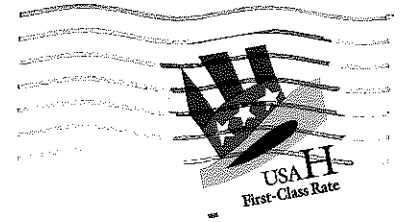


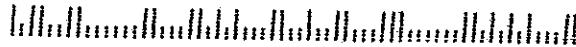
**Fox Valley Electric Auto Association  
1522 Clinton Place  
River Forest, IL 60305-1208**



**Address Correction Requested**

David B Aarvold  
915 Oak Street  
DeKalb IL 60115 -3470

60115+3470



**NEXT MEETING: Friday, February 19 at 7:30PM in Room K-161 at  
the College of DuPage SW Corner of 22nd Street & Lambert Road in Glen Ellen.**

**DISCUSSION TOPICS - 1. Cindy McFadden from Argonne will present a program on  
the FUTURE CAR Challenge programs sponsored by DOE. 2. Race Video.  
(Note - these items were recycled from the January Meeting. See Minutes.)**

**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 member to receive our monthly Newsletter that contains useful information about electric car components, construction, policies and events. Dues for new members joining in February will be \$17.

To obtain information about the FVEAA, you may contact either President Woods or Vice President Shafer:

President - Ken Woods  
1264 Harvest Court  
Naperville, IL 60564-8956  
(630) 420-1118  
E-mail Casa Zeus2@aol.com

Vice President & Editor - Bill Shafer  
1522 Clinton Place  
River Forest, IL 60305-1208  
(708) 771-5202  
E-mail electric\_bill@compuserve.com

**FEBRUARY 1999 EDITORIAL**

**What is an electric car?** My definition of an electric car is one that has a conductive or inductive electrical coupling to receive electrical energy for propulsion from an outside source to be stored on-board. There is presently no standard that defines an electric car in this manner. The Toyota PRIUS does not qualify as an electric car in my opinion, . It has equipment to manage the petrol energy by power averaging. The small NiMH battery, electric motor, and generator act as an accumulator to receive energy stored in the gasoline. This makes better use of the fuel. The PANOZ Q9 racer is another example. Should the FVEAA recommend governmental adoption of the suggested definition standard so consumers are not confused ?

**BILL**

## MINUTES OF JANUARY MEETING

The meeting was called to order by President Woods at 7:36 PM. Twelve members and two guests attended.

The minutes of the January meeting were approved as published. Treasurer Carl reported \$ 1929.60 in the checking and \$ 2481.06 in the savings account. His report was accepted.

President Woods noted that attendance at tonight's meeting was small, probably due to the 23" of snow that was still being cleared. He also stated that the scheduled speaker from Argonne was unable to attend and the race video was unavailable. These items will be rescheduled for February.

Those attending took advantage of the time to discuss two potential programs this spring the FVEAA could participate in. The first would be at the next regional meeting of the Clean Cities fuel Program at Argonne in early spring. The FVEAA could present a session on the process for recycling and converting a conventional car to electric power, using slides available from the Nissan Project, Bill Shafer's Mazda, and John Emde's Suburau.

This could be supplemented with handouts and exhibits of three or four cars in the Argonne Parking Lot. Cars potentially available are Ed Meyer's Nissan, George Krajanovich's Omni, Bill Shafer's Mazda, and Fred Kitch's Ford Ranger. John Emde noted that his conversion of a 1992 Ford Ranger might be completed in time for a side-by-side comparison with the Ford factory product.

The consensus was we should proceed and President Woods was authorized to prepare a program abstract and contact either Darwin Burkhart at the Illinois EPA or Jeff Williams at Ivy State College.

A similar event was suggested for late spring as a tutorial to be held at Triton College. or the College of DuPage. There was a discussion of the relative merits of the two locations. It was concluded that Triton had better facilities. The consensus was to have President Woods get in touch with Member Ray Oviyach, retired as a professor of automobile engineering at Triton, to investigate the availability of Triton.

Member Ed Meyer stated that the person wishing to restore and convert a 55 Chevy pickup now has procured the vehicle and will attend a future FVEAA meeting to discuss the project

He also led a brief discussion of using an inverter connected to his Nissan 120-volt battery pack as a source of emergency power for his house. He has assembled a breadboard experiment with parts he has and proven the idea is feasible. His next step will be a discussion with TRACE Engineering, a maker of power inverters, about a commercial product that will work with a 144-volt system the NISSAN will have after an upgrade to add 3 more 8-volt batteries.

Ed announced his Curtis 120-volt controller will be available for sale for \$ 600 when it is replaced with a higher-voltage unit during the voltage upgrade.

Member Dana Mock is moving to a new house and needs to dispose of a quantity of EV parts now stored at his present location. Anyone interested should call him at (630) 679-9081.

Bill Shafer announced that the latest issue of *Current Events* Newsletter had an ad offering an \$ 8500 converted 1984 Fiero for sale by a person in Iowa. Don at (319) 643-5650, email: laugh@avalon.net..

Submitted by:

Secretary Dave Aarvold

## RECENT ARTICLES ABOUT ELECTRIC VEHICLES

**Chicago Auto Show - '99.** Chicago Sun-Times February 11, Special Section. One thousand cars will be exhibited at the 1999 event. The Honda VV will be shown. It is similar to the Toyota PRIUS. It is scheduled to be released for production later this year. There is also an article about the Toyota Prius. Neither the Honda VV or the Toyota Prius is an electric car.

**What's the Greenest of Them All?** New York Times September 6, 1998. The following table called the "Green Guide" lists vehicles that are most environmentally friendly:

Vehicle	Fuel	Mile/kwh or mpg	Rating (100 max)
GM EV-1	Electric	3.3	56
Honda GX	Natural Gas	43 (mpg)	49
Toyota RAV-4	Electric	3.2	49
Chevy S-10 EV	Electric	2.2	42
Ford Ranger EV	Electric	2.6	41
Honda EV Plus	Electric	2.0	39
Geo Metro	Gasoline	44 (mpg)	38
Ford Crown Victoria (Gas)	Natural Gas	17 (mpg)	36
Suzuki Swift	Gasoline	39 (mpg)	35
Chrysler Epic	Electric	1.9	35

The worst vehicle is the Lincoln Navigator SUV that gets 12 mpg in the city and has a 9.5 rating. The average Green Guide rating was 21.

The Green Guide is published by the American Council for an Energy-Efficient Economy. Copies can be purchased for \$ 8.95 + 5 for shipping and handling from Web: [www.aceee.org/greenguide](http://www.aceee.org/greenguide). The 1999 guide will be available later this year.

Editor's note. There were several articles about the Honda VV. In keeping with the editor's opinion about what constitutes an electric car, reviews of these articles are not presented.

## NEW ISSUE OF ELECTRIFYING TIMES WILL COVER HYBRID CARS

Received an e-mail from Bruce Meland, the Editor of *Electrifying Times* that he will soon have a special issue of that publication, called **PREVIEW 2000**, that will cover 40 hybrid cars. You can get a copy by sending a check for \$ 7.50 to him at Electrifying Times, Bruce Meland Editor, 63600 Deschutes Market Road, Bend OR 97701. Please mention that you saw this item in the FVEAA Newsletter.

## MEMBERSHIP ROSTER FOR 1999 DELAYED

Each Year the February issue of the FVEAA Newsletter usually contains a current membership roster. It is sent only to paid-up members. It is not included in any of our newsletters that are exchanged with other organizations or are sent to commercial companies. We like to protect the privacy of our members. Every day we get enough junk mail. Treasurer Corel's records are incomplete so the new roster is missing in this issue. Paid-up members for last year get a free ride this month. I hope to have the new roster for the next issue.

## FROM OTHER EV NEWSLETTERS

**EEVC, the organization in Valley Forge, PA** in their January Newsletter had a profile of Ed Kreibeck who was named the EEVC member of the year. Ed did a lot of work the students at Cinnamonsen High School in their Tour de Sol 1998 competition. Part four of that story was in the EEVC January issue.

Also in the issue was a calculation comparing the TROJAN T-125 and the OPTIMA battery. Both are lead-acid type. The Trojan is a 6-volt battery weighing 75 pounds. The Optima is a 12-volt battery weighing 45 pounds. Range is a function of lead in the battery. It takes 15-20 pounds of lead to get one mile. A good comparison the number of minutes each battery will deliver 75 amps. A Trojan T-125 will do this for 125 minutes; the Optima for 31 minutes. It would take two parallel banks of Optima 12-volt batteries to deliver 62 minutes. The very low internal resistance of the spiral-wound Optima has an advantage for high acceleration currents..

**VEVA, the Vancouver group,** in their January Newsletter notes that DaimlerChrysler (DC) seems to prefer methanol as a fuel for the fuel cell car they are developing. Before the acquisition Chrysler was leaning to extracting hydrogen from petroleum. They expect to have a working methanol fuel-cell vehicle later this year. (Editor's note - It doesn't seem a fuel cell car is an electric vehicle.)

**EV News February issue** had an article about Ford's plans for PIVCO, its newly-purchased operation in Norway that builds the THINK minicar. It appears they will proceed to build and sell 5000 units per year in Scandinavia. The car has a 27 kw induction motor, and will use Nicad batteries to give it a 62 mile range. Anticipated sale price is \$ 19,000. Ford also exhibited three versions of its P-2000 car in Detroit: One with batteries, a hybrid version, and a fuel cell option.

## 2/0 CABLE AVAILABLE FOR FVEAA MEMBERS

Member Rod Bohlmann has salvaged 200 pounds of 2/0 power cable from the FAA project to upgrade the air traffic control system in Aurora. The cable was removed as part of that construction. The cable comes in 4-5 foot lengths and is equipped with bolt-on lugs. Rod will have samples at the February meeting. FVEAA members who want the cables can sign up for them at the February meeting and pick these up at the March meeting for no charge. Nice to have you back in town Rod.

## BAD NEWS ABOUT FEDERAL INCOME TAX CREDITS FOR ELECTRIC VEHICLES

Member George Krajanovich is preparing his 1998 Federal Income Tax Return. He planned to file for the 10% tax credit allowed for electric vehicles. Page 245 of IRS Publication 17, Your Federal Income Tax for 1998 is reproduced below:

### Credit for Electric Vehicles

You may be allowed a 10% tax credit if you placed a qualified electric vehicle in service during the year.

**Qualified electric vehicle.** This is a motor vehicle that:

- 1) Has at least four wheels and is manufactured for use on public streets, roads, and highways.
- 2) Is powered *primarily* by an electric motor that draws its power from rechargeable batteries, fuel cells, or other portable sources of electrical current.
- 3) Is originally used by you, and
- 4) Is acquired for your own use, not for resale.

**Amount of credit.** The credit is equal to 10% of the cost of the vehicle. However, if the vehicle is a depreciable business asset, you must reduce the cost by any section 179 deduction before figuring the credit. Get Publication 463, *Travel, Entertainment, Gift, and Car Expenses* for information on the section 179 deduction.

The credit is limited to \$4,000 for each vehicle.

**Special rules.** You cannot take the credit if you use the vehicle predominately outside the United States.

The credit will be subject to recapture if, within 3 years after the date you place the vehicle in service, the vehicle is used predominately outside the United States or is modified so that it is no longer eligible for the credit.

**How to claim the credit.** To claim the credit, complete Form 8834, and attach it to your Form 1040. Include the credit in your total for line 47, check box d, and write "8834" on the line next to box d.

Note the conflict between this and the following IRS definition 1.30.1-1 under Section 16.045, Regulation 4054. It restricts the definition of qualified electric vehicle:

(a) Definition of qualified electric vehicle. A qualified electric vehicle is a motor vehicle that meets the requirements of section 30(c). Accordingly, a qualified electric vehicle does not include any motor vehicle that has ever been used (for either personal or business use) as a non-electric vehicle.

It seems to me the IRS definition does not follow the intent of Congress to provide a tax credit for electric vehicles. A recycled and converted car is an electric vehicle. FVEAA experience shows a converted car can be substituted for a conventional car in limited distance missions and provide the same environmental advantage as a new, factory-built car costing 5 times more..

George can forget the 10% tax credit for the \$ 8000 he spent on converting his Dodge Omni, he can file an amended return later this year and make his case *pro se* in Tax Court, or the FVEAA and other electric vehicle organizations can seek to get have the IRS restriction rescinded..

## WILL THE MINICAR BE ACCEPTED IN THE UNITED STATES ?

There was an article in the Chicago-area SUN publications entitled "Small but Smart" that stimulated this essay on small electric cars. The author experienced driving a CitiCar when it was first produced 25 years ago. A number of these are still running; a testimonial to the durability and long life of electric cars.

My dominant impression with the CitiCar was that it did not mix well with urban traffic. I got an uncomfortable feeling being passed by an 18-wheeler and looking up at the truck's rear axles. A friend of Member Ed Meyer, after driving Ed's upgraded CitiCar car that has good performance said, "Please don't force me into driving one of these". The current popularity of SUV's is partly due to a feeling of protection.

From an energy use perspective there is no reason why a 2 ton vehicle is necessary to carry one or two persons each weighing less than 150 pounds. A 20-pound bicycle will carry one individual in a very energy-efficient manner. Toyota's e-com 2-passenger electric car weighs 1742 pounds. The Smart, Pivco's Think, the GEM Neighborhood vehicle, Japan's 2-passenger Lucieole concept car, and other small electric cars each weigh less than 1 ton. Corbin's 1-passenger Sparrow weighs a half ton..

Most drivers will not accept minicars for a 30-minute commute. American drivers have become accustomed to the amenities, silence, feeling of security, air conditioning, and luxury that present cars provide. Leather seats add nothing to performance but are an important sales tool.

As long as gasoline is plentiful and cheap, there will be no move in the U.S. to energy-efficient vehicles. When gasoline was scarce in 1973, the American big family sedan was abandoned. As oil production declines and gasoline becomes more costly it is likely the today's SUVs will be rejected for the same reason. The 1999 edition of *The State of the World*, published annually since 1984 by the Worldwatch Institute, on Page 25 predicts that oil production will peak in a decade and will then decline precipitously. The small car is something that our grandchildren will likely be considering.

Minicars may find their first acceptance in Asia where most individual travel is now by bicycle or motor scooter. Another possibility is Europe where city geography with ancient narrow streets is more friendly to small cars and where gasoline is heavily taxed. I believe the astute auto manufacturer will develop minicars for sale first in these areas. Don't look for many on U.S. roads for at least a decade.

Bill Shafer