

May 2011

Rock River Valley Section

www.ieee.org/rrvs

Event

Sense

The Institute of Electrical and Electronic Engineers, Inc.

RRVS Annual Picnic and 2012 Section Officer Elections

SERVING IEEE MEMBERS OF NORTH CENTRAL ILLINOIS AND EXTREME SOUTH CENTRAL WISCONSIN

Annual Section Picnic and Election

When Thursday, May 26, 2011

Where

Hamilton Sundstrand Park,
2322 Newburg Rd, North Pavilion 2 (see map on page 2), north of the Chrysler Plant in Belvidere.

Agenda

- 6:00 PM Networking
- 6:30 PM Dinner
- 7:30 PM Elections

Program

Picnic and 2012 RRVS section and chapter officers election. Members and friends are cordially invited to attend the Annual RRVS Section Picnic. The RRVS will provide the food and drink **FREE OF CHARGE TO IEEE MEMBERS**. In addition, 2012 RRVS elections will be held.

Meal/Reservations

Dinner will feature **steak, chicken, and veggie burgers**; vegetables, corn on the cob, fruit, pop, dessert and much more! Please make **dinner reservations online (preferred)** at http://meetings.vtools.ieee.org/meeting_view/list_meeting/6819 or by

THE MEAL IS ON US!

(For IEEE Members)

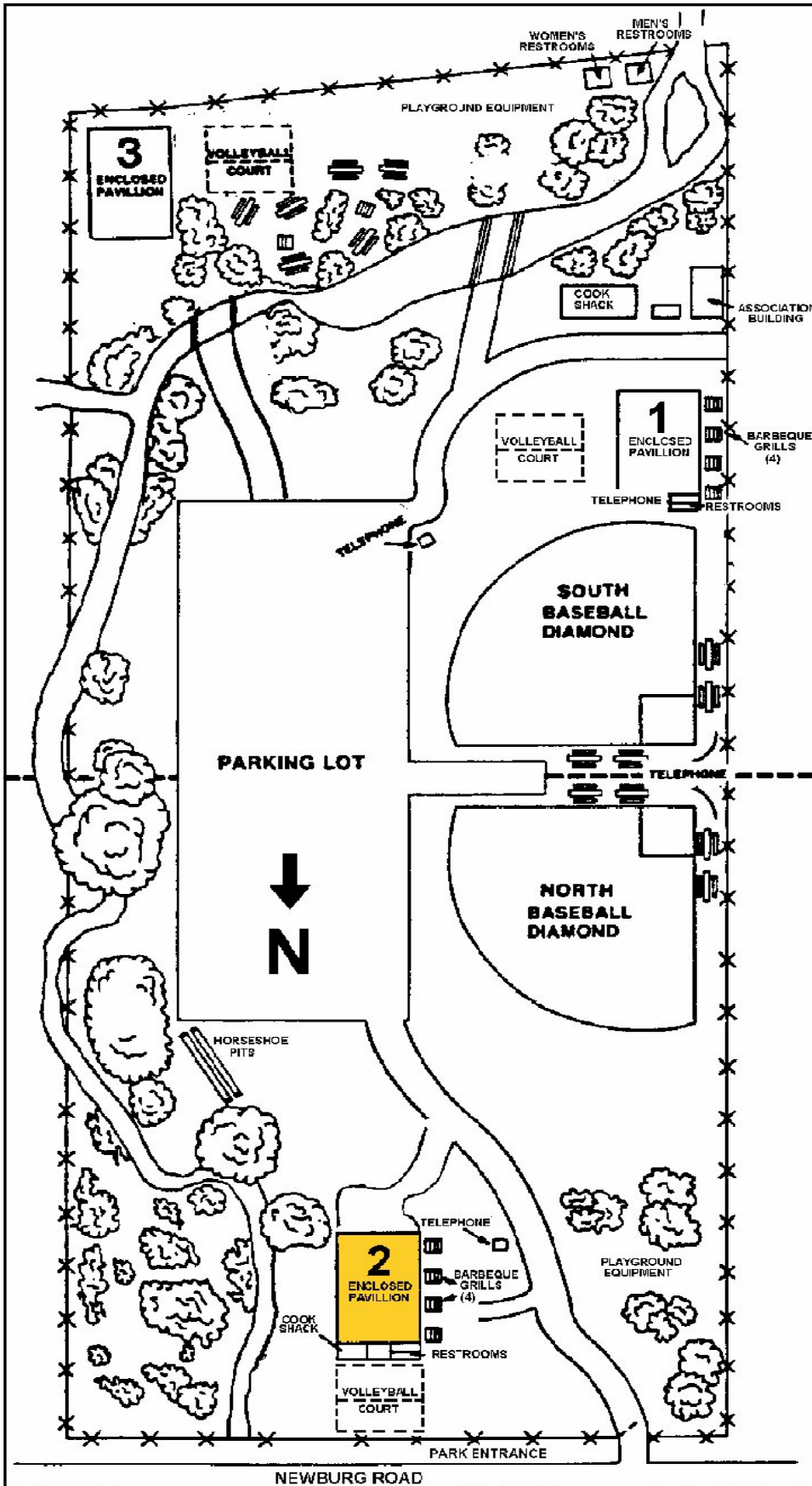
emailing Ginger at ginger.spinasant@hs.utc.com by **Tuesday, May 24, at noon**. Please include the following information: your dinner choice (steak, chicken, or veggie burger), name, phone number, email address, and IEEE member number. Dinner is **FREE** for members and student members, \$20 for non-members and \$10 for non-member students. **IEEE MEMBERS WHO ARE NEW AS OF FEB 1, OR THOSE WHOSE MEMBERSHIP HAD LAPSED AND WHO SUBSEQUENTLY RENEWED AFTER FEB 1, MUST BRING THEIR 2011 IEEE MEMBERSHIP ID TO SHOW PROOF OF ACTIVE MEMBERSHIP.** Unemployed members may call one of the officers for special arrangements.

Note

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



Hamilton Sundstrand Park



April Meeting Recap By Dr. Gary Blank

At the joint meeting of the Rock River Valley Section and the IEEE Chicago/Rockford Consultants Network held on Thursday, April 28, at Rock Valley College there were three presentations. Ben Miller, Chair of the Illinois Society of Professional Engineers and a Consultants Network Member, discussed the importance of being licensed (registered as a Professional Engineer) in Illinois. Wes Martin, Vice Chair of the Consultants Network, explained several methods for finding consulting assignments and employment on the internet. Roy Leventhal, a Consultants Network member, reviewed how some electronic design automation tools for modeling and simulating signal integrity, power integrity, and EMI/EMC can be used effectively. Mr. Martin and Mr. Leventhal's presentations are posted on the [IEEE RRVS website](#). Speakers and attendees pictured below.



IEEE Employment Network Meeting, Monday, May 16**By Dr. Gary Blank**

The RRVS Employment Network will be meeting on Monday, May 16, 6:30 – 8:30 pm, in Room 141, Woodward Technology Center.

The Network has been very effective in helping our members to find employment in this area. Everyone is invited. There is no admission charge.

How to Prepare For and Pass the Professional Engineers Exams Meeting, Tuesday, May 24**By Dr. Gary Blank**

There will be a meeting on Tuesday, May 24, in Room 210, Woodward Technology Center. From 6:30 – 7:15 pm there will be a presentation by Dr. Gary Blank (IEEE-USA Vice-President, Career and Member Services) on the content and types of questions, and how to prepare for the first exam (FE, Fundamentals of Engineering). Then from 7:30 – 8:15 pm the presentation will focus on the second exam (PE, principles of Engineering) for those who have already passed the FE exam. Everyone is invited. There is no admission charge.

IEEE Chicago/Rockford Consultants Network Meeting, Monday, May 23**PRESENTATION:** *An Introduction to Electronic Countermeasures (ECM)* By Richard F. Gillette P.E.

An electronic countermeasure (ECM) is an electrical or electronic device designed to trick or deceive radar, sonar or other detection systems, like infrared (IR) or lasers. It may be used both offensively and defensively to deny targeting information to an enemy. The system may make many separate targets appear to the enemy, or make the real target appear to disappear or move about randomly. It is used effectively to protect aircraft from guided missiles. Most air forces use ECM to protect their aircraft from attack. It has also been deployed by military ships and recently on some advanced tanks to fool laser/IR guided missiles. It is frequently coupled with stealth advances so that the ECM systems have an easier job. Offensive ECM often takes the form of jamming. Defensive ECM includes using blip-enhancement and jamming of missile terminal homers.

Richard will provide us an enlightening primer on this important topic to our military forces.

ABOUT THE SPEAKER:

Richard F. Gillette, PE is President of RF Gillette Inc., a consulting engineering firm, and Executive Director of The Save Community College Organization Inc., a 501 (c) 3 Educational Charity. He is retired from Northrop-Grumman where he held many engineering positions including VP of Engineering. In addition to his 30 years at Northrop, he was employed by Knight Kit and Beltone Electronics and has successfully operated a number of small businesses.

He holds a BSEE (RF communications) from the Illinois Institute of Technology ('66) and a MBA (Operations Research) from Loyola University of Chicago ('69). He is both a Licensed Professional Engineer, and a Licensed Real Estate Broker. He is a senior life member of the IEEE, a Harper College, Trustee Emeritus and a past Chair and Director Emeritus of the IEEE Chicago/Rockford Consultants Network. His Amateur Radio call sign is W9PE, reflecting his PE license and profession.

Reflecting his vocation, working avocation and hobby, his 3 web sites are: <http://rfgillette.com>, <http://saveccs.org> and <http://w9pe.us>.

Please consider meeting us for an optional dinner before the meeting: 5:30 pm at Bakers Square on Northwest Highway, 2 blocks south of the library.

Do you know that networking is responsible for most professional jobs? Do a friend a favor; invite him/her to a meeting. There is no admission fee. Don't forget to bring business cards for networking! Attendees may earn 1 PDH.

Scheduled future meetings will be on Monday, July 25, 2011, Monday, September 26, 2011, Monday, November 28, 2011, Monday, January 23, 2012, Monday, March 26, 2012 and Monday, May 21, 2012.

RRVS 2010/2011 YEAR-IN-REVIEW



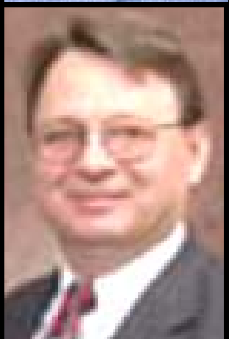
<< **August 2010**
 Tour of **Danfoss Drives** in Loves Park, IL.

September 2010 >>
Dr. R.S. Sreenivas, Associate Professor of Industrial and Enterprise Systems Engineering at the University of Illinois at Urbana-Champaign, presented *Embedded Control—Theory and Applications*, and several entertaining demos.



<< **October 2010**
Dr. Dr. Veysel Demir, Assistant Professor in the Department of Electrical Engineering at Northern Illinois University in DeKalb, presented *Simulation of Electromagnetic Fields - The Finite Difference Time-Domain Method and Its Applications*.

November 2010 >>
Nancy Van Schooenderwoert, Agile Enterprise coach and founder of Lean-Agile Partners, Inc., presented *Agile for Embedded Systems: An Overview*.



<< **January 2011**
Vladimir Crk, Hamilton Sundstrand Fellow, presented *Reliability Challenges in the Aerospace Industry*.

February 2011 >>
Chet Kolodziej, Executive Director of Freedom Field Renewable Energy, Rockford, IL, presented *'Freedom Fields' and Its Future*.



<< **March 2011**
Curt White, retired Hamilton Sundstrand EMC Department Manager and EMC Advisory Engineer, presented *Proper Grounding Design for Electromagnetic Compatibility*.



^ **April 2011** ^
Consultants Ben Miller, Wes Martin and Roy Leventhal, members of the IEEE Chicago/Rockford Consultants Network discussed the importance of being registered as a Professional Engineer in Illinois, a variety of approaches for finding consulting assignments using the internet, and electronic design automation tools used for modeling and simulating signal integrity, power integrity, and EMI/EMC, respectively.



^ **May 2011** ^
 Annual picnic and election of 2012 RRVS officers at Hamilton Sundstrand Park in Belvidere features steak, chicken, and veggie burgers on the grill.

2011 IEEE RRVS Executive Committee



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Messages for student officers can be left at the NIU Dept of Electrical Engineering, (815) 753-9974 or e-mail at sb.niu@ieee.org

The Rock River Valley Section gratefully acknowledges the following companies and colleges for supporting Section Officers:

[Hamilton Sundstrand](#) • [Northern Illinois University](#) • [Rock Valley College](#) • [River North Solutions](#)



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<http://www.ieee.org/web/membership/join/>

RRVS Calendar

- May RRVS Employment Network Meeting** **May 16**
Room 141, Woodward Technology Center, Rock Valley College, Rockford, IL
- May IEEE Chicago/Rockford Consultants' Network Meeting** **May 23**
Intro to Electronic Countermeasures, Palatine Public Library, 700 N. North Court, Palatine, IL 60067
- May Professional Engineer Exam Prep Meeting** **May 24**
6:30pm - 8:15pm, Room 210, Woodward Technology Center, Rock Valley College, Rockford, IL
- May RRVS 2011 Officer Election and Annual Picnic Meeting** **May 27**
Steak barbeque, Hamilton Sundstrand Park, Belvidere, IL
- RRVS Summer Break** **June and July**
- August RRVS Tour** **August 26**
Freedom Field Tour, Rockford, IL

Rock River Valley Section Chapters

Industry Applications Society Chapter
Established 1992

Joint Computer/Control Systems Society Chapter
Established 1995

Power Electronics Society Chapter
Established 1996

Electromagnetic Compatibility Society Chapter
Established 2007

Time-Sensitive Material

Inside This Issue

- May RRVS Annual Picnic and 2012 Section Officer Election 1
- Map of Hamilton Sundstrand Park 2
- April RRV Section Meeting Recap 2
- Other Meeting Announcements 3
- RRVS 2010-2011 Year-In-Review 4
- 2011 RRVS Executive Committee Contact Information 5
- RRVS Calendar 6