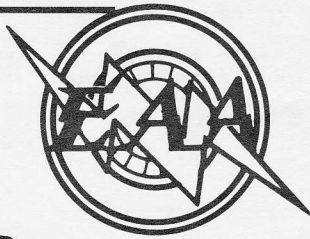


**Electric
Auto**



NEWS

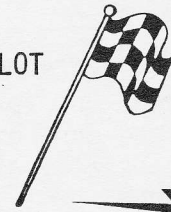
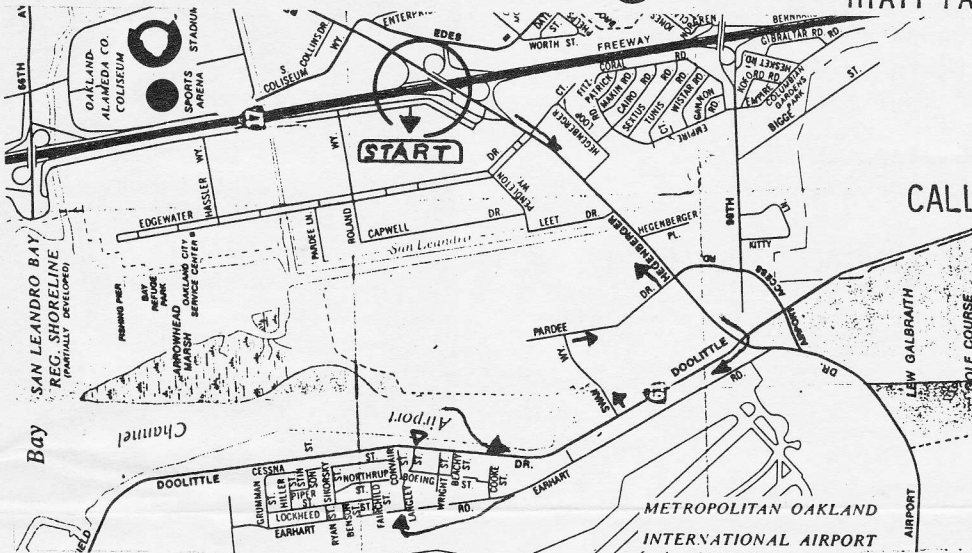
AUGUST 1987

Association

Vol. XIX No. 8

OAKLAND - Aug 8

HYATT PARKING LOT



Rally

CALL: Is Tillin (415) 524-2242

COME AND HELP US EXPOSE
MORE PEOPLE TO ELECTRICS.
SHOW & TELL, SHARE YOUR
EXPERTISE WITH OTHERS
WE ASK & NEED YOUR HELP!!

INTERNATIONAL

DENVER - Aug 22-23

Call: George Gless (303) 442-6566

SEE RSVP IN JUNE NEWS & RESPOND NOW!!
WE CANNOT PLAN FOR YOUR COMPLETE ENJOYMENT OF EVENTS, IF WE DO NOT
KNOW YOU ARE COMING.

George Gless 2940 13th St. Boulder, CO 80302

SANTA CLARA CHAPTER

15th ANNUAL SUNNYVALE RALLY 1987

SYMPOSIUM SEPT. 19 & 20

SOLAR & EV COMPONENTS FAIR

NOW!!! ANYBODY IN THE WORLD CAN WIN A GOLD MEDAL AT THE EAA INTERNATIONAL RALLY:

In 1982 we lost one of our most beloved and knowledgeable members KEITH CROCK, because Keith pioneered much of our early technology we established this award in his name.

TWO KEITH CROCK AWARDS FOR TECHNICAL ACHIEVEMENT will be awarded. One for an International Rally participating vehicle, and another a write-in candidate. If you have developed a special feature for your Electric Vehicle;

- 1-Write it up
- 2-Have it documented by two disinterested parties
- 3-Must be INSTALLED and OPERATING in an EV

SUNNYVALE RALLY ENTRANTS WILL BE ELIGIBLE TO ENTER WITH WRITE IN CANDIDATES, WITH OUT DOCUMENTATION SINCE CARS WILL BE INSPECTED ON SITE AND AWARD WILL BE PRESENTED AT OUR BRUNCH.

Send to Bill Palmer
44 Dior Terr.
Los Altos, Ca 94022



Solar Cells Without Silicon

(grs) The *Hahn-Meitner-Institute* in Berlin has developed electro-chemical solar cells produced with compounds of copper and indium with either sulphur or selenium. With these new solar cells, which mark a significant step forward in the area of the direct conversion of solar energy into electricity, it has been possible to receive unprecedented energy yields. In these special solar cells sunlight triggers a flow of electrical energy from an electrolytic liquid to a semi-conductor anode. The electrolyte consists of iodine-iodide, the semi-conductor material of copper-indium compounds containing either sulphur or selenium. The sulphurous compound which forms the cell itself converts energy at an efficiency rate of about ten percent, thus outdoing previous inventions using a sulphur basis; they achieve a rate of only six percent. A similar solar cell consisting of a copper-indium-selenium compound even has an efficiency of twelve percent. Since in addition these semi-conductor materials can absorb light very well they are also suited excellently for thin-layer solar cells because their photo-active layer has to be just a few thousandths of a millimeter thick.

Contact: Hahn-Meitner-Institut, Pressestelle, Postfach 390128, D-1000 Berlin 39

EV Marketplace

FOR SALE

JET" Electrics, Never sold od regestered 2000 miles as Demo. 2 door, 4 speed, loaded, A/C, P/B, Heater, Stereo, 12/96 Volt system. Original price \$14000, asking \$7500 or best offer or trade for small motor home or boat of equal value. Can deliver in USA.

1961 Renault 4 dr. automatic, 12/72 Volt system Relays. Asking \$800 or B/O can deliver in USA. Ken Bancroft, Houston, TX, CALL: (713) 729-8668.

NOTICE TO CHAPTER PROGRAM CHAIRMEN

LIVEN UP YOUR NEXT MEETING AND GET A LOOK AT A FUTURE ELECTRIC VEHICLE !

35 AMP 3 PHASE 208 VOLT DRIVE
NO BATTERY PACK ON BOARD
NO ENGINE OR GAS TANK ONBOARD
FULL SPEED CONTROL BY DRIVER
30 HZ TO 120 HZ TRANSISTOR INVERTER
3 TIMES MORE EFFICIENT THAN BATTERY
AEROSPACE COMPOSITE CHASSIS
PREFERENTIAL ROAD TAX
AUTOMATED ELECTRICITY BILLING

WE WILL SEND YOU A VHS CASSETTE FREE IF YOU WILL DROP US A LINE AT THIS ADDRESS:

TWENTY FIRST CENTURY ELECTRIC VEHICLES
8136 G BYRON ROAD
WHITTIER, CA, 90606
ANSWERING MACHINE - 213-945-6220

SYNOPSIS

SWITCHED LINEAR INDUCTION MOTOR APPROACH WITH MOTORS AND INVERTERS BURIED IN THE ROADWAY AND VEHICLES WITH SEPARATELY SUSPENDED TRACTORS OPERATING NEAR THE MOTORS - COMPATIBLE WITH ALL VEHICLES AND ROADWAYS INCLUDING ELEVATOR SHAFTS. SHOWS ACTUAL VEHICLE, MOTOR, AND TRACK.

RUNNING TIME: 24 MINUTES - VHS-SP

FOR SALE: 1981 SCT ELECTRIC VW RABBIT, Diesel Heater, 120/240 Volt ON-Board Lester Charger, less than 2,000 actual miles! Original price over \$16K, sell for \$2800. CALL: 1 (518) 356-0700 after 7 PM.

FOR SALE

White Bradley GTE Electric, 120/240 volt Lester charger, 155 miles, AM-FM st cass. PINTO red electric, EVC transistor controller, 20 hp GE motor, 96 volt system, 9502 miles. JET INDUSTRIES ELECTRA VAN 750 (FORD COURIER) blue, 20 hp GE motor, 8631 miles, 240 volt Lester charger, 120V system, gas heater, GE SCR controller, AM-FM stereo cassette. ElectroMotive Systems, PO Box 1381, Oak Ridge TN 37831-1381, CALL: (615) 986-5744 evenings.

FOR SALE

INVADER GTS KIT ON VW PAN, Red fiberglass with gull wing doors, black bucket seat interior. 16 Batteries, 4 speed, Looks Great, Runs Good, registered for first time Dec. 1986. \$2000 or best offer Tim Neol, Boy Scouts, San Mateo CALL: (415) 341-5633 Mon-Fri 9-5.

FOR SALE

Aircraft Starter-Generator Delco Mod. A-8581 By General Motor Corp. Dayton 3700/8000 RPM. Adaptor Plate & Clutch for VW Beetle. Glen Wilcox, 940 So. 1000 E., Orem, Utah 84058 CALL: (801) 225-2325.

FOR SALE

LIMITED PRODUCTION AQUILA GT SPORT
GULLWING COUPE VW FLOORPAN

96 VOLTS

PRESTOLITE MOTOR

TRANSISTER CONTROLLER

DC TO DC CONVERTER

SEEN HERE @ SUNNYVALE RALLY, Forground Rt.

CALL: Al Hardage

(408) 734-8385

1085 Tasman Dr #732
Sunnyvale, CA 94089





Energy
Technologies
Advancement Program

California Energy Commission

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Commissioners
Arturo Gandara
Warren D. Noteware
Robert Mussetter

For more information contact:

Development Division
1516 Ninth Street MS43
Sacramento, CA 95814

When Will Funding Be Available?

Project proposals are due by 5:00 p.m. on January 20, 1987 with selected projects receiving funds beginning in June, 1987.

Note!!

**Do you have a
technically sound
energy project
that nobody wants
to finance?**

What Does ETAP Do?

ETAP provides cofunding to:

- research projects that overcome the early engineering, economic, or environmental barriers to energy technology development;
- development projects that advance the energy efficiency or cost effectiveness of energy technologies into the demonstration stage;
- demonstration projects that illustrate in full-scale application the engineering, economic and social benefits of harnessing California's indigenous and renewable energy resources.

What Is The Energy Technologies Advancement Program?

If you're a public agency or private business with an energy idea so innovative that it doesn't qualify for conventional financing, the State of California's Energy Technologies Advancement Program (ETAP) may have what you're looking for.

ETAP is a state-administered funding program that offers loan and research contracts for energy technologies research, development and demonstration.

Does Your Project Qualify?

ETAP is a hardware development program. To qualify, a project must increase the efficiency or cost-effectiveness of an energy technology, or develop a new alternative source of energy.

How much Funding Is Available?

Approximately 2 to 3.4 million dollars is the minimum available for loans, while 1.1 to 2.4 million dollars is the minimum available for research contracts. Any individual project may be allocated up to 1.1 million dollars.

'88 Calendar Coming Events

START NOW DEAD LINE FOR 1988 CALENDAR IS NOV. 1 ST. NO EXCEPTIONS
WE NEED ADDS TO HELP PAY FOR PRINTING

EV Marketplace

FOR SALE

Complete and running EV, 76 Audi, 96 Volt-ETC. \$1200 O.B.O. (408) 624-4563 or PO Box 2032, Carmel, CA 93921.

FOR SALE

1981 JET ELECTRICA 007

(Factory conv/Omni 024 body)

White hatchback/blue interior, in excellent condition with 15,000 miles on it.

Needs Batteries.

- 23 HP GE motor w/4spd trans
- General Electric EV-1 SCR Cont.
- Lester 9868 120 Volt Charger
- Capable of 50+ miles @ 55 MPH (ed. mine does)
- Complete service manual included

\$2500 takes it, you ship.

CALL: Rick (305) 834-1562 Orlando.
(ed. great little car, I LOVE IT)

FOR SALE

68 FIAT, 2CM76 gen. PMC controller. Near new ALCO batteries. Extras. Runs very good. \$4500 value--only \$1195/offer. Also 2CM81B 200 amp gen. \$75. For more info CALL: (408) 732-7324

■ ENVIRONMENT

Tighter Limits On Air Pollution

The Environmental Protection Agency announced a major change in clean air standards to reduce "particulates" — dust, dirt and soot — that it says can result in death to those who inhale them.

The new rules replace standards for suspended particulate matter and call for the filtering out of particles that are 10 micrometers or smaller — one-tenth or less of the thickness of a human hair.

In announcing the new standards, EPA Assistant Administrator Craig Potter said the tiny inhalable particles are much more dangerous than larger particles.

"Small particles that penetrate farther into the lung pose the greatest risk," Potter said. The new standards, he said, will provide "more effective protection of the human health."

GO WITH A WINNER!

ALCO BATTERIES

MORE RALLY WINNERS USE ALCO BATTERIES THAN ANY OTHER BRAND. THE EXTRA MEASURE OF QUALITY THAT GOES INTO ALCO BATTERIES MEANS EXTRA MILEAGE AND LONGER LIFE FOR YOUR BATTERY PACK.

CALL FOR PRICES. FREE DELIVERY IN SAN FRANCISCO BAY AREA.

ELECTRO AUTOMOTIVE



THE SYMBOL OF EXCELLENCE
IN ELECTRIC VEHICLE COMPONENTS
P.O. #1113, FELTON, CA 95018
(408) 429-1989

ATTENTION: RALLY DRIVERS!

If you plan to run your EV in the Sept. rally in Sunnyvale, don't get caught on rally day standing at the registration table scratching your head! Do you know your car's frontal area? How about the gear ratios? If not, study the registration form in this newsletter, and figure out those numbers in advance. (Most of the info is in the service manual for your year and model.)

We need this information in order to determine an efficiency award, as well as to add to the EAA's pool of knowledge on EV performance. Don't wait until the last minute!

If you want to save yourself even more time on rally day, fill out the entire registration and mail it, with your check or money order, to: Rally Registration, P. O. Box 1113, Felton, CA 95018. Mail before Sept. 12.



CALENDAR

August 8: East Bay Chap. RALLY
Hi-Way 17 & Hegenberger, Oakland
Reg. 9:AM CALL: Is (415) 524-2242

August 15: Santa Clara Chap. EPRI
Photovoltaics Video, Albuquerque
Video, & Rally planing.

August 22-23: 3rd. Annual EAA
INTERNATIONAL RALLY SYMPOSIUM
DENVER, CO. Call: George (303)
442-6566 (CO) or Clarence (408)
248-2588 (CA)

Sept 19-20: 15th ANNUAL SUNNYVALE
RALLY-SYMPOSIUM-EV FAIR!!
CALL:Mike or Shari (408) 429-1989

EAA Chapters

ARIZONA: PHOENIX
Roger Smith 602-969-9667
P.O. Box 16800 #273
Mesa, AZ 85202

CALIFORNIA:
Burbank
Irv Weiss 818 841-5994
2034 N. Brighton #C
Burbank, CA 91504

East Bay
SCott Cornell 415 798-0909
60 Alan Dr.
Pleasant Hill, CA 94523

North Bay
Gordon Schaeffer 415 456-9653
211 Bellan Blvd.
San Rafael, CA 94901

Peninsula
Mae Bensen 415 992-5453
8 San Juan Ave.
Daly City, CA 94015

Sacramento
Carl Metcalf 916 486-0321
3654 Bausell St.
Sacramento, CA 95821

San Jose
Don Gillis 408 225-5446
5820 Hern St. #3410
San Jose, CA 95123

Santa Clara
Lee Henstreet
787 Florales Dr.
Palo Alto, CA 94306

OREGON; Willanette
Leslie Brundidge 503 390-3871
4040 Gary St. NE
Salem, OR 97303

TEXAS: Houston
Ken Bancroft 713 729-8668
4301 Kingfisher
Houston, TX 77035

WASHINGTON: Seattle
Bryan Lowe 206 632-4496
5011 9th NE
Seattle, WA 98105

WISCONSIN: Milwaukee
Dave Pares 414 481-9655
3251 S. Illinois
Milwaukee, WI 53207

NEW JERSEY: Hackensack
Kasmir Wysocki 201 342-3684
293 Hudson St.
Hackensack, NJ 07601

Vancouver, B.C.
VEVA 604 987-6188
543 Powell St.
Vancouver, B.C. V6A 1G8

NON-AFFILIATED GROUPS

CANADA
Ottawa, Ontario
Fred Green
Box 4044 Sta. "E"K1S 5B1
Ottawa, Ontario, Canada

NEW MEXICO: Albuquerque
Mike Lechner 505 848-2331
PNM Alarado Square
Albuquerque, NM 87158

Southern CA EVA
Vic Schisler 714 842-9990
6841 Jardines Dr.
Hunt. Bch. CA 92647

DENVER CO DEVC
Genny Clark 303 451-5051

Fox Vally IL
John Stockberger
25643 Nelson Lake Rd.
Batavia, IL 60510

Eastern 215 696-5615
P.O. Box 717
Valley Forge, PA

For information on forming a chapter in your
area write Electric Auto Association, 1249
Lane St. Belmont, CA 94002. For a sample copy
of the newsletter send SAE #10 envelope.
PHONE (415)591-6698

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EVENTS. ARTICLES-Comments etc. all correspondence to address below

**Electric
Auto**



NEWS

Association

AUGUST 1987

1249 Lane St.
Belmont, CA
94002

Address Correction
Requested

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TIME DATED MATERIAL - DO NOT HOLD