

EEVC NEWSLETTER

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. Web site: www.eevc.info

President: Oliver Perry, 5 Old Stagecoach Turn

Shamong, NJ 08088, (609) 268-0944

Copyright © 2015, Eastern Electric Vehicle Club, all rights reserved

Vol 35 No 12

DECEMBER, 2015

(revised edition)



Affiliated with EAA

CELEBRATING OUR ANNUAL DECEMBER "CHRISTMAS COOKIES" MEETING (Beverage of Choice... Prune Juice) Oliver Perry

As usual we discussed a wide range of topics, from electric hot rods to the low prices of crude oil. We viewed a special video from former EAA historical recorder Terry Wilson. Terry is trying to get some old historical materials from the early days of the EAA

into the hands of Stanford University. We also viewed a video showing the continued pumping of oil from the Los Angeles, area of California, seeing pumps that continue to work the Signal Hill vicinity, one of the largest sources of oil discovered in North America back in the 50s.

You want traffic?

One of the items we discussed at the December Christmas Cookie meeting refers to



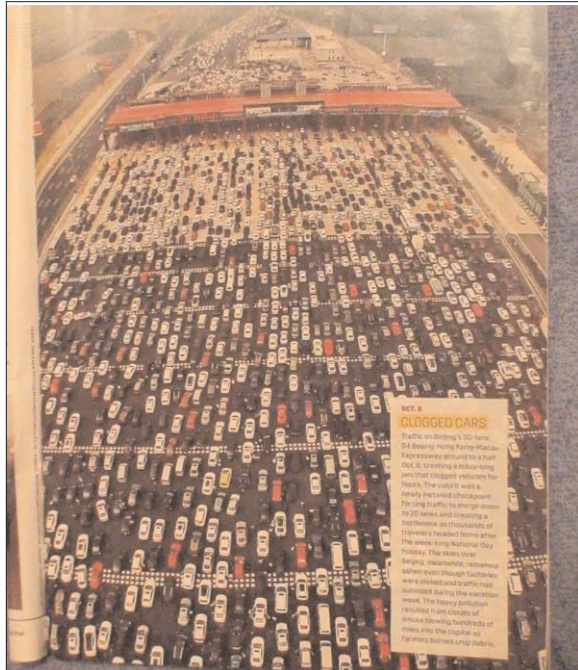
Left to Right: Carl "Banna Man" Grunwald, Robert "I'm Here" Haaz, Bruce "The Rebel" Sottovano, Jay "The Mailman" Beckerman, Joe "Jersey Boy" Michalski, Jim "Wall Street Investor" Natale, Joe "The Electrician" Michalski Jr., Ken "Drive Them Hard" EV Barbour, Al "Pickup Man" Arrison. Front Center: Our resident scientist, Professor Michael "Einstein" Manning.

the picture on page 2, which answered the question, "How many lanes for traffic are there on the Beijing toll booth end of the Hong Kong to Beijing Expressway?" (Some special cupcakes were the prize for the first six contestants coming closest to the correct

answer.) One person, Robert Haaz, answered perfectly. He had read about the fact previously. The answer 50 lanes. The person with the worst answer guessed one lane. The caption for the picture explains it all:

Clogged Cars

Traffic on Beijing's 50-lane 04 Beijing-HongKong-Macau Expressway ground to a halt Oct 6th, creating a miles-long jam that clogged vehicles for hours. The culprit was a



newly installed checkpoint forcing traffic to merge down to 20 lanes. It created a bottleneck as thousands of travelers headed home after the week long National Day holiday. The heavy pollution that caused skies to remain ashen even though factories were shut down was not due to vehicle exhaust. It was caused by clouds of smoke blowing hundreds of miles into the capital as farmers burned crop debris.

CALIFORNIA OIL Oliver Perry

I never comprehended how big a player California was in oil production.



My wife and I took a trip to California last October. Our son Steve just happened to out there the same time we were. Steve received a

contract from a government-sponsored agency to run an air quality study in the Signal Hill region of the state (General Los Angeles area.). Steve uses very high tech infrared “real time” sensing equipment that identifies



Oil pumps in well-to-do residential neighborhoods.



specific compounds present in the air. We decided to visit the area Steve was working in and were surprised at the

left: Tribute to the Roughnecks statue in Signal Hill. below: plaque at the base of the statue.

amount of oil drilling that still goes on in a very highly populated area. We had no idea how much oil California has produced since the 1920s.



ELECTRIC GO-CART RACING



Ken Barbour separates himself from the pack..

A few members of the EEVC assembled at the Indoor Go Cart Racing Track in Cinnamonson on Thursday evening, December 10th. The Sports Car Club of America (SCCA) had one of its meetings scheduled at the track that evening.

Ken Barbour and Jim Natale wanted to find out if they would be interested in allow-

Adult Race (43)						
Racer Name	#	P	Last	Best	Gap	Lap
Gasless	40	1	20.81	20.81	-	14
John Hodgson	41	2	22.21	21.34	0.53	14
Bill Rowand	14	3	21.73	21.36	0.55	14
Steve	44	4	23.92	21.86	1.04	14
Al Erzak	45	5	23.00	22.05	1.24	14
Jamie	43	6	23.94	23.66	2.84	13

Ken Barbour races under the name of one of his EV license plate tags, "Gasless." Note that he beat the others in his first electric go cart race on this track.

ing us (EEVC) to participate in one of their SCCA sponsored events in Atlantic City sometime in 2016. They were very happy to consider doing so. They allowed us to participate in their go cart racing evening as a guest of their club at their discount rate.

GET A FREE PROJECT CAR

For anyone who would like to pick up a semi-finished conversion project, Jim Kuhlman has a deal for you:

"I used to come to the meetings at the high school a couple years ago. We had a blue Honda Insight and then a Chevy Volt. I have another Insight and was trying to sell it, www.evalbum.com/4396. I am to a point that I would like to give it away. If you or anyone else you know may be interested the car is located in Red Lion, PA. Please e-mail first as I work 3rd shift and sleep strange and varying hours."

Ken Barbour has a few comments:

"Somebody please snap this up quickly so I am not tempted to. I have too many projects already. But doesn't a fully electric car built on one of the lightest most fuel efficient chassis sound interesting? The 2 seater Honda Insight weighed less than 2000 lbs, was made out of aluminum, and had the lowest coefficient of drag of any car I know of other than the EV1. There isn't another car around that's begging to be electric as much as this one. A winner of the 21st CAC for sure to the person that finishes it."

Contact Jim Kuhlman,
tvrjim@gmail.com,
 717-817-4849

INTERNATIONAL GREEN ENERGY INITIATIVE ANNOUNCED

At the climate summit in Paris on November 29 President Obama and French President Hollande, along with other global leaders, announced "Mission Innovation," an initiative to accelerate public and private global clean energy innovation "to address global climate change, provide affordable clean energy to consumers, including in the developing world, and create additional commercial opportunities in clean energy."

Through the initiative, 20 countries that represent 75 percent of the world's CO2 emissions from electricity, and more than 80 percent of the world's clean energy R&D investment are committing to double their respective clean energy research and development investment over five years.

According to the official Web site, <http://mission-innovation.net>, "Each of the 20 participating countries will seek to double its governmental and/or state-directed clean energy research and development investment over five years. New investments will be focused on transformational clean energy technology innovations that can be scaled to varying economic and energy market conditions that exist in participating countries and in the broader world."

How much will actually be done remains to be seen, since the benefits from taking action are in the future, and the economic and political pain are immediate. One suspects that all such efforts will go nowhere until the disaster is truly upon us, at which point the counter-argument will be "we no longer have the money to do anything about it."

NEWS UPDATE

Tesla goes bigger on battery plant plans

One wonders if Elon Musk sees the greatest prospects for his company not in making cars (a notoriously expensive and competitive business) but in manufacturing advanced batteries — for EV use, certainly, but also for stationary applications. A November 18 piece by Paul Shea at learnbonds.com reports that "[a]ccording to an interview the Tesla execs did with Fast Company, the firm now plans to build the Gigafactory bigger than previously thought. At completion the battery plant will come in at

13,600,000 square feet. Fred Lambert over at Electrek spotted the change first. The previous measure for the floor space of the plant came in at 10,000,000 square feet.”

The idea, it seems, is that through economies of scale and by increasing demand through its home battery business Tesla would be able to drive down the cost of batteries, which will make EV more popular and accessible. That Nevada gigafactory just keeps getting bigger.

Nevada makes a dubious deal?

After securing the Gigafactory project, Nevada seems to be going after more EV-related businesses, although not all of them seem fated to do well. The most recent was an announcement that Nevada governor Brian Sandoval was planning to offer \$335 million in state tax incentives and infrastructure upgrades to Chinese-backed EV startup Faraday Future to build a manufacturing plant in the suburbs of Las Vegas. The subject has been bandied about in the EEVC chat room, and the consensus seems to be that it's a bad deal for Nevada, and that nothing will likely come of it. Readers will remember a small item on this company in last month's *Newsletter*.

State EV fees becoming more popular

According to the Department of Energy, ten states now impose fees on EV users, the money (supposedly) to be used to offset the loss of gas tax revenue that EVs and other high-efficiency vehicles represent. The state with the highest fees is Georgia, which hits owners of commercial EVs with a \$300 annual fee, and non-commercial users \$200. Next up is Washington state, at \$100 per EV and to increase by \$50 for PEVs that can travel 30 miles or more on battery power.

Idaho charges \$150 per PEV and \$100 per HEV (not plug-in); North Carolina charges \$100 for EVs as well. Least expensive are Colorado and Wyoming, at \$50 for PEVs.

For the full list, see www.energy.gov/eere/vehicles/fact-901-november-30-2015-states-assessing-fees-electric-vehicles-make-lost-fuel-tax.

Jaguar to participate in Formula E racing

Jaguar has announced that in the Autumn

of 2016 it will return to motorsport as a manufacturer with its own team in the third season of the FIA Formula E World Championship. Nick Rogers, Group Engineering Director for Jaguar Land Rover, said: “Electric vehicles will absolutely play a role in Jaguar Land Rover's future product portfolio and Formula E will give us a unique opportunity to further our development of electrification technologies. The Championship will enable us to engineer and test our advanced technologies under extreme performance conditions.”

Racing Robots?

On November 27 Formula E announced that “Formula E and Kinetik [have] announced a partnership with the intention to launch a global race series for driverless electric cars. This new championship called ‘ROBORACE’ will provide a competitive platform for the autonomous driving solutions that are now being developed by many large industrial automotive and technology players as well as top tech universities.

“The plan is for ROBORACE to form part of the support package of the FIA Formula E Championship, with the first race intended to take place during the 2016-2017 season. ROBORACE is aimed to take place prior to each Formula E race, using the same circuits in major cities across the world. Ten teams, each with two driverless cars, will compete in one-hour races over the full championship season. All the teams will have the same cars however will compete using real-time computing algorithms and AI technologies.”

NYC aiming for EV municipal EV fleet

A December 1 *New York Times* article by Michael M. Grynbaum reports that New York mayor Bill de Blasio has announced plans to replace 2000 city-owned sedans with EVs like the Leaf and the Volt between now and 2025.

“The program is expected to require a capital investment of between \$50 million and \$80 million over 10 years, to support the creation of additional charging capacity for the vehicles.

“Amy Spitalnick, a spokeswoman for Mr. de Blasio, said fuel savings would help offset additional costs, such as the higher purchase price for electric cars.”

EPA to require more biofuels in gas

Although it has been shown that adding ethanol to gasoline puts more greenhouse gases into the atmosphere than using straight gasoline, contributes to higher costs for food and causes environmental degradation, the EPA has come out with new rules that will require more, not less ethanol. “The agency set levels for 2014 and 2015 at what producers actually used in those years, and it increased the total volume of renewable fuel required by the end of 2016 to 18.11 billion gallons, an 11 percent increase from 2014, the agency said,” according to *The New York Times*. While some dispute the reality of anthropogenic climate change, not one can deny the political power of the farm lobby.

Solar tax credit extended 5 years

“The “solar cliff” looks to have just been avoided,” according to a December 16 *Inside EVs* piece by Jay Cole.

“The 30% federal credit for solar energy was set to expire in 2017, to be replaced with a 10% credit for businesses and eliminated entirely for residential solar consumers; basically signaling a huge roadblock for widespread PV adoption in about 13 months.

“However, late last night House Republicans took the wraps off of new legislation which had provisions for five year extensions of tax credits for solar and wind.

“And if that action seemed a bit odd for the Republications...or at least a bit out of character, well, there are trade-offs. The cost was the end of protracted negotiations with the Democrats over the ban on exports of U.S. crude oil.”

If this upsets you, remember the quote widely attributed to Otto Von Bismarck: “Laws are like sausages, it is better not to see them being made.”

More tolls on Interstates?

From Tullio Falini, quoting *The Kiplinger Letter*: “Don’t be surprised if more states charge tolls to drive on interstate highways. Congress quietly (the recently passed Highway Bill) lifted a ban on state tolls....in place since 1956.” While we here in PA and NJ are used to tolls (they were grandfathered in), most of the rest of the country will soon start seeing them. “More city and state govern-

ments are using electric vehicles...even police cars. The move not only reduces emissions but also cuts costs. Atlanta figures each of its 50 electric vehicles will save up to 600 gallons of gas a year and will lower maintenance costs by about 40%. Also....with all-electric cars are Houston, Indianapolis and NY City. Plus half of the light-duty vehicles purchased by 2017 in LA will be electric. Meanwhile, 37 states offer tax credits or other incentives to buy electric cars, ranging from 1000 in MD to 6000 in Colo....all...on top of the Federal tax credit of up to 7500. That credit will expire down the road as manufacturers reach a sales threshold for plug-in-vehicles. But some states are imposing fees.....GA 200 annual fee for plug-ins, ID and WY are adding fees in 2015. Colo. NE, NC, VA and WS already have such fees. The fees are meant to offset falling gas tax revenues.” How high can these fees go? As high as the public lets the Gov’t. go. Electric car lobby and advocacy must start forming more strength as Tesla and others put more EVs into the mainstream.

ARE WE GREEN YET? By California Pete



With all the hoopla about energy savings, two enterprises in my own city of San Leandro (across the water from Baghdad by the Bay) quietly go about actually doing it. One is a training center belonging to the IBEW (electrical workers union) that goes by the name Zero Net Energy Center. With skylights, LED lighting, thermal storage, windows that actually open, solar panels and wind turbines, the place uses no net external energy. Not bad. And just up the street is a company called Energy Recovery Inc., which is perhaps best known for its energy-saving desalination system for sea water, but also has technology that saves energy in ammonia production and oil & gas recovery.

This is why I avoid San Francisco

For a pretty good explanation of what SF has become, take a look at “San Francisco’s strange detour from paradise to parody,” by John King and Heather Knight in the *San*

San Francisco Chronicle for September 18. It describes in riveting detail such atrocities as one-bedroom apartments renting for \$6800 a month, “a 291-square-foot condo [that] sold in April for \$415,000,” grilled cheese sandwiches that cost \$14.00, “a shot of blue-green algae at Juice Shop, a local chain,” that goes for \$3.00, and too many others to mention. Take a look at www.sfchronicle.com/bayarea/article/San-Francisco-s-strange-detour-from-paradise-to-6489844.php?cmpid=gsa-sfgate-result.

On top of that, the place is impossible to get to by car, especially if you’re not wealthy (the non-wealthy are an endangered species in SF), according to a December 9 *Chronicle* piece by Joe Garafoli. “The median commute distance for people who work in San Francisco and earn less than \$40,000 jumped from 9 miles in 2008 to almost 15 miles in 2013, according to a study by Zillow. The commute for those making more than \$40,000 remained relatively unchanged over that period.

“Commutes are getting so long that fewer low- and middle-wage workers who live outside San Francisco are applying for jobs in the city.” And you can’t get ahead of it: the backups on the major bridges now begin at 5:00 a.m. and extends to 7:00 p.m.

You might think that self-driving cars, those high-tech darlings of the futurists, might be a partial solution, but the DMV seems to have put the brakes on that, adopting “draft regulations that ... would require the vehicles to have steering wheels and licensed drivers behind those wheels, ready to take control in case technology fails,” according to the *Chronicle*. So no snoozing or texting (not to mention such quaint activities as reading the paper) while the car drives you to work.

Keeping all that in mind, the last few times I went there I used public transportation, not only because of the tolls and the traffic, but because I can’t shake the fear that I might be arrested for driving an American car in San Francisco.

COMING EVENTS

SAE 2016 Government/Industry Meeting, co-located with the Washington Auto Show.

Jan 20-22, Washington, DC. www.sae.org/events.gim/

Motor & Drive Systems 2016

Jan 21-22, Jacksonville, FL. www.e-driveonline.com/conferences/

SAE 2016 Hybrid & Electric Vehicle Technologies Symposium

Feb 9-12, Anaheim, CA. www.sae.org/events/hybridev/

2016 Clean Low-Carbon Fuels Summit

Feb 23, Sacramento, CA. <file:///C:/Documents%20and%20Settings/All%20Users/Documents/Nov%2015%20Newsletter/Events/CALSTART%20Events%20%29%202016%20Clean%20Low-Carbon%20Fuels%20Summit.htm>

SAE 2016 World Congress & Exhibition

April 12-14, Detroit. www.sae.org/congress/

WAVE TROPHY 2016 ++ 11 - 19 JUNE 2016

June 11-16, from the North Sea to the Alps. www.wavetrophy.com/en/

2016 American Solar Challenge

July 22 - Aug 6, traveling through seven states from Brecksville, OH to Hot Springs, SD. <http://americansolarchallenge.org/competition/ascfsgp-2016/>

SAE 1016 Convergence; Theme: Personal Mobility – Creating a Smart and Autonomous Journey

Sept 19-22, Detroit. <https://www.sae.org/events/convergence/>

NOTICE ON DUES

Annual EEVC dues are \$20 with electronic delivery of the Newsletter, or \$25 for a printed copy. Mail checks payable to EEVC to James Natale, 3307 Concord Dr, Cinnaminson NJ 08077, or pay via PayPal to jnatalemicro@comcast.net.

MEETING SCHEDULE

Meetings are held in Room 49, Plymouth-Whitmarsh High School, 201 East Germantown Pike in Plymouth Meeting, PA, and begin at 7:00 p.m.

Jan 13

Feb 10

Mar 9

Apr 13