
May 1998

Rock River Valley Section
www.ieee.org/regional/section/rock_river/

Event



Sense

The Institute of Electrical and Electronic Engineers, Inc.

IEEE RRVS Picnic/Elections

FREE

STEAK!!

For IEEE Members

When May 28, 1998

1998. The RRVS will provide **5247 by Tuesday, May 26,** the food and drink **FREE OF 1998.** The cost of the **dinner is**

Where Sundstrand Association Park, Area 2, North Pavilion (see map on page 2), on Newburg Road north of the Chrysler Plant.

CHARGE TO IEEE MEMBERS. In addition, 1998-1999 RRVS elections will be held.

free for IEEE members and \$12.00 for non-members. Unemployed members may call one of the officers for special arrangements.

Agenda 6:00 PM Social Hour
6:30 PM Dinner
7:30 PM Elections

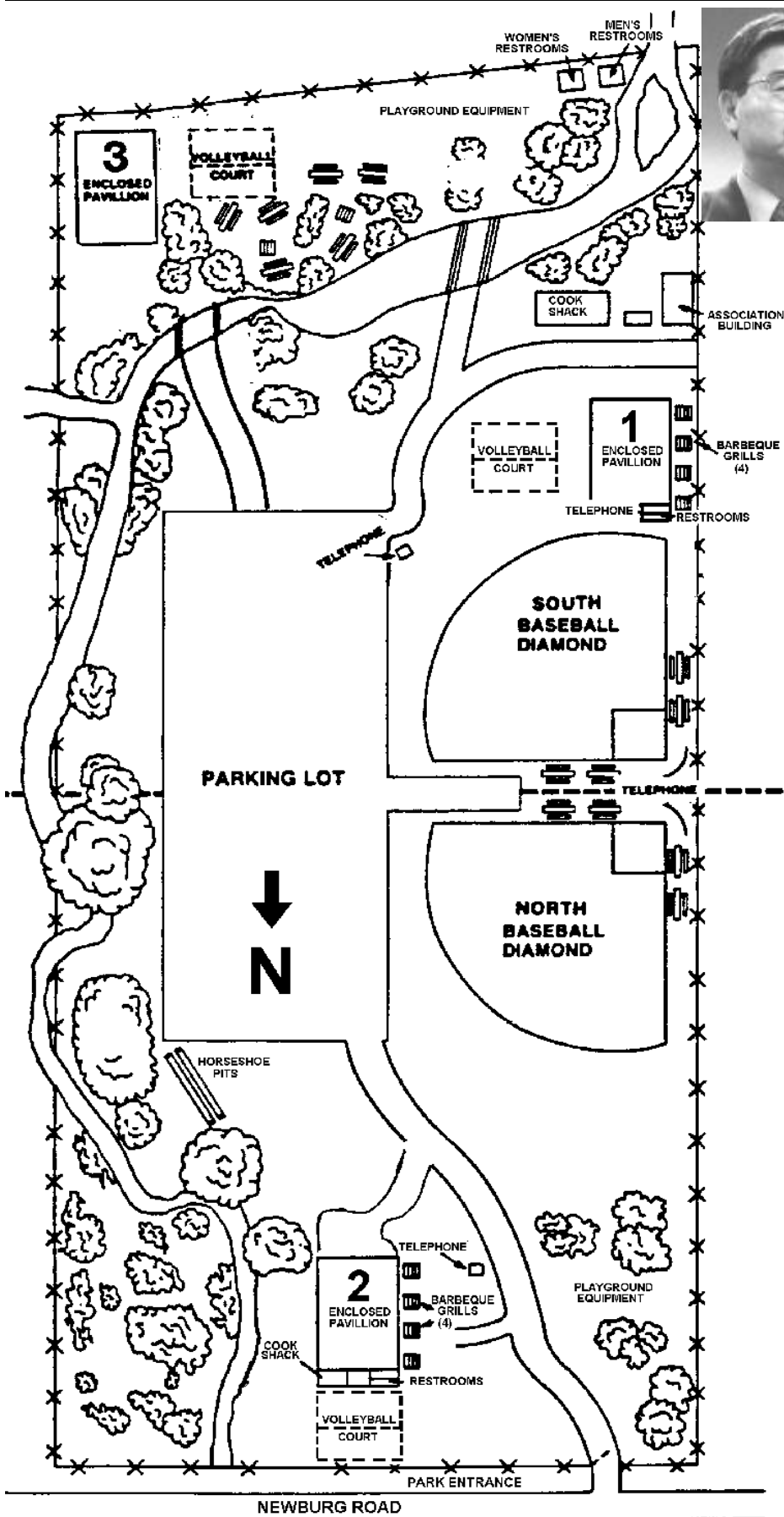
Door Prizes Sponsored by RRVS

Meal Dinner will be charcoal broiled steak, vegetables, fruit, beer, pop, dessert, etc. Please

Note The meeting is open to the general public. You need not be an IEEE member. However, please call to enable us to make proper arrangements.

Program Picnic/Elections - You are cordially invited to attend the Annual RRVS Picnic on May 28, by calling **Gloria at 815-226-**

make your **dinner reservations** at 815-226-



March Meeting Recap

Dr. Fred Lee, IEEE Power Electronics Society Distinguished Lecturer, spoke on *An Overview of Soft-Switching Techniques for PWM Converters/Inverters*. Dr. Lee also discussed a new university and industry consortium to conduct research in the field of electronic power conversion. Together with over 100 U.S. industrial companies, work will begin to move electronic power conversion into the new millenium. The next major performance increases in power electronics will come from silicon carbide and may be available within 5 years. Dr. Lee went on to present the most compelling soft-switching technique, Zero-Current Switching, which allows for near-zero switching losses at both turn-on and turn-off, while also reducing EMI emissions across the entire frequency spectrum.

April Meeting Recap

About 44 people attended the UPS tour 4/18/98. This billion dollar worldwide shipping organization started in 1907 by two teenagers who delivered packages for people in Seattle. Rockford is the second largest air hub in the United States. The distribution center employs over 1500 people. Twelve planes belong to the Rockford hub. But up to 28 planes can be accommodated at the terminal. UPS' Boeing 767 costs more (\$80 million) than the entire building.

Submissions to *Event Sense*

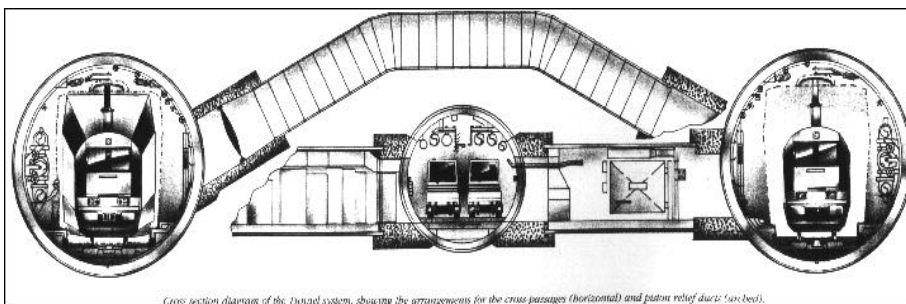
Send articles and job ads to the *Event Sense* editor, Bob Parro, via e-mail (preferred), or fax. Job ads will run for two consecutive months. Contact the *Event Sense* editor if the ad needs to run longer. Please make submissions by the twenty-fifth of the month. All submissions are subject to editing for style, clarity, and space considerations.

e-mail: b.parro@ieee.org
 fax: (815) 394-2497

1997/98 YEAR IN RE-



RRVs Executive Committee
 (l-r) **standing:** Larry Wachowiak, Treasurer; Hassan Mansir, IAS Chapter Chair; Don Zinger, NIU Student Branch Counselor; Matt Zimmer, Secretary and IAS Chapter Vice Chair; Roger Caruana, Education and Technical Activities Chair; **seated:** Caio Ferreira, Past Section Chair and current IAS Chapters' Department Chair, Bob Parro, Section Chair; Bill Barber, Section Vice Chair and Membership Chair; Jim Buerosse, PELS Chapter Chair; Paul Peterson, Joint Computer/Control Systems Chapter Chair and Awards Chair



Cross section diagram of the tunnel system, showing the arrangements for the cross passages (horizontal) and piston relief ducts (arc bed).

September 1997

From a to b Without c - English Channel Tunnel Faraday Lecture Series Video

October 1997 (not pictured)

Bob Lorenz, Professor of Mechanical Engineering and Electrical and Computer Engineering from the Univ. of Wisconsin at Madison spoke on *True Sensorless Control of AC Drives*

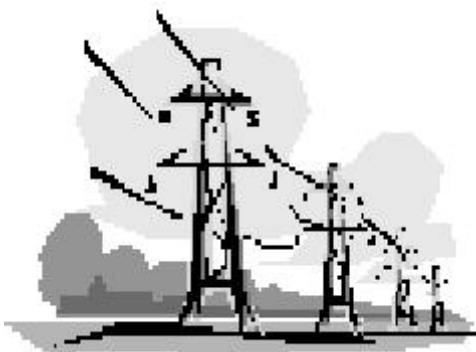


January 1998 (above and below)

Daryl McCall, Global Navigation Satellite Systems Technical Director at Rockwell Collins' Commercial Air Transport Division, discussed the *Global Positioning System and Other Satellite-Based Navigation Systems*

November 1997 (left)

Harry Terhune from ComEd talked about the *Impact of Deregulation on the Electric Utility Industry*



December 1997 (not pictured)

Visiting UK Professor William Sheppard from the University of Wisconsin at Madison presented *Some Puzzles In Power Electronics*

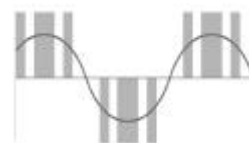
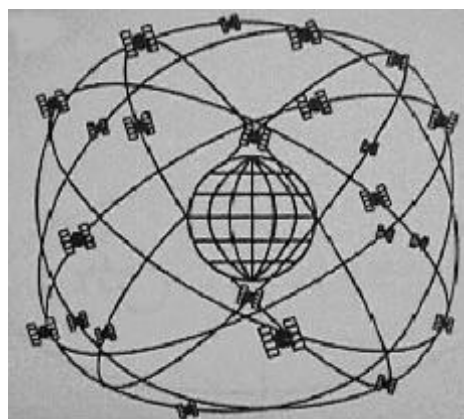
February 1998 (left)

Prof. William Beckman, ASME distinguished lecturer from the University of Wisconsin at Madison, illuminated us on *Can Solar Energy be Competitive in a Deregulated Energy Market?* in our 2nd annual joint meeting with the local chapter of the ASME



March 1998 (opposite page and right)

Prof. Fred Lee, IEEE Power Electronics Society Distinguished Lecturer from Virginia Polytechnic Institute, elucidated on *An Overview of Soft-Switching Techniques for PWM Converters/Inverters*



April 1998 (opposite page)

RRVs members and guests toured the UPS Facility at the Rockford Airport



Rock River Valley Section
Established 1947

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Calendar

May Section Elections/Picnic **May 28**
Sundstrand Park



Joint Computer/Control
Systems Society Chapter
Established 1995



Industry Applications
Society Chapter
Established 1992



Power
Electronics
Society
Chapter
Established 1996

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