FOX VALLEY ELECTRIC AUTO ASSOCIATION NEWSLETTER FOR August, 2001

NEXT MEETING: Saturday August 18th at 9 AM in the Triton INDUSTRIAL CAREERS BUILDING, (East Campus), Room 108

DISCUSSION TOPICS: 1. Triton Project Report. 2. 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 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 August will be $ 6.

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

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PRESEZ

The July 14th event at the Science museum was both informing and disappointing. Competing vehicles in the *American Solar Challenge* were similar to the GM vehicle that won the first Solar Challenge in Australia. Each had an aerodynamic curved top surface covered with solar cells with a plastic bubble in the center for the vehicle driver. I wondered why the bubble couldn't be a convertible with a windscreen. It must have been devilishly hot for the driver under the sun. Some vehicles were clearly student efforts but most had corporate sponsors. Sponsored team costs reportedly were up to a million dollars. The University of Michigan with an outstanding support team won the race.

The National Renewable Energy Lab exhibit was "Mickey Mouse", providing little solid technical information. There was one question on the quiz worth noting. "What percentage of the State of Nevada would be able to generate all the electricity used in the United States? (I presume this would be at noon with maximum radiation received.) Answer: 10%.

The August 18th meeting will be brief. Only a Triton Report and Open Topics are scheduled. The rest of the time will be used to work on the Triton Project.

This issue of the newsletter will be brief. There were three events that required the Editor's time this month; the death of a sister-in-law, a week-long family reunion with five grandchildren under 7 to celebrate my 80th birthday, and the 62nd annual reunion of my Iowa High School Class at which my attendance was mandatory. I expect to catch up with EV matters in the next issue.

BILL

MINUTES OF THE JULY 21ST MEETING

The meeting was brief and no minutes were taken. Nine members attended. Member Ed Meyer presented a tutorial on EV controllers for the membership and Triton Participants in the Project.

There was a report on the July 17th Event at the Science Museum. Solar cars participating in the 2001 *American Solar Challenge Race* from Chicago to Los Angeles on Old Route 66 were on display.

I had a very interesting conversation with Rick Lane, the Editor of the Ottawa Canada EV Newsletter. He brought his 1916 vintage Milburn electric car. Three other Milburn owners joined him; The Museum's restoration, an excellent restoration exhibited by a gentleman from Nebraska, and an aluminum-bodied car that was not restored. The Nebraska man said he traded a Stanley Steamer for the Milburn. All the cars had tiller-bar steering. One had flowers in the bud vase.

A Unique Project

Member Al Wagner, who is converting one of his two British Berkley cars, sent to me an article describing Geoff Sommer's modification of a GM EV-1 he is leasing in California. Geoff installed two small jet engines in the trunk space. He propped open the trunk lid so he did not violate the no-modification lease requirement. Two engines together supply about 85 pounds of thrust, sufficient to propel the vehicle at a steady 67-mph on a level surface. Fuel consumption is calculated to be about 4 miles per gallon. Project information maybe found on the EV1 Club Home Page. Data on the jet engine is at **www.amt.nl**.

Long-Time Member Frank Delmonaco has accumulated a number of items he now wishes to sell. Call Frank at (708) 544-6315 for information.

(2) Navy surplus power plants. Rated 200 amps, 30 volts. Hercules water-cooled 4-cylinder engine sized about 17" x 20". In original crates. $ 250 each.

Homelite 110-volt generator. Needs carburetor. $ 60.

Two-cycle engine, 50-amp, 30-volt army tank battery charger. Weighs about 85 pounds. $ 150

Japanese WW II dual-voltage communications generator. $ 150

Sun Electric Tester on a rollaway cart. $ 55.

110- volt generator with a 7 HP Tecumseh propane fuel engine. $ 300.

1979 Chevy Malibu Station Wagon. 1200 miles on odometer. Garage-kept.

Two "surplus" generators. Heavy. FREE.

Mechanical parts for converting a VW Beetle. $ 200.

Mechanical Parts for converting a front-wheel drive car. $ 225.

From other EV Newsletters and articles affecting EVs

DEVC, the Denver Group in their July Newsletter describes ultracapacitors. The stored electric charge in a capacitor is directly proportional to conductor area and inversely proportional to electrode separation. Porous electrode material has a surface area of about 2000 square feet per gram. Separation is a few angstroms. These devices are rated 2500 farads and 2.5 volts. Units are series-connected for system voltages encountered. A 250-volt array can deliver 6250 coulombs (40 amps @ 40 coulombs/sec). A capacitor can be discharged many thousand times, making it ideal for recovery of braking energy.

They report a Wisconsin dairy farm milking 1800 Holstein cattle a day has installed a system that recovers methane from the daily 48,000 pounds of manure produced each day. An anaerobic digester produces 300,000 cubic feet of gas a day, used to fuel a 750 kW generator. Iowa State University devised the system.

The July 27th issue of the Chicago Tribune reports Texaco and Energy Conversion Deices (NiMH batteries) have combined to mass-produce NiMH batteries for hybrid-electric vehicles. The plan to spend $ 150-million on battery and fuel cell products.

The July 8th issue of the Tribune had an article about an unusual vehicle, a 17-foot long, 3,280-pound motorcycle. The vehicle was built by the legendary "Wild Bill" Gelbke. Owner Buzz Walnek spent five years tracking down the cycle and buying it. The vehicle identification calls it a *ROADOG*. It has a 152-cu in, 4-cylinder "iron duke" engine that was used in a Chevy II and a powerglide transmission.. There is 1700 pounds resting on the front wheel making it impossible to turn until the cycle is going 15-20 mph. The vehicle features hydraulic rams that automatically extend and stabilize the vehicle as it slows. No way a driver can do that with his feet.

Photo omitted on e-mail copies
(One of these day's I'm going to have to get a scanner and learn to use it)

Another unusual vehicle was the subject of an article in the Tribune. It's an 8-wheel electric vehicle built by a professor at Japan's Keio University. Four of the 8 wheels are in the rear, two amidships and two in the front. It looks like a cross between a ballistic missile and stretch limo carrying eight persons. Peak power rating is 590 horsepower. Rows of 3.76-volt lithium-ion batteries are series-parallel connected on the underside.