

Directions: From the Boughton & Weber Rd intersection, go south 0.5mi (past all the malls) and turn right (west) on Clow Intl. Pkwy. Park in the lot next to Charlie's Restaurant. The meeting is in the Packer Wings hangar (second hangar north from the parking lot). Enter the hangar from the side door on the south side.

Meeting: Friday, March 16th
Doors open at 7:00PM
Meeting starts at 7:30PM
Clow International Airport
130 S Clow Intl. Pkwy, Bolingbrook, IL 60440

Fox Valley Electric Auto Association
PO Box 214
Wheaton, IL 60189-0214

FVEAA NEWSLETTER Fox Valley Electric Auto Association <small>A Not-For-Profit IL Corporation & Chapter of the Electric Auto Association (eaaev.org)</small>	
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March, 2007

Meeting Agenda	<i>Ted Lowe</i>
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Call to Order and Introductions
Approval of Minutes & Treasurer's Report
Old Business

1. Heated Seat Order – Jim Dawson
2. Committee Reports (up to 5 minutes each)
 - 501(c)3 – Ted Lowe/Dave Aarvold
 - Club Car Project – Tim Moore
 - Cruise Nights – Rich Carroll
 - Midwest AFV Expo – Rich Hirschberg
 - Charging Infrastructure – Todd Martin
 - Programs – Todd Dore
 - Promotional Video – Peter Hartel/Ted Karson

New Business

1. Chicago Green Festival – McCormick Place – April 21 & 22

2. Business Memberships Coming
3. By-laws Ratification
4. Finish your EV, be on the (WGN) news!
5. WktEC viewing at John Emde's community - Saturday May 19th, 2pm

Intermission - Networking, Refreshments, and Raffle

Programs

More Light With With Less Watts

Jim Dawson will discuss the alternatives to convention automotive lights. He will discuss both High Intensity Discharge (HID) lighting and LEDs. If you want to read up before the meeting, here's a good link:

<http://www.halcyon.net/lights/hid-faq.shtml>

Don't miss this enlightening talk! (ouch:-)

ZAP! Comes To Illinois

Rick Sbragia (or one of his partners) who owns "Zap! of Oak Forest" will talk about the Zap! line of EVs. Rich Carroll will be trailering one of Ricks' fully charged Zap! cars for our inspection and enjoyment! More information at:

<http://www.zapfoakforest.com>

Let's show Rick and ZAP! a BIG and warm welcome everyone!!

President's Words

Ted Lowe

I'll keep it short this month so we can all spend more time outdoors now that the weather has warmed up. As i write this, its 70+ degrees out and the windows are open letting in the early Spring sounds and smells.

Like Spring, i see the FVEAA has that same sense of renewal and growth. We are doing the right thing at the right time for the right reasons! As long as we keep our eyes on the road and our feet to the pedal we'll go a long way this year!

Meeting Minutes

Ted Lowe

Minutes for FVEAA meeting February 16, 2007 at Clow Airport in Bolingbrook.

Call to order 7:40. The attendance sheet was passed around.

Ted Lowe introduced himself. We started with introductions of people present. Each told where they were from and their EV interest. In the cold, the attendance was down. Still five or six new faces were noted. Twenty six total attendees were noted at this time. Later, thirty five were counted.

Ed Meyer discussed insurance regulations and reminded that we were in an aircraft hanger with planes filled with 110 or 115 octane. The exit is the door we came in, and people need to know that no other safe exits are available. In the summer we will be asked to keep the front overhead door open. Safety will be discussed at two meetings a year. There are seven fire extinguishers around. Some are on auto start and will go off automatically at a specified temperature. These may discharge foam if triggered.

Minutes were approved as printed.

The treasurer's Report was presented. Dale Corel stated our total in the bank was \$4578.86 over \$1800 in checking.

Ted described some of the booklets and trade journals that are available to club members. Ted opened Current Events in front of us. He disseminated the toll free number to call in for the EAA annual meeting coming up on February 24th.

There is a new events calendar on the website, available to all members. On March 8th is a meeting of the Chicago Area Clean Cities coalition, in Des Plaines. Chicago Area Clean Cities (CACC) coalition is a voluntary organization dedicated to encouraging the use of clean fuels and clean vehicle technologies in the Chicago metropolitan area. See: www.chicagocleancities.org This event is on a Thursday afternoon at the Gas Technology Institute. The Des Plaines event is the coalition's first meeting of 2007. Motion to continue paying out membership in the Chicago Area Clean Cities Coalition. Approved.

March in Yorkville will be the Kendall County Environmental Fair. Saturday, March 24, 2007 - 9AM-Noon - Kendall County Environmental Fair at the Old Kendall Courthouse, 110 W Madison St, Yorkville, IL 60560 Contact: Danielle Ebersole 630-553-4111 Website: www.kendalenvironment.org

Batavia's EnvironExpo, '07, on April 21st, from 10 am to 4 pm at City Hall, 100 North Island Ave Contact: Ann Drover, Exhibits Chair, DroverAnnAl@aol.com See their invitation letter at: www.fveaa.org/docs/uploads/EEvents/Batavia-EnvironExpo-Letter.pdf

This is another invitational event, this one in the south suburbs. Ted Lowe attended with his EV last year but can't this year due to conflict. They would love to have us attend with an EV!

In Chicago Heights:
Alternative Energy Awareness Fair
Bloom Trail High School, on Tuesday May 8th, 2007.
101 W. 10th Street
Chicago Heights, IL 60411
708-755-1122

Contact: Jill Krysiniski, jkrysiniski@bloomdistrict206.org

Ted also offered new members programs to the Midwestern Alternative Fuel Expo from 2006. He also noted that the Midwest Alternative Fuel Vehicle Expo (Midwest AFV Expo 2007) along with the Illinois Renewable Energy and Sustainable Lifestyle Fair - August 11-12, 2007 - Oregon, IL (www.illinoisrenew.org)

This Midwest Alternative Fuels Expo could be combined with Illinois Renewable Energy Fair in August, 2007 on the second weekend in Oregon, Illinois. Motion to put this on was approved. We could sell t-shirts of whatever or other fundraising efforts.

Todd Martin had a request to put on two Avcon chargers in Aurora at the train stations. We buy the charging station, the City of Aurora agrees to install, operate and maintain it. Cost is \$380 each and we get matching funds from EAA. We have about \$4000 with matching funds. They wanted to get it installed by Earth Day. We need to order the Avcons now, these have already been approved.

We need a new meeting location, as noted in newsletter. We need to find a central location that meets the guidelines. We have been at Packard Wings for over a year, although this started as a temporary location for a month or two. The Board will construct a search committee. Several options were discussed.

Additional summer outings could be planned with respect to additional locations.

In the raffle, a power planner, to plug in your electric motor, (sump pump or electric refrigerator, or whatever), a \$30 value was offered.

-- Break ---

Reconvened at 9:27, and the raffle took in 33 dollars. Included a Solar Power magazine, which was won by John Bannes And the power planner was won by Joe Downing.

Ed Meyer discussed current stage of his battery charger. This should include LED panel meters to help review the monitoring. Ed is aiming at a size of a shoe box. 110 or 220, to work with any number of batteries.

Rich Carroll talked about the Chicago Auto Show, and the EXAR-1 from Ametrان and it's entrance to the Auto Show in the early 1980's. He discussed the Ametrان company and its (?) production and finished with a discussion of ZAP cars, the only total electric vehicles at the Auto Show.

Jim Dawson discussed seat heaters.

Evidences of exciting EV times are just around the corner. There are several major players in the EV market that either have now, or promised soon, practical EV's.

At the low end of the spectrum, the Zap line meets the definition of a practical EV. These are low cost transportation for in-town use. Anyone who needs a vehicle to get to and from the grocery store, and to drop the kids off at sports practice after school, might consider this vehicle. Totally electric, it is limited by it's top speed (almost 40 MPH) and range (almost 40 miles.) The Zap cars are available now, and you can buy one (or several) today. They also may be useful in urban delivery of light items, such as pizza or sandwiches in high rise neighborhoods.



At the other end of the scale are the high priced offerings like the Tesla, the Tango, and the Venturi, all of which promise to have purchasable production soon.

In the middle of the spectrum are the plug-in hybrids. Certainly an effective solution to the need for a car that is mostly an EV, except when your boss suddenly wants you to go to Dekalb this afternoon. There are no production models on the market yet, but a new Special Interest Group (SIG) has been created within the Electric Auto Association (eaaaev.org) for sharing information and help. Rumors of future models from several major manufacturers have persisted for months.

There are also prototypes running from several sources who plan production, but have not announced dates yet. AC Propulsion has delivered their first eBox to Tom Hanks, a full EV converted from a Scion xB. AC Propulsion also has tzero sports cars that are in the prototype stage.

Meyers Motors has taken over the Sparrow, and have said they will start production soon. Phoenix Motorcars made quite a splash recently with a President George Bush inspection of their vehicle. They are claiming that they can build vehicles on order, and have an active press campaign, but minimal production of vehicles yet.

The Chicago Auto Show had several hints of upcoming EV's, including the Chevy Volt, although Chevy stated production was at least two to three years down the road, and needed improved battery technology.

In light of all these developments, I think that one of the most important issues for club members is knowledge of these cars. Your neighbors, coworkers, and friends know that you have an interest in EV's. They will look to you for advice, whether they intend to purchase and use an EV or not. You will be a primary source for opinions about these vehicles, so I urge you to learn, and to be ready with your thoughts when asked.

Are you looking for technical help on an EV project? If so, tap into an incredible resource on the Internet, the EVDL! This is a mailing list of EV experts and enthusiasts from all the world that pose questions and share answers on EV technical issues. It is a very active list, so setup an email filter to sort your email to a separate mailbox. More info at: www.madkatz.com/ev/evlist.html

Welcome New FVEAAers

Ted Lowe

Join me in extending a warm welcome to new FVEAAers:

Larry Gray, Lafayette, Indiana
Robert Funk, Auburn

Welcome aboard, folks! We hope to see you at meetings and other EVents! Let us know if we can be of help in your EV pursuits!

EV's in the News

Rich Carroll

Kia

Kia Motors unveiled the Rio Hybrid concept at the Geneva auto show. The brand's first-ever gas-electric hybrid, developed in conjunction with Korean parent company Hyundai, employs a 90-horsepower 1.4-liter four-cylinder gas engine mated to a compact 12-kilowatt electric motor. Kia said it is working with the Korean Ministry of the Environment on an ambitious R&D exercise that will see nearly 4,000 Rio Hybrids on local roads as part of the company's "real world" test program. Kia previously had hinted that it planned to begin selling the Rio Hybrid in North America in 2007, but those plans have been stalled until 2008-'09, according to media reports from Korea.

Toyota

Toyota Chief Executive Officer Katsuaki Watanabe has confirmed that Toyota will develop new lithium-ion batteries for its third-generation hybrids. Perhaps that is to offset some of the publicity lately about Toyota that is less than green. Much of the Japanese carmaker's recent offerings seem to emphasize more speed and comfort in their cars, or bigger, stronger trucks. The new Tundra is their biggest truck ever, and is getting a very significant promotional effort. New Sequoia and Highlander sport-utility vehicles will also be bigger and heavier than their predecessors.

Toyota has confirmed that the new generation of hybrids, due out in late 2008 or early 2009, will use lithium-ion batteries. These batteries will be lighter and more powerful than the current nickel metal hydride packs, and will make for more fuel-efficient hybrids. This is a change from the first and second

generation hybrids which used nickel metal hydride.

Watanabe was questioned if the new batteries can be developed in time for the next generation, and he assured all that this can be done. In addition to new batteries, the rest of the hybrid system will be downsized, perhaps by one-half in both size and cost . This would make purchasing the hybrid system more cost competitive with regular gasoline cars.

Toyota plans additional hybrid models in the next few years. Watanabe states that he believed hybrid sales could reach 1 million a year by the early part of next decade. At the Detroit show, Toyota North America chief Jim Press said the company is looking to increase hybrid sales by 50% in 2007, to between 250,000 and 300,000. Japanese reports indicate Toyota is considering offering hybrid versions of any vehicle whose model sells more than 100,000 units a year. "We're considering what sort of hybrid system can be applied to many types of hybrid vehicles," said Watanabe. To make hybrid sales to reach seven figures volumes, "we will probably have to double the number of models with a hybrid system installed."

If Toyota can achieve its goal of producing Li-ion powered hybrids quickly, it will widen its lead over other many auto makers. Ford, GM and Chrysler have asked congress to subsidize advanced battery research to the tune of \$500 million over five years.

General Motors (GM) has asked Johnson Controls-Saft Advanced Power Solutions, to develop Li-ion batteries. This group is a joint venture between automotive-systems manufacturer Johnson Controls (JCI) and Paris-based Saft, and Cobasys, a joint venture between Chevron (CVX) and Energy Conversion Devices (ENER).

Toyota does believe that it can solve the battery safety issue with Li-ions. Last year, Sony (SNE) took a \$430 million charge against revenue due to li-ion powered laptops catching fire, necessitating significant recalls. The consequences of a battery fire in a car are very significant, and Watanabe said, "We're making sure that the problem can be avoided. These difficulties must be reflected in the design."

Tesla WhiteStar

Tesla has announced their four door counterpart to the already announced roadster. The WhiteStar will be powered entirely by electricity, but it still has a gas cap. "(It) looks like the kind of gas cover you'd open," said Darryl Siry, head of marketing and communications for Tesla Motors. "Instead, there's a plug." With the news that Tesla in April will start building a manufacturing plant, Albuquerque becomes host to what industry experts say is one of the up-and-coming companies in the world of electric cars. The five-passenger WhiteStar is expected to be its most practical product.

"One of the major drawbacks of electric vehicles in the past is that folks can't get the cruising range they need. For many people, they're not practical. You have to charge it after every long drive," said George Peterson, president of AutoPacific Inc., an automotive market research firm in Tustin, Calif.

"Tesla has managed to come up with the vehicle configuration to get 150 to 250 miles per charge." Tesla has made a splash with its Tesla Roadster, a two-seat electric sports car capable of speeds over 130 mph and accelerating from zero to 60 mph in four seconds. The Roadster, being built at a Lotus plant in England, should be delivered to customers this summer, the company says on its Web site.

But Peterson said the four-door WhiteStar "has much more market potential than the sports car does - to the tune of 10 times more market potential." The WhiteStar will range in price from \$50,000 for the basic model, capable of traveling about 130 miles on a single charge, to \$65,000 for a model that can reach 250 miles on a charge, Siry said. It would take six hours to charge the car, which accepts standard household current, he said. The charge time is cut to three and a half hours with a special, high-voltage home charging system, he said.

Clearly, then, driving the WhiteStar across country would be time-consuming. But Siry said that isn't the point. "These cars are not designed for long road trips," he said, but for quick trips around town. Peterson said Tesla's promise of a longer cruising range between charges makes the car a "viable proposition" for some consumers.

But he expects most people to buy the WhiteStar as a feel-good purchase because it has no tailpipe emissions. Even when taking into account that its energy will actually come from a coal- or natural gas-fired power plant, the company says its cars emit fewer greenhouse gases than their hybrid counterparts such as the Toyota Prius.

"You will never be able to justify its purchase price based on the fuel savings," Peterson said. "It's almost purely an ego purchase. Driving it will make you feel good."

Prius

The Wall Street Journal reports that hybrids, which can be "quieter than a vacuum cleaner," are the target of the National Federation of the Blind, which is pressing the automotive industry to make hybrids emit a noise while turned on - a noise, the Journal reports, should be louder than other ambient noise.

With the increasing popularity of hybrids, the lack of operating noise in some circumstances could be a growing problem. Hybrids are a small fraction of the vehicle fleet at fewer than 400,000 registered on roads, but are being touted by and other companies as a medium-term solution to fuel economy and oil use.

The NFB has been toying with a few solutions, the Journal says, including sensors that would alert blind pedestrians when a hybrid is near, or a device that would make noise when the vehicle's axles rotated. Pedestrian deaths totaled 4881 in 2005, according to the National Highway Traffic Safety Administration, up two percent since 2000.