

# RES Retired Engineers & Scientists of Cincinnati

Luncheon Meeting -Tuesday, February 16, 2010 @ 11:30 am  
Evergreen Retirement Community  
230 West Galbraith Road, Cincinnati, Ohio 45215  
visit us at [www.resc.org](http://www.resc.org)

## All-Electric Drive Train

**AMP™ Advanced Mechanical Products, Inc.**

By: Tim Wieck, Chief Engineer, P.E.  
Ohio P.E. CPD Credit

AMP Inc. has developed a one of a kind all electric high performance drive train for the installation into the Saturn Sky and Pontiac Solstice vehicles. The end product is an all Electric Vehicle that does not sacrifice the handling and "feel" of a conventional ICE sports car.



On October 19th, 2009, AMP was selected by the Progressive Insurance Automotive X PRIZE to be included in the 43 Qualified Teams who received passing scores from the Design Judges. The process evaluated 97 registered entries and reduced the field by more than half. The remaining teams will bring a total of 53 vehicles (28 Mainstream and 25 Alternative Class) into the next stage of the competition. Qualified Teams have passed two hurdles – the Registration process and Design Judging. The next phase of the competition is the technical qualifiers, which begin in Spring, 2010.

The AMP power train delivers 150 miles per charge, and a complete "fill up" cost about the same as a gallon of gas. The converted Sky has a top speed of 90mph and will accelerate from zero to sixty mph in under 6 seconds.

Mr. Wieck has hands-on engineering experience in the Aerospace, Commercial and Automotive industries. He was Chief Design Engineer for Parkway Products, a \$70MM/year international aerospace components manufacturer. Previous to that, he was in a supervisory position with ESCO Corporation, a \$600MM/year international leader in steel alloy products.

Tim holds a BS in Mechanical Engineering from the University of Portland, and has been a registered engineer since 1993

## **FEBRUARY TOUR**

**One hour credit: Ohio P.E. CPD**

### **Siemens Product Lifecycle Management Software**

#### **Product Design and Performance - On Time - PLM/CAD/CAM/CAE, Synchronous Technology**



From high performance vehicle design to high performance footwear and everywhere in between, you will see the tools used to accomplish design goals and manufacturing demands in today's world of rapid time-to-market. Please provide your Ohio P.E. registration number with your reservation. Certificates are prepared ahead of time.

#### **Global Birthplace for CAE**

**WHEN:** Wednesday, February 24, 2010

**WHERE:** 2000 Eastman Drive, Milford, Oh 45150

**TIME:** Meet at 10:15 am (tour begins sharply @ 10:30 am)

**Lunch:** Cracker Barrel, 475 Rivers Edge Drive, Milford, Oh 4510

**Reservations Deadline Feb. 17 - Call John Gilman 513-541-1147 Limited to the first 25**

## Congratulations to Rachael Flatt, as she heads to the 2010 Olympic Winter Games



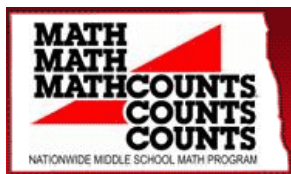
Rachael Flatt from Del Mar, California is the 2010 U.S. National Figure Skating Champion and the granddaughter of RESC member Jack Reed. She is a 17-year-old high school senior at Cheyenne Mountain in Colorado Springs, Co.



In 2005, she won the U.S. National Novice Ladies Figure Skating title at age twelve and went on to win the silver medal in the Junior Ladies division in 2006. In 2007, she won the Senior Ladies title at both regional and sectional competitions. Rachael is the 2008 World Junior Figure Skating Champion, and the 2008 and 2009 U.S. Ladies Silver Medalist.

Did we mention academics? She has never received a B in a class, EVER. The straight A student is taking a full load at Cheyenne Mountain: Advanced Placement English, AP physics, AP calculus, AP French. Without a doubt, she has been influenced by her mother who has biology degrees and research experience, and her father who has a doctorate in bio-chemical engineering and experience in R&D.

Clearly, Rachael Flatt has demonstrated a high level of performance for both the skills of figure skating and the discipline of the academic environment, despite frequent travels around the world for competitions, exhibitions, health organization programs and TV filming. With seldom less than 30 hours per week of rink time for skating practice, coaching, stretching/conditioning and choreography, she manages her time from 4:30 am to late pm.



### **Math Counts Needs Judges**

MathCounts needs judges to grade exams on Feb 20.

For details contact John Molander at 513-791-6529 or email [jcmo@one.net](mailto:jcmo@one.net)



### **The 2010 UC Robotics Team has again entered the Intelligent Ground Vehicle Competition for the 18th year.**

Their project is to convert a Motorized Scooter into a computer controlled device that would permit senior citizens or people with disabilities to be transported around campus. One variation would even permit someone without arm control to use muscle or mind control.

#### **They Need Our Help**

They have asked a few engineering organizations for a small amount of funding to get a motor, a gearbox, a small laptop computer and a mind control sensor. RESC has been one of the organizations that have been asked.

They also welcome your participation with the project. They meet each Friday during the academic year in Room 551 Baldwin Hall and would welcome anyone.

**If you can HELP**, contact: Dr. Hall at [hallel@ucmail.uc.edu](mailto:hallel@ucmail.uc.edu). Details for Financial Contributions & the Project Brochure are on the RESC web site at [www.resc.org](http://www.resc.org).

### **Famous scientific quotes**

"If you thought that science was certain - well, that is just an error on your part." Richard Feynman

### **Not so famous scientific quotes Said what . . . ?**

"There is not the slightest indication that nuclear energy will ever be obtainable. It would mean that the atom would have to be shattered at will". (Albert Einstein, 1932.)

## ARE YOU SMARTER THAN A 5<sup>TH</sup> GRADER? Not to worry, you can still be a Science Fair Judge!



**NACKES** (North Area Counties of Kentucky Exposition of Science) held at NKU is looking for science fair judges. The judging will be Saturday, February 27, 8 am to 12:30 pm.

To sign up please contact Jerry Carpenter via email at [rhondac2@fuse.net](mailto:rhondac2@fuse.net)

You can register on their web site at [nackes.nku.edu](http://nackes.nku.edu).

**Do not** put "w w w" in front of the address. Click on "Judges"



### RESC Now Syndicated. What is this and why do it?

**What is it?** When you want to learn something from the web you either search for it, use a bookmark from a previous visit, or type in the URL. This can be time consuming and a real nuisance if you like to keep up-to-date from a number of sites like RESC, CNN, IEEE, Enquirer, Reds, Bengals, Wall Street Journal, Stocks, CNN, etc.

**Why?** The solution to that dilemma is to have your favorite sites come to you rather than you go to them, and that is done by syndication.

**How it works:** You install a free reader and invite or sign up your favorite sites to visit you when they have something to say. Their info will display on your screen "hands free". Once set up, you can keep track of as many sites as you wish, providing they have syndication.

**What we do:** when we have something to say like a monthly luncheon announcement, newsletter release, tour announcement or special event, we broadcast it (Feed) using a BLOG. We set up a non-moderated, non-participating BLOG where we will announce our events. Then, using a Feed Burner we transmit the BLOG information to anyone signed up to our service. This process is called syndication, RSS (Really Simple Syndication).



**Does a site have RSS?** You will know if your favorite site has RSS if they display any one of these icons. You may also see "RSS/XML" or "RSS FEED"

**What Reader to Use?** Many free readers are available including Google and more. You need a Google account (free) to use their reader. A free desktop reader is available here: <http://www.rssreader.com/>

**Subscribe to RESC RSS:** after you install your RSS Reader, visit the RESC web site and click on the RSS logo at the top of the page. Then copy the URL for the RSS page and paste it into your reader.

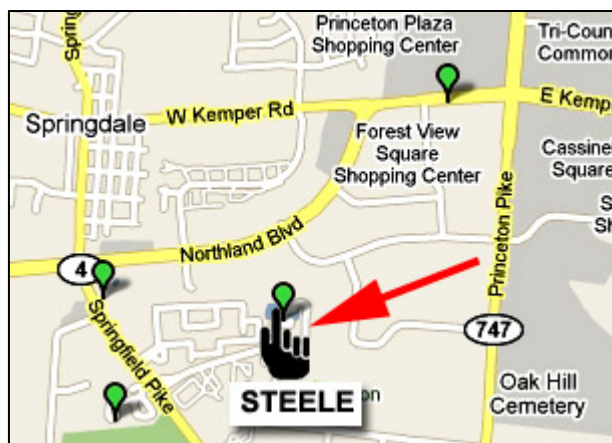
### RESC Carpool ~ Ride-Share



For those that **need-a-ride** or would like to **carpool** we have attempted to make it easier to **find-a-ride**. On the web site we have an interactive map where most of the members and some past

members are displayed using a map-pin.

Look for the menu selection "Carpool/Ride-Share". To locate someone near where you live just mouseover a map pin near you and the person's last name will appear. Using the RESC directory you can then determine the person's phone number. If you don't happen to have the directory, just call the treasurer, Zan Smith at 513-520-4338, and he will provide the contact information.



**RESC Tours Melink®**

RESC members and their guests toured Melink® at 5140 River Valley Road, Milford, Ohio 45150 Ph 513-965-7300

On January 13, 2010, Bryan Miller, Engineering Manager; John Florelli Sr. Engineer, EE; and Jennifer Sivak, Marketing Manager; provided an excellent technical tour of their LEED Gold Certified Building. RESC board of directors and members wish to thank Melink® for their hospitality and the outstanding tour of a truly green environment.



Not only is the company green but so are the people. Over 50% of the employees drive a hybrid vehicle and the employees actively practice energy saving techniques in their homes. Home energy bills are regularly posted on the bulletin board to demonstrate actual savings. Did we mention that many of the employees post their resume for public display? No, they are not traditional resumes but, energy saving resumes that detail their personal approach to reducing the carbon footprint. An impressive display . . .!



Several geothermal wells at a depth of 450 feet provide their year round HVAC requirements. Some of their electrical needs are provided by a large photo voltaic solar collector grid on the roof. In addition, a 6 kW LoWind Turbine will begin to supply power with a 4 mph wind. Excess power is sold back to Duke Energy.



Year round hot water requirements are supplied from solar water heaters mounted on the south side of the building. See picture at right.



### AWOL - NAME BADGES

If you have inadvertently taken your name badge home, please return it. They cost us about \$1 to replace. Thanks

**LUNCHEON RESERVATIONS**

Mail Label

Zan Smith  
 PO Box 30346  
 Cincinnati, OH 45230

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

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<b>RESC Dues &amp; Luncheon Reservation Form</b>				<b>MENU</b>		
Make check payable to "RESC" and Mail to the Treasurer: <b>ALL reservations must be on or Before Thursday, February 11th</b>				<b>Roast Beef hot Browns</b>  <b>Buttermilk Mashed Potatoes</b>  <b>Green Beans Amandine</b>  <b>Green Salad and Dressings</b>  <b>Fruit Pie</b>  <b>Beverages</b>		
<b>Date of luncheon</b>		<b>February 16, 2010</b>				
<b>LUNCH</b>	<b>Member name</b>		<b>\$13.00</b>			
	<b>Prospective Member</b>		<b>*\$13.00</b>			
	<b>Guest Name</b>		<b>\$13.00</b>			
	<b>Ohio P.E. Name**</b>		<b>\$13.00</b>			
<b>DUES</b> ANNUAL Payable by Oct 2009	<b>Membership</b>		<b>\$15.00</b>			
	<b>Golf</b>		<b>\$ 5.00</b>			
*No charge when attending the first meeting and sponsored by a member			<b>TOTAL</b>		<b>TREASURER</b>  <b>Zan Smith</b> <b>PO Box 30346</b> <b>Cincinnati, OH 45230</b>  <b>Ph: 513-520-4338</b>	
<b>Ohio P.E. Registration Number</b>		<b>CPD Certificate (Y/N)</b>				
**Continuing education certificate included with the \$13.00 lunch cost.						
Please list any CHANGE to your email, personal address, or phone number.						

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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](http://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.**

**That's it!**

## **THE VILLAGE VOICES CHOIR DELIGHTS RESC**



The Village Voices Choir entertained at the Christmas luncheon on December 15th. The choir is a vocal group of 25 plus members from the Greenhills area of Cincinnati that have been performing since 1958. The all volunteer choir has one thing in common - they love to sing. The audience quickly caught their enthusiasm and soon everyone was in the Christmas spirit. If you missed The Village Voices Choir, you missed a great choral presentation.

### **FUTURE PROGRAMS**

#### **March 16, 2010**

##### **Queen City Square Project**

Building the Future, Cincinnati's Tallest Building

Ohio P.E. CPD Credit

By: Bob Grace, Turner Construction

Mr. Grace is the project executive responsible for all operations on the 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.

By: Jack Clock CMfgE, Green Energy Ohio (GEO)  
GEO is dedicated to advancing 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, the data-driven view**

Ohio P.E. CPD Credit

By: Dr. Marwan Nusair, Physicist

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.

#### **April 20, 2010**

##### **Green Issues and Solutions**

Ohio P.E. CPD Credit



#### **NEW GUINEA by Edwin Daley**

Our January 2010 luncheon speaker, Edwin Daley, a world traveller who has been to over one hundred countries, showed us rare scenes of not only the popular coastal areas but from the sparsely travelled interior from his 300+ slides he took from his last two tours there. A wide variety of rare fauna and flora abounded along with native peoples and customs.

### **RESC NEWSLETTER**

10266 Kingsport Drive  
Cincinnati, OH 45241