Fox Valley Electric Auto Association
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Address Correction Requested

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NEXT MEETING: **Friday, June 18 at 7:30 PM in Room K-161 at the College of DuPage, SE Corner of 22nd Street & Lambert Road in Glen Ellyn**

DISCUSSION TOPICS: **1. Dragster group activities. 2. Next Meeting Location 3. Early fall tutorial and electric car exhibit.**

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 June will be $ 10.

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

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JUNE,19[illegible] VEEPSEZ

Ken's message was not available at deadline time so I will have to again substitute for him.

The dragster group has been busy with their vehicle. Their website reports equipment problems. We expect to have a report from the group and discuss remedies.

This will be the final meeting at the College of DuPage. They have not replied to our request for a meeting with the COD Board. Ed Meyer has offered his hangar in Bolingbrook for our July meeting which we will probably accept. We need a new place beginning in August..

The departure of Honda from the EV field should again direct attention to car conversions. It is evident that hybrids, such as the *PRIUS,* will be the focus of commercial developements. For many years individuals and EV organizations were the mainstay of electric car progress. The FVEAA should put together a first-class exhibit, tutorial, and public relations effort at Triton in early September to inform the public. **BILL**

MINUTES OF MAY MEETING

The meeting at the College of DuPage was called to order at 7:39 by President Woods. Ten members and one guest attended.

There were two corrections to the minutes. The meeting date should read **May 21** and John Emde's Ford Ranger he is converting is a **1993.** Corrected minutes were approved.

Treasurer Corel's report was accepted.

The dragster group was in Colorado for the National Electric Dragrace meeting. Their vehicle was not ready for the Joliet event on May 15.

John Emde, who helped with the dragster construction, gave a report on the vehicle. It has two Kostov motors connected by a Lovejoy coupler, and two 1200-Amp T-Rex controllers that are linked. The 336-volt electrical system is furnished by Hawker Genesis batteries mounted in u-shaped fiberglass channels, called LRT. The two-speed Linco transmission is air-shifted.

Members ~~are~~ are anticipating a report by the dragster group at the June 18 meeting. For those of you having access to the Worldwide Web, information is available at http://www.ameritech.net/users/hostage/dragster.html.

President Woods exhibited a Chicago Area map on which was plotted possible meeting sites. Member Vana reported on a no-charge site available on the third Friday of each month at the Lyons Township Hall. He is a member of a flying group that meets there on the **Second Friday** and a gyrocopter group that meets there on the **Fourth Friday** of each month. The **Third Friday** is available. Vana gave President Woods information on the the contact person at Lyons Township.

There has been no response by the College of DuPage President to Ken Wood's letter requesting a discussion before the COD Board. Bob Munroe and Ken will follow up. The June 21 meeting will be the last at COD. Member Ed Meyer offered to open up his hangar in Bolingbrook for the July meeting. There was discussion but no action taken. .

Member Shafer presented two suggestions. The first is to make a VCR tape about electric cars. The FVEAA history, illustration of the steps taken to convert the Club Nissan, and the Economics of converted vehicles would be covered. He offered to have a draft script for discussion at the June meeting.

His second suggestion was an early-fall tutorial on electric car conversions. The last one the FVEAA presented was a Triton College. He proposed that the FVEAA and Illinois Solar Energy Association fund the event by a grant request to the Illinois Department of Commerce and Community Affairs. They are administrators of a fund created by a one-cent monthly charge on electricity bills for promotion of sustainable energy projects. This charge was part of the electricity deregulation bill. There is presently $4-million in the fund.

Further action was deferred.

The meeting was adjourned at 9:55.

From the notes of Bill Shafer

RECENT ARTICLES ABOUT ELECTRIC CARS

A Different Road - but. Naperville Sun 5/16/99. (From LA Times) DaimlerChrysler and others are on record saying they will begin mass-producing fuel cell vehicles by 2004. Many auto experts dismiss this as hype designed to give a "green" image and impress regulators.

Fuel cells are considered to be the favorite zero-emission vehicles to supplant the internal combustion engine. All major manufacturers have fuel cell car projects. The Ford P2000 is a 5-passenger sedan based on a stretched Contour. It weighs about 3000 pounds. DaimlerChrysler NECAR 4 is a four passenger sedan based on a Mercedes A-Class compact sedan. It weighs 3800 pounds. Both cars are not consumer-ready. The compressors produce a whiny noise for example. Fuel cell cars rely on gasoline for fuel, but today's gas won't work because it must first have the sulfur removed to avoid catalyst poisoning.

There were eight other articles about fuel cell cars this past month, probably generated by press releases from the various manufacturers.

Cheap gas isn't fueling interest in efficiency. Chicago Sun-Times 2/18/99. (From Gannett News Service) Cheap gasoline prices are making the challenge of designing fuel-efficient cars more difficult. Of the 14.1 million 1998 cars and trucks sold only 159,209 (1.1%) were models ranked in the top 10 of their respective classes according to the EPA.

Car companies have been increasingly vocal that the Government should raise gas prices and offer tax breaks for buying the clean machines to shore up the market for them. One possible reason - there seems to be a move toward regulations requiring higher fleet average mileage and to class SUV's as cars.

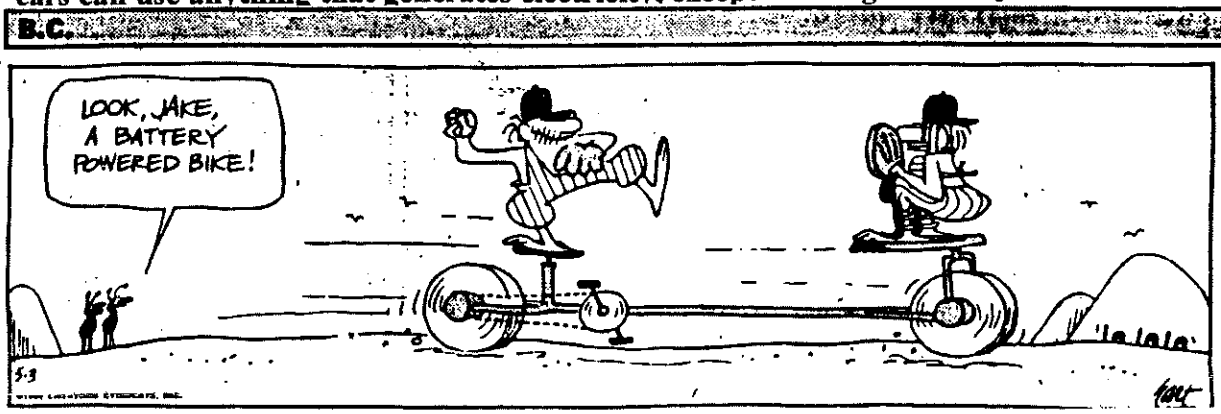
HAVE IT YOUR WAY. Popular Mechanics, May, 1999, Page 76. This is an intriguing article about replacing the body on a car rather than periodically trading in the car on a new one. Fifty years ago it was a rare car that would last 100,000 miles; now they are ready for their first tuneup at this mark. Consumer's may buy the idea that a new body could be placed on the old chassis when the design looks dated. New plastic body materials also help this concept.

You could take your old car to a shop where you could choose a new body design that replaces the one your are tired of. Buyers could customize their cars with their own selection of cupholders and other frills. Among the obstacles - crash testing for safety. The concept would be particularly applicable to electric cars that have an extended useful drivetrain life.

Promise of "Neighborhood Electric Vehicles (NEV) is Alluring" Wall Street Journal, 6/1/99, Page B2. Lightweight electric vehicles are cheaper than most cars and zippier than golf carts that are used in gated communities. The NEV offer features such as seatbelts and safety-glass windshields. Global Electric Motors of Fargo North Dakota offers an NEV called the GEM for $ 6200. The two-seat vehicle has a 25 mph top speed. Corbin Motor Company offers the "Sparrow" for $ 12,900. The Canadian Bombardier NEV was a winner in *Business Week's* top 100 designs for 1998. Walt Disney Co. in Orlando has a planned community; sprinkled with NEV parking lots. Resident's, however, mostly drive their $ 3500 golf carts.

The NEV will not mix safely with urban traffic. This limits their use to gated communities that provide off-road paths.

Editor's Note - Several issues ago, I announced that the FVEAA Newsletter would no longer have articles about hybrid cars because they are not *ELECTRIC* cars. The same applies to fuel cell cars that also rely on petroleum, methanol, or ethanol for fuel. One FVEAA original purpose was to provide information about electric cars. In my opinion, only an *ELECTRIC* car has a connection to an external electrical energy source. Electric cars can use anything that generates electricity, except rubbing an ebony rod with cat's fur.



It may be battery-powered but it isn't electric

I propose that future issues of the FVEAA Newsletter will exclude articles about both hybrids and fuel cell cars. No one in the FVEAA has a good working knowledge or experience with fuel cells. Please provide your opinion of this decision.
BILL

FROM OTHER ELECTRIC VEHICLE NEWSLETTERS

Genesee Region Clean Communities in their June Newsletter are asking for donations toward replacing the five-year old battery pack in their Shelby Cobra replica used extensively for electric vehicle demonstrations. New batteries will cost $ 1000, but they would like to upgrade the pack with a set of higher-capacity units that will cost $ 2500.

They also note that in March, gasoline prices in California went up 42%, from $ 1.10 to $ 1.58 per gallon. CA requires reformulated gasoline that increases costs.

The Argonne Publication, Future Drive, in their Summer issue had articles about the Virginia Tech design team work on a series hybrid using hydrogen as a fuel. Thirteen universities had entries, all hybrid-electric in the Future Car Challenge held June 2-10 in Auburn Hills, MI.

VEVA, the Vancouver group, in their May Newsletter issue had 35 electric vehicles for their *Ride Electric Vehicles* show on June fifth. The event included an Electrathon competition.

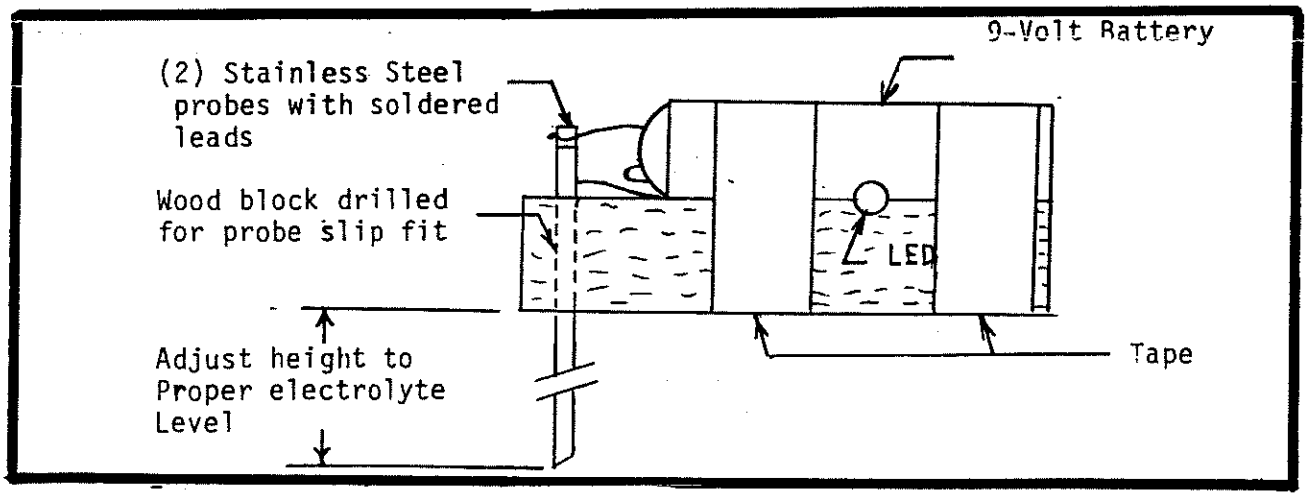
They also note that Toyota has already met its initial quota for delivering battery-powered vehicles. It has delivered more than 350 RAV-4EV to California and more than 500 nationwide. They further note that electric cars have been on the market since 1966 with the following production; Chrysler *EPIC* -37, Ford *RANGER EV* - 634, *GM EV-1* - 578, GM *S10 Pickup* - 422, Honda *EV Plus* - 267, and Nissan *Altra EV* -30. The total is 1958.

VEVA also furnished the following list of electric bicycles: Schwinn *Sierra* - $ 1100, Giant's *LaFree* - $ 1000, Zap *Electracruizer* - $699, *GT Charger* - $ 1100, and *Trek Electric* - 1500.

BATTERY ELECTROLYTE LEVEL LOCATOR (BELL)

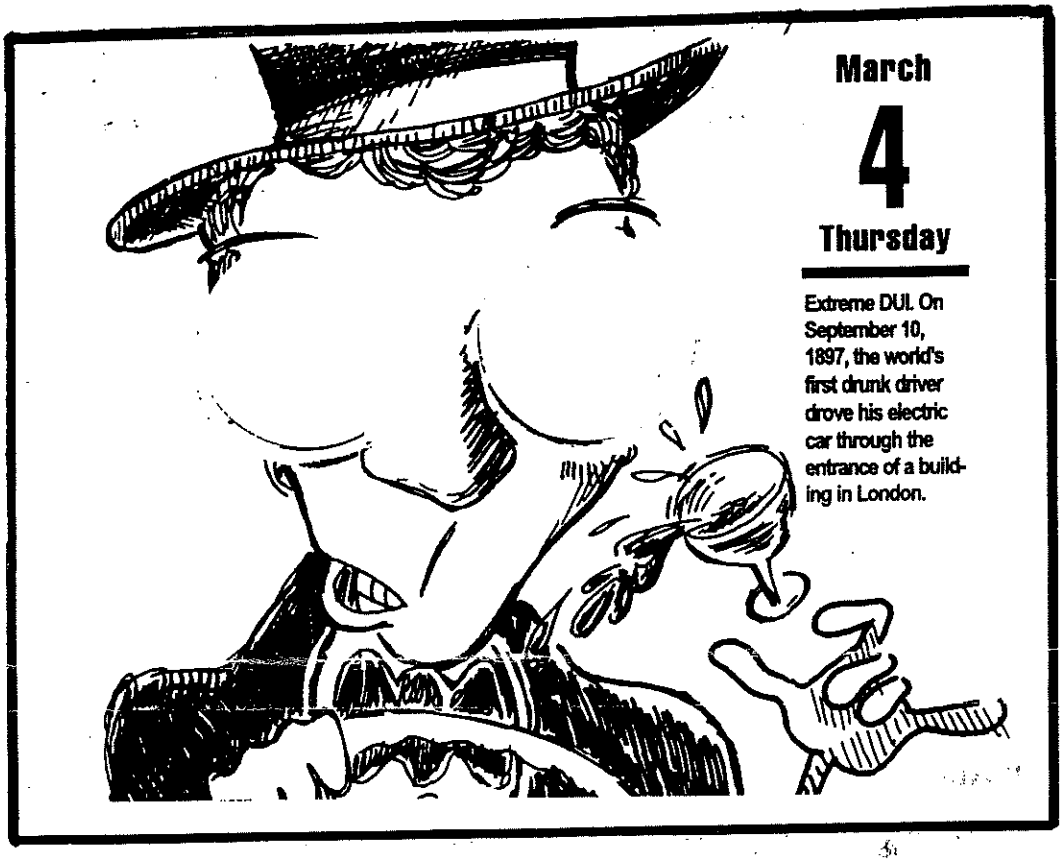
Determining the electrolyte level can be difficult and messy. Most individuals use flooded lead-acid batteries for their conversion because of their low cost. A 96-volt system has forty eight cells that require periodic addition of water. The usual battery syringe leaks water that must be blotted up when the job is done to avoid corrosion. Here is a device and suggestion that will make the job simpler.

It was devised by former FVEAA member Les Stone. A sketch was included in the November, 1987 Newsletter. The components are a 9-volt transistor battery, a light-emitting diode (LED), a suitable resistor to limit the current to the LED to its appropriate level, a block of wood and two metal probes. After you have secured the battery in place with electrical tape as shown, cover the entire assembly with electrical tape. This will prevent electrolyte from soaking into the wood and causing a continuous LED light. Here is a sketch:



In use, the probes are adjusted so the tips are at the correct electrolyte level for a cell. The BELL body is then placed on the battery with probes extending into the cell. Distilled water is then added until the LED is illuminated by completing the 9-volt circuit through the electrolyte.

Adding water can be facilitated by going to a medical supply house and getting an intravenous fluid plastic bag, tubing, a shut-off clamp, and building a stand to hold the assembly. Fill the bag with distilled water, position the tubing over the filler hole, open the clamp and fill until the BELL illuminates. That's all there is to it. Use of BELL and bag can reduce by half the time required to rewater a battery.



March

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Thursday

Extreme DUI. On September 10, 1897, the world's first drunk driver drove his electric car through the entrance of a building in London.

"And they say electric cars aren't practical."