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

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NEXT MEETING: Friday, March 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. Reports on meeting s held in Chicago and Argonne this month. 2. Status of our meeting room future assignment. 3. "Ask The Fox open topics.

#### 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 March will be \$16.

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

## **MARCH 1999 PRESSEZ**

Our next meeting will include three items:

- 1. A report on the Clean Cities program phase II held at the American Lung Association offices on Thursday March 11,1999. Ray Oviyach planned to attend.
- 2. A report on the program at Argonne called "Advance the Choice" held Tuesday March 16, 1999. Ed Meyer planned to attend.
- 3. A report nu Bob Munroe on the status of our negotiations with COD for our meeting place.

**KEN** 

### MINUTES OF FEBRUARY MEETING

The meeting was called to order by VP Shafer 7:36 PM. Our regular meeting room was under construction so we met in Room 142. Twenty Five members and three guests attended. The racing group who are new members showed videotapes of the Woodburn 1998 event and also last year's Phoenix gathering.

President Woods arrived and announced that Cindy McFadden who was scheduled for the third time to present a program on the FUTURE CAR challenge was again a no show. He brought along and introduced Hans Detweiler, the public information person from the Environmental Law and Policy Center in Chicago.

Mr. Detweiler explained the purpose of that organization was to facilitate governmental environmental programs. He gave a background on the organization, the programs they are involved with, and answered questions.

President Woods had to get the speaker back to the train while the membership continued their meeting.

The minutes were approved as published and Treasurer Corel reported \$ 1481.06 in the checking and \$ 2388.38 in the savings account. His report was accepted.

President Woods returned after the break and stated the College of DuPage, without notice, had evidently changed meeting room policy and the persons administering room assignments. We were billed \$ 45 for the January meeting.

A spirited discussion of this development followed. Member Bob Munroe volunteered to investigate this matter by contacting COD. Member Ray Oviyach also volunteered to inquire if Triton, another community college, might be willing to

provide facilities for future FVEAA meetings as a part of their community service mission. Their reports will be discussed in March.

President Woods then announced the Clean Cities program at Argonne would be held there on March 25. There is a \$ 15 meeting charge and reservations are required. The FVEAA request to present a program on electric car conversions was not granted.

The lack of an opportunity to present a program effectively killed interest by the FVEAA. Four members who had agreed to provide electric cars for display withdrew their offer to participate.

There was a discussion of the two issues raised by Member Shafer: 1) What is the proper definition of what an electric car is, and 2) The IRS tax rebate for electric cars. The members accepted Bill's offer to further investigate both matters and solicit comments from other EV groups.

Ed Meyer's Curtis 120-volt controller used on the Nissan was bought by Member Rod Bohlmann who will use it for a voltage upgrade of his Escort, "Sparky". Ed has a new Curtis Model 1231-8601 unit rated at 144 volts max that will allow increasing the Nissan system voltage by 24 volts.

Member Bohlmann asked for a discussion of techniques for field weakening in connection with upgrading "Sparky". The consensus was a simple chopper circuit that would deliver 24 volts to the motor field and using a potentiometer manually adjust the field voltage when higher speeds were desired.

The meeting was adjourned at 10:26 PM.

From notes taken by Bill Shafer.

# RECENT ARTICLES ABOUT ELECTRIC VEHICLES

Lee Iacocca Rides Again. AARP Bulletin, February 19, 1999, Page 18. Although he is a self-admitted lousy bike rider, Lee Iacocca remains a superb pitchman. He noted, "After you retire you don't run out of ideas." He equates his electric bicycle with the creation of the hugely successful Ford Mustang when he was with that company. He acknowledges that the vehicles he produced as a "car man" were big polluters. His electric bikes are produced in Taiwan. As the reporter was leaving Lee asked, "Do you have a bike? We'll get you one" -ever the salesman.

Iacocca's Crash Course In Retirement Investing. Forbes, March 1, Page 54. Lee Iacocca has been one of the less fortunate in business investing since he retired from Chrysler. He has put money into the following electric vehicle ventures:

| Company                      | Business              | Investment                  | Status                             |  |  |
|------------------------------|-----------------------|-----------------------------|------------------------------------|--|--|
| EV Global Motors             | Electric<br>Bicycles  | \$ 600,000<br>+Raised \$ 6M | No sales yet. Delisted from NASDAQ |  |  |
| Unique Mobility              | EV Motors             | \$ 3.3 M                    | Bought @ \$6, recent quote \$5     |  |  |
| Energy Conversion<br>Devices | Advanced<br>Batteries | 218,000<br>shares           | Negative return of 40%             |  |  |

The article also lists seven other Iacocca unsuccessful investments since he retired...

Diesel-electric bus near test phase. Chicago Tribune 2/29/98, Section 3. GM is developing a diesel-electric bus that will be tested in New York City. The wheels are driven by an electric motor. On board is a half-sized diesel engine-generator that will run at a steady level to keep the on-board batteries charged. The system is expected in increase mileage and significantly reduce pollution. (Editor's note - this is not an electric bus.)

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Zip-A-Dee-Do-Dah. Chicago Tribune 10/18/98, Page 5. Zappy, Zip, and Stealth are coming to the sidewalks. These are electrically-powered versions of the familiar scooter. They are likely to make heads turn. The travel at about 12 mph. The ZAPPY sells for \$ 649, the ZIP that includes a foldable bicycle-type seat for \$ 895, and the STEALTH for \$ 700. The vehicles weigh less than 50 pounds, fold like collapsible luggage, and have a range of 10-20 miles. The Taiwanese government has ordered production of 50,000 of these, hoping to reduce the pollution from the widely-used motorbikes. Police are baffled by the device; its not a motorcycle, its not a mini-bike, its not a moped. It doesn't mix well with pedestrians on the sidewalk or with cars on the street. Their small wheels are challenged by street or sidewalks irregularities.

### FROM OTHER EV NEWSLETTERS

EEVC, the Eastern Group, in their February Newsletter had an informative and entertaining article by Member Peter Gurendamann about his converted Escort. His EV interest was initiated while he was in high school by a 1973 article in *Popular Science*. He was encouraged by GM's 1979 announcement they would offer an electric car by 1985. Conversion started in 1998 when he bought a junkyard Escort. The engine components were removed and returned to the yard. The conversion was done in the parking lot of his apartment. All material was delivered to the worksite by bicycle. The process required about two months.

The issue also contains Part V of the Cinnamonsen High School car that competed in the Tour de Sol. An interesting part is about the challenges of administrative red tape.

The January issue of EV News had an article about the Ovonic NiMH battery. Battery costs are coming down from an initial \$3000/kwh and today's \$2000 to an estimated \$1200/kwh as manufacturing moves from prototype to pilot production volume. The ultimate objective a cost of \$300/kwh. Solectria is also marching in the price reduction parade, lowering the sticker price for its FORCE to \$25,700, a 25 % reduction for last year's level. They have delivered about 230 of these cars so far. Aerovironment has run a Chevy S-10 777 miles in 24 hours using its PosiCharge fast recharging. The 60kw unit has a \$60,000 price tag.

Technical advances were discussed at the NAVEI 98 meeting. AC motors are used by Ford, GM, and Daimler-Chrysler electric vehicles. Toyota, Honda and Nissan use brushless DC motors (BLDC) that have simpler electronics. Hybrids usually use three-phase brushless motors that can also function as an engine starter.

The issue also notes that EPRI estimates a 4000 vehicle market for electric buses in the next 5 years. Freedonia, an industrial consulting group, forecasts few EVs will be sold outside of California. Battery Council International notes that in 1996 lead acid batteries had a 96.5% recycling rate, the highest for any consumer product.

The Clean Communities February newsletter notes that there are about 600 EVs and 150 charging locations in Los Angeles County. They also state that Capstone Turbines will be used on hybrid busses to be tested in Chattanooga.

The March Newsletter reports that San Francisco's BART used 40 vehicles made by PIVCO in its Station Car Test. The vehicles accumulated 150,000 miles of use.

EV Circuit from Ottawa in their Jan-Feb Newsletter noted their members own nineteen electric cars, four electric boats, and several electric bicycles.

VEVA, the Vancouver Group in their February Newsletter reported that Ballard has secured a contract to furnish their fuel cells to Nissan who will use the apparatus in their development of future vehicles.

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| NAME                 | AREA       | PHONE FAX              |                  | E-MAIL    |  |
|----------------------|------------|------------------------|------------------|-----------|--|
| STREET               |            | TOWN                   | sT               | ZIP       | SUBZP                                    |
| David B Aarvold      | 815        | 758-3412               |                  |           |  |
| 915 Oak Street       |            |                        |                  |           | -3470                                    |
| Joanne Ashdown       |            |                        |                  |           | r<br>T                                   |
| 6229 Springside      |            | Downers Gro            | ve IL            | 60516     | -1775                                    |
| Vaughn Baker         | 219        | 931-3470               |                  |           |  |
| 1450 Summer Str      | eet        | Hammond                | IN               | 46320     |  |
| Dr Rodney Bohlmann   | 630        | 851-6813               | rjb@vu-alı       | umni.elfv | verks.com                                |
| 1212 Lenhertz C      | ircle      | Aurora                 | IL               | 60505     | -2329                                    |
| Alfred Brinkmeyer    | 630        | 968-7052               |                  |           | 440-                                     |
| 4323 Devon Ave.      | 015        | Lisle                  | IL               | 60532     | -1137                                    |
| Larry Claypool       |            |                        |                  |           |  |
| Kenneth Cobler       | е в<br>015 | Frankfort              | 1Li              | 60423     |  |
| 9943 Drury Lane      |            |                        |                  |           |  |
| Dale Corel           |            |                        |                  |           | 000                                      |
|                      |            | Elk Grove V            |                  |           |  |
| Frank Delmonico      |            |                        | 111.             | 00001     | -3433                                    |
|                      |            | Berkley                | TT.              | 60163     |  |
| John Emde            | 630        | 968-2962 447-46        | 73 emdel@junc    | .com      |  |
| 6542 Fairmount       | Avenue     | Downers Gro            | ve IL            | 60516     | -2919                                    |
| John J Enhorning     | 616        | 843-3093               | •                |           |  |
| PO Box 29-3956 S     | Stiles     | Rd. Ludington          | MI               | 49431     | -0029                                    |
| Len Fisher           | 614        | 764-9733 764-58        | 75 105546.217    | @compuse  | rve.com                                  |
| 6351 Amiston Dr      |            |                        | ОН               | 43017     | -1917                                    |
| William T Forde      | 206        | 337-4179               |                  |           |  |
| 12231 44th Drive     | e SE       | Everett                | WA               | 98208     | 9101                                     |
| Rich Gloff           |            |                        |                  |           |  |
| 270 West Grantle     |            |                        | IL               |           |  |
| Jon Halblieb         | 815        |                        |                  |           | r en |
| 27 West 115th        | 015        | Lemont                 | IL               | 60439     |  |
| Hendley Hall         |            | 877-7290<br>Loves Park | **               | 01111     | m 4 0 0                                  |
| George Hamstra       |            |                        |                  |           |  |
| 2 Buckskin           | 013        | Lemont                 | hostage@cn<br>IL |           | 11.us                                    |
| Everett Harris       | 630        | 232-0344               | 111              | 60439     |  |
| 214 Nebraska Str     |            |                        | ${f IL}$         | 60134     | _2824                                    |
| William H. Hendricks |            |                        |                  | 00104     | -2024                                    |
|                      |            | Oak Forest             | IL               | 60452     |  |
| Thomas Kaminski      |            |                        |                  |           | •  |
| 4828 West Warwic     | ek         | Chicago                | IL               | 60641     | -3509                                    |
| James E Ketelle      | 715        | 887-3912               |                  |           |  |
|                      |            | Port Edwards           | s WI             | 54469     | -1021                                    |
| Fred Kitch           |            |                        |                  |           |  |
| 171 East Burling     | ton        | Riverside              | IL               | 60546     | -6125                                    |

| NAME<br>STREET   | AREA           | PHONE<br>TOWN    | FAX             | ST                 | E-MAIL<br>ZIP      | SUBZP      |
|--|----------------|------------------|-----------------|--------------------|--------------------|------------|
| Karl Klein   | 815            | 588-0267         |                 | electromo          | tion@aol.          | com        |
| 36257 North W  | ildwood        | Lake             | Villa           | IL                 | 60046              |            |
| O-man Wan inovich  | 630            | 834-0370         |                 |                    |                    |            |
| 17 W 381 Eise  | nhower F       | toad oarbi       | ook Terre       | ace IL             | 60181              |            |
| Steve Leisner  | 414            | 634-4470         |                 | WI                 | 53405              |            |
| 1617 Quincy A  | venue          | Racin            | ie              | W.T.               | 55405              |            |
| Robert Loescher  | 414            | 691-3841         | .l              | WI                 | 53072              |            |
| N 26 W 27192,  | Hwy SS         | 963-5227         | ikee            | ***                | 000.2              |            |
| Michael Magiera  | 311            | Sharr            | sville          | IN                 | 46068              | -0198      |
| PO Box 198   |                | 759-0326         | 75 11110        | <del></del> -      |                    |            |
| Edward E Meyer<br>216 Sunshine                                       |                |                  | gbrook          | $_{ m IL}$         |                    |            |
| Dana Mock  | 708            | 759-8033         |                 |                    | 54@aol.com         | n          |
|  |                | ת הול ה          | ngbrook         | IL                 |                    |            |
| Rob Munroe   | 630            | 858-7066         |                 | ROBMUNSC           |                    |            |
| 22 W 388 Glen  | Valley         | Dr. Glen         | Ellyn           | IL                 | 60137              |            |
| Kenneth Myers  | 630            | 584-6057         |                 | т.                 | 60174              | -2543      |
| 1303 Indiana   | Street         |                  | narles          | IL                 | 60114              | -2343      |
| Richard Ness   | 773            | 889-7757         |                 | IL                 | 60639              |            |
| 2129 North Na  | raganse        | tt Chica         | ago<br>250 4125 | TD                 | 00000              |            |
| L J Obiala   | 920            | 867-3445         | 406-4140        | WI                 | 54983              | -0369      |
| PO Box 369   | 620            | weya.<br>4050227 | ıwega           | ***                | 01000              |            |
| Scott Ortiz<br>332 North Mar   | + ha S+ m      | eet Lomba        | ard             | IL                 | 60148              |            |
| Raymond Oviyach  | 708            | 560-0715         | ~1 ~            | rovivach           | @aol.com           |            |
| 16800 Laramie  | Avenue         | Oak l            | Forest          | $_{ m IL}$         | 60452              |            |
|  |                |                  |                 | jpaulsen           | @lucent.co         | om         |
| 848 62nd Stre  | eet            | La G             | range           | $_{ m IL}$         | 60525              | -3844      |
| Paul A Polster   | 847            | 740-1048         |                 |                    | 00070              | 0145       |
| Jim Paulsen 848 62nd Stre Paul A Polster 529 N. Ravine Bob Randerson | Drive          | Round            | d Lake Pa       | rk lL              | 60073              | 3145       |
| Bob Randerson  | 708            | 352-3887         |                 | **                 | 60525              | -2236      |
| Zo South Spri  | 1115           | Dati             | ange            |                    |                    | -2230      |
| Ben Schmid   | 219            | 924-7951         |                 | DBS18@ao<br>IN     | 46321              | -4203      |
| 1315 Fitzgera  | ald Driv       | e Muns           | ter             |                    | hill@com           | puserve.co |
| William H Shafer   |                | 771-5202         | r Forest        | TI                 | 60305              | -1208      |
| 1522 Clinton   | PIACE          | 588-0267         | i folese        | scroof@a           |                    |            |
| John Spooner<br>101 Beverly I  | ane            | New              | Lenox           | IL                 |                    |            |
| Vladimir Vana  | 708            | 246-3046         | 2011011         |                    |                    |            |
| 5558 Franklin  |                |                  | ange            |                    |                    | -3347      |
| John Viehweg   | 815            | 588-0267         | _               | jvoehweg           | @ahhgo.co          | m.         |
| 838 Kingston   |                | Nape             | rville          | IL                 | 60540              |            |
| Dan Wier   | 630            | 365-200Ô         |                 |                    | 00110              | 0157       |
| PO Box 157   |                | Elbu             | rn              | II                 | 60119              | -0157      |
| Alan V Wilson  | 608            | 362-2956         |                 | 1.17               | 50511              | -4549      |
| 917 White Ave  |                | Belo             | it              | WI<br>Constitution |                    |            |
| Kenneth Woods  | 630            | 420-1118         | 42U-1517        | Casazeus<br>II     | 2@aol.com<br>60564 | -8956      |
| 1264 Harvest   |                | Nape<br>588-0267 | rville          | kevzulu@           |                    | 0000       |
| Kevin Zak<br>15440 West 10   | 815<br>815 Stn |                  | nort            | II                 |                    |            |
| 1044U West I   | oora ser       | eet nock         | POLO            |                    |                    |            |