

FVEAA NEWSLETTER FOR NOVEMBER 2003

An Independent Not-For-Profit Corporation associated with the National Electric Auto Association

NEXT MEETING: Friday, November 21st at 8:00 PM in the Triton INDUSTRIAL CAREERS BUILDING, (East Campus), Room 108

DISCUSSION TOPICS: 1. Election for 2004. 2. Battery heater experience reports. 3. EV conversion basics

MEMBERSHIP INFORMATION

Any person interested in electric cars is welcome to join the Fox Valley Electric Auto Association. The cost for a full year's dues is \$ 20 which will entitle members to receive our monthly Newsletter that contains useful information about electric car conversions, construction, news, policies, and events. Membership is not required to attend our meetings.

To obtain information about the FVEAA you may:
Visit the FVEAA Website at www.fveaa.org

Or contact FVEAA President William H. Shafer
1522 Clinton Place
River Forest, IL 60305-1208
(708) 771-5202
E-Mail Assessorbill@cs.com

PRESEZ

November is election time for FVEAA officers for next year. The nominating committee recommends the following persons:

President – Bill Shafer
Vice President & Director – Steve Grushas
Secretary – Tim Moore
Treasurer – Dale Corel
Directors - :John Emde, Rob Glowacki, and Pater Hartel

The FVEAA continues to grow. We now have 75 paid members. The Rockford area now has nine members with recent additions. I hope many will be renewing their membership for next year.

The renewal form is included in this newsletter. It contains one change. The Board decided to reduce the membership fee to \$ 15 for persons electing to receive only the e-mail version of our monthly newsletter.

Three members have installed battery heaters. We will hear from Tim Moore, Todd Dore, and Ted Lowe about their initial results.

With many new members contemplating a project it is once again time to review the basics of converting a car to electric power. We recommend reading Bob Brandt's book, "Build your Own Electric Car" for general information and Mike Brown's book, "Convert It!" for the specifics. This topic will supplement these documents with the experience FVEAA members gained during their conversion projects.

BILL

MINUTES OF THE OCTOBER 17 MEETING

The meeting at Triton was called to order by President Shafer at 8:10 PM. Eighteen persons attended. Four were here for the first time. Five persons joined the FVEAA for 2004; Vincent Potenzzone from Barrington, Christopher Sharp from Yorkville, Robert Gascoyne from Roselle, Bob and Gerald Haney from Machnesny Park (Rockford). Four cars were in the garage for opportunity charging during the meeting. Minutes and the treasurers report that \$ 3,900 is in the checking account and \$2761 in savings was accepted. Bill also noted the Board has approved one change in the 2003-4 dues structure. Members electing to receive only an e-mail copy of the monthly newsletter will have their dues reduced from \$ 20 to \$ 15.

Bill started the meeting with a discussion of cold temperature effects on batteries. Basically at -40° batteries will not work. Zero to 32° is the area of concern. At 70° a lead-acid battery has 98% of its power available. Optimal heating required for each battery is 20-30 watts. This is based on the long experience that the Ottawa EV Group has. It will cause loss-of-life if batteries are overheated.

Tim Moore showed a battery pad for six batteries. Bill cringed at the \$80 price. Due to its rating Bill advised to use it carefully. A lively discussion ensued with various methods and suggestions proposed John Emde suggested that an AC current be used for battery heating when the battery is not charging. **AC & DC don't mix!** Rich Manzi showed an electrical heating tape usually used for deicing house gutters. It could be installed under an aluminum plate to distribute the heat. Ray DeBoth discussed the technology used for car mirrors and waterbed heaters. Bill closed the discussion by saying to be careful when applying the heat.

Tim Moore asked why it takes twice as much time to recharge at work as it does at home, many suggestions. Many suggestions were offered - gauge of wire, length of the run to the outlet and differences of outlet voltages. The at-work plug voltage is 8 volts below his at-home outlet.

Todd Dore talked about his experience parking "downtown" in Chicago's Humbolt Park Green Center. Nice opportunity charging facility in a poor location. Best used during the day. He feels uncomfortable with the neighborhood at night.

Bill brought up the possibility of the club doing a conversion on Rob Glowacki's car (1999 Ford Escort that will replace his rusted-out Escort). Several members said they would be interested. Bill said he would discuss the idea with Triton, possibly as a "Continuing Education Course".

Bill also brought up the idea of possibly changing the name to The Chicagoland Electric Vehicle Association (CEVA) as the successor the FVEAA. There was no interest in the idea.

At 9:30 the meeting was recessed to the garage for conversation and doughnuts + coffee. It was adjourned at 10:45 PM

Submitted by
Secretary Tim Moore

FROM OTHER EV NEWSLETTERS AND ARTICLES AFFECTING ELECTRIC VEHICLES

The October Newsletter from the Denver group reported on a proposal by the Southern California group to test an electric vehicle using Lithium-polymer batteries. Calculations show that it could have a 300 mile range with a 150 kWh battery system. Battery lifetime projection is of **600,000 miles!** An alternative would have a 100 kWh drive train, a 150-mile range, and a 400,000 miles battery life. The concept can be discussed with the originator, Norm Smith, on his website normsmith@hotmail.com.

The issue reports the *T-zero* experimental vehicle built Alan Ciccone, the developer of the AC drive system for GM's EV1, performed well at the Bidenbum Challenge in a Sonoma CA track. It uses Lithium Ion batteries. The vehicle was graded better than the other 49 vehicles competing. The T-ZERO has a 300-mile range and 0-60 time of 3.6 seconds. The purpose built car weighs less than 2000 pounds.

The issue also reports the *Buckeye Bullet* built by Ohio University to challenge the 245 miles per hour speed record for EVs attained 262 mph in preliminary runs.

A DEVC member has a converted motorcycle that has a 34-mile range. More information about the vehicle is on website <http://www.megawattmotorwerks.com>

The October Newsletter from the Eastern Group also contains a report on the Bidenbaum 2003 challenge. The T-ZERO was in the prototype classification. The vehicle has 200 horsepower AC motor and 6200, Li-ION batteries; each weighing 28 grams and slightly larger than the familiar AA-size batteries. These replaced the former battery, 28 Optima Yellow Tops.

The military is testing an electric conversion of a Humvee. It uses Unique Mobility permanent magnet motors. The advantage – silence.

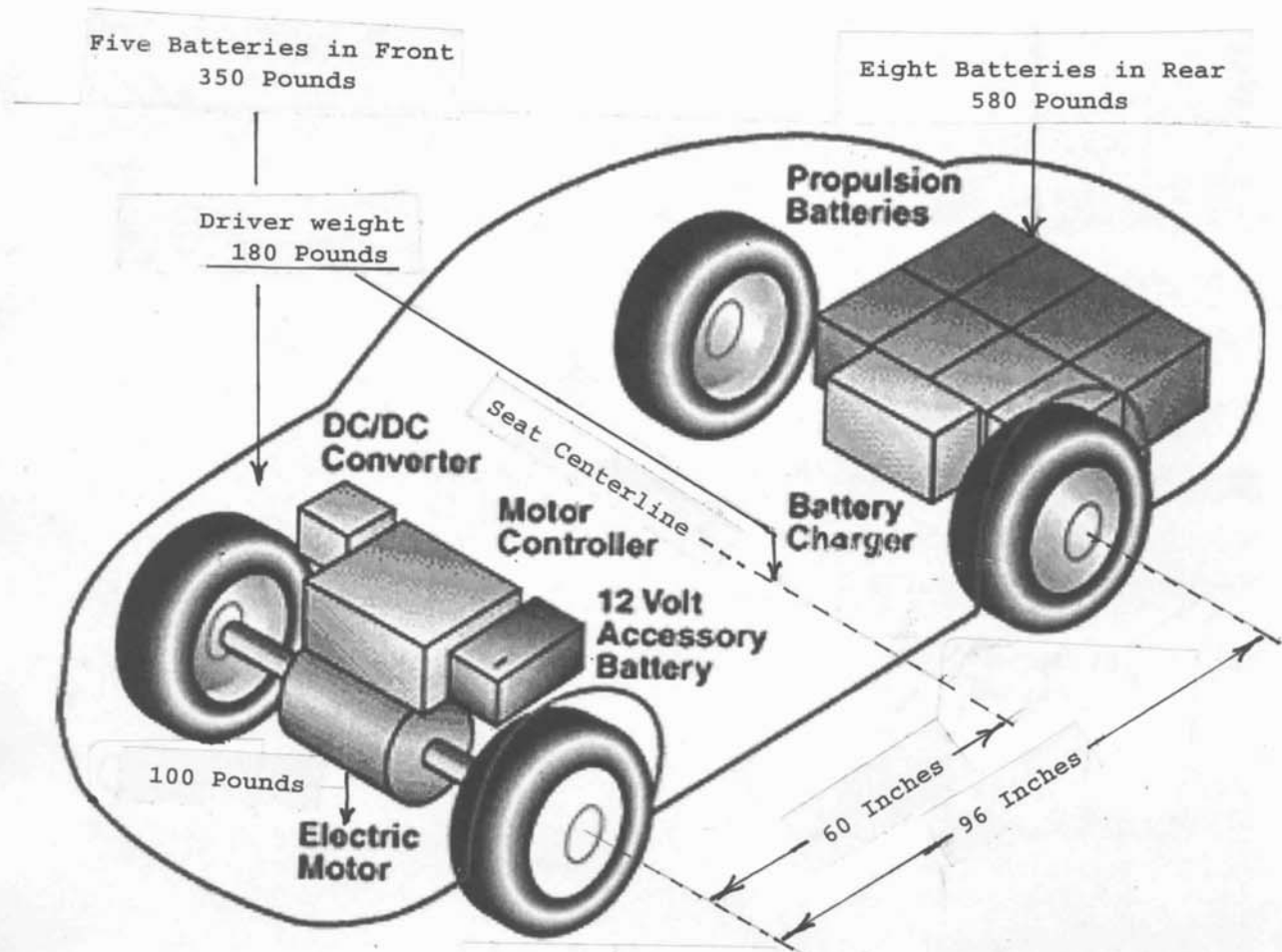
The October 27th issue of *Business Week* has an article about hybrids on Page 44. The caption reads, "Detroit is missing the boat". It notes that about every ten years a new segment of the auto market appears. The Japanese introduced small cars in the 1980's. In the 1990's it was the SUV. The next segment appears will be hybrids. Last year 38,000 hybrids were sold. Estimates of future annual sales are about ½ million. Detroit has lost 20% of the market share in twenty years.

Once again Detroit is far behind. GM seems to be enamored with pickups and SUV's that have produced profits for the past few years. They are apparently conceding hybrids to Japanese. Instead, they are now spending \$100-million a year on fuel cell cars to be introduced in 5-10 years. The experimental Hy-wire vehicle has an estimated future price tag of \$50,000. (Editor's note – I assume this includes GM's pension payments of \$3,000 per vehicle. This is a tremendous handicap for GM.)

The last page of this newsletter is an application for FVEAA membership for next year. Please note the change in dues schedule. Your renewal check should be sent to Treasurer Corel.

Paul Harris said he will bring his electric conversion to the November meeting for inspection. It is the most-recent project completion by a FVEAA member. Paul commissioned John Emde to do the work. Paul will be living in Florida during the winter, as is his custom. He will store the car until he returns.

FVEAA November 6 Meeting
 RX-7 MAJOR COMPONENT PLACEMENT



CAR WEIGHTS-With Driver

<u>Front 1700 pounds</u>		<u>Rear 1700 pounds</u>	
Left Front	698 pounds	Left Rear	843 pounds
Right Front	648 "	Right Rear	868 "
Center of gravity - 53 inches behind front axle			

Adapted from sketch in the Electric Auto Association's 2003 Rally Edition
 November 6 2003

FVEAA MEMBERSHIP APPLICATION FOR 2004

Please Print

NAME _____ DATE _____

ADDRESS _____ CITY _____ STATE _____

ZIP _____ SUBZIP _____

PHONE (____) _____ FAX (____) _____

E-MAIL _____

What is your principal interest in electric cars ?

General I would like to convert a car
 Energy supply concerns Environmental improvement
 I now own an electric car. Year acquired _____ Make _____ Year _____

Membership Options (Check One)

1. Send the monthly newsletter by mail \$ 20.
 2. Send the monthly newsletter by e-mail. \$ 15.

List below your comments, questions, or suggestions.

Our fiscal year begins in November. Dues for new members joining after that are adjusted according to the following:

Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
\$ 20	19	18	17	16	14	12	10	8	6	4	2

Make your check payable to the FVEAA and mail to
Dale Corel, FVEAA Treasurer
595 Gateshead North
Elk Grove Village, IL 60007-3433