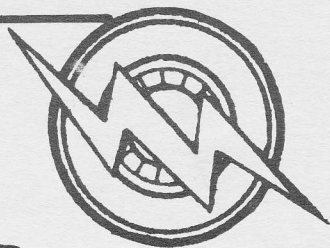


Electric
Auto



NEWS

SEPTEMBER 1984

Association

VOL. XVI NO. 9

TWELFTH ANNUAL INTERNATIONAL

Schedule Pg 2

SYMPOSIUM

Go for it! Rallye Event

1984 EVS 7

paris versailles

AVERE

AN EYE-BALL REPORT FROM OUR NAT'L. CHAIRMAN AND HIS LOVELY WIFE LYDIA (PRES. PENN CHAP.) ALSO A COMMENT FROM OUR NEWEST MEMBER DR. WOUK

You may have been wondering what could be shown at the Versailles, France, European Electrical Vehicles Exhibits that we don't have here. They have a lot of determined manufacturers putting out a lot of practical components and a larger variety of vehicles than we have in the U. S. The English and the Germans are outstanding. The Japanese were there with an exciting experimental car with an AC squirrel-cage induction motor system utilizing nickel-iron batteries. This vehicle has a single charge range of 100 miles and a top speed of 63 miles/hr.

CON'T. Bottom Pg. 4

The large variety of vehicles on exhibit includes many modes of public transportation which we do not have yet. They were showing a trolley bus with batteries for greater flexibility. A dual mode diesel bus with batteries was there. Also shown was a large passenger electric bus which regularly utilizes a trailer full of batteries. These lead acid batteries serve the bus all day by means of overnight charging plus several interim charging times during the normal operations. The previous procedure of exchanging discharged trailers for fresh ones during the day is no longer desired. These batteries are used for 60,000 miles per set.

With regard to the Newsletter, you can say something to the effect that the EVS-7 in Versailles in June showed that the Europeans are taking EVs seriously. Virtually every major manufacturing company related to the automotive industry in Europe, be it bodies, batteries or electronics, are involved in building both experimental and commercial electric vehicles. There may be a surprise announcement in August from Volkswagen concerning a commercial passenger hybrid.

DR. VICTOR WOUK

NOTICE!! ALL 100 MILE+ CARS ARE URGED TO START AT 7:30 or 8:30 AM

Schedule

SAT 8

Rally

- 7:30 Registration
- 9:15 Drivers Meeting
- 9:30 Rally starts
- 12:00 Lunch Break
- 1:00 Resume Rally
- 3:30 End Run

FLASH!!
PRIZE
LESTER
DUAL
VOLTS
CHARGER

SUN 9 SYMPOSIUM

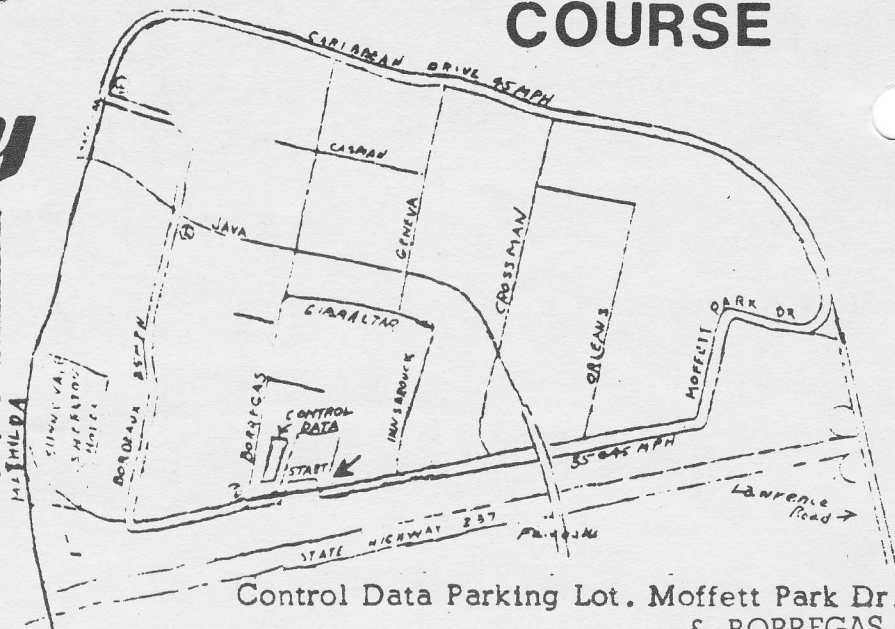
SHERATON HOTEL RODEO ROOM
Mathilda & Moffett Park Dr.

9:00 AM START PROGRAM

- 11:45 Social Hour Rodeo Room
- 12:45 AWARDS BRUNCH

3 To 5PM Board of Directors Meeting

BRUNCH INFO: Patricia Hardage (408) 734-8385
RALLY Clarence Ellers (408) 248-2588



Control Data Parking Lot. Moffett Park Dr.
& BORREGAS

SPEAKERS : Art Maimoni, of Lawerance Labs.
Barry Askew (EX. EPRI). John Anderson, ALCO
Batteries. Erv Ulbrick, 21st. Century Vehicles
Russ Kaufman, RUSSCO Electro Mech. Eng.

FROM EPRI & LAWERANCE LAB.

BUYERS WANTED

LIGHTNING ELECTRIC VEHICLES
NEW & USED EV'S, PARTS & ACCESORIES
WILL OPERATE ONE DAY ONLY SEPT 8th
AT THE RALLY. BRING ANYTHING YOU
HAVE TO SELL.

See

WORLDS DISTANCE RE-
CORD

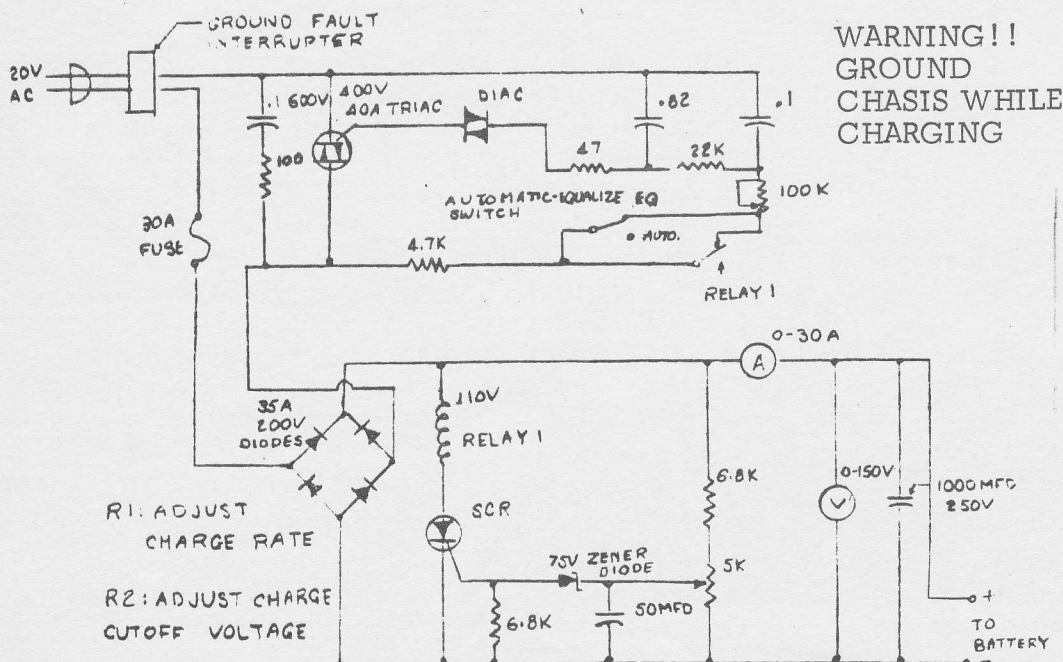
WORKING MODEL OF
INDUCTION ROADWAY
CHARGER

VIDEO PRESENTATION
ROGER HEDLUND'S
WORLD SPEED RECORD

WORLDS FIRST PRACT-
ical parr. HYBRID

CONVERSION
HARDWARE &
CONTROLLER
DISPLAYS

**EV EXPO
FAIR**



WARNING!!
GROUND
CHASSIS WHILE
CHARGING

WIN AN EV

LOTTERY FEVER HITS EAA STAN SKOKAN ELECTRIC VEHICLES INC.
HAS DONATED A HONDA CIVIC 72Volt AUTOMATIC TO BE RAFFELED AT
OUR UP COMING RALLY. ALL FUNDS TO BE USED FOR CLUB ACTIVITTIES

RAFFEL TICKET \$10.00 DONATION

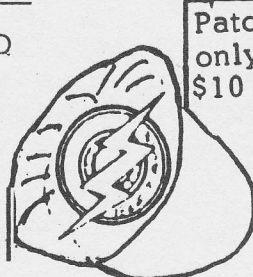
NAME _____
ADDRESS _____
CITY _____ STATE _____
PHONE () - _____

PLEASE REPRINT AS NEEDED

PLEASE SEND \$10.00 FOR EACH TICKET TO

SCEAA % LEE HEMSTREET
787 Florales Dr.
Palo Alto, CA 94306

EAA BASEBALL CAP
\$25 "RALLY" DONATION



Patch
only
\$10

ELECTRIC CAR PLANS

\$9.50
■ ea.

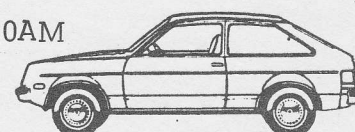
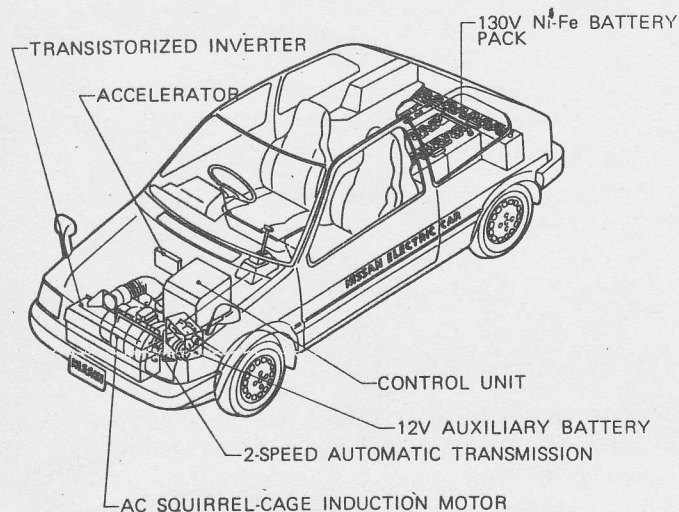
NOTICE!! ALL 100 MILE + CARS ARE URGED TO START AT 7:30 or 8:30AM

A. C. ELECTRIC SHOWN AT AVERE-VERSAILLES

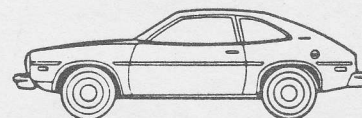
■ MICRA EV SPECIFICATIONS ■

Overall length	3,785mm
Overall width	1,560mm
Overall height	1,395mm
Curb weight	1,090kg
Seating capacity	2
Tires	155SR12
Motor	AC Squirrel-cage induction, rated output : 10KW
Controller	Transistorized inverter
Batteries	Nickel-iron alkali batteries : 130V, 160Ah
Transmission	Two-speed automatic, electromagnetic clutch
Range	160km for one charge at steady 40km/h.
Top speed	85km/h.

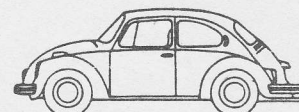
Advanced Propulsion System Installed on the Test Vehicle



Chevy Chevette
2-door or 4-door



Ford Pinto
Runabout or Wagon



VW Beetle
Coupe or Convertible

Convert any of these popular models to electric with detailed plans. The plans include drawings, photographs, step-by-step instructions, lists of parts and driving tips in a clear, easy to follow format. You can make your own parts (instructions included) or buy completed assemblies (sources listed).

The plans are produced by FLIGHT SYSTEMS - for over 13 years a leader in EV Controls, Parts and Service. We offer exclusive free technical assistance by mail to purchasers of our plans. Major credit cards accepted. Sorry no C.O.D.'s.

Mail your order today.

FROM THE EVC GROUP
OF FLIGHT SYSTEMS



FLIGHT SYSTEMS

P.O. Box 25
Mechanicsburg, PA 17055

THE OUTBACK GAZETTE

4 Many of our members are located in remote areas with no access to regular chapter meetings and have little contact with the E.A.A. except through this newsletter. In an effort to bridge this chasm we are adding this section to the newsletter.

First, any questions these members may have concerning electric vehicles may be addressed directly to The Outback Gazette at the address listed. All questions will be answered by personal letter because many technical questions require too lengthy an answer to attempt to solve them within the confines of the newsletter. Those of a shorter nature will also be included in The Outback.

Secondly, in an effort to bring members of the outback closer together, we are looking for volunteers in these regions to serve as clearing houses of this information for other members in the area. The net effect, hopefully, will be to create what could be called phone chapters who can pool their accumulated experiences, thus taking some of the trauma out of trying to assemble an electric vehicle without guidance of the skilled veterans that we take for granted at our established chapters.

The electric vehicle is a rapidly evolving machine but only a handful of people directly involved in the project are aware of these changes and most of them live within a one hundred mile radius of each other within the San Francisco Bay Area. This is a barrier in the path of information distribution that we must overcome if the idea is to ever fly. Too often, the outlying members are forced to rely upon unreliable information obtained from sources such as Mother Earth News and Popular Mechanics. These sources are usually untested theories and in some cases outright rip-offs.

One of our local members, a man highly regarded for innovation, is currently building his fourth or fifth car (it's hard to keep track of him) and he is still finding room for improvement in his designs. This underscores the variety of options and technology changes available to the E.V. builder and also demonstrates the need for better channels of communications within our organization.

Address your inquires to The Outback Gazette, 1904 Treewood Lane, San Jose, Cal, 95132. Let us here from you orphans out there in the boonies, and rember, we are looking for vollunteers to help set up local reference points.

H.I.M.

AVERE-VERSAILLES CON'T.

They also exhibited several sizes of normal electric buses and vans. Many of the buses are using nickel-iron batteries. A nickel-zinc battery was exhibited. They quote a lifetime greater than 1000 cycles (three times lead acid) and 35 watt hr. per #, or about half the weight of lead acid)

The Germans exhibited the fact that they have established a large number of service stations throughout their country for testing their electric vehicles. They have accumulated more than 10,000,000 miles of testing from these stations.

There was on exhibit one of the first vehicles of a fleet of European hybrid electric light vans and midibuses. The Commis-

sion of European Communities (CEC) is contributing funds to assess these vehicles in service. This is a forerunner to commercial procuction. Ford Motor Co. is to supply vehicle chassis and components for the production.

In England the pure electric systems are now factory options if you choose a Dodge, Bedford or Leyland van or truck. Their exhibit said "In Britain our 30,000 vehicles in daily use prove that they save money"

For one of us who has tried to fit a set of batteries into a previous ICE car, it was most interesting to see how easy a battery pack can be placed in a convenient location when designed into the vehicles orginally, as shown by these exhibits.

EV Marketplace

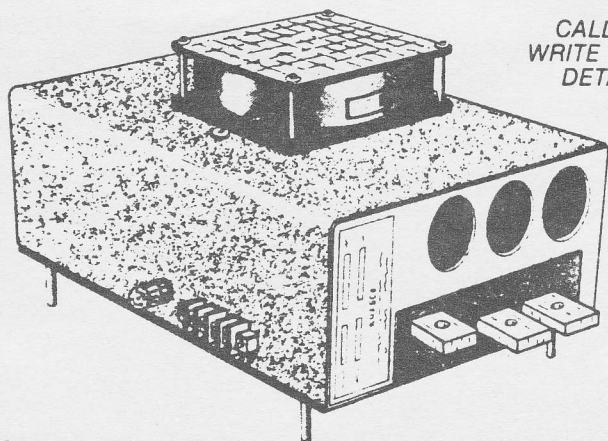
1969 VW Fastback (cost \$1050, less ICE) completely converted. All parts are brand new; Radiel Tires, H.D. Shocks; 36 MPCharge w/1500 faultless miles delivering. 1 bad mistake, and the controller died. Maybe trivial (?) or tragic. Make offer, deducting for Willey Controller, coming and getting it or towing it home, ETC. Nothing reasonable refused for cash. M. Dale Newton 460 Arnos St. No. 28, Talent, Oregon, 97540 (Just off Interstate Five, Ask for map of area) or phone 1-503 535-6098

FOR SALE: 1965 SIMCA 1500 GL, looks like BMW 2000 but has 4 doors. Body Exc. Good Paint. Engine apart for rebuilding. Have all new parts. New brakes & radials. Perfect for electric conversion. Eves, 415 592 7423

ELECTRIC VEHICLE CONTROLLER

\$495

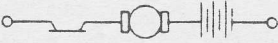
- 400 AMP
- 24 - 120 VOLT
- 4000 Hz EFFICIENCY
- FULLY PROTECTED
- FULL LINE OF ACCESSORIES AVAILABLE

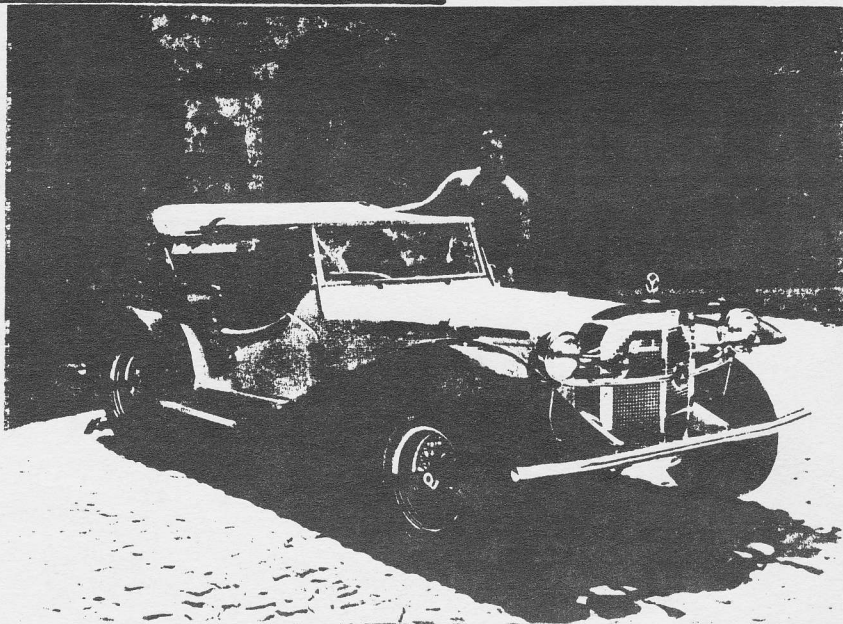


CALL OR
WRITE FOR
DETAILS

P.O. Box 3761
Santa Rosa, CA 95402

Telephone:
(707) 542-4151

RUSSCO 
ELECTRO-MECHANICAL ENGINEERING



Construction: Molded Fiberglass Body (beige)
Molded Fenders (brown)
Foam and vinyl upholstery (tan)
Propulsion Motor: Baldor 7444D compound wound 72 volt
8 H.P. @ 3,400 RPM
Controller: PMC transistorized chopper 400 amps.
Batteries: 12 Trojan J250 6V (with Hydrocaps)
1 Gould 12V 105 amp. hr.
Charger: Lestronic Dual Charger 230V
Automatic Timer

For more details call or write: Jim Wong
4411 E. 5th Street
Tucson, AZ 85711
(602) 795-7200

FOR SALE: '69 VW Bug/blown engine \$250
Galen (415)782 9712

FOR SALE: Aztec/Fiberglass Body, 16
Batteries, Digital Instrumentation
Best Substantial Offer (415)388 0838
Also copper cable #3 0 \$1 per foot.

FOR SALE: 10 H.P. Delco Compound Wound
Aircraft Gen/Starter Motor, 24 v field,
able to draw up to 48 v on armature.
Call Rich 1-414-377-0824 after 7 PM

2CM65C2 120 V. 167 A. GE Generators
\$ 200 each, 400 Amp. Relay \$10, #2 Weld
Cable 80 ft. \$40., 2-235 Amp SCRs \$ 10
each. (408) 370 8313

ADS must be received with payment by the 10th. of the month, for the following month's issue. AD rate is min. 1 to 5 lines \$5.00, 1/4 Pg. \$15.00, full Pg. \$50.00, full Pg. 2 sides \$80.00. Wanted, Trade, For Sale, etc. Mail to EAA 1249 Lane St. Belmont, CA. 94002

6 WHATS HAP'N Peninsula

SEPT. NO MEETING!!! LABOR DAY
REGULAR MEETING 1st. Sat. SAN BRUNO
LIBRARY 10AM-12
WATCH Newsletter for PROGRAMS!!!
Lydia (415) 591-6698

SEPT. 15, SAT. 10AM To 4PM
A GIANT fund raising FLEA MARKET/FAIR for
11 non-profit organizations will be held.
FOOD-FUN-BARGAINS!!!!!!
War Memorial building, SAN BRUNO PARK
off Crystal Springs Road, SAN BRUNO.
The ELECTRIC AUTO ASSO. will be repre-
sented with several cars. Please come &
support this affair.

"TED" & MAE BENSEN (415)992-5453

P.S. PLEASE DONATE ITEMS FOR THE EAA
TABLE!!!!!!

INTERNATIONAL

LOCATION: SUNNYVALE CA SEPT. 8Th & 9Th.
INTERSECTION OF STATE 237 & BAYSHORE(101)
TAKE MATHILDA AVE. NORTH, 2 BLOCKS EAST ON
MOFFETT PARK DR. CONTROL DATA PARKING LOT.



25

26

EVAC SYMPOSIUM-TORONTO, CANADA AND
ELECTR-EX-----

(613) 236-2497

EAA CHAPTERS
Call the contact person for meeting
times and places.
ARIZONA: Phoenix Chapter
Greg Whitney 602 849-1872
ARKANSAS: Little Rock Chapter
B.S. Boykin 501 562-0252
CALIFORNIA:
Bakersfield Chapter
James Peters 805 393-1749
Concord: Contra Costa Chapter
Max Rosenstein 415 229-3469
Los Angeles: Burbank Chapter
Il. Weiss 213 849-7632
Oakland: East Bay Chapter
Jim Fahey 415 848-1468
Sacramento Chapter
Cliff Veiles (916) 966-9281.
San Bruno: Peninsula Chapter
Mae Benson 415 992-5453
San Francisco Chapter
Bill Marquardt 415 586-6987
San Jose Chapter
Roy Paulson 408 269-7937
San Rafael: North Bay Chapter
Gordon Schaeffer 415 456-9653
Santa Clara Chapter
Lee Hemstreet 415 493-5892
DISTRICT OF COLUMBIA:
Washington: EVA/DC Chapter
Charles Dammers 301 439-1365
MARYLAND: Baltimore Chapter
D. Michalski 301 289-7896
NEW JERSEY: Moorestown Chapter
Sid Kreitsberg 609 829-2445
OKLAHOMA: Tulsa Chapter
W. E. Watson 918 743-9317
OREGON:
Albany: Linn Benton Chapter
Keith Sherry 503 745-5607
Medford: Rogue River Chapter
George Holbrook 503 772-6856
Salem: Willamette Chapter
Lee Brundage 503 390-3871
TEXAS: Houston Chapter
Robert Nixon 713 668-4214
WASHINGTON: Seattle Chapter
Steven Lough 206 325-2600
WISCONSIN: Milwaukee Chapter
David Perez 414 481-9655

EDITORS: - Walter Laski - John Newell - Bill Palmer - Paul Brasch - COMPILED AND
PUBLISHED By Clarence Ellers. SEND IN YOUR PERSONAL AND CLUB NEWS AND COMING
EVENTS. ARTICLES _ COMMENTS etc. all correspondence to address below.

Electric

Auto

Association



NEWS

SEPT. 1984

1249 Lane St.
Belmont, Ca.
94002

NON-PROFIT
ORGANIZATION
U.S. POSTAGE
PAID
SAN JOSE, CALIF.
PERMIT NO. 3021



HELP !!

EAA BASEBALL CAP
\$25 "RALLY" DONATION
787 Florales Dr.
Palo Alto, CA 94306

TIME DATED MATERIAL - DO NOT HOLD