

Fox Valley Electric Auto Association

**PO Box 214
Wheaton, IL 60187-0214**

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JUNE 2013 FVEAA Newsletter

The FVEAA is a Not-For-Profit Illinois Corporation and the Chicago Area Chapter of The Electric Auto Association

Note: Meeting Date and Place This Month

Next Meeting

June 21, 2013

Community Christian Church

1635 Emerson Lane, Naperville, Illinois 60540

at the intersection of Ogden and Rickert Drive in Naperville

Also called the "Yellow Box." We'll meet in the little theater west side, 1st floor

DOORS OPEN 6:30 p.m. MEETING STARTS 7:00 p.m. ENDS 9:15 p.m. Directions:

[Community Christian Church](#)

Agenda

- 6:30 Doors Open
- 7:00 Call to order - Welcome
- Committee Reports
- Old business / New Business
- Update on PHEVs
- Break
- Special Guest - Bob McKee on Mechanical Aspects of Building Electric Vehicles
- Close
-

- FVEAA Board Meeting 9:15 p.m. - 9:45 p.m. Officers and Board Members Only

Hi EVeryone,

Last month at our May 17th meeting we tackled the question, “**BUY or BUILD?**” something we tried to help answer by using a two ring circus approach - inside and outside the meeting room. Outside, we had representatives from Ford’s “Go Further Tour” giving rides in their electric eco-friendly vehicles including the · Focus Electric · C-MAX Energi · Fusion Energi
We thank Ford for providing the electric cars, and for their energy efficient line of hybrid cars as well.

Then inside we looked at how the FVEAA converted a 1984 Porsche 944 to Electric in “The 2007 FVEAA Porsche Conversion Project” which was led by our own Ted Lowe, electric vehicle expert and project manager. Nearly 80 slides told the story, showing intricate details of the build from start to finish. The presentation is in the file bank available to members.

JUNE - Build it and They Will Come - a Mechanical View

Continuing our theme of how to build electric vehicles, this month on June 21, we have special guest **Bob McKee**, founder of McKee Engineering out of Lake Zurich, Illinois. A master car builder and veteran engineer, Bob will delve into the mechanical aspects of building Electric and Hybrid vehicles. Bob worked in the NASCAR circuit during the 1950s, and built formula 1s. He built the first turbine car that actually worked and won races. In 1968 he built a small two-person electric vehicle that ran at speeds up to 62 mph and had a range of 100 miles with good performance. He built many of the initial electric vehicle prototypes for Chrysler, and range extenders for General Motors, and electric cars and hybrids for EPRI in California among others.



On June 21st, Bob will cover these subjects and more based on a presentation he gave the Society of Automotive Engineers a few years ago. Looking forward to it, Bob!

See you Friday June 21 at CCC.

Sincerely, Bruce Jones

Photos from Last Month

BUY?



Lee from the Ford "Go Further" team

Chuck Carrington checks the Focus Electric



Ford C-MAX Energi



Ford Fusion Energi

OR BUILD?



1984 Porsche 944 converted to electric by the FVEAA in 2007

Bleeding Edge Technology - What will it be worth in the future?

EV enthusiasts are certainly on the bleeding edge of technology, embracing a concept well before EV's became commercially viable in large numbers, and well before factory EV's were capable of highway speeds or normal creature comforts. Many of us either seized one of the very few factory produced vehicles from the 1999 era, or built our own. If you tried to buy a new, normal sized, EV three years ago, you were simply out of luck. Now, you can purchase about a dozen different EV's from major manufacturers.

But do we have any idea of the worth of 'bleeding edge technology' of 2013 when viewed from 15 or 25, or 35 years down the road. Unfortunately, predicting the future is still pretty much a guessing game, but there are some lessons we can learn here.

I know of a computer enthusiast, who was active in the fledgeling micro computer hobby some 30 - 35 years ago. This enthusiast purchased an Apple][+ as Apple had, by then produced over a hundred thousand units. This led him to start a mail order software business, and he taught Apple programming at the local community college as a natural progression. Apple went on to upgrade the][to the //e, and that had much improved text and graphics, and the business flourished. A couple of customers noted that the new programs would not work on the original Apple][machines, made in 1977 and 1978 as simply Apple][, not yet the][+. This computer enthusiast looked for an early machine to use to test program compatibility, and answered an ad in the Chicago Tribune for an early Apple, reportedly number 0047. The machine still worked well, but was priced about \$200 more than most Apple][units, because the owner thought it would be worth something, someday. It was purchased with the thought that it would be the litmus test for compatibility. If it would run on 0047, then no other customers would find the software to be incompatible.

I know the computer was serviced once by Apple, and although the first technicians told the owner it was a cheap copy, the Apple Service Manager did recognize the very early design and accepted it for service, and waived the charges to clean and reseat the (removeable) chips.

Apples have come a long way, with Apple Lisas, Apple ///'s and others along the way to Macs and iPhones, but Apple has been a consistent visionary in the market, and one who sets their own course, and doesn't seem to follow other leads very much. Kinds sounds familiar!

When I heard the Apple][serial number 0047 was going to be sold, I wondered what it would be worth. This very early Apple was certainly originally purchased by a bleeding edge microcomputer enthusiast. I was curious enough to watch the last few seconds of the eBay auction, noting it closed

for \$23,099!

More Ramblings from Rich....

Remember the Pike's Peak International Hill Climb? Last year electric power was all the rage, and had a strong likelihood of producing the overall winning time.

Well, Monster Tajima is back with another purpose built racer. He reportedly has 670 electric horsepower, but I put zero credibility into the numbers released. Why? Because the numbers serve little real purpose other than to possibly get inside other teams heads. Monster has a known history with fast cars, including several World Rally Championship cars, and in 2007 beat a 13 year old record (originally by Rod Millen) of 10:01.408. In 2011, he was the first ever to break the 10 minute barrier, with a winning time of 9:51.278. Both of those entries were gasoline powered. Last year his practice times in an electric powered racer were nothing short of incredible, but he did not finish the course. He has nine PPIHC wins in the 'unlimited class'

The road up the mountain is always interesting, with 156 turns in 12.42 miles, and a climb to 14,110 feet. One of Monster's greatest competitors is Rod Millen. Rod has a long history at Pikes Peak, but has not competed in an electric until this year. His purpose built Toyota EV P002 is from TMG (Toyota Motorsport GmbH). Rod's published numbers (remember maybe not an accurate number) is 536 horsepower and 885 lb-ft of torque. This is a further development of the car that won the electric division last year. Rod Millen has been the overall winner six times at Pike's Peak.

There are two more electric entries to watch, both with considerable experience. Fumio Natahara drive the Toyota Motorsport TMG P002 last year, winning the electric class in 10:15. He is certainly in the fastest league, and has electric experience, but is looking for a ride this year. He is not on the current competitor list, but I would suspect that some team will be more than happy to have his talents.

Ikuo Hanawa won the electric class in 2010 and 2011. He is back with a car built by Yokohama to showcase their tires. The Yokohama HER-02 EV is ultra lightweight, and Yokohama claims 255 horsepower, and claims the car weighs 2535 lbs, but these are press numbers, and not very realistic. Bear in mind, Millen's claim of 536 HP in 2200 lb car (just over 1000 Kg) has somewhat similar performance.

Don't be confused by the Millen name, Rod's sons (Rhys and Ryan) are active also, and so is Rod's

Brother Steve. Rhys Millen has won before (including a 9:46 last year) (lowest time ever), and is entered in the race built Hyundai PMS 80T. This car is an improved version of the car that Rod had also won with in the past. These are all gasoline powered racecars.

Other electrics of note include Janis Horeliks from Latvia, and two Mitsubishi MIEV Evolution II's. Who do I want to see win? The old guys are my favorite. Rod Millen and Monster Tajima are both 62, but Monster turns 63 on the day before the event. With a combined 17 wins to the event, either could be the 2013 victor.

And, just to make it interesting, Peugeot has brought a 875 HP rally car, driven by none other than Sebastian Loeb, the most successful driver in World Rally Championship history, who has a phenominal record of nine world championships in a row. The Peugeot 208 T16 is know for 875 Hp in a 875 Kg car, for one HP per Kg of car weight. That's about 1925 lbs. And, since the sponsors at Red Bull really wanted to shake up the Pike's Peak watchers, the other Red Bull sponsored car is Rhys Millen, overall winner last year. So the unlimited class of gasoline powered cars will be just as interesting as the electrics. We'll see on June 29th.

□

Meeting Minutes 05/12/2013

Bruce Jones

Welcome

President Bruce Jones opened the meeting at 7:05 p.m. and had newcomers introduce themselves. Then Lee and representatives from the Ford "Go Further" team, took members on test drives of the Ford plug-in electric vehicles

Old Business - None; New Business - None; Committee Reports - None

Bruce Jones then presented the FVEAA Porsche 944 Conversion Project, with assistance from Ted Lowe who was the project manager on the 2007 conversion team which involved dozens of members over 6 months including John Emde, Rich Carroll, and many others.

Break

The meeting ended at 9:15 p.m.

Board Meeting : A board meeting then took place among the officers.

FVEAA Membership Application Form

Name: _____

Address: _____

City, State Zipcode: _____

Phone: _____ Phone Type: Home ___ Work ___ Cell ___

Email: _____

Please check one: New Member _____ Renewal _____

How did you hear about the FVEAA ? _____

Member Types and Annual Dues (Please circle one)	Newsletter Delivery Types (Please circle one)
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Individual	\$15	No Newsletter	\$0
Family	\$20	Electronic Only	\$0
Business	\$100	Postal Mailed	\$15
Premier Business	\$250	Postal Mailed and Electronic	\$15
Charter Business	\$500		

Total Due from Both Columns:

Please make checks payable to "FVEAA" and postal mail it with this membership application form to:

FVEAA

PO Box 214

Wheaton, IL 60187-0214

Attn: Membership

FVEAA Business Members

Netgain Motors, Inc.



NetGain Motors, Inc.

Exclusive worldwide distributor of WarP™, ImPulse™, and TransWarP™ electric motors for use in electric vehicles and electric vehicle conversions.

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4c Hillview Dr.
Lake Barrington, IL 60010 bobshillviewauto@gmail.com Bob Baker
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Robert Harris
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Chicago Ridge, IL 60415
Phone: 708-422-5808
Email: harrisprecision@comcast.net

Plug-In Vehicle Solutions, Inc.

Mike Piscitelli
1104 Coventry Circle
Glendale Heights, IL 60139
Cell: 620-248-8810
Email: mpiscitelli@getplugging.com
Web: www.getplugging.com