

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

**Address Correction Requested**

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**NEXT MEETING: FRIDAY March 17 at 7:30 PM at Triton, INDUSTRIAL CAREERS  
BUILDING (EAST CAMPUS) ROOM 139**

**DISCUSSION TOPICS: 1. May 6<sup>th</sup> Workshop 2. Member's projects 3. EAA Membership &  
Establishing a Web Presence.**

**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 April will be \$ 14.

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

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**March 2000 PRESSEZ**

St. Patrick's Day Greetings.

We were "snowed out" of our February meeting. Several members called asking if there was going to be a meeting. They agreed that it should be canceled. I phoned the persons attending last month's meeting to advise them of the cancellation. I failed to reach John Emde and Kevin Zak who had their own meeting at Triton.

There are a few loose ends remaining with our May 6<sup>th</sup> Workshop. Ken Woods is working hard to publicize the event. We need to finalize the persons who will present topics.

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

We will start a discussion about becoming a Chapter of the national EAA an establishing a web presence.

BILL

## FEBRUARY MEETING MINUTES

Topics scheduled for February have been recycled to the March 17<sup>th</sup> meeting. Snow started falling Friday morning, eventually accumulating eleven inches. The February meeting was cancelled after phone conversations with members who called inquiring if there would be a meeting. I didn't want anyone to be stuck in a snow bank at 11 PM.

BILL

## INCENTIVES

ELVN [The Internet Electric Vehicle List News. For Public EV informational purposes. Contact publication for reprint rights.]{EVangel}

Ford Sales show more companies are taking advantage of incentives for alternative fuel vehicles (AFV)  
02/20/21 PR Newswire (Copyright (c) 2000, PR Newswire)

COSTA MESA, Calif., Feb. 21 More companies are turning to alternative fuel vehicles in response to increased regulatory pressure, raising environmental concerns and to take advantage of new state and federal incentives. The growing interest from private fleets is, in part, due to the increasing availability of incentives, rebates and tax credits from the federal government as well as states, municipalities and even fuel providers. A sample of organizations providing incentives include:

U.S. Federal Tax Deduction: \$2,000- \$50,000 available for the purchase of qualified clean vehicles.

Arizona: Up to \$2,000 incentive for the purchase of AFVs.

California: \$5,000 incentive towards qualified zero emission vehicles, \$3,000 toward ULEV, \$200-\$800 for AFVs in Sacramento.

Colorado: Incremental rebate based as a percentage of the AFV option cost; 50% for low emission vehicles (LEV), 75% for ultra-LEV, 85% for super ultra-LEV and zero emission vehicles ZEV).

Georgia: \$1,500 tax credit and HOV lane access for AFVs.

**Illinois: Up to \$ 4000 rebate per vehicle for 80% of the incremental cost for AFVs**

Massachusetts: Funding is available to state and municipal fleets to cover the incremental costs of AFVs.

Maryland: \$200-\$800 tax credit and up to \$4,000 from Clean Cities Programs to qualified buyers

New York: Tax credit for 50% of the incremental cost to purchase an electric vehicle up to \$5,000.

Oklahoma: Tax credit of 10% of the total cost for AFVs.

Pennsylvania: Tax credit for 30% of the incremental costs for AFVs.

Utah: Tax credit for 20% up to \$500 for the purchase of AFVs, and \$1,000 - \$2,300 per vehicle credit is available for ground transportation fleets from the Salt Lake City Department of Airports.

Source: Department of Energy Alternative Fuels Data Center.

## FVEAA MEMBERS RECEIVE REBATES

Three FVEAA members have received rebate checks for vehicles they purchased or converted in 1999:

Fred Kitch – \$ 4000 for his Ford Ranger purchase.

George Krajanovich - \$ 3802 for his Omni conversion

Bill Hendrickson - \$ 576 for his Suburau conversion

All have cashed their checks, but they will receive symbolic checks at an event sponsored by the *Illinois EPA and the Clean Cities Coalition* on March 16<sup>th</sup> held at Brookfield Zoo in suburban Cook County. Fred and George will have their cars on display. Bill Shafer will join them with his RX-7 conversion he completed ten years ago. An increase in license plate fees for fleet trucks in a 6-county area around Chicago provides rebate funding.

## RECENT ARTICLES ABOUT ELECTRIC VEHICLES

**Ford, Honda fueling up for alternative power.** Chicago Sun-Times, 02/10/00 (Auto Show Insert). Ford and Honda will have alternative fuel Vehicles (AFV) by 2000. Ford's full-sized hybrid was unveiled at the Detroit Show. It combines a three-phase ac drive system and internal combustion engine. Honda's FCX concept car was exhibited with a methanol fuel cell system. Also shown was the Taurus-sized Prodigy concept that may deliver 70 mpg using a diesel hybrid powertrain.

The GM hybrid entry was the Precept concept. It has a rear engine and new aerodynamic design to meet the 80-mpg target of the Partnership for New Generation of Vehicles (PNGV) joint program between US automakers and the federal government. So far \$ 930-million was spent on this program. Another \$240-million is budgeted for this year.

Honda's Insight and Toyota's Prius, both hybrids, are commercially available this year for about \$ 20,000.

(Editor's note – FVEAA Member Len Fisher has bought an Insight. He promises a user evaluation after a reasonable test period).

**Delphi testing fuel cell that runs on gasoline.** Chicago Sun-Times 12/28/99. Delphi is a subsidiary of General Motors. They are investigating a solid-oxide fuel cell developed by Global Thermolectric. The system incorporates a gasoline reformer supplied by Delphi and a fuel cell developed by Global.

**Small wonder.** Chicago Tribune 12/30/99 (Auto Section, page 1). This intriguing article is a chronicle about the British Mini, now owned by BMW. The initial car design was made in 1959 with an 848-cc engine that delivered 34 horsepower. It was the first vehicle to have a sidewise-mounted engine with front wheel drive. It was named the mini for the then-famous miniskirt. In 1995 it was named as "The Car of the Century". 1996 sold 5.2-million minis. The car presently has a 1275 cc fuel-injected engine delivering 63 horsepower, and selling for \$ 14,150 in the U. S. BMW will introduce the 2001 Mini in either Europe or Asia.

**Better idea.** Chicago Tribune 1/6/00 and Chicago Sun-Times 01/11/00. At the Detroit Auto Show, the Ford Chairman announced formation of a new group to develop a line of AFVs. It is called the TH!NK Mobility and will function along line similar to Ford's Lincoln and Mercury organizations. The original electric vehicle was developed in Norway where further development will occur. (There are currently two TH!NK vehicles: the CITY is a two-seat commuter with nicad batteries. It has a 56-mph top speed and 55 mile range; the NEIGHBOUR is a four-seater with lead-acid batteries, a top speed of 25 mph and 30-mile range. (

Editor's note – Claire Bell, the former Editor of the National EAA Current Events) recently joined Ford and went to Norway to work on TH!NK vehicles.)

**Versatile Vehicle.** A photo of GM's TRIAX, a concept car with a hybrid drive train. It drew lots of attention at the Chicago Show.

**Fuel cell bus puts Chicago in the driver's seat.** Chicago Sun-Times 12/19/99 and 01/17/00. The Chicago Transit Authority (CTA) has been testing fuel cell powered buses since March 1998. As part of the contract with Ballard, the CTA bought shares in Ballard, a move that cost the former CTA Chairman his job because of conflict-of-interest charges. The CTA paid \$ 1.8-million each for three buses that were placed in revenue service, spare parts, a hydrogen fueling station, and technical assistance from Ballard. The vehicles accelerate faster than their diesel engine counterparts, have a 200-mile range before refueling, and to the passenger the buses are the same. The big payoff is lack of combustion emissions and possible attractive purchase prices for commercial versions. The test will end in March and the CTA must decide if it wishes to continue the test at \$ 700,000/year, have the vehicles upgraded to incorporate new technology, or sell the units back to Ballard.

## RECENT ARTICLES ABOUT ELECTRIC VEHICLES – Concluded

**Electric Vehicles Get Better Batteries.** Machine Design, February 24, 2000. The US Battery Consortium, working with Saft, America, recently produced an improved NiMH battery. Each 12-volt unit incorporates a resealable vent in each cell to allow gasses to escape during equalization overcharging. It also includes a thermal-management system and restraints to prevent unit bulging during recycling.

A 30-module pack has a terminal voltage of 360 volts and stores 40kWh. The pack measures 925x2005x229 mm ( 26.5x79x9 in.) and weighs 1422 pounds. Power rating is 90 kW and max current is 350 amps for 30 seconds or 220 amps continuous. Packs are going to DaimlerChrysler for the EPIC vehicle.

## FROM OTHER EV NEWSLETTERS

**EEVC, the Eastern Group in Valley Forge,** in their February Newsletter featured the 20<sup>th</sup> Anniversary dinner held at the Boyertown auto museum. It was held despite a new snowfall of 12 inches. Many hours were spent modifying a GE Elect-Trak for snowplowing duty at the facility. They discovered that turf tires are suitable for snowplowing. Nineteen vehicles were on display for the event.

They also reported that Rome had designated Sunday, February 7<sup>th</sup> as a car-free day to dramatize the serious air pollution that vehicular traffic causes. Only taxis and buses were operating.

Electrosources in San Marcos Texas announced the successful completion of a yearlong test of five Orion hybrid buses that company produces. The vehicles have a propulsion system furnished by Lockheed-Martin. Another test of the Orion buses will take place in 2001 when New York City Transit receives the 125 they have ordered.

Italian car designer, Pininfarina, exhibited its new hybrid, the METROCUBO. This six-seat vehicle is a successor to the ETHOS that was just 3.0 meters long, 1.7 meters wide, and has a hybrid powerplant. The vehicle has no side doors.

**Future Drive**, the Argonne Lab's publication, described the hybrid vehicle developed by the University of Wisconsin-Madison as their entry in the Future Car Challenge. They were the winners in the fourth and final Challenge event held June 2-10 of last year. Their entry was called *The Aluminum Cow*. In tests it achieved 54.6 mpg. It was a parallel-connected hybrid with a Ford Europe 1.8-liter diesel engine burning Fischer-Tropsch diesel fuel, and a Solecia motor with a nicad battery pack made up of 840 Sub-C individual cells packaged in 56 18-volt strings to give a 270-volt system. The battery pack measured a mere 20x30x10 inches and weighed 110 pounds and had a rated energy storage of 2.16 kWh.. The cells were donated by Milwaukee Electric Tool where they are used for their cordless drill units.

The next challenge will involve electric trucks.

**VEVA, the Vancouver group**, in their December Newsletter lead article described investigation underway to test the Electrofuel Lithium Ion SuperPolymer battery for EV use. It is a joint investigation with the U. S. Battery Consortium. The battery is currently used in a laptop computer application. It has a volumetric energy density of over 470 Wh/Liter and an energy density of 190/Wh/kg. Additional information on this product may be obtained on the web: <http://www.electrofuel.com>