and into product support and obsolesces. Rarely does any new product from a kitchen food processor to the space shuttle escape the benefits of computer modeling and testing. On behalf of RESC we wish to thank Mr. Rocklin and Mr. Lawry for hosting the presentation.

AMP - All Electric Vehicles

At our February meeting, Chief Engineer Tim Wieck, from AMP, Advanced Mechanical Products, Inc., in Blue Ash, Ohio, provided a detailed view of the design considerations facing the development of an all electric drive train. Their existing drive train can support the Saturn Sky and Pontiac Solstice for a distance of 150 miles on a single charge. For driver convenience AMP has chosen to include the 120/240 VAC charger as part of the vehicle design. This means that you do not need a special charging station and can utilize the convenience of the existing power in you garage, at work or elsewhere.

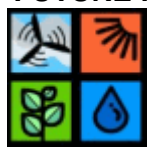


No surprise to anyone, safety is AMP's number one concern. With that in mind they have strategically chosen to retrofit existing vehicles that have thousands of man hours of safety engineering and testing built into the vehicle. Their value added contribution is the "All Electric Feature". The vehicle retains all the safety features of the existing vehicle while advancing us toward independence from oil with the all electric car.



A few days after Mr. Wieck's presentation, AMP introduced an all electric 6 passenger SUV by retrofitting the GM Equinox. Again, a 150 mile range on a single charge for the "All Electric Equinox". AMP is certainly making an immediate impact on attempts to solve our transportation dependence on oil. All vehicles are available for delivery now.

FUTURE PROGRAMS



April 20, 2010

Green Issues and Solutions

Ohio P.E. CPD Credit

By: Jack Clock CMfgE

Green Energy Ohio

GEO encourages environmentally and economically sustainable energy policies and practices in Ohio. GEO promotes renewable energy (solar, wind, biomass & low-impact hydro) statewide by acting as a clearinghouse to inform Ohioans on sustainable energy.



May 18, 2010

Global Warming

Ohio P.E. CPD Credit

by Dr. Marwan Nusair

The data-driven view of global warming, where evidence of each source of climate change is considered and the various causes then compared, including human activity.

RESC LIFETIME ACHIEVEMENT AWARD for 2010

Ordinarily, members would make nominations for the RESC Lifetime Achievement Award recipient for 2010 at the March 16 Luncheon Meeting. Since there were two nominees chosen winners last year (Howard Heineke and Lee Hite) and only one award is presented each year, there will be no nominations from the floor. The Award will be presented to our VP and Web Master, Lee Hite, at the May Luncheon Meeting.

Biomass Fuel Briquette Press

RESC member Zan Smith is quite active with the Cincinnati Professional Chapter of EWB (Engineers Without Borders). EWB partners with third world developing communities to improve their quality of life through the implementation of environmentally sustainable and economical engineering projects. EWB Cincinnati partner is in Rwanda, Africa.

With that in mind, they are developing a technique to use dead banana skins mixed with sawdust and other organic matter to make a small "fuel briquette". Organic fuel briquettes are used as a substitute for charcoal which comes from cutting down the rain forest. Experimentation with various organic mixtures required a briquette press. Pictured to the right is a briquette press made by Lee Hite.



The 16 inch briquette mold is from 3 inch schedule 40 PVC with holes on the wall at $\frac{3}{4}$ inch centers. The press applies about 5,000 PSI to the organic matter and results in a briquette about 5 inches tall or two at 2 $\frac{1}{2}$ inches tall. A center tube allows for additional liquid to be drained out during the compression process. Pictured are two 3" molds and one 4" mold.

Zan is also experimenting with the use of an industrial size caulking gun to make 2" briquettes that a family might use in their home. The large press is for production at the village level. Details available at www.home.fuse.net/engineering/ewb_fuel_briquette_press_large.htm

LUNCHEON RESERVATIONS

Mail Label

Zan Smith

PO Box 30346

Cincinnati, OH 45230

**Please make sure ALL lunch reservations
are Received ON or BEFORE Thursday, March. 11th**

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RESC Dues & Luncheon Reservation Form				MENU	
Make check payable to "RESC" and Mail to the Treasurer: ALL reservations must be received on or Before Thursday, March 11th				Baked Fish with tartar sauce Macaroni and cheese gratinee Stewed Tomatoes Green Salad with choice of 2 dressings Rye Rolls Fresh Fruit Cobbler Beverages	
Date of luncheon		March 16, 2010			
LUNCH	Member name		\$13.00		
	Prospective Member		*\$13.00		
	Guest Name		\$13.00		
	Ohio P.E. Name**		\$13.00		
DUES ANNUAL Payable by Oct 2009	Membership		\$15.00		
	Golf		\$ 5.00		
*No charge when attending the first meeting and sponsored by a member			TOTAL		
Ohio P.E. Registration Number			CPD Certificate (Y/N)		
**Continuing education certificate included with the \$13.00 lunch cost.					
Please list any CHANGE to your email, personal address, or phone number.					
TREASURER					
Zan Smith					
PO Box 30346					
Cincinnati, OH 45230					
Ph: 513-520-4338					

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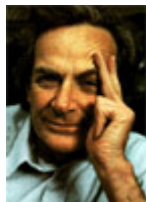
**Save A Stamp, Register for Lunch Online**

For those of you who prefer to write a check and mail in your reservation form, nothing has changed. However, if you already pay your bills online using the "Bill-Pay" from your bank, you can use that same method to pay for your lunch reservations. It's a two step process.

First, go to the RESC web site www.resc.org and complete the "E-mail Reservation Form" located on the home page. This will send your lunch reservation to the treasurer via email. You will receive an email confirmation, if not, please call the treasurer directly. Zan Smith, Ph 513-520-4338

Secondly, using your online bill-pay feature from your bank, send the lunch reservation money to the treasurer. Send to: **Zan Smith – RESC, PO Box 30346, Cincinnati, OH 45230.**

HELP! Your treasurer is being inundated with "pay-at-the door" reservations. While this is convenient for the members, it creates difficulties for the treasurer. Please pay at the door only in extraordinary cases, not as a routine method of payment. A bank draft or personal check mailed to the PO Box is preferred. Thank you.



Famous scientific quotes

"There are 10^{11} stars in the galaxy. That used to be a huge number. But it's only a hundred billion. It's less than the national deficit! We used to call them astronomical numbers. Now we should call them economical numbers." Richard Feynman



"If I had thought about it, I wouldn't have done the experiment. The literature was full of examples that said you can't do this. (Spencer Silver commenting on the work that led to the unique adhesives for 3-M [Post-It] Notepads.)"

NEWS ANNOUNCEMENT



**13th Annual Mars Society Convention,
August 5-8, 2010, at the Marriott Dayton Hotel.**
Additional information on the RESC web site.

THIS PREMIERE EVENT will bring the brightest and most influential leaders within the US space industry and scientific planetary exploration to Dayton, the birthplace of aviation. It will attract experts, innovators, investors, media, and enthusiasts from North America and around the world.

Special rates are available for students, seniors, and multi-day participants. For details, contact the Ohio Chapter at marsohio@aol.com or RESC member Lyle Kelly at LHKELLY@AOL.COM

Attention Board: On March 9, the Control Board will meet at "The Stratford at Kenwood" 5559 Kenwood Road, Cincinnati, OH 45227 Phone: (513) 561-9300, Details via email.

IN REMEMBRANCE:

Charles R. Owen, age 87 - Gio Cappurro, age 81

RESC NEWSLETTER

10266 Kingsport Drive
Cincinnati, OH 45241