FOX VALLEY ELECTRIC AUTO ASSOCIATION NEWSLETTER FOR NOVEMBER, 2001

NEXT MEETING: <u>Saturday</u>, November 17 at 10 AM in the Triton Industrial Careers Building, (East Campus), Room 108

DISCUSSION TOPICS: 1. Triton Project items. 2. Battery replacement options. 3. Membership renewals for 2002. 4. Proposed officers for 2002. 5. Member's meeting day preference.

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 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. Dues for NEW members joining in November will be \$ 20.

To obtain info about the FVEAA you may contact either Past-President Ken Woods or President Shafer

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PRESEZ

We have a full meeting agenda for our November meeting. The first discussion item will be a summary of the Triton Ranger Project. On October 27th we drove the car for the first time and found the automatic transmission did not shift out of second gear. There was a clean-up working session on November 3.

The second item will be about the article in the last Newsletter about the battery replacement options. Comments by e-mail or letter were invited. The replies and choices will be discussed, and I will reveal my choice.

November is the month for renewal of FVEAA memberships. An application form is included in this Newsletter. It is important that your \$ 20 renewal check include this form. The form is used to prepare a new roster and e-mail newsletter address book effective January 1, 2002.

The present and past FVEAA presidents make up the nominating committee. Their candidates will be announced at the meeting and other nominations for officers accepted. The election will be held at the next meeting.

The third Friday evening of each month was original chosen for our monthly meeting. This avoided a conflict that FVEAA founders John Stockberger and Ken Meyers would have had because they were Ham Radio club members that met on the third Saturday. Our meeting day was changed this year to Saturday morning with the beginning of the Triton Project. Since May 19th we have held a FVEAA one-hour meeting at 9AM on the third Friday, one hour before the beginning of that activity. We felt no one would enjoy attending a meeting on Friday night and a work session the following morning. We will discuss and establish a time for future monthly meetings. BILL

News about members

Past President Ken Woods had a 4-way heart bypass operation last month. He is recovering at home. He tells me it will be a slow process. I believe he would appreciate an e-mail greeting. His address is CasaZeus2@aol.com.

The address reflects Ken's interest in solar energy as applied to his architectural profession. CasaZeus2 is the energy-efficient home Ken designed and built. Gas for water heating and building heat is burned in an outside boiler and pumped to a heat exchanger inside the house. This eliminates any combustion emissions inside a very tight house. His usual annual gas bill is \$ 100. Last year it went up to \$ 200.

Past President Dana Mock died on October 1st. A Memorial Celebration was held at his home on November 10th as he requested. During his Presidency Dana exhibited his talent as an effective executive. He utilized his Board of Directors well, holding an officer's meting two weeks before the regular monthly meeting. Dana was a talented research chemist before he retired. Three years before he died, he suffered a stroke that impaired his ability to work on his Dodge "007" car conversion and work on fuel cells. The donor car was a precursor to the Omni.

This Newsletter includes information about the Warfield *WarP* line of series-wound DC motors for electric vehicles. John is a distributor for this product. He paid for preparing and extra postage for mailing with the newsletter. The document provides useful information about these motors.

Member Kevin Zak described the last drag race of this season by Net Gain Technologies dragster, *Bad Amplitude*. The vehicle was equipped with two motors on the same shaft and a 1000-amp controller for each. The tires were "smoked" in the water pit prior to going to the starting line. When the green light appeared the driver applied full accelerator. The vehicle spun the tires, lifted the front end and smoked the controllers. It was a spectacular finish to the season. This winter Net Gain will be rebuilding the vehicle for next spring's races. Perhaps Kevin will be able to show the video of the event at a future FVEAA meeting.

I checked with the Illinois EPA for applications giving rebates to converters of vehicles to electric power. Thus far they have only the Triton application for the Ford Ranger under review. Where are the rest of you? New member Tim Moore reported he found a web page for rebates on the Illinois EPA website.

From other EV Newsletters and articles affecting EVs

Volume 8 # 3 of *Electrifying Times* starts off this month's reviews because I didn't have space for it in the October Newsletter. The issue has several articles of particular interest to Editor Bruce Meland about "free electricity" techniques. There are articles about an Australian device, a rotating transformer phase inverter, a discussion about energy extraction from neutrinos, a Swiss device, government suppression of free-energy device information, and other articles related to this subject.

On a less-speculative level, there are articles about the US-Canada free trade pact that affects the daily 1 million-barrel production of Canadian oil, New Hampshire's decision to quit using MTBE gasoline additive. There was an account of the MIT solar car that won the 1150-mile race from MIT to Colorado race using newly-developed Champion bearings for hybrid cars.

Electyfying Times, Continued

There are also articles about the California Electricity crisis of last year, GM's disagreement with the California Air Resources Board rules for Zero Emission Vehicles (ZEV), and the Arizona alternative-fuel subsidy fiasco.

The *Chicago Tribune* (*CT*) **August 12th issue in the Transportation Section** had two articles about fuel-cells cars worth noting. The page 1 story discussed the reasons why fuel cell cars will be cleaner than petroleum and more convenient than electric cars. Fueling stations dispensing hydrogen will have to be built. There are only 10 locations presently in the world. It will be an estimated 10 years until fuel cells cars are developed for commercial sale. The second article described how a fuel cell car could deliver electrical energy while the vehicle is parked at home.

The August 27 CT reported the 80-mpg car work that has been underway for 8 years will not meet its objective. The Government-Industry Partnership (PNGV) has spent \$ 814-million of federal money and \$ 980-million of private funds in the effort. The experimental cars use a combination of diesel engines and electric motors, lightweight plastics, aerodynamic shapes and achieved 70 mpg. The vehicles are too expensive to be commercially successful and don't meet present emission standards.

In the same issue an article reported on a National Academy of Science conclusion that cars can be made more efficient but advised against raising federal mileage standards. They did note however that SUV's, presently classed as light-trucks, and should be required to meet passenger car standards.

Consumer Reports says the 1998 VW Beetle will carry 80 pounds more of cargo than a 1999 Lexus RX 300 SUV. (Story in the September 17 CT)

NY Commuters enter lottery to lease EVs. CT 11/04. Ford TH!NK Division will provide 100 of their EVs to New York's Transit Authority for leasing. The lease cost for each car is \$199/month. For this the lessee will receive a \$ 21/month discount on their train fares, furnished free a plug-in facility at the train station, and includes a \$ 2000 charger installation at their home. The TH!NK is currently be sold in Scandinavian countries for \$ 20,000.

Current Events, the National EV Association in their Sept-Oct issue had an article about Plug-In Hybrids. This type of vehicle built by the U of C in Davis CA won the 2001 future truck competition. The group has been building plug-in hybrids for nine years. A GM Suburban was the donor vehicle. It was fitted with a 1.9-liter Saturn engine, a 29 kWh Ovionic NiMH battery and a 75 kW Unique Mobility DC brushless motor. Its tested energy economy was 84% better than the base vehicle. Emission were below California ZEV requirements.

The issue had Mike Brown's article on motor-transmission assembly from his book Convert It.

The issue had photos taken at the Hagerstown, MD race, the first NEDRA event on the East Coast. *Bad Amplitude* had the best time of 12.046 seconds for the ¹/₄ mile, followed by a converted Toyota MR-2 at 18.77 seconds.

There was a story about a Neighborhood EV, the *GIZMO*, built in Eugene Oregon. It is a 3-wheel, 340-pound vehicle priced at \$ 8650. It has a 45 mph top speed and a 45-mile range.

From other EV Newsletters and articles affecting EVs - Concluded

DEVC, the Denver Club, in their October Newsletter, reported that a Japanese firm, Nikissa, reports a breakthrough on hydrogen storage using nanotubes. These are now ten times the cost of gold but can be mass-produced for \$ 0.84 per gram. Nanotube storage could provide enough hydrogen for a fuel-cell vehicle to equal the range of a gasoline-fueled car. (Wonder how they store and retrieve the gas?)

The issue also has an article on battery management that originally appeared in Batteries International in July 2001. An Oslo firm has been working on the problem for the past 11 years. It has developed a single-wire system for monitoring individual cells. Up to 25 units (cells) can be connected to each single wire to check voltage, check acid level, and other parameters. A voltage oscillation is usually an indication of a growing fault. Experience with submarine batteries has shown that a temperature difference between cells of +8 degrees C can decrease battery life by 50%.

The October VEVA Newsletter from Vancouver contained local news items about the group. It also had an article and photo of a restored Interurban transit car the runs from the Downtown Historic Railway Museum to Granville Island.

Miscelleanous material purchased for the Triton Project

Shown below is a table that summarizes the miscellaneous material purchased for the Triton *Ranger Project*. It is not often that an individual keeps all the receipts for this stuff. Miscelleanous material accounted for 6% of the Project cost.

FVEAA MEMBERSHIP APPLICATION

FOR 2001 – 2002

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