

**Fox Valley Electric Auto Association
1522 Clinton Place
River Forest, IL 60305-1208**

Address Correction Requested

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NEXT MEETING: FRIDAY February 18 at 7:30 PM at Triton, INDUSTRIAL CAREERS BUILDING (EAST CAMPUS) ROOM 139

DISCUSSION TOPICS: 1. May 6th Workshop 2. Member's projects 3. EAA Proposal

MEMBERSHIP INFORMATION

Any person interested in electric cars is welcome to join the FVEAA. The cost for a full year's dues is \$ 20 which will entitle the members to receive our monthly Newsletter that contains useful information about electric car components, construction, policies, and events. Membership is not required to attend our monthly meetings. Dues for NEW members joining in March will be \$ 16.

To obtain information about the FVEAA you may contact either President Shafer or Past President Woods

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February 2000 PRESSEZ

Arrangements for our May 6th Workshop are proceeding well. I have invited ComEd to be the event sponsor, and assist the FVEAA and the ISEA with publicity. I hope we will exhibit many of our member's cars. No demonstration rides are scheduled because cars will be opportunity charging for the return trip home. There could be a "parade" of vehicles around the parking lot, especially if we get TV coverage. This will be the first item discussed. We need to finalize the persons who will present the topics listed the minutes.

Time will be allotted for discussion of member's new projects or EV problems.

We will start a discussion about the pros and cons of becoming a Chapter of the national EAA

BILL

MINUTES FOR THE JAN. 17 2000 MEETING

The meeting at Triton at Triton College was called to order by President Shafer at 7:45 PM. The outside temperature outside was a -7 degrees. Ten members and two guests attended.

Treasurer Corel's report that there was no change in the savings account balance and \$ 2492.59 in the checking account was accepted. President Shafer noted that twenty members in 1999 had failed to renew their membership. He sent notification letters to these persons instead of the January Newsletter. Some have already responded.

Past President Woods reported on the Spring Workshop. The date has been change from Earth Day, April 22 to May 6th. April 22nd is Good Friday. The ISEA agrees with this change. He also reported the IBEW will allow our use of their facility in Alsip for the event. Ken was authorized to conduct the final details and present an agreement to the FVEAA for final approval. The IBEW will not charge the FVEAA or the ISEA for facility use. They believe many of their electrician members will be interested in the programs. President Shafer suggested that the IBEW host issue an invitation to Vice President Al Gore to come.

President Shafer noted that the President of Triton and one Trustee have become paid members of the FVEAA, stating they wished to support our activities. We welcome them. We never had the same support at College of DuPage.

President Shafer has sent a letter to Dr. Jorndt, Triton President, outlining the proposed program to have Triton student volunteers convert a vehicle to electric power as an extra-curricular activity. FVEAA members would be on-hand at each work session to conduct a classroom session on the various considerations of conversions and assist the Triton faculty member chosen to supervise the work. No response was available at meeting time.

The program for our Spring Workshop (**GO ELECTRIC – GO SOLAR**) was discussed. It was agreed that the FVEAA would give a 45-minute presentation on electric cars, followed by a 45-minute program on solar energy by the ISEA.

The tentative program agreed to was:

1. Opening remarks by the IBEW - program hosts, the FVEAA, and ISEA.

FVEAA PORTION

2. The current status of commercial electric cars.
3. The conversion process.
4. Ownership experience, costs and benefits.
5. Tax credits and rebates.
6. Unusual cars (The dragster).

ISEA PORTION

7. Description of how a photovoltaic panel generates electricity from solar radiation.
8. Solar panel installation.
9. Costs and benefits.
10. Tax credits and rebates.

An outdoor display of member's cars and related products would open at 10AM. The presentations would start at 11:30 AM and conclude by 1PM. The display would again open after the program and close by 3PM.

Members present briefly described the status of their conversion projects and problems.

Guest Roy DeBoth gave us a demonstration of electroluminicent power he is investigating. It could be included in a sprayed-painted clear coat. The substance can be energized by a low-wattage fluororesent lamp. Once energized it will glow in the dark for an extended period. Imagine painting your car with this and going out at night to glide silently along the emitting a ghostly green glow!

Member George Krajonivch discussed two problems with his Omni conversion. He wanted to belt a 55-amp alternator on the front end of his motor to provide auxiliary battery charging while driving. There isn't room. The suggested solution – use a dc-dc converter. He is also having a problem with his power brake vacuum system. He will install a new vacuum pump.

The meeting was adjourned at 10:10 PM

From the notes of Bill Shafer in the absence of our Secretary.

FROM OTHER EV NEWSLETTERS

EEVC, the Eastern Club in their December Newsletter had an article about hydrogen fuel. They noted the simplest compound from which to extract hydrogen is methane that has four molecules of hydrogen to each molecule of carbon, a 4:1 ratio. The hydrogen-carbon ratio for ethanol is 2:1. The methanol ratio is 3:1. For gasoline it's 9:4. At room temperatures, methane is a gas and the rest are liquid. A gallon of methanol can supply 800 gallons of hydrogen. They describe a process being developed by Powerball Technologies – not the lottery game- that drops ping-pong sized plastic balls filled with sodium hydride into a tank of water to extract the hydrogen. This is a violent chemical reaction. Measuring tank pressure is used to limit the number of balls reacting simultaneously and controls the rate of hydrogen production. A key feature in the proprietary process using methane (natural gas) to produce the balls.

The EEVC January issue featured articles about the 20th anniversary of their Organization.

The Electric Grand Prix group in New York in their February issue featured a discussion by Editor Paul Heaney about the classification of hybrid vehicles. His conclusion; since hybrids use gasoline they cannot be classed as an *Alternative Fueled Vehicle (AFV)*. Therefore hybrids are not eligible for tax breaks and subsidies applicable to AFVs.

EV Circuit from the Ottawa (CA) organization in their November/December issue announced their website has been relocated to www.econogics.com. The issue also discusses the need to establish the charging infrastructure needed before there is an extensive use of electric vehicles. Ford has delivered 16 (Electrified) Ranger pickup trucks to several Canadian organizations. There is also an extensive discussion of GM's *TRIAx* concept vehicle first exhibited at the Tokyo Auto Show. It can be configured as an IC engine, a hybrid, or an electric vehicle. The electric version has an all-wheel drive system using two electric motors one for each the front and rear wheels. Each motor is rated at 35kW.

VEVA, the Vancouver Group in their December Newsletter featured Bill Moore's analysis of the Honda hybrid Insight (www.evworld.com). Honda has filed 300 patents on the vehicle and components. It has a curb weight of 1887 pounds with automatic air conditioning.

The issue also has a review of the North American Electric Vehicle and Infrastructure Conference held in Atlanta in November. Electric vehicles available for sale can be checked out at www.evaa.com. Southern Company (an electric utility company) stated they have acquired 400 EVs for testing by various parts of their companies. Solectria stated they have sold 400 of their *FORCE*, a conversion of the *GEO Metro*. Editor Rob Cameron summarized his impressions of driving a GM's EV-1, Toyota's E-com, and

In the January issue EEVC stated that the Canadian Motor Vehicle Safety Standards group is proposing requirements for light-duty EVs that have an electrical system 74 volts and higher. A Low-Speed Vehicle Standard publication is expected by May. The standards group has also drafted a document for power-assisted bicycles that currently are in the motorcycle class. You can take a look at the proposed standard on the web:
http://canada.gc.ca/gazette/hompar1_e.html.

Ballard exhibited a smaller fuel cell unit at the Detroit Auto Show. Ford's TH!NK FC5 is the first prototype vehicle to use the new Ballard unit. It uses methanol as a fuel.

RECENT ARTICLES ABOUT ELECTRIC VEHICLES

Car News from Japan. Japanese car freaks are enthauastic about Honda's S-2000. The company plans production of about 500 of these per month. The Specs: Length- 4114 mm, Height – 1285, Width – 1750. Engine displacement 1.998 Liters. Price, about \$ 30,000 – 33,000 in Japan.

The second hybrid car from Toyota is the *Estima* a mini-wagon, due out by the end of this year. The car will not be sold in the U. S. because of its small size. Next year Subaru will have their hybrid, the *Elen*. The battery may be Hitachi's Lithium-ion.

Nissan plans real-world test of electric minicar. Naperville SUN. 11/26/1999, Page 7. This car is high, \$40,000. The test will be at two car-sharing projects in Japan. (See following article) Twenty vehicles will be allocated to the Downtown Rental Car Project and another 15 will go Ebina, Japan and used by the Ministry of Construction. The 2 seated car is 2660 mm long, 1475 mm wide, and 1550 mm high. It weighs 1848 pounds. Lithium-ion batteries give the car a single-charge range of 71 miles in urban driving with the air conditioner off.

Car Sharing in Japan. World Watch Jan/Feb 2000. Car-sharing trials of electric cars are now underway in Japan. Small vehicles are used to supplement public transportation. An Intelligent Transport System links cars and a control center. A using member makes a reservation either over the phone or on the Internet. The control center sends a signal to an available car. The car is unlocked using a cell phone and member's ID.

A navigation system in the car allows the control center to monitor car movements. When a member finishes using the car, the transaction is completed over a cell phone the car is locked and the member is billed for time and mileage. One experimental location in downtown Yokohama has twenty vehicles and 20 companies participating. Other locations are in Kobe where tourists are users and in the residential community of Tama where housewives are the targeted users.

In an accompanying letter, a lawyer-reader asks if car sharing might invite lawsuits in the U.S. How is vehicle safety provided? How are the maintenance and energy costs divided? How to limit users to only qualified persons familiar with the vehicle? What is the driver's liability?

E-bike has something to stand for. Chicago Tribune 10/29/1999 Page 2, Section 3. The battery-powered bicycle offered by Lee Iacocca is literally a pain in the butt because the seat is petite. Tribune auto writer Jim Mateja tried one out at the Knautz Motors auto dealership in Lake Bluff. Flick the on switch and two 12-volt batteries get you underway; also pedal if you wish. There are seven gears in the shifting system. At 20 mph you can push the cruise button and move steadily along. Single-charge range is 20 miles (without pedaling). The E-bike comes in two versions: base and Comfort that adds seat shocks. For an extra \$ 35 you can have an "ElGrande, wider seat. Other options include a \$ 60 speedometer, front and rear fenders to avoid road splash for another \$ 70, and saddlebags at \$ 50. (Editor's note – one would think that auto ex-executive Iacocca would have included these features as standard) The base model is priced at \$ 995 while the Comfort price tag reads \$ 1145. The bike is sold at Knautz, Mitchell Motors in McHenry and Premier Jeep in Chicago.

EV-1 owners find column shocking. Chicago Tribune 1/23/00. GM has pulled the plug on the EV-1. It will no longer build the hand-assembled vehicle at the GM Craft Center in Lansing. GM plans to build a luxury auto new assembly there and needs the space. The production run turned out 500 cars (Gen I) equipped with lead-acid batteries and another 500 (Gen II) with NiMH batteries. Not all of the Gen II cars have been leased although there are 1000 applications pending.

GM has not abandoned electric car development. Future plans for an improved EV-1, Gen III, have not yet been announced. Electric vehicle development will be mothballed for a while.