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

Return Service Requested

Monthly Meeting: Friday, August 21st, 2009 - 7:00PM (doors open at 6:30PM)

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

Directions: 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.



#### **July 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
FVEAA Yearly Elections
Any other new business anyone?

#### **Program:**

#### **Zero Motorcycles Talk and Demo**

Mike Mastrangelo will talk about the Zero Motorcycles prior to the intermission and then demonstrate outside. Familiarize yourself with these great all-electric vehicles at <a href="https://www.zeromotorcycles.com">www.zeromotorcycles.com</a>

#### **Controller Upgrade Demonstration**

Miodrag Zubic and Ted Lowe will remove the loaner Curtis 1231C controller (thanks Paul Schlie) from Ted's S10 and install Miodrag's Rev 0 1000 amp controller.

Wow, has the GM Volt gotten the PR lately! GM announced that the EPA gave the Volt a 230 mpg (city) rating. Rating vehicles like the Volt is new and more complicated due to its technological architecture. GM also announced that they are opening their new lithium battery plant in MI, gave details of their Volt chargers (onboard 120V and 240v home model), and will be developing their own motors and controllers.

I am deeply grateful for the opportunity to be FVEAA President for the last 4 years! I first became president. in 2005 when Kevin Zak had his accident (don't be VP unless you're prepared to be president)! Some highlights since then include: we've planned and executed the 5th EVer/AFV Expo in 2006, found a great meeting place at Packer Engineering, developed the Porsche club car in 2007, and grew to over 250 members in 2008.

It is with some sadness and relief too that I've chosen not to run for president again this year! That said, I don't plan on leaving the FVEAA anytime soon (sorry folks:-). I still plan to be involved in many FVEAA functions (website, technical projects, 501(c)3, etc.). I am so grateful for the many great people I've met and worked with and the many things I've learned (technically, socially, etc.) in the role of president! I encourage other FVEAA members to step-up and help lead the FVEAA into the future and will actively assist anyone in the ways I can. Thank You All FVEAAers!!!

Meeting Minutes Todd Dore

#### **June Meeting**

<u>Commencement</u>: The meeting began at 7pm. Introductions, new business, and old business were called. <u>Break</u>: We took at 1 hour break at 7:20pm to view the EVs present.

<u>Raffle</u>: Ken Simmerman was our raffle meister and raised \$24 for the cause. Prizes included a copy of *Solar Today* magazine. Congrats to the winners!

<u>Committee Reports</u>: Outreach (Rich Hershberg) - [1] Rich mentioned that a GM spokesperson would be speaking at a future FVEAA meeting. [2] On 6/20 and 6/21, there is the Willow Creek Car show in S. Barrington. Bring and show off your EVs! [3] 4th of July parades - various parades need EV participation - Wheaton, Elgin, and Evanston. Volunteer to be in the parade if you can. [4] The Elgin AFV car show is coming up in Sept. Rich passed out some fliers and encouraged club participation.

Legislative Affairs (Todd Dore) - Our beloved special class 'EV' plates are in jeopardy. The IL House and Senate both approved a bill which is now on the governor's desk for signature. This bill would create special plates for low-speed EVs (<35 mph) but eliminate the general EV plates that we enjoy. Please reach out to your state legislator or the governor's office to voice opposition to this provision. If the bill is signed into law, it would take effect 1/1/2010 for all existing EV plates, that is no renewal of the plates.

<u>Speakers</u>: Nathan Stowe presented the highlights of a power point as presented by Argonne National Laboratories - 'Well to Wheels Efficiency'. A lively discussion followed.

Adjourn: The meeting adjourned at 9:30pm.

#### **July Meeting**

<u>Commencement</u>: The meeting started at 7pm. Introductions were given.

<u>Raffle</u>: Michael Bodine was our raffle meister (thanks Michael!). Prizes were a 12V battery charger, donated by Pioneer Conversions (thank you Pioneer!), and various magazines. Congrats to the winners. <u>News & Announcements</u>: Ted Lowe spoke about the National EAA involvement and monthly magazine, *Current Events*. We encourage all FVEAA members to join the national EAA. He also noted various alternative energy magazines and brochures on the back table for members and guests to peruse. <u>Committee Reports</u>: Website - Ted Lowe mentioned that the club website is down, but will be up in the next day or so.

Outreach (Rich Hirshberg) - [1] Reminder of the Elgin AFV car show. It is on 9/12/09. Ted put forth a motion that the FVEAA pay the \$5 entrance fee / car for any club members who want to enter the show. The motion was seconded and approved.

Other events (Todd Dore) - Todd spoke about a special 'impromptu' party at his house on Monday evening. A Tesla EV roadster is traveling across the US and stopping in Chicago. Dinner will be at Russell's BBQ in Elmwood Park at 7pm, with the Tesla at Todd's house for a wine and cheese reception at 9pm. All are invited to attend. Update: The Tesla did not make it to dinner but did show up at Todd's house in North Riverside by 9pm. About 12 FVEAA members and guests attended the dinner and 15 attending the Tesla impromptu party. A picture of the event can be seen on the website RenewAmericaRoadTrip.com. The Tesla stayed overnight to get a charge at Todd's house, with owner Michael Craner and his girlfriend Maddy staying as guests. Many FVEAA members hung around taking photos until about midnight. All in all, it was a nice party and a great venue to see this wonderful machine. Follow up: Steve Clarke went on a ride in the Tesla the next morning, and they took him all the way to Iowa! Steve will have to fill us in at the next FVEAA meeting as to what happened. Raffle: We raised \$40 for the cause. Prizes included alternative energy magazines. Mark E. and Adam Niminsky were the winners. Congrats!

<u>Speakers</u>: Rich Carroll from Pioneer Conversions introduced a new motor controller that they are now selling. This is a high-power controller for a multitude of EV applications, including drag racing.

A team of interns from IIT spoke about the research on the new Nickel-Zinc batteries.

Rich Gunther from GM spoke about the efficiency improvements in the new GM models. He also spoke at length about the upcoming Chevy Volt. We all look forward to when that model will be rolled out!

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

#### **Nominations Open for 2009-10 Officers & Directors**

Ted Lowe

Per the FVEAA Bylaws, we elect 4 officers and 3 directors each September to serve 1 year terms. Nominations are now open and will remain open until the elections at the September (Annual) meeting. Submit your nominations anyway you wish and self-nominations are allowed as well.

**Outreach** Rich Hirschberg

<u>Past EVents:</u> The Evanston 4th of July parade had FVEAA participation from George and Elizabeth Gladic, Todd Dore, Chuck Carrington, and Charles Sheridan. There was a nice contingent of EVs. Chuck Sheridan's vintage Ford (Model T?) was a big hit. Todd Dore drove his Electric Bug, and George and Elizabeth drove the Electric Nissan and the PHEV Prius. Chuck Carrington drove his Electric MG and his veggie oil VW diesel. There was a fair amount of rain during the parade, but fortunately it was well attended and EVs made a good showing.

The Riverside parade had a single EV. An RX-7, driven by Nathan Stowe and his daughter. There was a light mist all morning, but there was a good turnout and a lot of questions at the car show after the parade.













Upcoming EVents: Please come out to the following events and show off your car if possible. See the "Outreach" member forum for more details.

<u>Sunday, August 30</u> - Will County Auto Rebuilders, at Moose Picnic Grounds 159th st East of I-355 Lockport. This is an old muscle and custom car show with one lone EV so far. Please bring your EV to show off our kind of custom car. See the "Outreach Forum" for details and possible charging/towing options.

Saturday, Sept. 12 - Check out the Old Car, Green Car show, Elgin.

It's the 2009 Downtown Elgin Car & AFV Show. We will be showcasing lots of old metal - antiques, modifieds, hot rods, & muscle cars - as well as lots of new, green technology. It's a show-within-a-show - The Midwest AFV Expo will features vehicles that run on batteries, veggie oil, biodiesel, nat gas, E-85, propane, and pedal-power.

We've expanded this year to include antique police, fire, and military vehicles.

Date: Saturday, Sept. 12th

Time: 9 am to 3 pm

Location: City Hall parking lot, corners of Highland and Douglas Aves.

Public is FREE; participants are \$5 per vehicle

We'll also have a FREE safety lane check for everyone (sponsored by NAPA), 50/50 raffle, door prizes, and music.

Special Feature for after the car show: 2 LIVE bands at the Gasthaus Zur Linde restaurant and bar, 15 N. Grove Ave. - a quick little walk from the car show. Go there for a great dinner and stay for the rock-abilly music.

Make a day of it in downtown Elgin!

<u>Tuesday, October 20</u> - FVEAA showing at joint SAE/IEEE EMC meeting in Lombard. 5pm We would like to show the FVEAA vehicles at this meeting. Charging is available. Please contact Nathan Stowe if you can bring your EV.

**Current Conversions**Nathan Stowe

Colorado/Canyon - Design Stage, Nathan Stowe - I have an electric RX-7, but I also have a Durango for trips longer than 30 miles, cargo, or more than one passenger. I would like to have one vehicle that does it all. I hope a slightly larger vehicle with a generator will meet all my needs. Ideally this will be AC drive, but this is not for certain yet. Does anyone know of an extended/crew cab donor?

Please send your "Current Conversions" to editor@fveaa.org.

#### **Membership Update**

Ted Lowe

We're **205 members strong**, 5 new this month! **A BIG WELCOME** to:

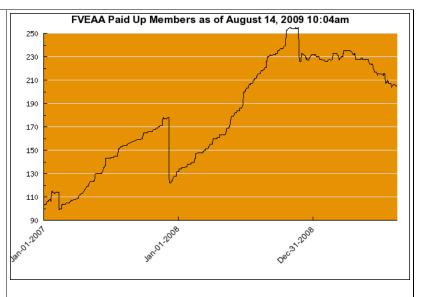
Larry Kelley - Elburn, IL Rich Ziegler - Sycamore, IL

Fernando Escalante - Chicago, IL

Matt Pollick - Schererville, IN Martin Belowicz - Palatine, IL

Many renewals are up now since it's been about 1 year since the \$4+ gallon gas of the summer of 2008. **Please renew all!** 

It will be interesting to see how this graph plays out this summer!



**EV For Sale Locally** 

George Gladic

1990 Electric Nissan Sentra For Sale



126 volt system, heater, rear window defogger, new tires in front, all new struts with upgraded rear springs. Has a 9-inch DC Warp motor sold by John Emde. DC to DC converter. 144 Volt Curtis Controller. Factory Manual included.

Tow hitch and tow bar included. Two-tone, Top panels painted, lower panels rust proofed, inside and outside.

Upgraded a couple of times - upgraded from original 8-volt batteries to 6-volt 125 Trojan batteries in May 2006 - heater added to the OEM duct work.

Driven daily 25-35 miles. Longest one day drive was to the FVEAA meeting in Naperville, 99 miles round trip with a 4-hour opportunity charge while in Naperville. Has 25,000 electric miles. I am the second owner. Make me an offer I can't refuse! -- George Gladic 847-722-7801



#### **New Product Bonanza**

Rich Carroll

Several new developments for those building EV's. First, I didn't get a chance in the last newsletter to describe the WarP-Drive controllers. A premium controller, with expansion cards, and 1000 amps sustained, 1200 burst, 1400 short burst capabilities. Up to 170 volts can be routed through the controller. If you need more voltage or more amperage, use two controllers and connect them with an optical connection card, and use up to 2400 burst amps, or up to 340 volts. These controllers are compact, have auto type connectors, and have the high voltage, high amperage connections conveniently on top. We'll try to bring an EV or two with one installed to the meeting.

And the people at NetGain have been going at WarP speed (pardon the play on words) and have introduced another line of controllers, and a line of chargers. The controllers are made by Logisystems, and are internally the same as the Logisystems line of three voltage ranges (72-120v, 120-144v, and 144-156v) and three amperage ratings (550A, 750A, and 1000A) The WarP Core line of controllers as these are called have anodized red cases and include the special pot box developed by Jim Prosise to smooth the starting curve.

NetGain is also introducing a line of chargers, starting with the 3 kW version:

- 3kW AC draw
- ~92% efficiency
- 156/144V nominal output (lower voltages also possible)
- Various amp-hour settings
- AGM/Flooded algorithms
- Pulse charging during final stage
- Temperature compensation with included external temperature sensor
- Output isolated from AC mains
- Sealed enclosure heatsink design without fans
- Greater than 0.98 power factor (current and voltage between 1 and 2 degrees out of phase)
- 90-260VAC input without any modifications to the charger
- Automatic reduction of power draw on 120VAC input to 1500W (12.5A), and full draw with higher AC voltages

- Input frequencies of 45-65HzWeight of about 21 lbsShort circuit protection

- Reverse polarity protection
  Automatic restart when below about 12.5V or after 30 days

These are dual voltage input, 110v or 220 v, and are power factor corrected, and have a charge with a pulsating feature at the finish of the charge to reduce battery sulfation.

Newsletter Nathan Stowe

Please send submissions to editor@fveaa.org. The deadline is the the first Friday of the month. If you are a member selling your EV, we will run the ad free of charge. Please add editor@fveaa.org address to your address book, or the allowed list in your spam filter.

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How did you hear about the F	VEAA ?
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