E E V C
INDEPENDENT MOTORING

EEVC NEWSLETTER

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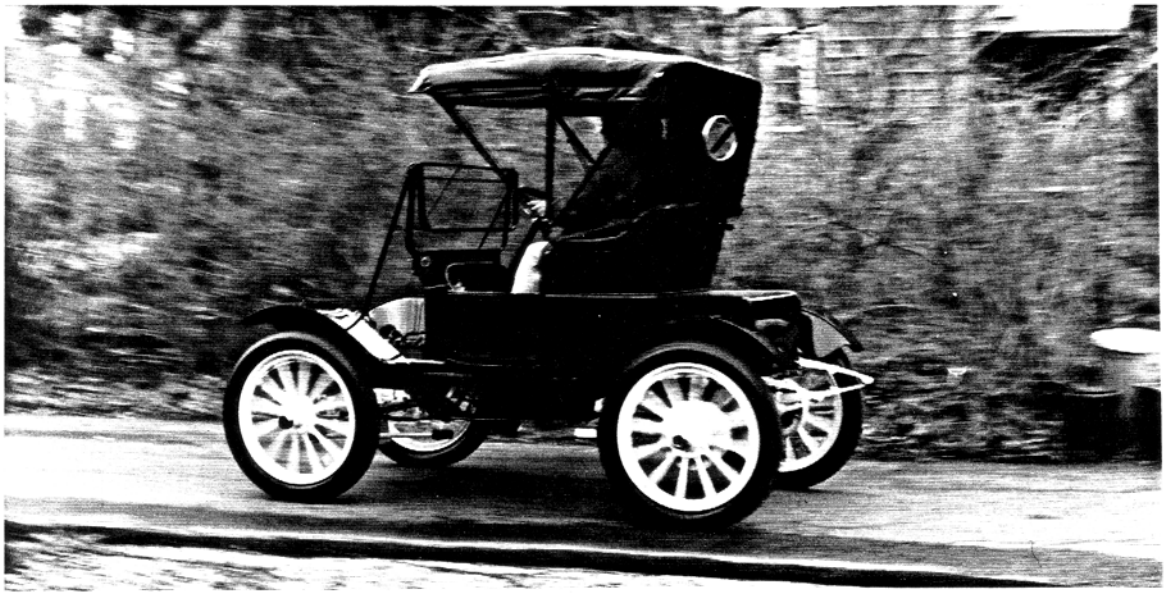
President: Ed Kreibick, 1729 Griffith St
Philadelphia, PA 19111, (215) 722-8378

ACROSS THE COUNTRY IN A BAKER



Crew chief Mike Wyka takes the 1912 Baker runabout for a test run on the streets of Boyertown

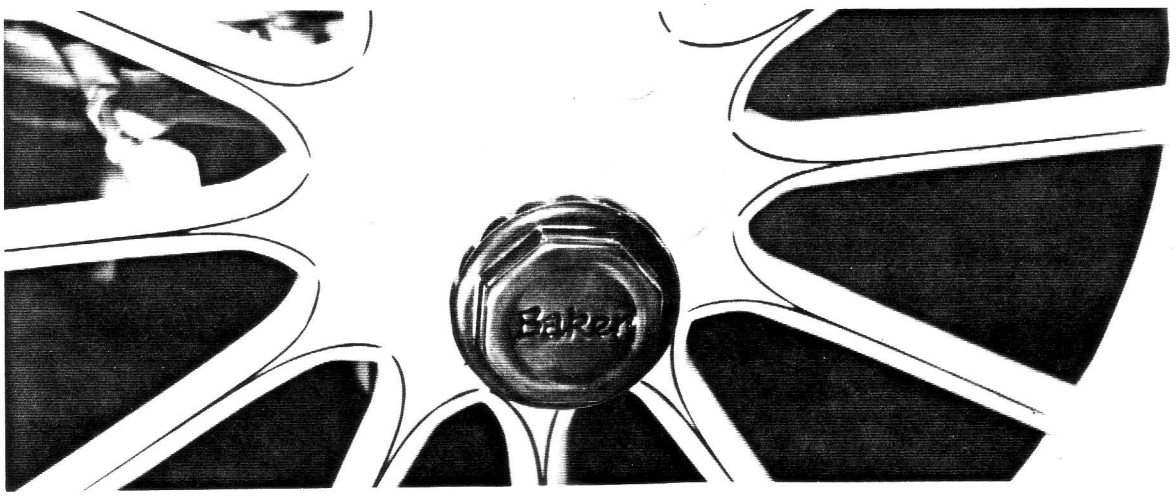
Last summer Raymond H. Carr made some automotive history: he drove coast-to-coast in a 1902 Northern runabout. This summer he plans to do more. He's going to drive across the country in a 1912 Baker electric.

A few weeks ago we took a look at the car, which is at the work area in Boyertown. Carr's crew chief Mike Wyka was there, with Guy Davis, Dan Carlin, and Dave Patterson.

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 at the rear is "Baker Motor Vehicle Company, Model W, Chassis number 7646." Elsewhere there's another plate with the body number: 2245.

The motor, a GE unit marked 48 V, 26 A, 1750 rpm, is mounted amidships, to the right, and is coupled to the propeller shaft



with a roller chain running off the front.

The brakes are internal expanding, on the rear wheels only. The tires are 33 ×1. the headlights are set up for 12 V.

When we visited, Dan and Guy were busy installing a Curtis PMC controller, in an operation that has become part of their standard procedure in getting an antique electric ready for extensive road use. They don't modify the car permanently in any way; instead, they find a hidden spot where they can hide the controller, which is mounted on a wooden base and can easily be lifted out. Electrically, the unit is wired in series with the battery feed to the car's original drum controller, which is left in place. To drive forward, the drum controller is put in its highest-speed position and left there. The drum controller also takes care of reverse. To put the car back in its original form just requires changing two connections and lifting out the PMC. This is the same method used on the Boyertown Museum's 1913 CT bus.

At the time of our visit, the car was being set up to run on 72 V. No one is sure what the original voltage was, although there's reason to suspect it was 60 V; the motor is a GE unit marked 48 V, 26 A, 1750 rpm, but it runs fine on 60 V, and Baker may well have used that voltage.

A test run

Once the controller was in place, and everything hooked up, Mike climbed aboard for a test run. He noticed more low-speed pull from the motor immediately, which is characteristic of electronic controllers–They give a current-multiplication effect at low speeds. With a car in front and a car in back, Mike then went for a ride around the streets of Boyertown, with Dan Carlin as a passenger. He got an indicated 19 mph on the flat, pulling 25 A, and 12 mph up a small hill. This is about 10% better than it had done with 60 V, so it's obvious that something will have to be done. We're not going to speculate on how fast it would have gone with a smaller passenger.

A new motor

What will be done for the cross-country run is a new motor. There are two simple reasons for this: more speed is needed, and it's not easy to get repair parts for a 1912 GE motor. For the trip across the country the original motor will be taken out and set aside. In its place will go something a little bit more powerful, from Advanced DC Motors. At the same time the system voltage will be raised to 72, in hopes of getting a bit more speed. Mike Wyka suggested that he could have gotten two or three more mph by taking down the top (it's a splendid wind-catcher), but Guy insisted that he wanted the vehicle capable of 30 mph, so there will be some reserve.

On the battery side, plans call for a set of nickel-metal hydride batteries from Ovonic Battery Co. to be installed, with hopes of getting 100 miles per charge.

Before the car can get on the road the wheels will need some work. There's quite a bit of axial runout (wobble, in layman's terms), and the spokes need to be tightened.

The schedule calls for the car to leave California at the end of May and arrive in Atlantic City on the fourth of July. We'll keep you posted as we get more information.

EEVC SURVEY
Bud Swedkowski, Club Secretary

In a recent issue you received a copy of a survey form requesting information on your preferences for the club. Here are the results, along with the names of the winners of the prize drawings.

The survey prize drawing took place at our meeting on Wednesday December 14, 1994. The winners were: First prize winner Joe Cioppi ($25.00), second prize winner Abel Lehman ($15.00), and the bonus prize drawn only from those whose entries received in the first 10 days was Jerry Burchett ($10.00). Winners please be patient until we can get our secretary and treasurer together to send out your checks. Thanks to all who participated. We got a lot of good feedback and comments.

A synopsis of the survey results, including average scores, is as follows. All answer ate on a 1 (least favored) to 10 (most favored) scale.

Question 1: club activities:
High scores: EV info gathering and distribution 8.8, list of sources for EV parts 6.9
Low scores: restoration of antique EVs 3.4, preserve and promote EV history 3.8

Question 2 newsletter features:
High scores: technical articles 8.9, reports on club members projects 7.0
Low scores: old time EV advertisements 3.0, members news 4.1, advertisements 4.2

Question 3 meeting topics:
High score: vehicle presentations, exhibits 6.1
Low score: hands on vehicle work 3.2

Question 4 club services:
High scores: battery purchasing deals 7.6, parts location services 7.4
Low scores: grant money 3.7, newsletter advertising 3.8

Question 5 social events:
High scores: dinner meeting 5.4, picnic 4.7
Low score: trips fund raising 1.9

Question 6 main categories importance:
High scores: newsletter 8.8, services 4.5
Low score: social events 2.9

There were 30 surveys returned out of a total of 144 newsletters distributed, that's 21%. We hope to survey our members in a similar way about every two years or so. The 21% survey return rate is pretty good, maybe next time we can get even higher.

The club officers hope to meet in the near future to further discuss the results and decide on the future direction of the club.

LIKE FATHER...
Ed Kreibick. Jr

The author, the son of club president Ed Kreibick, wrote the following essay as part of an entrance application for Drexel University. The question was, "If you could change one event in history what would you do?"

In 1908, Henry Ford initiated the production of the celebrated Model T line. With this, Ford proved to be successful in standardizing interchangeable parts and assembly-line techniques in his plant, thereby changing American Industry and raising the American standard of living. This was also the birthday of the reign of gasoline powered cars, although at the time the streets were dominated by electric-powered buggies.

I believe things could have turned out much differently. Henry Ford and Thomas Edison were very close friends. In 1865, Ford went to Edison for a very important piece of advice. Reportedly, Edison told Ford that in his opinion the internal combustion engine was a practical source of power for a horseless carriage. No one knows why Edison said this, for he himself was involved with electric vehicles. But, if Edison could have influenced Ford to produce an electric vehicle and apply his initiative and technology towards improving that aspect of transportation, we could all be driving far advanced electric vehicles right now and be charging up when we come home.

With this change in history, the air

quality of the world would be vastly improved. Not only would we be far less polluted, but we would have a much de-emphasized dependence on other countries for oil. I believe if Edison could have seen the long term effects of his decision, he would have swayed towards what we call "alternative power."

HELP YOUR LOCAL SCHOOL

We have received a request for help from the Technology Student Association of Northeast High School, in Philadelphia. That group has decided to "explore the concept, design, and construction of an alternative power vehicle, and electric car."

They're looking for any and all assistance that members could provide in obtaining materials, literature, advice, and technical support. They are planning on a dune buggy type vehicle, but apparently are starting pretty much from zero, as they're asking for a dune buggy frame, a VW rear and drive unit, electric motor assembly, adaptor plate for a VW transaxle, flywheel, clutch assembly, control box, cables, etc.

Anyone who would like to help out can contact Mr. Charles Kosola or Mr. Alan Siegle of the Technology Students Association at Northeast High School, Cottman and Algon Avenues, Philadelphia, PA 19111.

COMING EVENTS

National Hydrogen Association

March 6-9, Alexandria, VA. "Hydrogen Technology Moving Toward Commerfcialization." Contact Angel Barbera, (202) 223-5547.

International Solar Energy Conference

March 19-23, 1995, at the Westin Maui Hotel, Kaanapali Beach, Hawaii, sponsored by the Solar Energy Div. of ASME, the Japan Society of Mechanical Engineers, and the Japanese Solar Energy Society. Contact ASME at (212) 705-7793.

American Tour de Sol

May 20-27, Waterbury, CT to Portland, ME. Contact Nancy Hazard, NESEA, (413) 774-6051.

1995 Cleveland Electric Formula Classic

July 21-23. Contact Kevon Makell, (216) 447-3552 (from Electric Vehicle News, November.

Formula Lightning race

August 16-18, Indianapolis, IN. Included will be two Formula Lightning races, an electric education and motorsports conference, and the championship awards dinner. Contact the Solar & Electric Educational Foundation, (602) 953-7715.

MEETING SCHEDULE

Meetings will be held the second Wednesday of each month. All meetings at PECo Energy's West Conshohocken gas plant on River Road, beginning at 7:00 p.m.

February 8

March 8

April 12

May 10

June 7

July 12

August 9

September 13

October 11

ADVERTISEMENTS

For Sale

Converted 1975 MGB. Fully restored. Porsche red. Wire Wheels. Advanced DC Motor (FB1-4001A). 90 V system expandable to 108 V. Curtis PMC 1200 series controller. K&W charger. Vacuum assisted brakes. Five new Invicta tires. Car located in Philadelphia. $14,000 or B.O. Phone (202) 667-1506, FAX (202) 667-1507