

Fox Valley Electric Auto Association
PO Box 214
Wheaton, IL 60187-0214

Return Service Requested



October 2011 FVEAA Newsletter

The FVEAA is a Not-For-Profit Illinois Corporation and the Chicago Area Chapter of The Electric Auto Association

Next Meeting

**Friday, October 21st, 2011 - 7:00PM (doors open at 6:30PM) at
Packer Engineering, 1976 N Washington St, Naperville, IL 60563**

Packer Engineering is the on East side of Washington St, just North of the I-88 Tollway (North of Diehl, South of Warrenville Rd). Turn off of Washington onto Bighorn at the Packer Engineering sign, then take the first right into Packer Engineering and then an immediate left. Park in the lot between the buildings. 1976 is the new building up the hill. Enter the building in the middle of the North side.

Agenda

- Call To Order
- Old Business
- Committee Reports
- New Business
- Before Intermission Program: Nilo Tamoria, Renewables in the Philipines
- Special Guest
- Intermission: Refreshments, Networking and EV Viewing
- Program: Scott Fauque and his Chevy "My Volt" presentation

President's Words

Bruce Jones

I'd first like to thank Rich Carroll and give him a huge round of applause for an outstanding two years of FVEAA leadership. Besides being a terrific leader, he has been a good friend, wonderful colleague, knowledgeable teacher and an excellent president. I am indebted to

Rich for helping me enter the electric vehicles two and a half years ago when I was searching for a hybrid electric truck for the New Community Ministries food bank. He pointed me to NetGain Technologies for a solution, and the rest, as we say, is history. They donated the perfect hybrid electric truck and I was hooked. The FVEAA is very fortunate to have Rich and it will be difficult to fill his shoes, but I am looking forward to the challenge, and helping a great organization get even better. Here are the results from last month's elections.

FVEAA Board:

President	Bruce Jones
Vice President	Rich Hirschberg
Secretary	Dave Aarvold
Treasurer	Todd Dore
Director	Rich Carroll
Director	John Emde
Director	Ted Lowe

This month we have Todd Dore's brother in law Nilo Tamoria, an Executive Regional Director of the Department of Natural Resources in the Philippines who will describe the state of electric vehicles in the Philippines. Then after the break Scott Fauque will present the many details of how his Chevy Volt has been performing, its use of electricity and information available on the web site. We may also have a possible special guest visitor drop into to the meeting, another Volt driver and prominent Naperville personality.

Rich's Ramblings

Rich Carroll

Recipe for generating Teen interest in Building EV's - An amazing story of how an old antique auto is being fixed up and converted to electric!

- Start with a 1938 Ford Farm Truck, abandoned many, many years ago. All significant glass, engine, etc were either removed or shot off long ago. Plan to promote the recycling aspect of this.
- A dream about using the 1938 Ford as a well done Rat Rod, ugly looking, but with a state of the art electric power train.
- Add in a Chevrolet S-10 chassis from about 15 years ago. No useable engine, body demolished. Plan to promote the recycling aspect of this.
- Plan on state of the art components for pure electric propulsion.
- One dedicated project manager who has a good grasp of the difficulties and finances involved
- Several high school classes from several different districts
- Well over 250 Boy Scouts (and a few Cub Scouts) seeking merit badges in 18 different disciplines
- A 35,000 Sq. ft. building that started life as a Cavalry drill hall for the US Army in 1907, and was given local officials before WW II as cavalry horses were no longer used. Essentially this is a large open brick building, that was built as a horse barn. Take some of the adjacent land, make it into a museum for Historic Fort Snelling. Sell some of the land to make the Minneapolis -St. Paul Airport. Sell the cavalry building to the local Boy Scout Council to be renovated as a meeting place and central location for scout activities. Call it BaseCamp (<http://www.explorebasecamp.org/>), with meeting areas, rock climbing walls, and much more.
- Stir in a Pepsi Refresh Challenge Grant.

John Hodnefield is the name of the man with the dream; he's also the dedicated project manager.

Start with the truck, and try to get it out of a field in South Dakota, and down to Minneapolis. After research, decide on a mid 1990's S-10 chassis, which can teach teens about brakes, suspension, etc. Realize that the project will need lots of big donations, or else alternative funding. Put the project on hold for a year while you promote this to every local Scout organization and several different school districts. Find that Pepsi announced Refresh Challenge grants that could potentially offer \$10,000. Ask everyone you can touch to vote for your project on the Pepsi Refresh voting website. Win one of only a few Pepsi Refresh awards. Solicit other project sponsors from vendors you might use.

Take the S-10 chassis, strip the chassis, paint it, and prep it for show with aftermarket suspension pieces and parts. Mount the ratty old Ford cab to the frame, and get the high school students involved in their shop class to help make custom brackets for wood bed, battery boxes, hood, cab, etc.

Use the Northern Star Council, BSA BaseCamp (the former horse barn) as a focal point, and design a Northern Star Rumble, which coincides with a full Merit Badge Weekend Extravaganza. Consider all the Merit Badges that could be conceivably offered. Form PlugNPlayMn to handle the finances, and totally involve national scout character 'Scoutmaster Bucky.'

Generate publicity that says, "PlugNPlay has joined forces with Scoutmaster Bucky to offer the nations first "Innovation Weekend" event."

"Our inaugural event is October 7, 8 and 9 at Northern Star Council's new BaseCamp facility located near the Fort Snelling historic site. We have identified over 18 different merit badges that Scouts can choose from - themed around an all electric 1938 Ford ratrod build. "

"This is the nations first all electric build, researched, designed and built by students. Scouts will be asked to help design wind and solar solutions as well as participate in journalism, photography, web communications and over 20 other topics. "

"Ever imagine what Mary Shelly's ride would have looked like if Dr Frankenstein had built her a car? This project is a combination of mad scientist meets American Gothic."

*"**PlugNPlay** will be building an all electric Ford truck - circa 1938, tuned to the image of a ratrod. Rusty but trusty. Components built from a Scout's young mind and hands, tapping into the imagination of each individual. You may see a windmill or two, broken spokes and a cracked dash gauge. Participants will research, design and build an all electric 1938 Ford ratrod that uses plug-in power, solar, and wind for fuel. This is a ground up build were we will paint, assemble, cut and wire almost every component of the build."*

Tie in the merit badges to the truck build. The wood bed of the truck and wood cab floor need work under the Woodworking Merit Badge. We do need a good photographic journal, so enter the Photography Merit Badge. Add Automotive Maintenance, Electricity, Electronics, Farm Mechanics, Journalism, Painting, Photography, Robotics and more as actual Merit Badges, and find counselors who will work within the program to add to the work on the Farm Truck. Needless to say, John Hodnefield deserves a

merit badge for Salesmanship for enthusing and empowering the entire program.

Start the program on the three day Columbus Day weekend, and use three days of build time and merit badge classes and rotating groups of scouts to complete the project. Mix in several radio and television stations, local newspapers, national magazine about Rat Rods and Hot Rods

Serves over 300 (mostly Scouts thirsty for adventure and knowledge).

And, for the long run, the program will be an exercise in taking it apart and having different groups participate in the next build. The truck will be recycled, not once, but over and over. Here is the picture at the start of the three day weekend:



Woodworking crews produced more visible progress than the other groups, although all made progress:



I was fortunate to talk to John in the beginning stages of this project. As someone who was comfortable with the build of EV's and also as a Boy Scout Unit Commissioner, I was in a position to see the benefits and work with John on several parts of this completely unique project. It was a long weekend, but extremely rewarding. We had several scouts who said that they had never used an electric drill before, taking a short safety class, then putting parts of the truck together. We had some of the more advanced scouts, after they had heard my talk about why electric vehicles are a good idea, turn around and be interviewed by the Videography class. Boy Scouts is about making Leaders, who can make the decisions and carry them out. It is really rewarding to watch this in action over one weekend. - Rich

Meeting Minutes - September 16, 2011

Bruce Jones

WELCOME

Rich opened the meeting at 7:03, on our annual elections meeting night. Everyone in the audience then introduced themselves. Rich mentioned that FVEAA dues are only \$15 annually which includes delivery of the electric newsletter. It's the best \$15 that you will ever spend!

The sign-in form was then passed around.

EV SURVEY

Rich held a survey of those with electric cars, regarding the kind of charger they use, on-board versus off-board chargers, and at what voltages they charge their cars.

FINANCIAL INCENTIVES

Financial incentive - George Vergara has a proposal in front of the board regarding an EV education program

OUTREACH

Rich Hirshberg mentioned several upcoming events and shows.

David Broz mentioned the Elburn annual car show Sunday Oct 2nd and wants those with EVs to attend.

FINANCE -Todd Dore provided a report and we are in good shape financially

MEMBERSHIP - Ted Lowe mentioned some EVs that are available for sale and we could potentially make this a project.

ELECTRONIC COMMUNICATIONS - No news

ELECTIONS

Rich mentioned there is no formal order of elections, as the only guidance provided in the bylaws is that the nominations open August meeting and close at the September meeting.

The following officers were elected following standard procedures where members are nominated; those who accept, remain on the ballot; a move is made for the nominations to be closed; and a vote is taken with those members voting in favor say "aye."

- | | |
|------------------|-----------------|
| · President | Bruce L. Jones |
| · Vice President | Rich Hirschberg |
| · Treasurer | Todd Dore |
| · Secretary | Dave Aarvold |

Directors:

Five members were nominated for the three Director positions. Directors have a voting right on motions to spend more than \$100. Note that the original list of nominees also included Bob Baker and Ken Simmermon. The following three Directors were elected

- Rich Carroll
- John Emde
- Ted Lowe

BREAK

AT the break we had a full complement of electric vehicles including a Leaf, a Bug, a Volt, and Chevy S-10 on display.

Door prizes - 2 Netgain pens and 2 shirts

EV and BATTERY PRESENTATION

Carlos Helou the President of GREP International representing the energy half of their company spoke on Electric Vehicles, battery technologies and a variety of energy related topics. Some highlights of his talk include

- The Tata Nano electric vehicle will be selling for \$2300 in India
- China is adopting a Western appetite for consumption and is growing very quickly
- 40% of CO² greenhouse gas comes from China and the US
- The U.S. imports 60% of its gasoline, with two thirds going to cars
- The Capacity Factor of a power plant = Actual annual output / Full annual capacity = 44.9% in the U.S. which means we have an over capacity in electrical

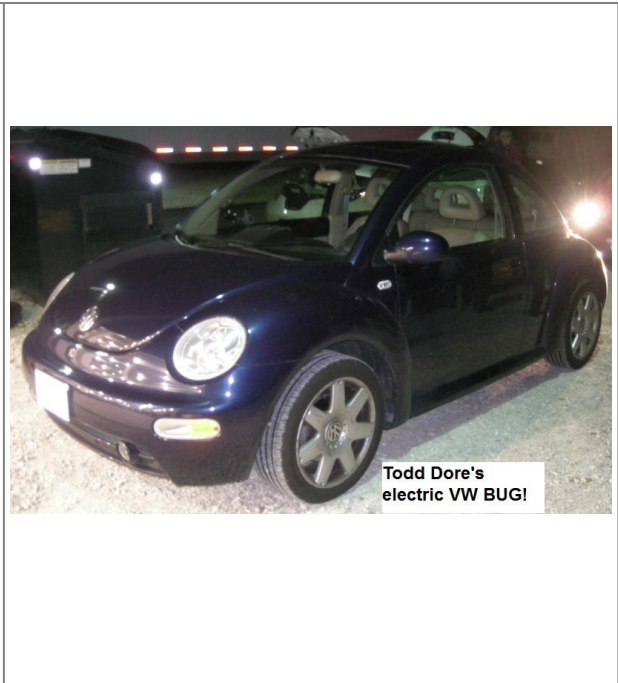
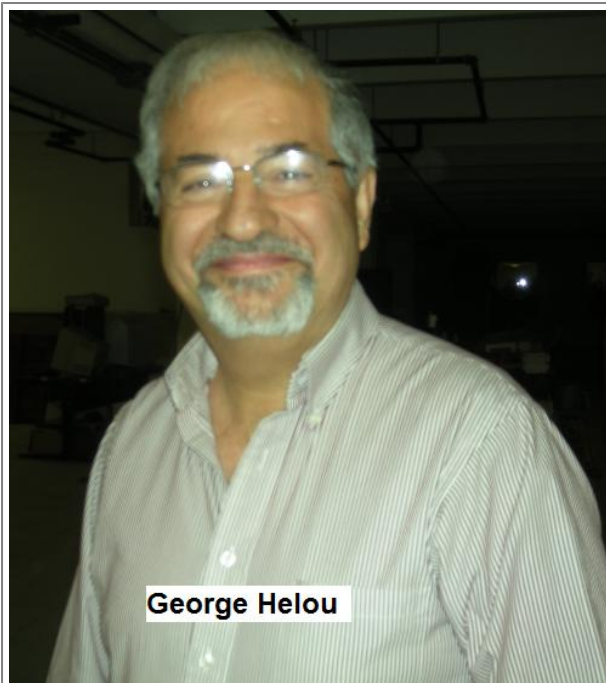
generation. This capacity could be useful if the electric cars were charged on off-peak periods

The dominant battery technology today is Lithium Ion with the following variations

- LFP Lithium Iron Phosphate good for energy and not power trucks
- LMO Lithium Manganese Oxide for cars
- LNO Lithium Nickel Oxide
- NMC Nickel Manganese Cobalt
- LCO Lithium Cobalt Oxide
- NCA Nickel Cobalt Aluminum

Tronox is the only company in the U.S. that makes the battery cathode. The rest of the manufacturers are in Asia and Europe. China, Japan, South Korea and Europe are the dominant battery manufacturing countries.

Carlos then showed “spider” graphs of the above battery technologies comparing six different attributes: Specific Energy, Specific power, Life Span, Cost, Performance, and Safety. NMC and NCA are the best overall but the cathode material is very expensive, around 3 times the cost of Lithium Manganese but it has advantages in terms of capacity. He described many other aspects of electric vehicles and technologies in the remainder of his fascinating presentation. Thanks Carlos!





Ted Lowe's 1992 electric Chevrolet S-10 pickup



10/11/2011 Naperville's mayor George Pradel (left) shows off the city's new Chevy Volt to FVEAA president Bruce Jones

FVEAA Membership Application Form

Name: _____

Address: _____

City, State Zipcode: _____

Phone: _____ Phone Type: Home ___ Work ___ Cell ___

Email: _____

Please check one: New Member _____ Renewal _____

How did you hear about the FVEAA ? _____

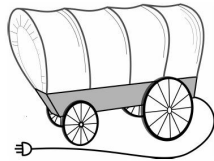
Member Types and Annual Dues (Please circle one)		Newsletter Delivery Types (Please circle one)	
Individual	\$15	No Newsletter	\$0
Family	\$20	Electronic Only	\$0
Business	\$100	Postal Mailed	\$15
Premier Business	\$250	Postal Mailed and Electronic	\$15
Charter Business	\$500		
Total Due from Both Columns: _____			

Please make your check payable to "FVEAA" and postal mail it with this membership application form to:

FVEAA
PO Box 214
Wheaton, IL 60187-0214
Attn: Membership

FVEAA Business Members

Pioneer Conversions, L.L.C.



Your local **WarP** motor dealer
Custom Electric Vehicle Conversions

12305 S. New Ave., Suite N
Lemont, IL 60439
(630) 243-6616

pioneerconversions.com

Batteries Plus
Ed Hatteberg



115 E Ogden Ave, Suite 131
Naperville, IL 60563
Phone: 630-355-6822
Cell: 630-470-5700
Fax: 630-355-6874
Email: batplused@yahoo.com
Web: www.batteriesplus.com

Netgain Motors, Inc.



NetGain Motors, Inc.

Exclusive worldwide distributor of WarP™, ImPulse™, and TransWarP™ electric motors for use in electric vehicles and electric vehicle conversions.

900 N State St, Suite 101
Lockport, IL 60441
630-243-9100
Fax: 630-685-4054

www.go-ev.com



"Good Service For A Long Time"

Gas · Hybrid · Electric

847-842-9543

4c Hillview Dr.

Lake Barrington, IL 60010 bobshillviewauto@gmail.com

Bob Baker
Owner

Harris Precision Tools
Robert Harris



10081 Anderson Ave
Chicago Ridge, IL 60415
Phone: 708-422-5808
Email: harrisprecision@comcast.net

Plug-In Vehicle Solutions, Inc.
Mike Piscitelli



1104 Coventry Circle
Glendale Heights, IL 60139
Cell: 630-248-8810
Email: mpiscitelli@getplugging.com
Web: www.getplugging.com

Ecological Products Company, Inc.
Glenn Hunter
739 N Elmwood
Oak Park, IL 60302
Phone: 708-445-0341
Email: info@illinoiselectricvehicles.com
Web: www.illinoiselectricvehicles.com

Carbon Day and Carbon Day Automotive
Brian Levin
Cell 847 903 6652



Email: brianl@carboday.com
Web: carbodayautomotive.com