EEVC NEWSLETTER

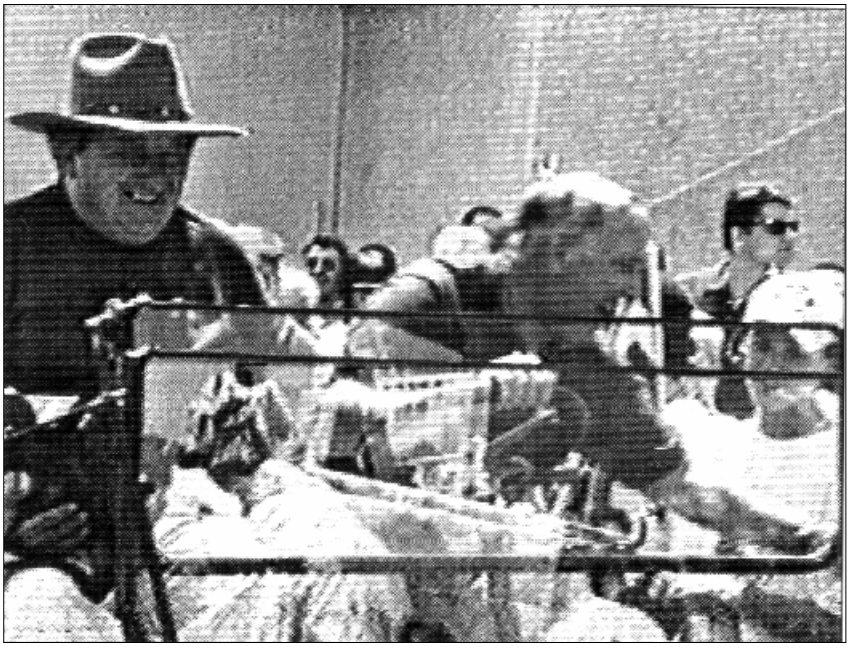
Published by the Eastern Electric Vehicle Club

Peter Cleaveland, Editor **Vol 29 No 8**
Club Address: P.O. Box 134, Valley Forge, PA 19481-0134 **AUGUST, 2009**
email: easternev@aol.com. Web site: www.eevc.info
President: Oliver Perry, 5 Old Stagecoach Turn
Shamong, NJ 08088, (609) 268-0944

Now affiliated with EAA

FIRST EVER COAST TO COAST TRIP IN A FACTORY BUILT ELECTRIC CAR
By Oliver Perry

On July 3rd , 1995 Ray Carr drove into Atlantic City, New Jersey, completing a so-called first ever trip from the Pacific to the Atlantic Ocean in a factory built electric car. I happened to be on hand in the crowd on the boardwalk to witness and actually capture on a video cam the historic event.



From page 1 of the July, 1995 Newsletter: Ray Carr and Crew Chief Mike Wyka (in hat) arrive at Harrah's Marina casino in the 1912 Baker.

The following is taken directly from page 3 of the 1995, Monday September 18th, Legislative Journal of the House of Representatives of the state of Pennsylvania, the 179th session of the 1995 General Assembly.

"Raymond Carr Presented"

"The Speaker. The chair recognizes the gentleman from Chester County, Mr. Schroder.

Mr. Schroder. Thank you, Mr. Speaker.

"Good afternoon, members of the House and guests.

"Today it is my honor to present a citation on behalf of the Chester County delegation of the House to my constituent, Mr. Raymond Carr of Chester Springs, Pennsylvania.

"Mr. Carr is a real estate developer by trade, and a very successful one at that, but today we honor him not for his vocation but for his avocation. Mr Carr — and I do believe that 'Carr' is a most appropriate name for this fine gentleman — has made two historic cross-country trips in vintage automobiles.

This past summer he completed a coast to coast, 3100 mile journey in an 83 year old

Baker electric car. The trip began in Astoria, Oregon, and ended July 3 in Atlantic City, New Jersey. It is believed to be the first sea to sea journey accomplished in a factory built electric car. Ray Carr is headed for his second entry into the *Guinness Book of World Records* for this achievement.

"Mr. Carr averaged about 90 miles per day at 18 miles per hour in rain, snow, and summer heat, hitting speeds up to 30 mph downhill. Thanks to painstaking maintenance, he encountered no mechanical problems. He hopes this trip encourages American carmakers to step up their efforts in developing a practical, reliable electric automobile.

"This afternoon, the 1912 Baker electric car is on display outside the Capitol East Wing by the fountain, and seeing it is a very gorgeous day out there, I would suggest that all members take a moment from your schedule to go see the car. You will not regret taking the time to go out and see it." End of Journal Quote

In the winter months of 1995 I actually got to see the vehicle that Ray Carr was preparing for his history making trip. Ray Carr had dropped it off at the Boyertown Museum of Historic Vehicles for "special treatment" for his upcoming venture. The car was placed in what was to later become the main display area of the museum. At the time of my visit the large garage type warehouse was the storage area and prep place for many of the antique vehicles displayed in a smaller building across the parking lot. The building was once home to the truck manufacturer Boyertown Body Works. Guy Davis, Dan Carlin, and Dave Patterson had turned a section of the building into a repair center for all types of restorations and electric car makeovers.

Ray Carr's crew chief Mike Wyka, Guy Davis founder and first president of the EEVC, Dan Carlin and Dave Patterson, members of the EEVC, and Pete Cleaveland, editor of the *EEVC Newsletter*, were the first to actually get their hands on the vehicle. Pete recorded in the February issue of the *EEVC Newsletter*, "The car is a thing of beauty, with everything that could possibly be shiny gleaming. The body is a deep blue, and the fenders an even deeper blue — almost black, in fact. The top is black, while the trim is nicely varnished wood — all a tribute to Bill Pollock's restoration shop and the careful work of restorer Brian Dawity. On a plate in the rear is Baker Motor Vehicle Company, Model W, Chassis number 7646. There is another plate with the body number 2245."

The original motor was a 48 volt, 26 amp, 1750 rpm General Electric. Dan Carlin and Guy Davis installed a Curtis PMC controller, which was then standard operating procedure for upgrading an antique electric car for extensive road use. The PMC was hidden so as to not interfere with the authentic look and connected in series with the battery and the original drum controller. According to Pete Cleaveland's account, nobody knew what the original voltage of the vehicle was but suspected that it was 60 volts. The Baker Company seemed content to operate the 48 volt motor with a higher voltage. The Boyertown group decided to run the car on 72 volts. Pete recorded that the first test drive around the streets of Boyertown went fine. The driver with a heavy passenger got 19 mph on the flat pulling 25 amps and 12 mph up a small hill. At the time of the article the team decided that the original GE motor should be replaced with an up-to-date motor because parts were not available for the original. They also decided to install nickel-metal hydride batteries from Ovonic Battery Company. It was concluded that the wind catching top would have to be taken down at times going cross country.

In April of 95 Pete reported in the *EEVC Newsletter* that Guy Davis had successfully replaced the old motor and achieved speeds of 30 mph with no difficulty but was having trouble with range with lead acid batteries. The May issue of the *EEVC Newsletter* reported that the wheel spokes had been tightened and the rims fitted with a brand new set of 580x120 Michelin tires made in France. A small add-on instrument panel for the Curtis Controller was tucked away under the seat along with a 12 volt fan to keep the controller cooled. The wooden floors of the under-the-seat compartment had been replaced with an aluminum plate with lots of holes for cooling. And, instead of using the nickel metal hydride batteries Carr decided to use twelve 6 volt Exide batteries.

The Baker was a chain drive vehicle and due to a nonstandard pitch of the chain the team found no back up chain suitable for

replacement should the original one break. Guy Davis was very concerned that it might not last the trip. Thankfully it did last with no problems.

According to historical records the world's first electric car is believed to have been constructed in 1839 by Robert Anderson of Aberdeen, Scotland. In 1870 Sir David Salmons built an electric car with a lightweight motor in England, but the great weight of the storage batteries made it impractical. In 1886 a practical electric taxi was introduced in England with a top speed of eight miles per hour.

In 1893 Walter C. Baker as a young student built his first electric car in the United States. It was called the Electrobat Automobile for the World Exposition in Chicago. Baker became a pioneer in the ball bearing industry and began building cars for sale in Cleveland, OH in 1898. He displayed the first shaft driven automobile in Madison Square Garden in 1898. In 1902 Baker was the first to drive a car over 100 mph in his electric "Torpedo" at Ormond Beach, FL.

The first large-scale operation in the American automobile industry was the Electric Vehicle Company, formed in 1899. In 1904 it produced 2000 taxicabs as well as electric trucks and buses.

According to a short history published by Ray Carr the first-ever-coast to coast trip on battery power was made in a vehicle built in 1968 by students from the California Institute of Technology. In 1984 a little three-wheeled experimental car powered only by solar cells made the first sun powered trip across the United States.

First "Factory Built" electric to cross the US

Ray Carr felt that his trip would represent the first factory built electric ever to traverse the U.S. He chose the Baker Runabout, No. 2245, built in 1912 to establish history. It may be the only one in existence.

In 1912 the company ran an advertisement reading, "The Car of Long Life- and a Good Record." The ad continued; "There are literally thousands of Baker owners today who have driven their cars week in and week out for years, some of them for a dozen years, with service unimpaired." Thomas A. Edison bought the first Baker Electric as his first automobile because of its fine engineering features.

I am not sure what a factory built vehicle is supposed to be mean to when it comes to certifying that the Ray Carr 1995 restored Baker was "factory built." Certainly the motor, controller, tires and battery pack were not the original factory built version of the 1912 Baker Runabout. Newer factory built technology was added to the older in order to make the trip across the country in a reasonable amount of time. In baseball, records set with newer balls, bats, and rules in newer ball parks, frequently come into question. So too, technicality speaking, we must leave Ray Carr's questionable factory built Baker for readers and record keepers to debate. The body, however, was authentic.

Ray Carr acquired his Baker runabout from the William F. Harrah automotive collection in 1986 for $13,000. The absence of early ownership papers makes it impossible to trace the history of the runabout. Body markings suggest it was the 7646th vehicle built by the Baker Motor Company and the 2245th runabout.

The driver

Ray Carr, previous to his trip across the US in the Baker, had gone into the *Guinness Book of Records* as the owner and driver of the oldest automobile to ever cross the United States, a feat he accomplished in May 1994 in a little red 1902 Northern runabout. His route took him across the Southern part of the U.S. from San Diego to Jekyll Island, Georgia in only 23 days.

Ray Carr, a hard working entrepreneur, made his money in real estate ventures after he left his father's milk trucking business at his father's death. In addition to his business ventures Ray Carr also built an orchestra as a professional musician and considers himself a lover of history. He enjoys ventures that preserve the past for future generations to enjoy.

The trip

Like the pioneers with their covered wagons Carr plotted his route to follow river valley and take the lowest passes through the mighty Rockies. Beginning in Astoria, Oregon on May 27th he traveled along the Columbia River. His trip eventually took him

along the Oregon Trail and down into America's heartland. He selected segments of Route U.S. 30 both in the West and in the East for historical significance. The eastern section in Pennsylvania was a part of the great Lincoln Highway, the nation's first coast-to-coast roadway.

Mission accomplished

Just before noon on July 3rd, 1995 Ray Carr arrived on the Atlantic City Boardwalk at Harrah's Marina Casino and drove slowly and triumphantly through a crowd of well wishers, relatives, press people, Harrah's employees, and others to complete his 2400-mile trip. After the requisite handshakes and speeches, Ray and his chief mechanic Mike Wyka proceeded to the edge of the pier and poured a silver flask of Pacific Ocean water into the Atlantic. The ride covered eleven states, rain, wind, hail, scorching sun, and even a late season snow storm. The average day's travel was 90 miles with two quick charges. Once the car went 89.6 miles on a single charge. (Not bad for twelve six volt lead acid Exide golf cart batteries.) There were few hitches along the way. An oil line on a battery charger failed a couple of times. There were problems with a high rate charger and the Curtis PMC controller tucked under the seat overheated several times until an additional heat sink was added. The accessory battery itself was once found discharged. The Baker itself never missed a beat, suffering from only a few squeaking sounds from the wheel spokes during the rain.

RENEW AMERICA ROAD TRIP WITH TESLA
By Oliver H. Perry

July 15th 2009, I witnessed three Tesla Roadsters, a red, white, and blue trio, leave the curb in front of the "green" Westin Hotel New York on West 43rd Street, headed for Philadelphia on the first leg of a trip across America. By the time you read this, the Renew America Road trip, crossing the United States in a Tesla Roadster using only electric power, will have ended. One of the Roadsters, the white one, will actually have crossed the continent. Others will have accompanied it for partial legs. For the complete story Google renewamerica roadtrip.com and see what you find. The renewamericaroadtrip web page should provide you everything you want to know,

In a nutshell, a middle aged technology executive and registered patent agent, Michael Crane, spearheaded this interesting venture. He partnered with a gal nicknamed Maddy, Madushini Gunaward, who presently is a physician in training at Touro College in New York City. This colorful duo planned on doing most of the driving across the wide prairies, from sea to shining sea, and at the same time raising awareness for electric cars and a number of green organizations and charities.

Michael and Maddy linked pleasure with purpose by including a means for sponsors to donate to selected worthwhile charities. Charities were chosen both for greenness and for their ability to generate public attention for electric cars. Michael and Maddy have coined this venture the first "green" car "charity" road trip since it is not the first electric car to transverse the United States. Several others have previously done so.

Ron Freund, chairman of the publication Current Events, was approached a number of months ago by Michael regarding his plan. Ron provided Michael with many contacts needed to create the mechanics of such a road trip. The concept appeared to be bright, doable, and loaded with potential for introducing the viability of electric cars to "Mid America." One of Ron's expressed concerns, however, regarded the timeline. There seemed to be an overwhelming amount of networking, organizing, and planning to do, as well as support raising before the July 15th 2009 send-off.

Michael quickly began contacting EAA chapters across the country to assist him in setting up charging and media event stops along the route. I was contacted as a representative of the EEVC, a chapter in the Philadelphia region. We were slow to react to Michael's request for support because of the overload of activities our members are currently engaged in. Don Auker, the first Pennsylvanian to acquire a Tesla, a newly acquired EAA and EEVC member, responded and agreed to help map the Eastern Pennsylvania route as well as drive it with his blue Tesla.

Don Auker and friend Angie set in NYC to depart on first leg of journey across America.

Jerry Asher, an EAA member involved in chapter relations, decided to help the cause and include it in his Spirit of DC travels. Jerry was first to put pressure on me to meet with Michael and Maddy, which I finally was able to do July 6th. After a dinner together at a Mexican restaurant, Michael offered me a ride in his white Tesla Roadster. He borrowed money to purchase this impressive car for his planned ride across America. (His money hopefully will be recouped by auctioning off the vehicle on e-Bay.) I was impressed with the acceleration. I have never experienced such quickness in a vehicle.

After the ride the four of us, Michael, Maddy, Jerry Asher, and I, reviewed the road trip plan in Michael's living room. Obviously time was short and Michael's needs were long. Unfortunately I had to inform Michael and Maddy that the EEVC, historically rooted in Valley Forge, PA. was not a deep pocketed organization nor did we have many excited volunteers that were ready and willing to rush to his aid like the minute-men of old when

Michael and Maddy being interviewed before departure.

Jerry Asher next to his plug in prius The Spirit of DC helping to keep the spot in front of the Westin Hotel in NYC free for the Tesla car line up.

George Washington knelt in prayer at Valley Forge. Regrettably for the Renew America Road Trip team, the time spent with me did not add anything significant to their coffers.

The road trip departed New York City with a "catch as catch can" spirit of adventure. Michael achieved a remarkable amount of support in a short span of time. The launch was made on schedule with Jerry Asher and the Spirit of DC aggressively keeping buses and taxi cab drivers out of the reserved Tesla parking spaces in front of the Westin Hotel.

As many ventures have been forced to do, the Renew America Roadtrip (RAR) counted upon many parties to come together on the fly and a measure of good luck as they rolled down the highway. There once was a time when electric vehicle clubs and organizations would quickly swarm all over such a venture with an abundance of enthusiastic volunteers. But it is not so today. There are so many things happening in the EV-world currently that it is impossible for anyone to remain on top of a fraction of them. When someone like a Michael and a Maddy come along requesting our help even for a worthwhile electric vehicle project, it is not that we do not wish to jump to their aid, but rather the truth is their venture is no longer the only game in town. Driving across America in an electric car is no longer considered to be a major newsmaking event.

Much is happening in the electric vehicle world daily. The high profile electric vehicle organizations of our country today could be serving the public every week of the year, in some cases every day of the year, in a green outreach. EVents take time, energy, and resources. There are not enough qualified doers, committed to finishing their assigned jobs to go around. Burnout is occurring in

some of our electric vehicle chapters because too few are doing most of the real work. Unless highly skilled qualified new people step in to do the work, many of the things we do will no longer be done. When somebody calls out for us to support another green project, we are being forced to reply, "Let somebody else do it please!"

In the end, Don Auker was the only EEVC member who actually participated in the RUR adventure. He and his girl friend Angie accompanied the Michael's white Tesla for several legs of the journey making it as far as the Pittsburgh area. Don may share his thoughts with us about the experience in an upcoming fall meeting or in this newsletter. Briefly speaking Don said most things went very well; a few things did not.

Jerry Asher drove his plug in Prius, The Spirit of DC, across the country providing advanced media attention for the RUR team in many of the places scheduled for a charging stopover. Jerry agreed with Don that many things went well and a number of things did not. The camera man and the driver of the donated Nissan support vehicle unexpectedly departed the venture somewhere in the western part of the US. This left Michael and Maddy alone to drive both the Tesla and the support vehicle to the west coast. The team arrived in California, declared victory at the first California stop and did not choose to finish the scheduled trip up the coast to San Francisco.

What is the conclusion? A couple by the name of Michael and Maddy are the first recorded couple to drive a Tesla Roadster from New York City to California making many recharging and publicity stops along the way. They established history in July of 2009.

NEWS UPDATE

The Cash for Clunkers program has a lot of cars dealers smiling, but there was one company that is adding dealers while Ford, GM and Chrysler have been shedding them: Wheego Electric Cars, maker of a low-speed two-passenger vehicle called the Whip, assembled in Ontario, CA. In fact, company executives are embarking on a coast-to-coast road show from August 8 to September 26 to sign up dealers. "This vehicle is unlike any other LSV in the world," says company president Jeff Boyd, "in that it is based on a car chassis; not a golf car chassis. For your market, the car can be programmed to go up to 35 mph if your local laws allow it."

The car is a two seater with room for golf clubs in the back. It also comes with a full size spare tire.

Energy is stored in 12 8V lead acid batteries a 102 V LiOn system is optional), while power comes from a 10 hp avg (40 hp peak) AC brushless motor.

MSRP is $18,995 (plus extras, including A/C).

"This car will be the basis of our FSV (full speed vehicle), Boyd continues, "which we hope to bring to market in 2010. The FSV will be capable of 65 mph and have a driving range of approximately 100 miles between charges. This vehicle will have air bags and meet all US/NHTSA (National Highway Transportation Safety Administration) requirements."

For more information, go to www.wheego.net.

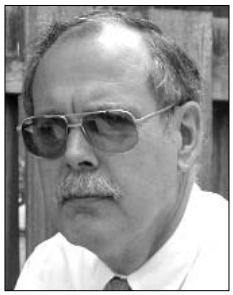
Nissan shows its new EV

On August 2 Nissan gave the first public showing of its new EV, called the Leaf, which is expected to be available world-wide in late 2010. The price is anticipated to be "in the range of a well-equipped C-segment vehicle," according to the company. And tax

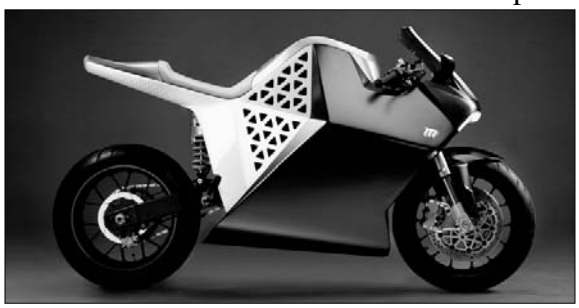
credits and incentives are also expected.

The car seats five and claims a range of 100 miles (160 km) using a Li-ion battery with a 90 kW output feeding a motor rated at 80 kW (107 hp)/280 Nm (206 lb-ft).

ELECTRIC MOTORCYCLES MOVE AHEAD IN BAY AREA
By California Pete



Wired recently reported on a new company in San Francisco making an electric motorcycle that it claims can go 150 mph (it would not be a good idea to try that in S.F.). The company, Mission Motors (www.ride mission.com) makes the Mission One, which it claims is the world's fastest production electric motorcycle (although production has not actually started yet). The company recently entered a machine in the the TTxGP zero-emissions motorcycle race held at the mountain course on the Isle of Man as part of the Isle of Man TT and finished in fourth place



— not bad for their first time at the event. There's a nice record of all that occurred at http://ridemission.com/blog. Some technical specs include a lithium-ion battery pack with thermal management, a liquid-cooled, 3-phase AC induction motor rated for 100 lb-ft of torque at 0 to 6500 rpm and range of 150 miles per charge.

Celebrating anniversaries

California has just celebrated two important anniversaries: the 40th anniversary of the murders carries out by Charles Manson and his followers in Los Angeles, and the 75th anniversary of the establishment of the federal prison on Alcatraz island.

Some members of the Manson "family," are still in prison (as is Manson himself) and some (who did not participate in the murders) have spent the intervening decades trying to blot out the memories, although, according to the *San Francisco Chronicle*, some have remained faithful to the man who is arguably one of the most dangerous psychopaths in American history.

The celebration of the 75th anniversary of the opening of the federal penitentiary on Alcatraz brought us back to realm of crooks whose motives were generally easier to understand. Plenty of tourists showed up, along with a few of the original guards and a couple of ex-inmates.

Lots to see in San Francisco

The new San Francisco police chief, George Gascón, was driving around the Tenderloin prior to taking the oath where he was surprised to see drug deals going down right in front of him. Since he had not yet been sworn in he couldn't do anything, but it may have given him a clue as to the challenges ahead of him.

We're watching you

Not far from San Francisco is the exclusive town of Tiburon, which sits on its own peninsula and has only two roads in or out. Houses there sell in the millions of dollars, and while crime is low the local police have proposed a way to reduce it further: install cameras that will record the license number of every car that enters or leaves, 24/7.

U.S.leads in wind energy

Product Design & Development recently reported that Secretary of Energy Steven Chu "has announced the release of DOE's 2008 Wind Technologies Market Report, detailing $16 billion in investment in wind projects made in the U.S. in 2008, making the U.S. the leader in annual wind energy capacity growth, as well as cumulative wind energy capacity."

"Wind power contributed 42 percent of all new U.S. electric generating capacity in 2008;

for the fourth consecutive year, wind power was the second-largest new resource added to the U.S. electrical grid in nameplate capacity."

Some of the key findings of the report, says DOE, include:

• The U.S. continues to lead the world in annual capacity growth and overtook Germany to take the lead in cumulative wind capacity. For the fourth straight year, the U.S. led in wind capacity additions, capturing roughly 30% of the worldwide market.

• The cumulative wind capacity installed in the U.S. at the end of 2008 would, in an average year, be able to supply roughly 1.9% of the nation's electricity consumption.

• Soaring demand for wind has spurred expansion of wind turbine manufacturing in the U.S. The American Wind Energy Association estimates that the share of domestically manufactured wind turbine components has grown from less than 30% in 2005 to roughly 50% in 2008.

• Texas led all states with 7,118 MW of total wind capacity installed, followed by Iowa (2791 MW) and California (2517 MW). Seven states now have more than 1,000 MW installed, and 13 have more than 500 MW.

• Iowa and Minnesota have the highest levels of wind penetration.

• Wind power remained competitive in wholesale power markets in 2008, with average wind power prices at or below the low end of the wholesale power market price range, although upward pressure on wind power prices looks set to continue.

COMING EVENTS

One Gallon Challenge
August 19-20, Greenfield, MA. For information go to www.moonbeamplans.com.

Power of DC drag race, EVADC "East of the Mississippi" Chapters Conference and Launching of the Xtreme BugE "Fun Run in the Sun"
August 28-30, Hagerstown, MD. For information go to www.EVADC.org, www.PowerofDC.com, and www.FunRunintheSun.org.

Fifth IEEE Vehicle Power and Propulsion Conference
September 7-11, Dearborn, MI. For information go to www.vppc09.org/

Energy Conversion Congress and Expo
September 20-24, 2009. San Jose, CA. Go to www.ecce2009.org/

AltWheels Fleet Day 2009
October 5, Framingham, MA. For information contact Alison Sander, 617-868-1582 or go to www.altwheels.org

eCarTech 2009 1st International Fair for Electric Mobility
October 13-15, Munich. For info go to www.ecartec.eu/index.html

The Business of Plugging In
October 19-21, Detroit. For info go to www.pev2009.com or or contact Center for Automotive Research, 734-662-1287, CAR_EVENTS@cargroup.org

Battery Power 2009
October 20-21, Denver, CO. For information go to www.batterypoweronline.com/bpptconf09/bp09_index.php

MEETING SCHEDULE

Meetings are held in Room 49, Plymouth-Whitemarsh High School, 201 East Germantown Pike in Plymouth Meeting, PA, and begin at 7:00 p.m. As in previous years, there will be no July or August meetings.

September 9

October 14

November 11

December 9

*** FOR SALE ***

Lester Electrical 12/96 volt Battery Charger, 208/230 volt input, 96 volt 30 amp output, used by Jet Industries in converted trucks. $50.00

Contact Edward F. Kreibick, 215-396-8341, ekreibick@verizon.net