

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

Return Service Requested

Monthly Meeting: **Friday, May 15th, 2009 - 7:00PM** (doors open at 6:30PM)

Meeting Location: **Packer Engineering, 1976 N Washington St, Naperville, IL 60563**

Directions: Packer Engineering is on the 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.



## May 2009 FVEAA Newsletter

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

### Meeting Agenda

#### **Business:**

Call to Order and Introductions  
Old Business  
    Committee Reports  
New Business  
    Any other new business anyone?

#### **Intermission:**

EV Viewing, Networking & Raffle Tickets

#### **Programs:**

##### **Customizing The EV Dashboard**

Rich Carroll will speak about and demonstrate the Blue Window product he wrote about last month.

##### **Controller Repair - The Finale**

Ted Lowe and Miodrag Zubic will present details of the steps involved in repairing Ted Lowe's Curtis 1231C.

## President's Words

Ted Lowe

i'm about 2/3 done with my controller repair and am looking forward to putting it back in my truck. It has been a very labor-intensive project thus far, say 6-8 hours. i can better understand why controller repair/rebuilding companies charge so much (\$600) for this service. Besides my time (which is 'free':-), i've spent \$130 to buy 18 MOSFETs. This project has helped me understand more about the construction of a high power DC controller (i knew about the electrical theory, but not about the physical implementation of that theory).

i'd like to give a give a BIG THANKS to Miodrag Zubic that provided very useful information about the project!

## FVEEA Meeting Minutes

Todd Dore

### March Meeting

Call to order: 7pm

#### Introductions

Ted's Introduction speech: Ted welcomed all new members and guests. He posed the question to the club - now that EVs are becoming more prevalent, and the cars will be out (relatively soon) en masse in a few years, what should the mission of the FVEEA be? Discussion responses included grant writing, future outreach Events, etc. If anyone has any specific outreach ideas for the future, please see our Outreach Committee Chairman, Rich Hirschberg.

Committee Reports: Todd Dore (Legislative Affairs and de facto Charging Infrastructure chairman) - Howard Hansen gave an update on his dealings with the Secretary of State's office for EV plates for his Ford EV Ranger. There is one particular administrator within the office whose interpretation of the IL Vehicle Code is in disagreement with our interpretation. Howard will continue to work on this effort with the committee's help.

Ted Lowe: Provided a brief history of EVs. He also announced that updates to the FVEEA website will be coming soon.

Raffle Meister: Tim Moore volunteered to host the raffle.

Intermission: 7:50pm - 8:45pm

Raffle Results: \$34 was raised for the club. Raffle prizes were a Solar Today magazine, and a NetGain Technologies computer carry-on bag. Congratulations to the raffle winners!

Speeches: Craig Dusing spoke about his recent conversions - a Chevy S10 Pickup and a Toyota Tercell. Craig's business is Electric Vehicle Solutions, Inc.

Adjourn: the meeting adjourned at 9:45pm and we were out of the building by 10pm.

### April Meeting

Call to Order: 7pm

Intros: Ted had all newcomers and the representatives from Carbon Day/Coulomb Technologies introduce themselves.

Old & New Business: Ted went over the highlights from the EAA and FVEAA newsletters, in particular the booming Li-ion battery business. Howard Hansen brought in a nice FVEAA sign that was made by the Schaumburg library. Ted gave an update on the Form Motor Company FVEAA club interviews and read their nice Thank You letter.

Ted explored the FVEAA future mission issue again. Ideas that were discussed are: [1] We would still have outreach EV events, [2] Consumer education and training on how to effectively drive EVs and PHEVs, [3] Training classes for EV repair specialists, and [4] Being a positive advocate for favorable EV legislation.

Ted went over some brief membership statistics - the club is 234 members strong!

Steve Clark mentioned some new public transportation options with CTA & PACE.

Committee Reports: Outreach - Rich Hirschberg announced a green day seminar on Saturday, 4/25/09 at Elgin Community College. Rich invited anyone who wants to bring their EV to participate. Legislative Affairs - Todd Dore and Howard Hansen reported that there is an update to a bill submitted by rep Yarborough which suggests changes in the wording of the vehicle code in relation to EVs, which would eliminate the EV plates. We urge you to contact your state reps to get this wording changed so the bill in its current form does not become law.

Raffle: This month's raffle prizes were a Solar Today magazine, a color copy of the FVEAA newsletter, and a 3-wheeled plastic child's toy vehicle which could be converted to electric. Joe Sykes was our raffle meister. The raffle raised \$20 for the club. Winners were Joe Sykes, Bob Baker, and Brae Hattaway. Congratulations to the winners!

Break: from 7:35pm to 8:30pm.

Speakers: Scott Emilfarb from Carbon Day (representing Coulomb Technologies) spoke about the charging point infrastructure that they are implementing in the mid-west. Features of their charging points are: [1] There are bi-directional meters that are built into the units. [2] Low Voltage (110V) is available now, High Voltage (208 - 240V) will be available in 3rd Q 2009 (upon approval by UL). [3] The chargepoints have the capability of detecting when an EV's car batteries are full. [4] The economic model for host businesses is similar to an ATM. This was a very informative speech and we are glad Scott came out with his colleagues to talk about this new and exciting technology.

Ted Lowe and Miodrag Zubic spoke about motor controllers, and in particular our club's ability to repair these (Miodrag is our resident expert).

Adjournment: The meeting adjourned at 9:50pm and we were out of the building by 10pm.

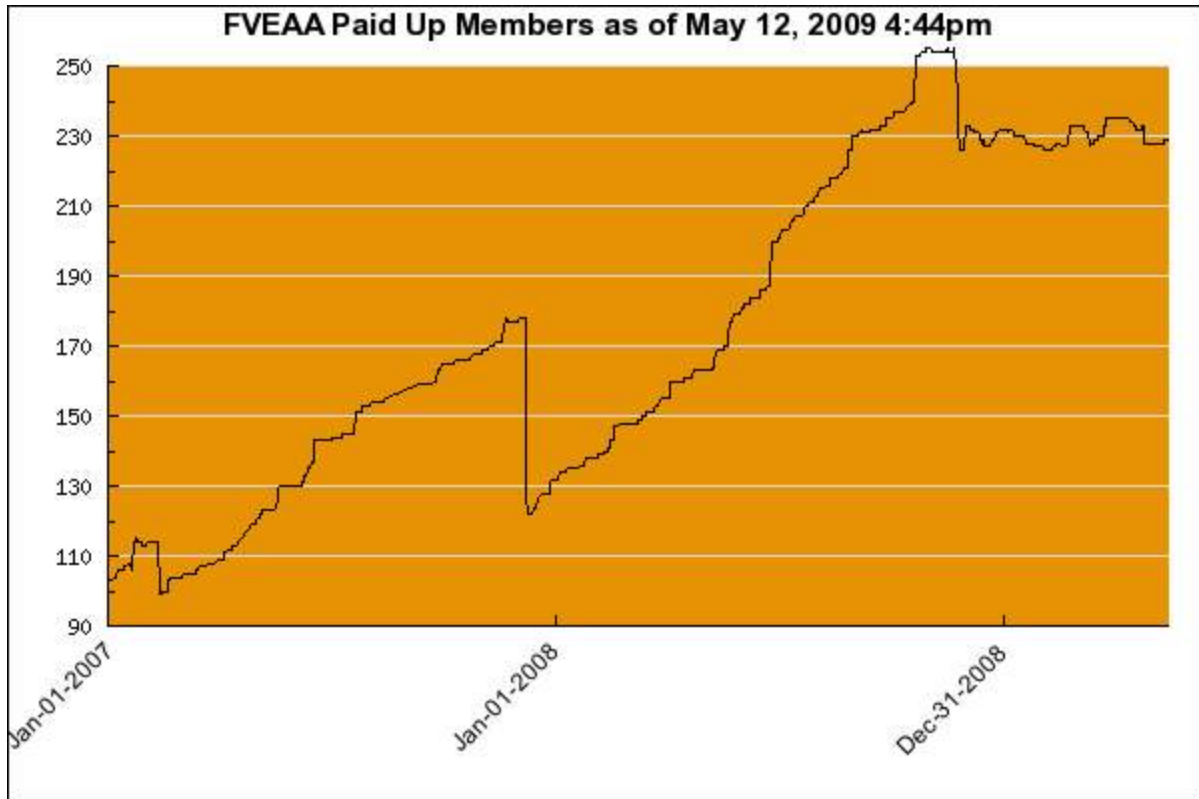
## **Membership Update**

*Ted Lowe*

We're **229 members strong**, 1 new since last month! **BIG WELCOME** to:

Peter Cesarz- Arlington Heights, IL

It will be interesting how this following graph plays out this summer. **Newer members, please renew** (Even if gas isn't \$4+/gallon)!



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### EV's in Press

*Rich Carroll*

Recently, I was interviewed by Andy Mikonis, from the Sun Times; they gave a nice write up in the paper last month, and it appeared in their online session at:

[http://searchchicago.suntimes.com/autos/news/1563705,AM050709\\_electric-cars.article](http://searchchicago.suntimes.com/autos/news/1563705,AM050709_electric-cars.article)

Other than getting my name slightly wrong, most of the online and printed article are pretty accurate.

After the recent Green Expo at Elgin Community College, several pieces appeared in local Elgin and Fox Valley papers. Todd Dore, John Jeide, and Rich Carroll each brought vehicles to join Rich Hirschberg at the show. Rich was quite successful in getting the EV display into a prime place, both under cover (it rained) and where every visitor had to pass the display to get into or out of the show. Todd, John and Rich each reported a day of many questions, although all thought the questions to be of a much higher caliber than most. It appears that people who visit Green Expos already have a good background on EV's.

## May Special at Pioneer Conversions

Rich Carroll

During the entire month of May, the WarP 7 inch motor is on a very special sale price of **\$1,200. This motor normally retails for \$1,650.** This is WarP's smallest motor, but it outperforms the Advanced DC 8 inch motor, and has performance close to the Impulse and WarP 9 motors. The WarP 7 draws less amps than an 8 inch motor, and produces the same torque, but at significantly lower RPM's. I'll include some specs so you can judge it's usefulness yourself.

	<b>WarP 7</b>	<b>Impulse 9</b>	<b>WarP 9</b>
Length without pilots	15.74 in	13.6 in	15.92 in
Shaft Diameter CE/DE	1.125/1.125	0.875/1.125	0.875/1.125
Motor Diameter	7.125 in	9.25 in	9.25 in
Weight	86 lbs	129 lbs	143 lbs
Horsepower	27 HP (mechanical) @ 72v	37 HP (mechanical) @ 72 V	33 HP (mechanical) @ 72 v
Torque @ 260amp, 75 v	35 ft-lbs	30 ft-lbs	49 ft-lbs
RPM	3133	3920	2444
Rated Motor speed (continuous duty)	5500 RPM 205 amps	5500 RPM 400 amps	5500 RPM
Burst	7200 RPM 400 amps (120V)		> 5000 RPM at > 500 amps

This motor is useful for a light car or EV, but not recommended for larger or heavier vehicles. If you have the room, the two WarP 7 motors can be configured to give unbelievable performance.

This month's sale price is more than 25% off the regular selling price, and is likely the biggest sale you will ever see on WarP motors. If you have questions about the WarP 7 motor, we'll try to answer them for you.

## A Couple of Cool Blogs

Ted Lowe

i happened-upon a couple of useful energy-related blogs recently:

NRG Blog - <http://nrgblog.net>

PicoTech's Energy Efficiency Blog - <http://blogs.picotech.com>

## Closer Look @ The Stirling Engine

Christopher Sharp

Picture taken at FVEAA's January 2009 Meeting. Ray DeBoth is showing a working model of the Stirling Engine with Matt Remec looking on.



Learn more about the Stirling Engine:

[http://en.wikipedia.org/wiki/Stirling\\_engine](http://en.wikipedia.org/wiki/Stirling_engine)

<http://www.sesusa.org/>

<http://www.howstuffworks.com/stirling-engine.htm>

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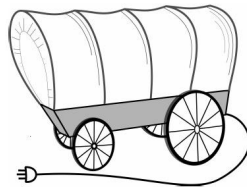


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**FVEAA Membership Application Form**

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City, State Zipcode: \_\_\_\_\_

Phone: \_\_\_\_\_ Phone Type: Home \_\_\_ Work \_\_\_ Cell \_\_\_

Email: \_\_\_\_\_

Please check one:    New Member \_\_\_\_\_ Renewal \_\_\_\_\_

How did you hear about the FVEAA ? \_\_\_\_\_

**Membership Types and Annual Dues**

The FVEAA offers these types of memberships (please circle your choice):

- Individual                    \$ 15
- Family                        \$ 20
- Business                     \$ 100
- Premier Business         \$ 250
- Charter Business         \$ 500

**Newsletter Delivery Types (please circle your choice):**

- No Newsletter             \$0
- Electronic Only            \$0
- Postal Mailed Only        \$15
- Postal Mailed and  
Electronic                    \$15

**TOTAL DUE:** \_\_\_\_\_

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