



IEEE

THE SUNCOAST SIGNAL

THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.

Volume 60—No. 9 September 2015

IN THIS SIGNAL:

Page 2

- ◆ [Florida Professional Engineer Continuing Education Requirements Change](#)

Page 3

- ◆ [MILCOM 2015](#)

Page 4

- ◆ [Arc Flash - Updates and Training on NFPA 70E-2015, Electrical Safety in the Workplace.](#)

Page 5

- ◆ [IEEE Senior Membership](#)

Page 6

- ◆ [Beckwith Electric Advertisement](#)

Page 7

- ◆ [IEEE-USA E-BOOKS is offering a complimentary copy of "Work-Life Balance, Book 2"](#)

Page 8

- ◆ [IEEE Aerospace and Electronic Systems Society - Cognitive Radar inspired by The Brain: Theory and Applications](#)

Page 9

- ◆ [IEEE Computer Society Conference - Local Computer Networks \(LCN\)](#)

Page 10

- ◆ [Calendar](#)

Upcoming Meetings

EXCOM Meeting

Tuesday, September 01, 2015 5:30PM at TECO Plaza

Register online at <http://time2meet.com/fwcs-excom/index.html>

Open to all FWCS Members

Cognitive Radar inspired by The Brain: Theory and Applications”

IEEE Distinguished Lecturer: Dr. Simon Haykin

September 21, 2015

Details on page 8

Arc Flash - Updates and Training on NFPA 70E-2015

Electrical Safety in the Workplace.

September 25, 2015

Details on page 4

MILCOM 2015

October 26-28

Details on page 3

IEEE Computer Society Conference - Local Computer Networks (LCN)

October 26-29

Details on page 9

2015 IEEE EXECUTIVE COMMITTEE - FLORIDA WEST COAST SECTIONCHAIR: Claude Pitts claudie.pitts@ieee.orgVICE CHAIR: Chris Lambrecht, chris.lambrech@ieee.orgSECRETARY: Sean Denny, venner20@ieee.org, 727-678-0183TREASURER: Jim Howard, Lakeland Electric (863)834-6585 jhoward@ieee.orgSIGNAL EDITOR: Donna Howard, Serge Beazile, Daniel Sangines, Phone (813) 207-7966
dhoward@frcc.com, Serge.beazile@ieee.org, Sangines@ieee.orgAWARDS & BYLAWS : Richard Beatie, PE, r.beatie@ieee.orgMEMBERSHIP: Jim Howard, Lakeland Electric (863)834-6585 jhoward@ieee.orgTEACHER IN-SERVICE: Sean Denny: Venner20@ieee.org (727) 678-0183PES/IAS CHAPTER: Serge Beazile, Lakeland Electric, (863) 834-6511
serge.beazile@ieee.orgMTT/AP/ED CHAPTER: Jing Wang jingw@usf.eduCOMP/AESS CHAPTER: James S. Lumia (813) 832-3501, jlumia@ieee.orgEMBS: Engineering in Medicine & Biology: John West: 727-743-2267,
john.west@ieee.orgROBOTICS and AUTOMATION SOCIETY, Sean Denny, Venner20@ieee.orgSP/COMM CHAPTER: Chris Lambrecht chris.lambrech@ieee.orgWIE: Women in Engineering: Valerie Tur, (813) 334-2317, VLT4@cornell.eduLIFE MEMBER AFFINITY GROUP: Glen Cock gcock@tampabay.rr.com, 813-689-4765

GOLD: Victor, Basantes

PACE: Jim Anderson , (813) 425-2467 jim.anderson@ieee.org

STUDENT BRANCH CO-ADVISORS:

Dr. Paul Schnitzler, USF PS&A (813) 974-5584 pauls@eng.usf.eduDr. Andrew Hoff, hoff@usf.eduSTUDENT BRANCH MENTOR: Jim Howard, Lakeland Electric (863) 834-6585
j.howard@ieee.org (H) (813) 876-1748

STUDENT BRANCHES:

T.J Ross, @mail.usf.edu

CONFERENCES: Richard Beatie, PE,

r.beatie@ieee.orgWEB PAGE: <http://www.ieee.org/fwcs>WEB MASTER: Claude Pitts, III, cpitts7@tampabay.rr.com

THE SUNCOAST SIGNAL is published monthly by the Florida West Coast Section (FWCS) of the Institute of Electrical and Electronics Engineers, Inc. (IEEE). THE SUNCOAST SIGNAL is sent each month to members of the IEEE on Florida's West Coast. Annual subscription is included in the IEEE membership dues.

The opinions expressed, as well as the technical accuracy of authors, advertisers or speakers published in this newsletter are those of the individual authors, advertisers, and speakers. Therefore, no endorsement by the IEEE, its officers, or its members is made or implied.

All material for THE SUNCOAST SIGNAL is due in electronic form by 1st Sunday after the 1st Tuesday of the month preceding the issue month.

Address all correspondence to:

Donna Howard

3133 W Paris Street Tampa, FL 33614-5964

Home Phone 813-876-1748 E-MAIL: dhoward@frcc.com

The Signal, Copyright 2015

PE Corner

Art Nordlinger, PE, Senior Member

Florida Professional Engineer Continuing Education Requirements Change

As I discussed in my last installment, all professional engineers licensed in Florida will be required to obtain a total of eighteen (18) continuing education (CE) course hours in order to renew their licenses. These requirements are officially in effect for the 2015-2017 biennial renewal. The significantly increased CE requirement will make it much more difficult to wait until the last minute to complete your course hours; a practice for many of us in past years.

To avoid the last minute rush, start planning your continuing education now. There are lots of opportunities to earn CE hours. IEEE, as a provider of technical CE hours, offers several seminars a year where CE hours are awarded. The member price for these seminars is often well below the cost of courses offered by commercial vendors. Other opportunities to earn CE hours include publishing technical papers and filing patents for those to whom this might apply.

How about sharing your expertise in your field with other engineers? The first time you teach a course that qualifies for CE hours, the teacher gets double the number of hours! If you are interested in teaching a technical seminar through IEEE, please contact me or Serge Beazile for details.

The FBPE made several other changes to the rules surrounding continuing education. Prior to the current rule change, CE hours has to be taken in a PE's Area of Practice for those hours to count toward license renewal. That has changed in that a PE many now count any course from a Florida accredited provider toward meeting the continuing education requirement. One CE hour may also be earned by serving as an officer for a Board-recognized technical society (of which IEEE is one).

Refer to F.S. 471.017(3) and Chapter 61G15-22 for a full description of the changes related to continuing education requirements for licensed engineers and to the FBPE website: <https://www.fbpe.org/index.php/continuing-education/continuing-education-ce-requirements>

Advertisement

<p>Wayne Ellis President</p>		<p>Steve Antman Sales Engineer Cell: 813-523-3161</p>
<p> * Line Crew Services- Repair, Salvage and New Installation * On-Site Electrical Service * Transformer Repair & New Transformer Sales * Complete Turnkey Installation * Circuit Breaker Repair & New Circuit Breaker Sales * Oil Processing Services * Testing (Breakers, Relays, Transformers, etc.) </p>		
<p> Electrical Engineering Enterprises, Inc. is the company to meet all of your electrical needs. Electrical Engineering is a multi-faceted electrical repair/testing company. Our services are available 24 hours a day seven days a week. </p>		
<p> www.electricalengineeringenterprises.com 5316 E. Henry Ave Tampa, FL 33610 Phone (813)740-9601 Fax: (813)740-9360 </p>		

Powers and Company, Inc.

Power Transformer and High Voltage Switchgear Experts
Delta Star Power Transformers, Royal Switchgear

Dick Powers
(813) 282-3011
(813) 760-2556 Mobile
powerscomp@aol.com
Offices in Tampa and St. Petersburg



EMConsulting

Interference eliminated

EMC-EMI-E³ Design & Troubleshooting



your EMC WIZARD

- Finds & solves your EMC problems
- Supports all project phases
- Designs / reviews designs
- Writes / reviews documentation
- Is LOCAL to the Tampa Bay area
- Initial meeting always FREE

visit emcwizard.com for more

Stu Benner phone: 301.730.2144

INARTE Certified EMC Engineer stu@emcwizard.com

PO Box 51, Odessa, FL 33556-0051

MILCOM 2015

October 26 – 28

The Premier International Conference for Military Communications

MILCOM 2015 celebrates the 34th anniversary of the premier international conference for military communications. "**Leveraging Technology – The Joint Imperative**" gathers the leading minds of government, military, industry and academia in an interactive forum to further explore and define the benefits that joint-level collaboration bring to current and future communication challenges. The annual conference will take place at the Tampa Convention Center. Leaders from around the world will address the critical role communications plays in military readiness and operations. MILCOM offers industry the opportunity to discuss communications technologies and services with decision makers from all branches of the armed forces, the Department of Defense, federal agencies and multinational forces.

In the MILCOM tradition, the conference will feature an outstanding series of technical presentations, discussions and tutorials, as well as nearly 30,000 square feet of industry exhibits all under one roof. It will include more than 300 unclassified and restricted technical presentations, tutorials and panel discussions led by experts in defense communications. Topics will include the spectrum of command, control, communications, computers, intelligence, surveillance and reconnaissance (C4ISR) technologies and capabilities that address 21st century communications challenges related to national defense, homeland security, disaster response and interoperability. Continuing education credits will be available to all attendees.

For more information please visit:

<http://events.jspargo.com/milcom15/public/enter.aspx>

***Arc Flash - Updates and Training on NFPA 70E-2015
Electrical Safety in the Workplace.***

Date: Friday, September 25, 2015

Time: Registration & Breakfast: 8:00AM-8:30AM

Seminar: 8:30AM – 3:00PM

Speaker: John Leedy, P.E., Owner, LEEDY ELECTRIC EAST, LLC

Location: Seminole Electric Cooperative, 16313 North Dale Mabry, Tampa, FL 33618

Cost: \$150 Members, \$300 Non-Members, \$100 Students. Includes Breakfast, Lunch, & seminar text, “NFPA 70E – 2015 Standard for Electrical Safety in the Workplace” (a \$65 value) is included with this seminar.

PDH Credits: Professional development hours will be awarded. Be sure to enter your name and PE number on the signup website as it appears on your license. Florida exempt provider #00015.

Reservations: Online at: <http://time2meet.com/fwcs-pes4/index.html> (Select Reservations)

Make checks payable to IEEE FWCS and mail a check in advance to IEEE PE/IA Chapter Treasurer:

PES/IAS Chapter 2593 Forest Run Court

Clearwater, FL 33761-3716

Space limited to the first 50 registrants!!!

Questions: Tom Blair at 813-228-1111, ext. 34407 or thblair@tecoenergy.com

Seminar Text A \$65 Value is included with this Seminar.

Your local IEEE PES/IAS Chapter is offering this 6 hour training on Electrical Safety in the Workplace by John Leedy, Owner of Leedy Electric East.

This training session will be devoted to the subject of Electrical Safety in the workplace as it relates to the latest edition of the NFPA 70E-2015 and the updates contained therein. Topics such as “how does electrical safety and the NFPA-70E apply to the workplace” and “what is required to be compliant with the standard” will be covered.

A copy of the standard, NFPA-70E-2015 Standard for Electrical Safety in the Workplace is included in the training costs.

John Leedy graduated from University of Florida in 1982 with a Bachelor of Science in Electrical Engineering with an emphasis in Power Delivery. John worked for Dillard Smith Construction as a protective relay technician. He joined General Electric as a Field Engineer, specializing in Power Substations and DC Electronic Drive Systems in Paper Mills as well as Project Management of Paper Machine Drive System retrofits and substation construction and commissioning. John left GE to join the family business, Leedy Electric Corp, in 1987. He earned his PE license for the State of Florida in 1992 and the State of Georgia in 2013 and received his Masters in Engineering Management from the USF in 2002. John has been working with NFPA 70E regulation since 2002, performing hundreds of Arc Flash Risk assessments throughout the SE United States, training management and employees on the standard. Leedy Electric is located in Mulberry Florida, and has been in business since 1975, specializing in Engineering and Electrical Service for the commercial and industrial industries.

IEEE Senior Membership

Senior member is the highest grade for which IEEE members can apply. IEEE members can self-nominate, or be nominated, for Senior member grade.

To be eligible for application or nomination, candidates must:

- be engineers, scientists, educators, technical executives, or originators in IEEE-designated fields;
- have experience reflecting professional maturity;
- have been in professional practice for at least ten years (with some credit for certain degrees);
- show significant performance over a period of at least five of their years in professional practice.

Prospective members who would like to apply directly for Senior member grade should join IEEE and then submit the Senior member Application Form as an IEEE member number is required on the senior member application. There is no additional fee to apply for senior member grade.

To start your IEEE Senior Membership Application form today, visit ieee.org, select “**Membership & Services**” tab at the top, then select “**Member Grade Elevation**” on the left. You will need an IEEE account to start the application. There is no cost to set up an IEEE account and, if you have not set up an IEEE account, at the top of the home page, select “**Create Account**” to set up your account today. If you are in need of references for your senior membership application, please stop by one of our monthly executive committee meetings and we will be glad to help identify some references. We meet the first Tuesday of every month and you can find specific info in this newsletter.

Benefits of Senior Membership

- **Recognition:** The professional recognition of your peers for technical and professional excellence.
- **Senior member plaque:** Since January 1999, all newly elevated Senior members have received an engraved Senior Member plaque to be proudly displayed for colleagues, clients and employers to see. The plaque, an attractive fine wood with bronze engraving, is sent within six to eight weeks after elevation.
- **US\$25 coupon:** IEEE will recognize all newly elevated Senior members with a coupon worth up to US\$25. This coupon can be used to join one new IEEE society. The coupon expires on 31 December of the year in which it is received.
- **Letter of commendation:** A letter of commendation will be sent to your employer on the achievement of Senior member grade (upon the request of the newly elected Senior member).
- **Announcements:** Announcement of elevation can be made in section/society and/or local newsletters, newspapers and notices.
- **Leadership Eligibility:** Senior members are eligible to hold executive IEEE volunteer positions.
- **Ability to refer other candidates:** Senior members can serve as a reference for other applicants for senior membership.
- **Review panel:** Senior members are invited to be on the panel to review senior member applications.
- **US\$25 referral coupon:** Newly elevated Senior members are encouraged to find the next innovators of tomorrow and invite them to join IEEE. Invite them to join and the new IEEE member will receive \$25 off their first year of membership.

IMMEDIATE CAREER OPPORTUNITY

Application Engineer – Protective Relays

You are a power electrical technician or field engineer with an electric utility, heavy industrial or switchgear company. You are ready for the challenge of interfacing with the Customers of a leading manufacturer of innovative high quality products, technical services and solutions for the power electrical industry. You want to grow from task-based to actively contributing to the success of a top-shelf technical support group.

We are looking for a dynamic individual with strong written and verbal communications skills. They will be responsible for the application of the company's products and systems related to protective relaying of distribution feeders (including recloser controls), transformers, generators, and distributed energy resource interconnection. This individual will provide technical services to customers in support of the application, use, and maintenance of the above products and systems.

Familiarity with protection scheme documentation: 1-lines, 3-lines, logics and elementary diagrams. Ability to calculate protection settings, use Industry standard secondary injection test equipment and knowledge of digital communications as applied in Utilities and Industrials (DNP, IEC-61850, MODBUS) is desired. BSEE with 5+ years of relevant experience or AAS and 10+ years of relevant experience is required.

Please contact Human Resources Department at jobs@beckwithelectric.com.

Beckwith Electric, founded in 1967, is a premier provider of innovative and high quality products, technical services and solutions that meet the needs of customers involved in the production, transmission, and distribution of electric power.



Products Provided and Markets Served

Beckwith Electric's products include tapchanger, regulator, and capacitor controls, protective relays, custom services and solutions, and equipment for synchronizing and motor bus transfer. Customers include electric utilities, large industrial companies, original equipment manufacturers and owners of alternative sources of energy.

For additional company or product information, please browse our website or contact us at (727) 544-2326.



6190 118th Av. N., Largo, FL 33773

Fax: (727) 544-2015

jobs@beckwithelectric.com

www.beckwithelectric.com

Drug Free Workplace EOE

***IEEE-USA E-BOOKS is offering a complimentary copy of
“Work-Life Balance, Book 2” to members in August.***

Author Peggy Hutcheson explores work-life balance in light of career stages -- young professional, mid-career and late career -- and explores a strategy to help achieve balance in each.

For example, regarding young professionals, she writes that, “though balance between the time and energy spent on developing a career, and time and energy to manage an active social and family life is difficult, early careerists can often rely on higher levels of energy to help manage their lives.” She points out that developing healthy eating habits and doing regular exercise will have important positive consequences later, in the lives of young professionals.

“Remember that work-life balance is the state of control, achievement and satisfaction in life,” Hutcheson writes. She suggests being brutally honest about your time and how you spend it, and recommends keeping a diary. Hutcheson believes doing so will help you uncover things that may be preventing you from feeling successful in your accomplishments.

HOW TO GET YOUR FREE E-BOOK

From 1 August to 15 September, you can get your free e-book to download by going to <http://shop.ieeeusa.org/usashop/product/careers/76735>. Log in with your IEEE Web account, add the book to your cart and use promo code AUGFREE at checkout.

SEPTEMBER E-BOOK

In September, IEEE-USA E-BOOKS will offer “Writing for Success -- An Engineer’s Guide -- Volume 3: The End Products of Engineering Writing,” by Tom Moran.

This free e-book looks at the characteristics of several types of written products, such as reports, specifications and instructions -- documents with the primary mission of informing and explaining. It also explores requests and proposals -- documents with the primary goal of persuasion.

IEEE-USA E-BOOKS seeks authors to write an individual e-book, or an e-book series, on career guidance and development topics. If you have an idea you think will benefit members in a particular area of expertise, please email your proposal to IEEE-USA Publishing Manager Georgia C. Stelluto at g.stelluto@ieee.org and IEEE-USA E-Book Chair Gus Gaynor at g.gaynor@ieee.org.

IEEE-USA serves the public good and promotes the careers and public policy interests of nearly 200,000 engineering, computing and technology professionals who are U.S. members of IEEE.



“Cognitive Radar inspired by The Brain: Theory and Applications”
IEEE Distinguished Lecturer: Dr. Simon Haykin

Tampa, FL – September 21, 2015 at 6:00 pm

The IEEE Aerospace and Electronic Systems Society proudly presents Dr. Simon Haykin, a Distinguished Lecturer for the global AESS society. Dr. Haykin will travel from McMaster University in Ontario, Canada to present his research over the past year on Cognitive Radar, a subset of the Cognitive Dynamic System discipline he has developed. The Cognitive Radar in Dr. Haykin’s research closely mimics the visual brain! Practical attributes of Cognitive Radar from an engineering perspective will be discussed.

Dr. Haykin has dedicated his research over the past year to Cognitive Dynamic Systems, including Cognitive Radar and Cognitive Control. During this event, he will concentrate on the Cognitive Radar portion that closely mimics the visual brain. Specifically, the following will be covered:

- The four principles of cognition: perception-action cycle, memory, attention and intelligence, each one of which will be carefully defined.
- Structural composition of Cognitive Radar that will build on these principles, and the role of each principle will be addressed.
- To demonstrate the information-processing power of the Cognitive Radar and its novel control capability, an air traffic control example with deep-corner turn for the experiment will be used. The unique capability of Cognitive Radar will thus be demonstrated using computer simulations.
- With target tracking as the objective, the important properties of the new Cubature Kalman Filter, developed in Dr. Haykin's lab, will be highlighted.

Please read more about the details of this amazing opportunity and register early for this space-limited event at: <https://meetings.vtools.ieee.org/m/35261>.

Food and beverage will be provided. Please contact Jim Cavanaugh with any questions: James.A.Cavanaugh@ieee.org

Cost is \$5 for Student and Senior IEEE members, \$10 for IEEE members and \$20 for non-members.

IEEE Computer Society Conference - Local Computer Networks (LCN)

Sheraton Sand Key Resort -Clearwater Beach, FL - October 26-29, 2015

The IEEE LCN conference is the premier conference on theoretical and practical aspects of computer networking. LCN is highly interactive, enabling an effective interchange of results and ideas among researchers, users, and product developers. Major developments from high-speed networks to the global Internet to specialized sensor networks have been reported at past LCNs.

Conference registration is available via the IEEE online conference registration Web site (<http://www.ieeeln.org/Attendee.html>). Keynote presentations will be delivered by Dr. Robert Metcalfe of University of Texas at Austin and by Professor Muriel Médard of MIT.

Please visit <http://www.ieeeln.org/index.html> for more information about the 40th Anniversary of this conference.

Advertising Section



NFPA 70E - ARC FLASH HAZARD ANALYSIS

SERVICES INCLUDE:

- ◆ SYSTEM SURVEYS
- ◆ SYSTEM ANALYSIS
- ◆ DATA GATHERING
- ◆ REPORTS & LABELING
- ◆ DATA ENTRY
- ◆ TRAINING



(863) 425-2698
WWW.LEEDYELECTRIC.COM

Powers and Company, Inc.

Power Transformer and High Voltage Switchgear Experts
Delta Star Power Transformers, Royal Switchgear

Dick Powers
(813) 282-3011
(813) 760-2556 Mobile
powerscomp@aol.com
Offices in Tampa and St. Petersburg



NFPA 70E - ARC FLASH HAZARD ANALYSIS

SERVICES INCLUDE:

- ◆ SYSTEM SURVEYS
- ◆ SYSTEM ANALYSIS
- ◆ DATA GATHERING
- ◆ REPORTS & LABELING
- ◆ DATA ENTRY
- ◆ TRAINING



(863) 425-2698
WWW.LEEDYELECTRIC.COM

Size	One Month		6 Months		12 Months	
	Member	Non-Member	Member	Non-Member	Member	Non-Member
Business Card	\$25	\$33	\$120	\$150	\$210	\$252
¼ Page	\$40	\$52	\$190	\$238	\$335	\$402
½ Page	\$75	\$98	\$360	\$450	\$630	\$756
¾ Page	\$110	\$143	\$530	\$663	\$925	\$1,110
Full Page	\$140	\$182	\$670	\$838	\$1,175	\$1,410
Insert / Sheet	\$200	\$260	\$800	\$1,000	\$2,000	\$2,400

Blue Elephant Consulting

Unforgettable communication skills that will set your ideas free...



Dr. Jim Anderson
President
jim@BlueElephantConsulting.com
Phone: 813.418.6970
www.BlueElephantConsulting.com
P.O. Box 341734, Tampa, Florida 33694-1734

Your advertisement here reaches over 2300 members in the local area!

IEEE, Inc- FWCS, 3133 W. Paris St.
Tampa, FL 33614-5964



Florida West Coast Section, Tampa

**NON PROFIT ORG
U.S. POSTAGE PAID
TAMPA, FL. PERMIT
No. 1197**

DATE SENSITIVE MATERIAL. DO NOT DELAY

Change of address? IEEE Web Contact Update <http://www.ieee.org/membership/coa.html>
Or send address changes including your name, IEEE Member number and all pertinent information to:
IEEE, 445 Hoes Lane, P.O. Box 1331, Piscataway, NJ 08855-1331 or call (800) 678-4333
Or fax your address changes to (732) 562-5445

September 2015 Calendar of Events (For more information see P. 1) in this Signal...

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1 <i>EXCOM Meeting 5:30PM TECO Plaza</i>	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21 Cognitive Radar inspired by The Brain: Theory and Applications 6PM -8 PM	22	23	24	25 Arc Flash - Updates and Training on NFPA 70E-2015 8 AM—3:0PM 16313 North Dale	26
27	28	29	30			