



ELECTRIC VEHICLE ASSOCIATION OF SAN DIEGO (EVAOSD)

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Regular Meetings: 4th Tuesday of every month (January thru November), at 7:00 pm,
Location: San Diego R.T.C. (Pearson Kia), at 4001 El Cajon Blvd. and Interstate 15
Place: In the Autotorium
Next Meeting: Tuesday, February 27, 2007 @ 7 p.m.
Topic: Neighborhood Electric Vehicle available in San Diego a prospective from Joe Gottlieb

The President's Message

For the January EVAOSD meeting we started down the road through 2007. EVerybody contributed to the discussion "Jump-Starting an EV in YOUR Future" as we focused on 6 areas. We discussed the following: EV conversions; NEV (neighborhood EV); 3 start-up EV providers; PHEV; hybrids; and bio-fuels. Mr. Q demonstrated a motor turning gears and Puff da Mechanical Dragon. With all of the news and promises the momentum to improve this world seems to be quickly approaching in our rearview mirror.

Since our last meeting Keith Vansickle has attended the 6th Ever All EAA Chapters Meeting (representing EVAOSD) in Florida. Keith has information & photos to share with us as he reports that from The Beach Burn-out (drag racing) to meeting others EV'ers it was an EVent to attend. As discussed during our January meeting Keith would like to see San Diego charging towards an EV day at the races. Perhaps a drag-race at 1/8 mile track (that is not used) on the Barona Strip.

Lawrence Emerson was also busy attending a lecture by Terry Tamminen the author of "The True Cost of Oil"

and "Lives per Gallon." Larry was able to meet this man that has been called the Johnny Appleseed of a de facto nation climate plan. This is information that is not in the main media yet and you may want to learn more. Larry is willing to share what he has learned and read with us and we have provided information with links in this newsletter for you.

News Releases for EV related stories are coming out before we can add them to this newsletter. As I write this Telsa Motors has announced that they will be building their White Star EV in New Mexico. <http://www.livescience.com/blogs/author/leonarddavid>. Come to the meeting for the latest EV news.

For our February meeting we will be discussing several aspects about our San Diego Area Zap NEV dealership and hearing first hand from engineer Joe Gottlieb as to why he chose this direction to take and his prospective of what to come. We also will be networking and exchanging info about "Current EVents."

I look forward to seeing you at our meetings, perhaps in an EV.

Bill Hammons, President EVAOSD

The EV Grin

"EV'ers know about the grin that someone has just after driving an EV." Here are some notes for the San Diego EV Community.

Calendar of Events:

2/24/07 40th Annual EAA General (members) Meeting – Palo Alto, CA or via telephone (888) 865-7978 code 4084470607# - 10 a.m. – noon.

2/24-25 41st Annual Big 3 Auto Parts Exchange & Car Corral – Qualcomm Stadium, San Diego – (note 75% of show to be vehicle hobby related)

2/27/07 EVAOSD Meeting Zap EV Dealership in the San Diego Area with Joe Gottlieb

2/26 – 28 Faster Freight Clean Air in Long Beach

3/9/07 San Diego Regional Clean Fuel Coalition quarterly meeting.

3/27/07 EVAOSD Meeting – TBD

3/28/07 Greater San Diego Science & Engineering Fair

4/1-4/07 Nat'l Alternative Fuel Vehicle Conference &

Expo – Anaheim, CA www.afvi.org/

4/16/07 10 – 3 PM UCSD Clean Car Show all EV are welcome and encouraged to participate.

4/22/07 Earth Day 2007

4/22/07 San Diego Earth Fair & AFV Parade

4/24/07 EVAOSD Meeting - TBD

4/29 – 5/2/07 Hydrogen & Fuel Cell International Convention & Trade Show – Vancouver, Canada

5/22/07 EVAOSD Meeting - TBD

6/16 & 17 Enviro Fair at the San Diego County Fair

7/2 -13/07 Commuter Conversion Electric Car Class for Teachers

<http://home.att.net/~NCSDCA/EVAoSD/EVworkshopflyer2007.pdf>

Note that checks or PayPal payments for EVAOSD need to be made out to EAA with memo indicating that funds are intended for EVAOSD. Our day-to-day function stays the same EAA is helping with our banking and non-profit status.

To prepare this newsletter we use items that we find on the internet and to share the knowledge. In accordance with Title 17 U.S.C. Section 107, this material is distributed without profit to those who have expressed a prior interest in receiving the included information for research and educational purposes.

Three PHEV Attending the Pre-Oscars Golden Green Event...

The sponsoring organization, Global Green (the U.S. affiliate of Green Cross International founded by former Soviet President

Michael

Gorbachev) makes this a two-part event: the arrivals, and, equally important in terms of public participation, a media day and evening

Pre-Oscar Party on Weds. March 1. Here's a link to the Party <<http://www.globalgreen.org/events/signup.cfm>>.

EVAOSD Gives Thanks to all that help us down the road...

Dedicated people like you are EVAOSD's greatest asset. We appreciate your support and extra efforts.. Thanks to Russ Lemon and Kevin Taylor for donating equipment & time to meeting presentations. Abràn Quevedo for the EV motor demonstration and for putting together 2 EV Workshops this summer. Keith Vansickle for representing EVAOSD during the 6th Ever All Chapters Meeting in Florida. Lawrence Emerson for sharing inside info on "The true Cost of Oil." The following members & associates that are "Taking Turns" with updates that is not in the mainstream media.

Taking Turns ‘- - -, _ _ _ Messages from our members . . .

Lawrence Emerson reports from his meeting with author Terry Tamminen...

Far from being the merciless robo-governor some feared, Arnold Schwarzenegger has proved himself a green thinker, unveiling groundbreaking climate policies that put his state well ahead of the rest of the country. Much of that progress is due to the behind-the-scenes work of former adviser Terry Tamminen, who's now setting out Johnny Appleseed-style to help other states follow California's lead. Can he help create a de facto national climate plan? Tamminen talks with David Roberts about the prospects for success, the promise of hydrogen technology, and the sweet nothings Tony Blair whispered in his ear. **An interview with California environmental adviser Terry Tamminen author of "The True Cost of Our Oil Addiction" and "Lives per Gallon."**

<http://www.grist.org/news/maindish/2007/01/04/tamminen/index.html?source=weekly> Update Terry Tamminen for president – Clean air/ no war...
<http://www.grist.org/comments/soapbox/2007/02/16/tamminen/index.html?source=daily>

Bill Moore of EVWorld reports the Silence Isn't Golden, It is Electric...

<http://www.evworld.com/view.cfm?page=article&storyid=1192>



PHOTO CAPTION: Prototype Silence electric car has been operating flawlessly, according to Paul Laprade, for over a year now. It is based on the T-Rex tricycle platform, but is faster and more stable.



This "must see video" was provided by Dave Cutter of Village Energy info@villageebike.com for up-to-date information that you can use.



Summer Workshop

C2EC2T

Or



Commuter Conversion Electric Car Class for Teachers

July 02- July 13, 2007

Workshop Coordinator: Abrán Quevedo (Mr. Q)

Go from gross polluter to protector of the environment!

You can convert any stick-shift compact car from an ICE (Internal Combustion Engine) that uses gasoline to a NICE (No Internal Combustion Engine) all electric in just ten days! This course, designed for the absolute beginner or novice, will guide you in creating a reliable, pollution-free commuter electric car.

This is the perfect class for auto shop instructors, science teachers, industrial technology teachers, other industrial arts teachers and EV enthusiasts. We will be using the textbook, *Convert It* by Michael P. Brown which describes how to convert from gas to electric power, and along the way teacher participants will develop teaching strategies related to the electric car conversion process.

During the two week course, we will convert a loud, gas-guzzling candidate vehicle into an amazingly quiet, emissions-free electric car that will never have to pay at the gas pump again.

Overcome your fear of the conversion process with patient (mostly), gentle, hands-on instruction. Lots of wrenching included as an added bonus! Specific electric car classroom presentation will be offered by knowledgeable guest speakers related to low-rolling resistance tires, regenerative braking and electric car performance projections.

Tuition cost is \$300 (S.D. county ROP and SDCCC teachers exempt)

Class begins on Monday, July 02 and ends on Friday, July 13.

Each class runs from 8:00 a.m. until 3:00 p.m. daily.

Professional Growth Units (PGU) may be available at time of registration

San Diego Community College District Center City/Skills Center

835 Park Boulevard San Diego, CA 92101-4721 Phone: (619) 239-6739

For registration and motel accommodation information contact: quevedo@cox.net

Certificate of Completion Awarded to Workshop Participants

Zap news that will tie into this month's meeting...

Never Say Die at ZAP Last week EVWorld.com interviewed Stephen Schneider, the CEO of ZAP World while he was at the NADA convention in Las Vegas. He spoke plainly about the fortunes of the company he assumed control of in 2002, including the smart car fiasco, which came on the heels of ZAP's wildly successful promotion of the DaimlerChrysler-built car, resulting in \$2 billion in purchase orders.

This time out, the company garnered 2,300 orders, presumably for the little, \$8,900 Xebra electric car and pickup truck. They also debuted the Lotus APX, which the two companies are planning to offer in an all-electric version. While Schneider wasn't talking about the battery technology, he did heap a lot of praise on the APX, which he described as an all-aluminum frame that was specifically engineered so the car can be easily stretched and/or widened with only minimal engineering and tooling changes, offering enormous manufacturing flexibility.

He also commented that even though Tesla is working with Lotus on their Roadster, he sees ZAP and Tesla filling separate niches. Tesla is working on a sports car and family sedan, while ZAP is focusing on its under-\$10,000 electric runabout and a high performance crossover SUV-type vehicle.

So, the "plot" thickens as more companies, large and small are taking a serious interest in electric cars, and building some really attractive machines while they're at it. Heck, even the Xebra can start to grow on you after a while.

The Car 2.0: Stackable and Electric

Source: [Boston Globe](#)
[Feb 19, 2007]

SYNOPSIS: Researchers at the MIT Media Lab envision a fleet of lightweight stackable electric cars that can help reduce congestion and urban energy waste.



The full story is printed on our electronic edition of the EVAOSD Newsletter, please visit www.EVAOSD.com for this story and more EV news.

Additional EV news stories in the electronic edition are as follows: **[Jerry Brown Continues Big Auto Face-Off](#); [AC Propulsion Delivers First eBox Electric Car to Actor Tom Hanks](#); and an [invitation to the Phoenix Motor Car presentation 3/1/07](#).**

This marks the end of our printed & mailed newsletter additional EV related stories are available in our electronic edition at www.evaosd.com under meetings.

Continuation of EVAOSD Newsletter (electronic edition).

The Car 2.0: Stackable and Electric, Source: [Boston Globe](#)...

That's the vision of a team of researchers at the Massachusetts Institute of Technology's Media Lab. With backing from General Motors Corp., they are building a prototype of a lightweight electric vehicle that can be cheaply mass-produced, rented by commuters under a shared-use business model, and folded and stacked like grocery carts at subway stations or other central sites.

It's called the City Car, and the key to the concept lies in the design of its wheels. Dreamers have been reinventing the wheel since the days of cave dwellers. But the work underway in "the Cube," the Media Lab's basement studio, may be the most ambitious remake yet.

The MIT team has transformed the lowly wheel into a sophisticated robotic drive system that will power the City Car. Embedded in each of its four wheels will be an electric motor, steering and braking mechanisms, suspension, and digital controls, all integrated into sealed units that can be snapped on and off.

And under the hood . . . well, there won't be a hood on the City Car. Just an eggshell-shaped glass plate -- part roof, part windshield -- framing the modular cabin and stretching almost to the chassis.

"We're eliminating the internal combustion engine," said Media Lab research assistant Ryan Chin, studio coordinator for City Cars. He said the four electric motors will enable a more efficient use of power by also dispensing with the transmission and driveline. "We're removing as much hardware from the car as possible."

In its place will be software that sets passenger preferences, changes the color of the cabin, controls the dashboard look and feel, and even directs drivers to parking spaces. "We think of the car as a big mobile computer with wheels on it," Chin said. "This car should have a lot of computational power. It should know where the potholes are."

And like a computer, the car will start with the push of a button. Instead of a steering wheel, it has handlebars, akin to a scooter or motorbike. But the ride will be more like a traditional car, though smoother and quieter, Chin said. The body of the car will be made of lightweight composite material such as Kevlar or carbon fiber.

Among the car's other design departures are its folding chassis, enabling it to be stacked at designated parking areas across an urban area, where it could also be recharged. It also has a zero-turn radius, courtesy of a wheel configuration that provides omnidirectional motion. For the City Car, the traditional U-turn will be replaced by an O-turn, ideal for fitting into tight spaces.

The concept of the City Car was hatched by the Media Lab's Smart Cities group, as part of a strategy for reducing carbon emissions. The team is being led by William J. Mitchell, professor of architecture and media arts and sciences. Some of the Jetsonesque design of the City Car was inspired by the researchers' work with pioneering architect Frank Gehry, a friend of Mitchell, and associates at Gehry's architectural firm in Los Angeles. Gehry's firm was initially a partner, but has since scaled back its involvement to an advisory role.

"I think we'll be driving it around the interior of this building," Chin said, "and hopefully ask the MIT police to let us drive it around a parking lot."

The three-year-old project is moving forward under the watchful eyes of liaisons from General Motors, a Media Lab sponsor, and MIT researchers hope the automaker will build a City Car concept vehicle in 2008 to demonstrate at auto shows.

GM devotes a portion of its \$6 billion-plus annual research-and-development budget on university projects such as City Car to help its own researchers think out of the box, said Roy J. Mathieu, a GM staff researcher in Warren, Mich., who visits the Media Lab twice a semester and keeps in close contact with Chin's team.

"They're a rich cauldron of ideas we can use to develop concepts for our future cars," Mathieu said. "They're trying to imagine how the car will fit into the city in the future. Their ideas are interesting and intriguing, and we want to see if any of them fit into our technology road map."

Rebecca Lindland, director of automotive research at Global Insight in Lexington, said City Car is one of a number of futuristic designs being developed by automakers and independent labs to demonstrate new technologies and

concepts at a time of growing concern about global warming, traffic, and energy efficiency.

"The existing infrastructures can't support the population growth that we're seeing, so we're going to have to find viable alternative vehicles like the one MIT is designing," Lindland said.

Unless the cars can prove crashworthy and meet government speed and emissions standards, however, their applications may be limited to gated communities and entertainment parks, she said.

Chin said the design remains a work in progress, and if necessary the team will reinforce the car to make it crashworthy.

As the MIT researchers envision it, the City Car won't replace private cars or mass transit systems but ease congestion by enabling shared transportation in cities. Commuters could use them for one-way rentals, swiping their credit cards to grab a City Car from the front of a stack at a central point such as a school, day-care center, or office building.

"What you'll be buying is mobility," Chin said.

Jerry Brown Continues Big Auto Face-Off...

Source: [City on a Hill Press](#) [Feb 09, 2007]

SYNOPSIS: California Attorney General continues lawsuit against big 6 car manufacturers.



In another political two-punch combo to potential polluters, California Attorney General Jerry Brown announced that he would continue his predecessor's crusade against auto companies just hours before the news broke from Paris that global warming was "very likely" caused by humans.

Edmund "Jerry" Brown Jr., former governor of California and newly inaugurated California attorney general, announced Thursday that he will continue suing the six major auto companies for damages incurred by vehicle emissions, a project initiated by Bill Lockyer, former attorney general and current state treasurer.

Brown, in a general letter to automakers, invited the CEOs of General Motors, Ford, Chrysler, and the American outlets of Toyota, Nissan, and Honda to a formal gathering "at any suitable time or location," explaining that "with the current public, state, and Congressional focus on global warming and possible solutions, this is the right time for the state and the automakers to find cooperative approaches and resolve litigation in a constructive manner."

Gareth Lacy, deputy director of communications for the California Department of Justice, explained that this move to continue the lawsuit was a necessary action to make the auto companies prepare for the future.

"We're looking at a burgeoning population of six billion people. We're looking at between a billion and two billion cars worldwide in the next 50 years," Lacy said. "That's astronomical. Every gallon of gas we burn is 19.8 pounds of carbon dioxide into our atmosphere and contributing to global warming."

Tom Dresslar, communications director for Bill Lockyer, explained that they had faced trouble from auto companies in the past, and that the companies should be forced to pay for their actions.

"They've fought us in court on other air emissions cases. They fight against strong fuel economy standards," Dresslar said. "They talk about us, the state, filing frivolous lawsuits. For one, [the case against the auto companies] is not a frivolous lawsuit; it's well-founded and long-standing in common law that when you create a public nuisance you can be sued for the nuisance that you are creating. The emissions from their products are the largest single contributor to the public nuisance of global warming in the state."

Chris Paine, writer and director of "Who Killed the Electric Car?," a 2006 documentary that largely accused car manufacturers of deliberately and underhandedly eliminating demand for electric cars, feels that the government should stand up to the car companies.

"The industry complains about lawsuits, but they sued California on zero-emission vehicle standards, and they sued California on lots of other issues," Paine said, "If they say that lawsuits don't solve problems, why are they resorting to them? If Congress and the state had passed tougher regulations to begin with, and the car companies hadn't worked so hard to stop them, we'd all be in a better place, including the carmakers."

Dresslar agreed, saying, "They want to be able to sue our asses every time we do something to deal with global warming, but every time we try to hold them accountable, they whine."

AC Propulsion Delivers First eBox Electric Car to Actor Tom Hanks

Source: AC Propulsion
[Feb 19, 2007]

<http://www.podtech.net/nextgear/technology/1642/ac-propulsions-e-box> for audio interview on the eBox by Matt Kelly with Tom Page about AC Propulsion Inc. and the company's operation.

SYNOPSIS: Plug it in and it charges while you sleep. In the morning, the 35 kWh Li Ion battery is ready to go up to 150 miles, more than enough for a typical day's driving.



SANTA MONICA – AC Propulsion has delivered the first eBox customer car to Tom Hanks. The actor and producer, a veteran EV driver, ordered his eBox after driving the first prototype last July. "I still have a Toyota RAV4 EV and never spent a penny on gasoline for it", said Hanks, "What AC Propulsion is doing is fantastic. I drove their zero electric sports car a few years ago, so when they put the same technology in a four-door I wanted one for myself. It has double the range, goes fast, uses Li Ion batteries, and is incredibly roomy and comfortable. Oh, and I will also never have to put any gasoline into it!"

The eBox, which made its public debut in December, is a pure electric car, not a hybrid. With no gasoline engine, the eBox transports its occupants serenely and efficiently, at speed or in traffic, with powerful acceleration and amazing regenerative braking. Recharging is as close as the nearest electric outlet because the eBox can plug in anywhere. It seats five and has one of the roomiest rear seats in the business. Fold the rear seat and the eBox can take a huge haul. With air conditioning, electric heating, power steering, power windows, power mirrors and remote door locks, the eBox matches comfort and convenience with any car.

And there is one convenience no conventional car can match – the eBox refuels at home. Plug it in and it charges while you sleep. In the morning, the 35 kWh Li Ion battery is ready to go up to 150 miles, more than enough for a typical day's driving.

Benefitting from fifteen years of electric vehicle development at AC Propulsion, the eBox represents electric car state of the art - 2007. AC Propulsion has changed the perception and reality of the electric car with innovations such as light, powerful electric motors, maximized regenerative brakes, integrated high-power chargers, bi-directional grid connections that let the car supply AC power, and high-performance Li Ion traction batteries assembled from small cells.

The eBox comes with all of these innovations as standard equipment, making it not just a new car, but a milestone along the path to transportation without petroleum.

Just before he drove off, silently, in his new eBox, Hanks observed, "There are three electric cars sitting on the moon, and now another one in my garage. The eBox makes even more sense in Los Angeles than in the Taurus-Littrow Valley of the moon. I can drive all weekend, hauling dogs and helping my friends move, and the only reason I'll need to stop at a gas station is for beef jerky and lottery tickets."

AC Propulsion, founded in 1992, designs, engineers, and manufactures advanced propulsion systems for electric and hybrid vehicles, and provides hardware and engineering services for an international roster of clients. With facilities in San Dimas and Shanghai, AC Propulsion is building technology and capacity to supply advanced propulsion technology to electric vehicle manufacturers worldwide.



*See the unveiling of the only five-passenger,
electric, freeway-speed vehicle in America.*



*Ed Begley Jr. and Phoenix Motorcars cordially invite you for drinks, food, fun, and
to test drive the Phoenix zero emission SUV. A driving experience like no other.*

Thursday, March 1st, 6:00-9:00 PM
Petersen Automotive Museum
6060 Wilshire Blvd. (at Fairfax)
Los Angeles, CA 90036

*6:00 p.m. Guests arrive,
drinks, hors d'oeuvres*

7:00 p.m. Unveiling

6:00 - 9:00 p.m. Test drive the vehicle

9:00 p.m. Party ends

Business Casual Dress



Please R.S.V.P.: Email PhoenixDebutLA@yahoo.com or call Monica English at 818-333-3687