

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

Return Service Requested



July 2010 FVEAA Newsletter

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

Next Meeting

**Friday, July 16th, 2010 - 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**
- **Intermission:** Refreshments, Networking and EV Viewing.
- **Program:** Ted Lowe will discuss his Battery Monitoring system. and perhaps give us a preview of his proposed measurement system for Watt-Hr/Mile.

Show season is in full swing. With town parades, Eco shows, general car shows, etc. there are many opportunities for showing your EV. My impression is that this is a really good opportunity to respond to several requests for us to display EV's. From the folks who have contacted me, I see that several new shows have popped up, and often the new organizers don't have the specific knowledge to allow them to solicit EV participation effectively. An example was a young lady who emailed me only a couple of weeks before an Eco show, to announce the show, which was on a mid week day. Her announcement did not mention where the show was, or the hours, simply giving a date in the midweek and a description of what type of corporations she was soliciting. There were few specifics in her solicitation. I set it aside, and, I confess, forgot it. While I was out of town, I got a frantic phone call two days prior to the show asking why we weren't showing up. I tried to explain that:

- It is essential that promo information have the town. Telling me that it is on the Oakwood campus isn't descriptive enough. The Milwaukee-Chicago-Gary metroplex is a pretty large area, comprising almost 200 different municipalities.
- It is also essential to let us know what the time constraints are.
- Please understand that we like to eat at normal times. If there is not going to be food, let us know, so we can pack a cooler with a sandwich and a drink.
- Any advance publicity that gives biographical information on presenters or the FVEAA is welcome. Any brief explanation about EV's is helpful in answering the first line questions that always come up.
- Mid week shows (in this case, on a Wednesday, during the day) have a much poorer draw than weekend shows due to work schedules of many
- Extremely late notice is offensive. It assumes I am not doing anything, and/or am willing to drop my plans to help them.
- Our members are volunteering to show their vehicle. We aren't selling anything, so there is no commercial incentive. Members are encouraged to participate, but without some incentive, smaller numbers will participate. Simple incentives might be waiving the fee, or a coupon for a free hot dog and drink at the show, or raffle tickets for the door prizes, etc.
- Calling me on my cell phone two days prior to the event while I was out of town would not guarantee that we could properly contact all the possible members and make arrangements.

The young lady was upset with my comments. She seemed to feel that since we always wanted to show our EV's, she expected us to drop our jobs, our family obligations, even our vacation to make their event successful. I wish her well, but suspect her attitude won't be successful.

On the other end of the show spectrum, several of us participated in the Naperville Sustainability Challenge held in conjunction with the finish to the American Solar Challenge, a cross country race for solar powered vehicles. These events occurred on June 26.



Advance publicity was:

- Sent early enough to make decisions
- Complete so folks could plan to find and purchase a lunch there, rather than being required to bring their own food and drink.
- Well announced in several different venues
- Done enthusiastically by very friendly and accomodating people. They were willing to bend, even bend quite a bit, to encourage our participation.

Four EV's were there:

- George Gladic brought his plug-in Prius, and had a great presentation of how it was different
- Rick Mouche brought is Bradley II, which was opened up to invite the many, many questions he answered.
- Ted Lowe came in his S-10 with bed up, hood up, and lots of EV literature
- I brought my S-10

We had questions and discussion with many folks during the day. Toward the end of the day, more and more participants in the race teams came over to look and ask questions, and we did the same to their solar racers. It did help that I talked to Paul Brian on the radio (WLS-AM 890) that morning about the Sustainability Challenge and the American Solar Challenge Race. I had numerous mentions from visitors that they had heard the discussion. If you want to listen to a podcast of the broadcast, go to: [Drive Chicago podcasts](#). It will take several weeks for them to post them, perhaps they will have done that by the time you receive the newsletter. For those of you who don't use the web a lot, you can download them and listen on your computer, or just listen on their site to the 6/26 broadcast.

In addition to the show of EV's and the many questions from folks attending the show, we were able to watch the exciting finish of the race only a few yards from where the Sustainability fair was located. The solar team from the University of Michigan won, although many of us were cheering for the Northwestern team we met only a few months ago. Northwestern appears to have finished in tenth, but simply finishing this event is a major milestone.

I was amused to consider two recent show requests that started quite similar. Both were to show EV's in the same town about 15-17 miles from our shop. Both requests for EV's were for midweek events, both were from public agencies, both were for daytime showings. In both cases, I would have to find an opportunity charge or hook up the tow bar to show the EV. Both requests were in the same town, although not really close to each other.

The first request was made several months in advance with a personal call from the person responsible for the show. The second request came thruouh a second party. With the first request, the show organizer called several times to make sure that they were providing as much support as they could. They tried hard to find a 110V outlet before they said no. They offered advance publicity, and wanted information in avance. This was an middle school program with a simple handout of a program, but they asked what they should tell the students ahead of time to avoid the trite questions, and make the students more likely to ask real good questions. They offered to print biographical information for club and/or myself. Since the show did not span a meal time, they did not offer a lunch, but did go out of their way in order to find a place to park a tow rig when they found I could not opportunity charge. The kids were great, asked lots of insightful questions, and made my journey feel very worth-while.

The second request was a library in the same town, but included no information as to who

to contact, what the exact hours are, whether an opportunity charge is available, and wants no information from me for advance publicity, which means I will have to explain that again and again to those interested. The request came to me two business days before they "really needed EV's for their show." I wonder how successful that show was.

There are many things still to come this summer. At least three of our members, Bruce Lanzerotti, Brian Levin, and myself, will speak at EcoFair360, a three day symposium, exposition, and energy-eco fair in the Walworth County Fairgrounds. See: <http://ecofair360.org/> The fair runs for three days in July, starting on the same day as our meeting, July 16th, and continues the Saturday and Sunday of the weekend (July 17 and 18) This is an ambitious undertaking but the program looks phenomenal, with a diverse array of presentations and exhibitors.

I'm starting to be troubled that Governor Quinn has not yet signed HB 4717 into law. It has passed both the Senate in Illinois and the Illinois House of Representatives. This bill makes all EV's eligible for the EL series of plates, whether or not they are a B-truck or a car. Please drop a note to Pat Quinn and remind him to sign this legislation. See: <http://www.fveaa.org/forums/index.php/topic,757.0.html> for more information about the bill or directions on how to write to the Governor.

Ted Lowe has graciously agreed to help me this month, as I will be out of town for the EcoFair360 in Wisconsin. Bruce Lanzerotti (Plug In Vehicle Solutions), Brian Levin (Carbon Day and Carbon Day Automotive) and myself are all speakers on their program.

Polo Shirt Order

Rich Carroll

We're close to ordering the famous Fox Valley Electric Auto Association Polo Shirts, with the embroidered FVEAA logo. Delivery will be at the August meeting. These shirts are burgandy (maroon) and have a white embroidered FVEAA logo and wording. Sizes are your choice of: S M L XL or 2XL. We order these from Queensboro, the same supplier we have used in the past, the same supplier that NetGain, Plug in Solutions, and Pioneer use. Sizes seem to run fairly accurate. If you want one or more shirts, we need: A simple 3 x 5 card (we'll have some at the meeting) with your name, quantity and size on it, along with \$13 per shirt. We'll take dead presidents or a check or money order, something negotiable that we can clip to the 3 x 5 card. Please do not give us coins or US stamps.

If you can't get to the meeting, call Ted or Rich before 7/23, and we'll add your order before we call Queensboro.

On July 7th George Vergara assembled a Financial Assistance Committee Teleconference. This teleconference was to refine previous ideas. We're getting close to implementing ideas. What the committee needs now is effort and commitment. The members of the committee can be proud of themselves.

George Vergara, Chairman
Financial Assistance Committee

The EV educational bus kept rolling right along these past few weeks as FVEAA Chapter members made strong showings at various **EV** ents around the Chicago metro area.

On Saturday, June 26th, a handful of our members showed up at the Naperville Sustainability Fair & American Solar Challenge. The solar car challenge is a competition to design, build, and drive solar-powered cars in a cross-country rally event. This incredible race, which started in Broken Arrow, OK and ended at Naperville High School, featured 17 solar car teams from around the world. The route was chosen to combine pieces of old routes used in previous events, thereby giving a bit of a historical tribute for the 20 years of organized events in North America.

It was quite impressive to see their crews and set-ups. And as each solar car came into the finish straight-away, team mates ran out to greet them and escort `em all the way to the finish line. It was some exciting race and U of Michigan took first place.

Across from the finish line was the Green Fair that the FVEAA participated in. Special thanks go out to President Rich Carroll, Treasurer Ted Lowe, George Gladic, and Rich Mouche as our EV reps for the day. With a couple of canopies in tow, I'd say we were the biggest display there (albeit it wasn't a very big fair). George had his PHEV Prius, Ted and Rich brought their EV mini pick-ups, and Rich displayed his EV Bradley GT.

While we were having fun in Naperville, another FVEAA crew was standing on the front line taking the hard questions at a Green Fair up in Des Plaines. The Des Plaines library had an expo that highlighted rain barrels, green agriculture, and of course... us! This is the second time we've been at this library. Representing the FVEAA and taking the hits were Chuck Carrington (his EV MG), Carl Walters (a Tesla), and Mac D (did he make it?).

By taking the hits, I mean fielding the tough questions. You know the ones... like "Well, where does your electricity come from to charge your batteries? Coal-fired plants I bet!" Chuck did a good job of shutting up the one negative couple that showed up by saying "First I agreed with him that electric cars are not zero emission cars like some people like to call them, unless you are charging your batteries with solar or wind energy, but I also explained that even if I get all of my electricity from the dirtiest coal plant, I am polluting less than a gas car because gas motors are only 17% efficient while electric motors are about 98%. Chuck had more great answers, but you'll have to ask him about them. Carl got to chime in too when criticism of lithium batteries came up. Carl told them his batteries are warranted for 100,000 miles.

On the 4th of July, we had some of our members in the Evanston Independence Day Parade showing off their EV spirit and of course their USA pride. Way to go Chuck Carrington and George & Elizabeth Gladic. There were also 3 veggie cars and a Tesla. Our members even had time to snap a few pictures. Thanks to George for bringing a camera and snapping a few images (see attached photo). But what I want to know is, did you guys hand out candy... or Eveready batteries???



Upcoming Events – the Lincolnwood Car Show – Sunday, August 1st. Big car show in Lincolnwood as part of Lincolnwood Fest. Two years ago several FVEAA members were there with AFVs and talked to lots of people. Even though their web site says 1985 cars and older, the organizers were very receptive and excited to have us there.

If you are interested in showing at this event, let me know and I will pass it along to my assistant Chuck C. to get things set up for an AFV section. As always, if you know of any event that would be a good place for us to display and/or do a little Q & A, please let me know ASAP. In addition, I am always looking for a location where we can show our favorite EV movie "Who Killed the Electric Car?", display our member vehicles, do some great Q & A, and now I will add "Debunking" to our repertoire. It's best to email me the details at GoAFVs@yahoo.com. We can't get to every potential event, but we will certainly try. See ya next month.

Meeting Minutes - June, 2010

Bruce Jones

FVEAA Meeting Minutes 6/18/2010 by Bruce Jones
Rich Carroll, president opened the meeting at 7:05 p.m.

He reminded everyone that we want to be out tonight before the 9:45 alarm so we'll aim for 9:30 p.m. Rich had everyone introduce themselves and encouraged any non-members to join the FVEAA at a fabulous price of only \$15!

OLD BUSINESS - None
COMMITTEE REPORTS

Financial Assistance Committee: Director, George Vergara mentioned good progress was made at a June 16, 2010 conference call. Anyone interested in helping come up with fun ways to raise money for the group please contact George.

OUTREACH

Many events are coming up including the Ecofair 360 at the Walworth county fairgrounds on July 16 - 18 near Lake Geneva, the 4th of July event in Evanston, the Midwest renewable energy fair this weekend in Custer, the American Solar Challenge and Sustainability Fair in Naperville on June 26th with members participating.

NEW BUSINESS - None

LITHIUM ION BATTERY AND CHARGING PRESENTATION

Ted Lowe provided an in-depth technical presentation on Lithium Ion batteries and how to charge and balance them properly in an electric vehicle. Ted is known for his electrical and battery knowledge, and his talk included various aspects including flooded lead acid versus lithium ion batteries, and how multiple batteries in a serial chain complicates charging. Lithium batteries have a stringent charging limit of high and low voltages and can easily be ruined, so it is very important that every battery gets charged properly. Shunt resistors keep batteries from over charging but they aren't foolproof. The Thunder AC6 battery charger is a versatile unit that can be used for many kinds of batteries and charging scenarios. If anyone has any technical questions on the subject, we know who to talk to. Thanks for an illuminating presentation Ted!

RAPID CHARGING BEYOND LEVEL II

Rich Carroll, FVEAA president presented car charging specifications from J-1772 Level I (up to 16amps up to 117 Volts) and Level II (up to 40 amps 240 Volt) plus the latest thinking on higher speed electrical vehicle charging which is still in progress. The SAE has not yet established Level III specifications but in international circles, countries like Japan are making big strides in high speed charging systems including very high speed DC charging. Some newer battery chemistries like Lithium Phosphate cannot accept certain rapid charging like Lithium ion, so that wrinkle may require some re-thinking and collaboration between battery makers and the charging system manufacturers. Nice job Rich!!

At the Break

Ted Lowe's truck and Todd's lithium battery powered bug (at the meeting until the break) and the electric bicycle from Dennis Doney
Joe Sykes was the raffle meister who collected \$29

FEATURED PRESENTATION: EVATRAN'S PLUGLESS POWER

Rebecca Hough (who flew to Chicago from New York for us) gave an outstanding presentation on the Plugless Power system from Evatran, based out of Wyethville Virginia. Their new system being developed will charge electrical vehicles wirelessly, without plugs, using magnetic fields commonly used in transformers. The underlying company, MTC Transformers has a core technological niche customizing the internal technology of transformers to meet the specific operational needs of their customers. They wanted to become part of the current "green" revolution in sustainable energy or electric vehicles and

came up with an idea to use something they were experts at, based on 100 year old transformer technology. Their plugless product still has a way to go before release to the general public, but when it does, it may motivate many people on the fringe to buy an electric car, by greatly simplifying the vehicle charging process. Just pull the car into the garage and the system automatically (automagically?) communicates with it and starts charging the batteries. Without plugs.

Rebecca answered many technical questions on their proximity charging system, (core transformer geometry technology, physical aspects, efficiency, transfer of power, kW, size, weight positioning, as well as the security, leakage, efficiency hurdles to overcome etc.) with clear and concise answers, impressing even the most avid technicians present. Upgradable units should be available 4th qtr 2010 with full production of the core product slated for April of next year. Thanks Rebecca and good job!!!

Rich adjourned the meeting at 9:24.

Bruce Jones also submitted the two pictures below from the meeting. In the top picture, Dennis Doney shows his electric bike:



In the second picture, Rebecca Hough and Joe Sykes look at Ted Lowe's Truck:



NAPERVILLE SUSTAINABILITY FAIR AND SOLAR CHALLENGE - June 26th

Bruce Jones

Several members of the FVEAA participated at Naperville North High School on June 26th helping to promote electric vehicles and sustainable living. Ted Lowe, Rich Carroll, Bruce Jones, Rich Hirschberg, George Gladic, and Rick Mouche.

Just so everyone knows, the University of Michigan came in first place in the Solar Challenge race, and our Northwest University friends who showed their car in April finished in 10th place. All thirteen teams drove in under their own power on that final Saturday including international teams from Canada, Germany, and Taiwan. On Sunday, the car teams were presented awards and put on display at the Museum of Science and Industry.

FVEAA Membership Application Form

Name: _____

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

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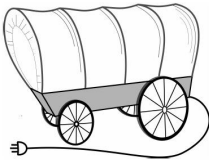
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