



# EEVC

Published by the Eastern Electric Vehicle Club

Peter Cleaveland, Editor

Club Address: P.O. Box 134, Valley Forge, PA 19481-0134

email easternev@aol.com

President: Oliver Perry, 5 Old Stagecoach Turn

Shamong, NJ 08088, (609) 268-0944

Copyright © 2004, Eastern Electric Vehicle Club, all rights reserved

Vol 24 No 2  
FEBRUARY, 2004



Now affiliated with EAA

## CLEAN AIR THROUGH AIR-POWERED CARS?

A recent piece on CNN's NEXT program discussed the compressed-air car that French inventor Guy Nègre is hoping will revolutionize transportation. He calls his vehicle the MiniCat, and it runs on compressed air, an idea he's been working on since 1997.

The idea is far from new—compressed air for vehicle propulsion was investigated in the latter part of the 19th century. It seems so obvious: store compressed air in a tank, then allow it to expand through an engine, which can drive the car. The engine is essentially a steam engine, and was a familiar device through most of the 19th century.

Nègre has formed a company, MDI - Moteur Developpement International, based in Luxembourg, to license companies



*This car, built by French inventor Guy Nègre, runs on compressed air.*

around the world to manufacture his car.

The car itself comes in several models—the MiniCat itself (a micro-coupe), a small truck, a family car (shown), a van, a taxi, etc.

The Mini-Cat is truly

small—2.65 m (104 inches) long, and weighs just 750 kg (1650 lb). Claimed top speed is 110 kph (68 mph), with range up to 300 km (186 miles). All models claim the same performance and have the same weight, but the others are 3.84 m (151 inches) long.

The air is stored at a pressure of 300 bar (4350 psi) in four carbon fiber tanks with a capacity of 90 liters, run through a series of heat exchangers to pick up ambient heat from the atmosphere, and expanded in a

four-cylinder engine that drives the wheels through an automatic transmission. The tanks supposedly can be filled in about four hours using an on-board compressor; and if and when filling stations are established, recharging time would be a few minutes.

Our estimation is that the thing will last as long as the inventor can keep up his enthusiasm and keep investors interested, and then quietly go away. On the other hand, it's refreshing to see people trying to put make their dreams into reality. You can find out more on the car at [www.theaircar.com](http://www.theaircar.com).

### **PRESIDENT'S MESSAGE** **Oliver Perry**

Thanks for the responses

It is interesting that I have received the most responses from distant and unknown subscribers when I have addressed NON-electric vehicle issues. I recently received two lengthy letters, one from the Mid-West, and the other from the West Coast, each in response to my "Working in Donkey Land" editorial.

Favorable responses tend to motivate a writer to keep writing along the same lines. And, the more responses to our newsletter articles, the better we can serve the interests our readership. So continue to comment about the topics we discuss. Keep us motivated to stimulate your minds.

If you genuinely feel that electric cars ought to be more promoted than they are, consider the schools of our land a significant factor in such a promotion.

### **Return to "Donkey Land"**

If you want workers to produce products that come off the assembly line with handsome profits, you do everything in your power to keep producers performing with little distraction. Most of us want our bosses to empower us to do what we do best. We want someone to hold the umbrella over our heads so that both our hands can be utilized. If the rain is kept off our head we tend to keep working until it floods our efforts. At that point we look up and ask what's going wrong.

Currently many of us are asking what is going wrong with government, business, the

economy, society, and the world in general. Asking shows that we are alive and concerned. But, what can we do about our concerns? More than one of us, it seems, is living in a frustrating "Donkey Land!" I admit that individuals who see the need for electric cars tend to be more intelligent than the average donkey around us. Maybe that is why so many of us in this organization are shaking our heads at the seemingly stupid world surrounding us. Are our IQs higher than those we work with? It takes patience to work with those less intelligent, especially if they think that they are smarter than you are. And, where did these people get or not get their "smarts?" In a school system somewhere.

### **My Donkey Land**

As a public high school science teacher, I find that my concerns frequently are also your concerns. If our public school systems fail we are all affected. I cannot help but believe that the environmental awareness in our country today is directly related to environmental issues that have been addressed within the school systems of our nation. I first became aware of environmental problems in my science classes as a young student. It was in school that I learned that DDT was eliminating specific bird populations.

For years, our science textbooks have addressed the impact that man has on the Ecosystems of planet earth. Most students understand the need for clean air and water and they understand that we are the polluters. Most students have been given an awareness of a need to protect our environment. Many know the specific causes of pollution and have accepted the fact that all of us have to adapt if we expect to remain alive and in good health.

Ask students how we can best clean up the pollution from auto emissions and many will include "electric cars" as a part of the solution. Most likely these students learned about electric cars from a science text or from participating in some kind of a solar project assigned in Junior High school.

So where does much of the understanding regarding environmental issues come from? I repeat, it comes from our school systems.

Education is the key to a pollution-free future. We all believe it. We all help pay for

education through taxes. We all understand that "turning students on" to the value of electric transportation (and the value of many other important things as well) is good for our cause. And the most practical place to accomplish that is in a school system.

Education is important especially in a democracy. Those who cast the vote should be informed intelligent citizens. A colleague of mine tried to blame George Bush for our nation's failure to advance a petroleum-free transportation system. I reminded him that Al Gore, who had the reputation for putting our environmental concerns on the front burner, did not receive enough votes to further his cause. Those who prefer SUVs will not vote for our agenda. They do not think that driving around in little efficient green vehicles really makes a difference in their health and well being. When my friend complained that Bush was adding to the current greenhouse gas, global warming, problem I asked him what percent of the atmosphere was made up of carbon dioxide gas. (0.03%, a lot less than people realize) And, I asked him what percent increase (debatable) in carbon dioxide gas was needed to raise the average global temperature one degree Celsius. (Which is bigger, a Celsius degree or a Fahrenheit degree?) And, did the rupture of Mt. Saint Helens affect the average temperatures more or less than the increase of carbon dioxide?

The complaints against President Bush went silent when my friend couldn't answer those questions.

Uninformed or misinformed people make great fodder for the political cannons of the day. The masses are donkeys. Some people, like the historical Samuel Adams of Revolutionary War times, learned how to use these donkeys for their political purposes. If you and I learn how to control them we might also become powerful. But our motives are more honorable than most and it is hard for us to become users and abusers. We would prefer to educate the masses and empower them to make sound, unselfish decisions. That is what our meetings are all about. We attempt to learn the facts related to electric vehicles and their impact on our environment. Then we pass this information on to anyone who will listen, hoping that they will become more informed voters.

Well-informed and well-educated people are less likely to become prey for greedy abusive political machines. But how well are our nation's young people being educated? What are the youth of today becoming?

I believe that too many of the school systems in our country are fast becoming a "Donkey Land" producing cannon fodder for those, who like MTV, want to use them. I have worked inside the system for nearly 40 years. A lot of things go on inside that the outside world is not fully aware of. Paul Revere's midnight ride warned the "Sons of Liberty" that the British were coming. My EEVC editorials are warning you that "The Donkeys " have already come! A revolution in education is needed to throw these donkeys out.

### **The Wing Bowl**

Friday, February 6th, 2004, my goal was to inspire my Advance Placement Physics students to design a successful four pound electric powered towing device for an upcoming Physics Olympics "Tug of War" contest. The double period that normally is reserved for such academic pursuits was shortened so that the whole school could celebrate the first (and I hate to say it) ANNUAL, Wing Bowl!

All of the students were summoned to the high school gym to watch ten contestants engage in a chicken wing eating contest while pretty dancers "winged" their way around the floor, and students yelled and cheered at the top of their voices. To the loud "blasting" of music the contestants entered the gym one by one, accompanied by their fans, who escorted them to the long table positioned at the base of the opposite wall.

Most, if not all, of the popular teachers in our school were positioned behind the table. These influential personalities, positioned by our society to shape and mold student's minds, moved about the table with smiles and laughs, lending a type of authenticity to this great Roman spectacle. One (who supported our electric car program for a year, including actually going on tour in the American Tour de Sol) walked about with taking pictures with her video camera. My science supervisor literally danced down the

gym floor, one hand waving to the crowd as his other led his favorite science teacher to the table, where she would attempt to stuff more chicken wings down her throat in ten minutes than the other nine contestants.

Where was I in all of this? I was assigned to sit up in the bleachers to keep an eye on student behavior. The duty is called "crowd control." The students were so "into" this activity that there was nothing for me to do except sit quietly and watch. I only saw one rowdy student removed from the gym for disruptive and disrespectful behavior, contrary to the morning last Fall when we held the African 101 Inventors assembly. That event required 20 teachers continually walking the isles of the auditorium to reach completion. Probably a dozen students were thrown out that day.

I believe in students having fun. I believe in sponsoring events that create school spirit. Many "pep rally" activities have value. The teachers who have fun with the students in these endeavors can often accomplish more long-term educational goals than those less popular can.

As I sat watching hundreds of students intently participating in this important food orgy, Friday, I asked myself whether or not the administration would allow me or anyone else to be given equal assembly time. Would the whole student body be allowed to attend and cheer for a Physics Olympic competition? Would the administration allow the student body to gather for a forty-minute assembly sponsored by the American Tour de Sol? Would the administration make my interests as important as the interests of the teachers sponsoring the Wing Bowl?

Do you have to be a DONKEY to be given such consideration? (My fellow teachers who participated in this event do not wish to be considered donkeys. They consider me a donkey for not "fitting in".)

The negative aspect of the Wing Bowl, in my opinion, was that "donkey" behavior was rewarded, not academic or even athletic behavior. Equal time, attention, and recognition will not be given to more important academic activities. As in many schools, the science fair winner, the national award winning poet, the brilliant math scholar, or the outstanding musician will not be given such

tribute as was our "Wing Bowl" winner.

Some might argue that most of our time in school, thank goodness, is spent doing academic work. But my point is that enthusiastic celebrations reward particular behavior. Behavior that is rewarded has a tendency to dominate behavior that is not equally rewarded. If acting like a donkey seems to be the thing to do and you get more perks for being a donkey than not being one, a donkey you will be. I noticed a few students sitting quietly in their seats looking around the gym totally left out of all this fun. Maybe they were asking, Do I have to act like this to be noticed? In order to get a standing ovation and the wild approval of the teachers do I have to eat 87 wings in ten minutes? How much attention would I get if I participated in Mr. Perry's Physics Olympic program and built an electric car? Would anybody cheer for me? Would the science supervisor even come to my event, let alone pay tribute to me?

As the cheering young students and their approving teachers left the gym, I answered, "Not likely!"

### **One More Donkey Tale (or Tail)**

Earlier in the day I happened to bump into the mechanic who keeps the Cinnaminson School District's busses running. In the course of conversation he asked me how his son was doing in my science class.

It was only at that point that I realized that I had his son in Earth Science class. But his son had just recently disappeared from my class. When I reported his boy to the administration for a cut I was told that he had been transferred to another class. When such a transfer occurs the teacher is supposed to be consulted, notified of the transfer, and given the reason. I had heard nothing except for this recent two-week-late administrative memo that informed me that the boy was in another teacher's class. When I relayed this to the boy's father he replied that he didn't know anything about the transfer. In fact a month earlier when his son had asked him if he could be transferred to another teacher, his father told him no. He was told to stay in my class and learn something.

How did his boy get to leave my class against his father's knowledge and permis-

sion, and without the proper paperwork going through me? Who knows? The father and I shook our heads, returned to our particular assignments, and simply agreed that this was typical of life in Donkey Land.

### **True Patriots Must Resist Donkeys**

Donkeys have no vision. Donkeys have few goals other than to feed themselves and have a good time. They don't even know that they are stupid. Until you and I hit them over the head with a two by four they won't wake up. School systems that are failing should have these donkeys replaced. Many administrators are in administrative positions because they don't like to work in the classroom. They like power over others and the position where they can delegate their work to others. They like the higher pay. They like the privilege to come and go wherever and whenever they want.

To hold their positions many administrators have become smooth politicians. They have few goals other than to keep out of trouble and keep things running quietly. Their motto is, "Don't rock the boat." They are not really interested in good education, (especially science) if it interferes with their agenda, which in many cases seems to be to please all of the parents all of the time. And, too many parents don't want good education as much as they want good grades. There is an important difference.

But, maybe some of you are tired of hearing these same old complaints. Perhaps you want to take some kind of positive action to change things. If you agree that there is a serious problem what should you do? (And if you think that I am simply complaining, exaggerating the problem, you should talk to more teachers in a variety of schools. I believe that you will discover that what I have described is true in many schools.)

The next time you bump into a school administrator look for donkey ears sticking out from under his hat. If he happens to be a donkey ask him if he is holding umbrellas over his teacher's heads, empowering them to teach, or is he expecting his teachers to do it all on their own. Ask administrators if they are supportive of teachers against unreasonable parents. Do they hold tough academic standards? Ask these leaders of education,

scientific questions and see if they shy away from them.

Find out if science and technology are really important to the educational rulers. Many administrators never understood science. Quite often you will discover that administrators were the C students in science and math, and in many cases hated both. Why do they therefore feel that they qualified to be leaders of education in a scientific and technical age? If we expect our presidents to have had military experience why don't we expect our school leaders to have experience in science? Does their sports program dominate their science program in conversation? Ask principals and superintendents questions about their science teachers. See if they even know who these teachers are and what kind of credentials they have.

Judge an administrator by the topics they comfortably discuss with you.

Donkeys often drive suvs and donkeys most likely are not interested in driving your electric or hybrid car. But then again, maybe that is a little too judgmental. (Forget checking out what administrators drive. Stick to their educational concerns.)

Lastly, be sure to ask the administrator if he intends to sponsor a "Wing Bowl" in his school. He may choke on that one.

### **APRIL EV EVENT IN LIMERICK**

The Green Car Club, which operates under the auspices of the NorthEast Sustainable Energy Association (NESEA) is organizing an EV event this coming April 10. The event will be held at Tri-County Toyota, Limerick, PA, from 9:00 a.m. to 2:00 p.m. Planned activities will include coffee and doughnuts at Tri-County Toyota, a look at the 2004 Prius, and a chance to run your car in the "fuel-minders" rally to Boyertown, PA, with prizes for best fuel economy and best answers to questions about sites along the way (details provided to registered entrants). Lunch and awards ceremony with the group, and a guided tour of the Boyertown Museum of Historic Vehicles.

Registration is \$25, and the contact is John Murphy. To register, or for more details, email John at [suncyclejm@aol.com](mailto:suncyclejm@aol.com). Be sure to put "Spring Brake" in the subject line to

avoid "spam" deletion.

**I WANT MY R1E**  
**Rev. W. Christopher**  
**Benham Skidmore**



*The following is excerpted from EVWorld.com—ed.*

**A Plan to Get Subaru to Build Highway-Capable EVs for the Rest of Us**

Hear me out. I have a plan. Well, it's more like a dream, but with your help we can make and implement a powerful plan for pressuring an OEM to bring a nice EV to market.

**PHASE ONE: Put Our Heads Together**

Let's launch a concerted, organized, grassroots, highly-focused campaign to bring another full-sized highway-capable EV to market in the United States of America.

Target one manufacturer.

Make them know it will be profitable for them because we will each: **PLEDGE TO BUY THE CAR WHEN IT IS PRODUCED.**

Believing that progress can be made in the corporate sector when a large number of consumers make their voices heard in a loud way, I want to start a campaign to get progressive-minded consumers (and potential EV consumers) uberfocused—and put pressure on one car maker: Subaru.

Here's why I want us to target Subaru:

They have proven themselves in a niche market here in the U.S. and the EV market is still perceived as only niche by auto makers. Subaru only sells five cars in the U.S. and have positioned themselves well as doing something no one else does and being the exclusive go-to company when consumers know what they want, e.g. all-wheel drive standard on every vehicle.

They already have a network of nearly 600

dealers across the United States poised for service and distribution. They have a dealership and service department in every state in the United States of America. I would really love to have an EV with a nice warranty and capacity for local service.

In 2003, they only sold 186,819 units. If we can convince anyone to take control of an entire, wide-open niche in the U.S., who better to target than a small niche-market company. We would not need to guarantee them many sales to make it worth their while. Even with a challenging sales environment and an increasingly competitive marketplace, they have continued to sustain strong sales growth in the U.S.

They have taken a step forward with a "hybrid" because what they have designed for the B9SC is adaptable to the existing drive trains in their other vehicles and basically turns a gas vehicle into a completely electric vehicle until it is operated over 50 mph or needs unusually quick acceleration.

They make some quality products. Consumer Reports recommends 3/4 of everything Subaru has ever built—and that's not an easy achievement.

They need to clean up their image on the environmental front after their decision to pollute more and consume more fuel by tweaking their wagons to obtain new light-truck classifications and add turbochargers.

And of course, they have already made a 240 V conductive charging, laminated lithium-ion, totally electric R1e.

Let's tap the wellspring of wisdom and pool our resources for some potent and honest analysis. Here's what I propose.

I want every person who has ever complained about OEMs not making an EV for the general public to e-mail, write to via USPS mail, and call every upper-level executive at Fuji Heavy Industries, Ltd. and Subaru of America, Inc., and the owner of their nearest Subaru dealer—within a set span of time, (perhaps around Earth Day)—and vow to purchase an EV from them if they will meet certain specifications. I am imagining a massive concerted effort in which we decide what we want, and then all ask for the same thing. For example we take polls and discuss in forums until we can come to some kind of a consensus about what we'd all like to have

in this EV and then we all call, write, and visit dealerships pledging to purchase a \$25,000.00, reliable, full-sized, vehicle-to-grid, 115 and 240V on-board charging, lithium ion powered sedan, that gets 100 miles of range, that looked like a legacy sedan, with side curtain and passenger air bags, a proper marketing campaign, five star crash rating, seating for five, our whole wish list, etc. etc. etc. and offer them a down payment on the vehicle immediately in advance.

If you are reading this, it means we already into phase one here. We can make this happen if we all get involved. Bill Moore has provided us with a forum for the initial hashing out of details, so read-on and then give your input about this plan to launch a massive telephone-calling campaign in which we would have people call every sales manager in all 600 dealerships making a vow to purchase the EV from their nearest Subaru dealer, and to also show up in person at their nearest dealer with the same pledge. Phase one is putting our heads together—vetting the plan by imagining every conceivable scenario, brainstorming, criticizing, and then actually deciding, through polls and discussion groups exactly what we can realistically expect to "demand." I wouldn't want to launch a campaign that involved asking people to pledge to buy any EV that Subaru might produce.

### **PHASE TWO: Put Our Energy Together:**

Phase two is putting our energy together. It won't be easy to decide on what we want to ask for, but once we are in agreement, we need to grow the base of activists before we take action. I don't know how many individuals are members of the Electric Auto Association, EV World, Electrifying Times, Alternative Fuels groups, and other networks, but these members are the initial base. Phase one will include input from all these members, and perhaps many more. Once we have established a realistic product to demand, we need to get as many people on board with this plan as we possibly can. This involves organizing, educating, motivating, and making commitments to spread the word and motivate potential customers. The campaign could only be successful if we can convince a company they have a large number of guar-

anteed sales.

In phase two we will need to reach out to every conceivable environmental group from BushGreenWatch to REPAMerica—to champion this cause and get folks on board. During this phase we'd need folks to volunteer to make slick and brief educational and campaign materials available to these other groups to lobby first for the need for EVs and then for our particular plan.

It might be possible to even tap into something like Josh Tickell's network of 10,000 biodiesel supporters as well. Could you imagine what we could do if we had 10,000 people making a solemn vow to Kyoji Takanaka to buy this product? Subaru only sold 10,694 units of their Baja model in 2003, and that was their best Baja sales year ever.

### **PHASE THREE: Putting Our Money Together:**

Phase three is putting our money together. No, I do not want us to pool our money; don't send me any money: pledge it to an automaker. Money talks. Let's shout.

Once we've decide what we are going to ask for and have executed a successful campaign to grow the numbers of people in our concerted movement, then we must take action and pledge to buy a specific EV if Subaru will bring it to market. We could use capwiz and meetup technology to help make this happen, but we would really need to make this a top priority everywhere we gather and in all communication channels. We'd need to carve out time from every EVAA meeting for a letter-writing campaign. This has to be a concerted effort with a strong commitment to make the in-person visits, surface-mail individualized (and even handwritten) letters bread for the world style, and multiple personal phone calls. If phase one reveals a dramatic show of interest, then I envision implementation of phase two and phase three could begin almost concurrently.

### **OKAY, THAT'S MY PLAN...**

It's not perfect, but I haven't heard anyone suggest something this radical in a while, and I'd like to see what you think about it. Am I totally off my rocker? Do you have insider info that says the reason why the R2 was non-electric was because the existing R1e

failed so miserably that Andreas Zapatinas was fired in disgrace? Is Subaru the right place to target? I think it is.

The really big OEMs obviously ignore what they consider to be niche markets (that's why Woodbury will make a go of the Tango. Don't get me wrong, I want a Tango, I just can't pay \$85,000.00 for one right now.) I really don't want to hurt the upstart EV makers, but I have heard a lot of people complain that OEMs can do this but won't. If you have ever complained about existing automakers not producing EVs, then please consider giving this movement all you've got.

There are other reasons why I think this will work than I have mentioned here, but I'd rather hear what you think of the idea. I do not work for Subaru, but I have driven one for the past three years and I love it. If you can make the case for targeting a different manufacturer and the larger community backs you up, then that's where I will put my energy and efforts.

If you even think this has a snowball's chance in Death Valley, then please let us know what you think.

If it is easier for you, please post your response in the Reader Response window at [www.evworld.com](http://www.evworld.com), where the original of this article appears, but the EVWorld YahooGroup might facilitate easier conversations. Wherever you respond, give a quick gut reaction, or take some time to think through many dimensions of such a campaign and let us know what you think with regard to the following items.

Is there a better company to target than Subaru, and if so who and why?

What would be our biggest hurdles to making this happen and how can we navigate these hurdles with success?

Exactly what features of a vehicle should we demand?

Specifically, what type of batteries should we demand, what type of charging system, what range, top speed, renewable components, etc.?

What safety ratings and features like ABS, curtain air bags, should we specify, if any?

What additional features should we specify, e.g. air-conditioning, etc.?

What advertising and marketing strategies should we suggest/demand that they employ

to help them insure this will be a profitable venture for them? We have blasted GM and others for botching this side of things, so let's help our targeted manufacturer learn from the mistakes of others.

What (realistically) is the maximum/optimum/ amount you are willing to pay for the car you want?

Are you interested in spearheading this campaign? I have no desire to make this all about me; I'd rather one of you supervise this campaign who has far more experience with EVs or with community organizing than I.

Should we couple this plan with a concerted initiative to also lobby the government to fund the development of wind and/or solar technologies? I live in coal country. Many people have argued that so long as so much of grid is using dirty, non-renewable sources, EVs actually become part of many problems instead of the solution.

Should we try to use our organized might to simultaneously make a strong showing to Subaru —AND— make a concerted effort to call all U.S. Senators, Representatives, Governors, U.S. Cabinet Officials, the White House, etc. to demand a very particular accomplishment: namely, to give the U.S. Department of Energy x number of dollars to fund research into developing cost effective PV technology, specifically —Professor Michael Graetzel's (of the Swiss Federal Institute of Technology) Dye-Sensitized Solar Cells (DSSCs) (with an emphasis on replacing the liquid electrolytes that are mostly used today for the hole-transport function by conductive polymers) and a full organic approach, in which a mixture of electron-acceptor and electron-donor organic materials is sandwiched between two electrodes, such as that being explored by STMicroelectronics.

Perhaps we can engage in a concerted effort to level the energy playing field for wind by citing examples such as the High Winds Energy Center between San Francisco and Sacramento, seems to be an example that has refined most, if not all, previous problems with wind turbines.

Just my two cents worth. Now let's have yours.

*Note: You can contact the author at [wcb@kycouncilofchurches.org](mailto:wcb@kycouncilofchurches.org).*



## NEWS UPDATE

### President Bush in an EV?



Many people tend to think of President Bush as resolutely pro-petroleum—after all, that’s where the family fortune came from—but could it be

that our oil-soaked Texan is really an environmentalist at heart? Well, not likely, but he will be driving an EV soon. During the upcoming G-8 conference scheduled for June 8-10 on Sea Island, Georgia, all the dignitaries will be travelling about in customized GEM NEVs. Customized, that is, with decal motifs based on their own national flags, according to CNN. So our petro-loving president will be riding around in a 72-V electric vehicle decorated with red, white, and blue. Kind of gives you a warm feeling, doesn’t it?

### GEM making good progress

GEM must be doing something right. On Feb 3 parent company DaimlerChrysler reported that, as GEM entered its seventh year in business, it is the leader in the neighborhood electric vehicle (NEV) market, with 28,000 in use across the United States and internationally. And the nice thing is, they’re being used in place of gasoline cars in exactly the service that causes ICE vehicles to emit the most pollution: short trips with a cold vehicle.

### Electric Drag Racing on TV

The Discovery Channel will inaugurate a new feature on electric drag racing on March 22. Called “Sucking Amps EV Racing,” it will follow the same basic format as “Monster Garage,” with watt rodder Roderick Wilde and his band of EV mechanics building and racing an outrageous electric powered postal vehicle called “Gone Postal.”

### More from Carbon, Inc.

CALSTART reported on Jan 19 that the Western States Petroleum Association (WSPA) was urging California Governor Arnold Schwarzenegger to reject the California Energy Commission’s (CEC) recommen-

dation to cut gasoline and diesel use in the state by 15% by 2020.

CEC has proposed the state adopt measures to help reduce fuel consumption, encouraging use of non-petroleum fuels and hybrid vehicles and pushing the federal government to double current fuel efficiency standards. WSPA is attacking the fuel goal as “foolhardy” and urged the governor to let the free market work to improve the availability of gasoline and diesel in California.

### But the governor likes hydrogen

From CALSTART: *The Los Angeles Times* reports that California governor Schwarzenegger wants to push the “Hydrogen Highways” initiative to jumpstart hydrogen fueling infrastructure in the state, reports. The proposed network of 200 hydrogen stations would be located every 20 miles along major highways and interstates, and are targeted to be in place by the end of the decade.

## COMING EVENTS

### Fuel Cell Vehicles—the Next Step Toward Commercialization and Facets of Implementing a Hydrogen Economy

Feb 18-19, Sacramento, CA. Call Diane Applegate, 724-772-7115.

### 4th Annual Clean Heavy-Duty Vehicles Conference

Feb 25-27, 2004, Rancho Mirage, CA. Go to [www.weststart.org](http://www.weststart.org).

### POWER-GEN Renewable Energy Conference

March 1-3, Las Vegas, NV. Contact Jan Simpson 1-888-299-8057

### SAE 2004 World Congress

Mar 8-11, Detroit. Call Tim Mellon at 724-772-7162 or visit [www.sae.org](http://www.sae.org).

### 4th Annual Fuel Cell Investor

March 24-26, Philadelphia, PA. Contact Valerie Connolly, 212-967-0095 x222, or visit [http://www.srinstitute.com/Application-Files/web/WebFrame.cfm?web\\_id=207](http://www.srinstitute.com/Application-Files/web/WebFrame.cfm?web_id=207).

### Monte-Carlo International Electric, Hybrid & Fuel Cell Vehicles Show 2004

April 1-4, Monte Carlo, Monaco. Call Laure Hatchuel-Becker, +377 93 50 13 44

### National AFV Day Odyssey 2004

Apr 2, multiple nationwide locations. Call NAFTC/West Virginia University, 304-293-

7882/6944.

**Spring Brake 2004**

Apr. 10, Limerick, PA. Contact email John Murphy at suncyclejm@aol.com. Be sure to put "Spring Brake" in the subject line to avoid "spam" deletion.

**Earth Technologies Forum**

Apr 13-15, Washington, DC. Call 703-807-4052.

**National Hydrogen Association's 15th Annual U.S. Hydrogen Conference and Expo - Hydrogen: A Clean Energy Choice**

April 26-30, Los Angeles. Contact National Hydrogen Association, 202-223-5547

**Fuel Cells 2004**

May 2-4, Stamford, CT. Contact Sharon Faust, 203-853-4266, ext. 304

**10th National Clean Cities Conference and Expo Celebrating 2004 Future Car Congress**

May 2-5, Fort Lauderdale, FL. Contact Clean Cities Program, 800-CCITIES

June 27-30, 2004, Washington, DC. Call SAE at 724-772-4006.

**Tour de Sol 2004: The Great American Green Transportation Festival**

May 21-25, Westchester County, NY to Washington, DC. Contact NESEA at 413-774-6051, www.nesea.org

**Power of DC Electric Drag Racing**

June 19, Mason-Dixon Dragway, Hagerstown, MD, organized by the Electric Vehicle Association of Washington DC and sanctioned by the National Electric Drag Racing Association. For information, go to www.powerofdc.com.

**2004 Future Car Congress**

June 27-30, Washington, DC. Contact SAE Meetings, 202-328-2000, meetings@sae.org, www.futurecarcongress.org

**FedFleet 2004: The 4th National Federal Fleet Manager Workshop and Information Fair**

July 20-22, New York.. Call 800-315-4333

**World Renewable Energy Conference VIII**

Aug 28-Sep 3 Denver, CO. Call Robert Noun, NREL, 303-275-3062.

**Electric Transportation Industry Conference 2004**

Sept 21-25, Kissimmee, FL. Call Kara Elden, 202-408-0774

**Alternative & Advanced Energy Tech-**

**nologies: Manufacturing Challenges & Opportunities**

October 12-13, Dearborn, MI. Contact Irene Spanos, SME Communications, 313-425-3155, communications@sme.org.

**EVS-21: The 21st Worldwide Battery, Hybrid and Fuel Cell Electric Vehicle Symposium & Exhibition**

April 2-6, 2005, Monte Carlo, Monaco. Contact the EVS-21 Monaco Organization, +377 97 77 54 21/+377 97 77 54 22.

**MEETING SCHEDULE**

Meetings are held in Room 35, Plymouth-Whitmarsh High School, 201 East Germantown Pike in Plymouth Meeting, PA, and begin at 7:00 p.m.

March 10

April 14

May 12

June 9

**ADVERTISEMENTS**

\*\*\*For Sale\*\*\*



1981 South Coast Technologies converted Volkswagen hatchback. Four-speed stick shift with clutch, shunt field controlled Siemens motor, 18 six Volt Batteries (108 V). Approx 500 miles on new battery set.

Lester charger, current PA inspection, tow package, many spare parts.

Seen at many EEVC Events

\$2500

David Patterson

215 493-0806