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Upcoming Meetings

EXCOM Meeting

Tuesday, January 05, 2016 5:30PM at TECO Plaza

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

Open to all FWCS Members

Protection and Coordination of Industrial and Commercial Power Systems - IEEE 242 (IEEE Buff Book)

Friday January 22, 2016

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Grounding and Bonding Best Practices

Friday, February 19, 2016

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Tampa Bay E-Week Banquet

Friday, February 26, 2016

Details on page 4 & 5

Laws & Rules and Ethics for Professional Engineers

Monday, March 21, 2016

Details on page 8

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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.

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PE Corner

Art Nordlinger, PE, Senior Member

Record Keeping

A significant change for providers of Continuing Education Hours (CEH) concerns record keeping and reporting CEHs to the Board. Proposed changes to section 61G15-22 can be found online at:

<https://www.flrules.org/gateway/ruleNo.asp?id=61G15-22.0001>.

One thing that has not changed concerns certificates of completion for Continuing Education Hours. Section 61G15-22.012 (3) obligates providers of CEHs to "Furnish each participant with an individual certificate of attendance." The rule goes on to say, "An attendance record shall be maintained by the provider for four years and shall be available for inspection by the Board and the Florida Engineers Management Corporation." IEEE has provided participants with certificates since inception of the rule and keeps records as required.

An additional requirement for providers, until recently, was that a provider "must electronically provide to the Florida Engineers Management Corporation a list of attendees taking a course within five (5) business days of the completion of the course." The proposed rule removes this requirement, so providers no longer report CEHs awarded to participants to the Board, except when specifically requested.

The rules have always placed a record keeping obligation on the engineer. However, this becomes even more critical with providers not routinely reporting all CEHs earned to the Board. Section 61G15-22.008 says, "It is the licensee's responsibility to maintain sufficient records to demonstrate completion of continuing education requirements for at least two licensure cycles (four years)." This obligation has always been part of the rules. The only proposed change, as is true with many sections of the rules, is to consistently use CEH terminology as the measure of hours completed.

Given this obligation, engineers should be sure that they receive a certificate of completion for all continuing education. Additionally, they should be sure that the certificate has their correct name and license number, the number of hours completed and the date, to avoid complications at the time of renewal. And be sure to keep these certificates where they will be available should the Board request proof of completion of an engineer's continuing education.

Questions about IEEE's compliance with these rules and records of CEHs awarded may be directed to Art Nordlinger at a.nordlinger@ieee.org.



USF PES/IAS Chapter Officer's Elected for 2016

At the Joint Chapter of IEEE PES/IAS (USF) officer's meeting held on November 23rd the following officers were elected for the 2015-2016 academic calendar year.

- President – Sayed Abdullah Sadat
- Vice-President – Jairo Garcia
- Treasurer – Ian Somerville
- Secretary – Chris Perilla
- Support Officer – Ariana McGuirk
- Webmaster/Design Chair – Amit Jena
- Fundraising Chair – Odinaka Okeke
- Outreach/Events Planner – Ebbin Daniel
- Support Officer – Rabi Kar

The University of South Florida Fall semester 2015 has ended in December as the exam week passed; we wish success to all the students and joyful holidays ahead.

Stay connected; join us if you haven't yet by going to our Bullsnc page:

<https://orgsync.com/127120/chapter>

Stay tuned for our spring semester activities, which is going to be announced in our January general body meeting.

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when you get a chance, please send yours in!

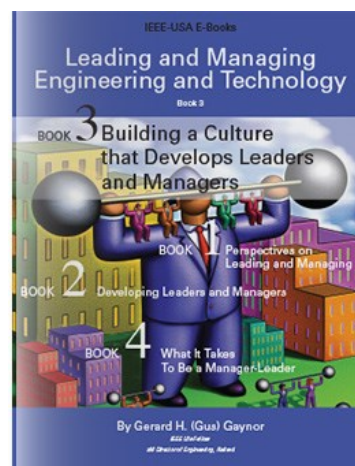
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**Kepler Mission Program Manager
Keynote Speaker**

John Troeltzsch is the Kepler mission program manager for Ball Aerospace. Troeltzsch received his Bachelor of Science in Aerospace Engineering from the University of Colorado in 1983 and was immediately hired by Ball Aerospace. While working at Ball, Troeltzsch continued his studies at C.U. and received his Masters of Science in Aerospace Engineering in 1989.

During his 31 years at Ball Aerospace, Troeltzsch has worked on three of Hubble's science instruments and in program management for the Spitzer Space Telescope. Following Spitzer's launch in 2003, Troeltzsch joined Ball's Kepler team and was named program manager in 2007. For the Kepler mission, Troeltzsch has managed the Ball team, including responsibility for cost, schedule, and performance requirements.

DATE: Friday, February 26, 2016

TIME: 4:30 – 6:30 PM Networking & Exhibition
6:30 - 9:00 PM Dinner Program & Awards

LOCATION:



4121 N 50th St, Tampa, FL 33610

Registration & Sponsorship Information
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More information and Registration can be found at:

<http://events.r20.constantcontact.com/register/event?oeidk=a07e9tjvzoq42b73460&llr=bvqrglcab>

Note that all donations may be tax deductible. FIN # 13-1656633



***Protection and Coordination of Industrial and Commercial Power Systems -
IEEE 242 (IEEE Buff Book)***

Date: Friday January 22, 2016

Time: Seminar 9:00AM to 2:00PM

Speaker: Thomas Blair, P.E., Engineering Fellow, Tampa Electric Company Seminole Electric

Location: Seminole Electric, 16313 N Dale Mabry Hwy, Tampa, FL 33618

Cost: Students with ID \$100 member, \$200 non-member, \$20 IEEE Student Members

PDH Credits: Four (4) professional development hours will be awarded. (For students a certificate for course completion will be provided.) Be sure to enter you name and PE number on the signup website as it appears on your license. Florida exempt provider #00015.

RSVP: Online at: <http://time2meet.com/fwcs-meetings/>

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 48179 or tom_blair@ieee.org

Your local IEEE PES/IAS Chapter is offering the next in a series of IEEE color book seminars. This seminar will cover IEEE 242-2001 (IEEE Buff Book) - IEEE Recommended Practice for Protection and Coordination of Industrial and Commercial Power Systems. This is one of a series of seminars based on the IEEE Color Books.

IEEE 242 covers the principles of system protection and the proper selection, application, and coordination of components that may be required to protect industrial and commercial power systems against abnormalities that could reasonably be expected to occur in the course of system operation. The topics are presented in a simple, yet comprehensive, format in the standard. The principles presented apply to both new electrical system design and to the changing, upgrading, or expansion of an existing electrical distribution system.

This seminar will cover the main topics from IEEE 242 of System Planning, Short Circuit Calculations, Instrument Transformer Selection, Protective Relay Selection and Application, Interrupting device Selection and Application, and Ground Fault Protection. The seminar will also address some of the equipment specific applications such as conductor protection, motor & generator protection, switchgear protection, and transformer protection.

Thomas Blair is an Engineering Fellow with Tampa Electric and works in the Generation Engineering department. He performs electrical system analysis and uses the results to specify electrical equipment ratings, protective relay settings, and electrical system arrangement. Mr. Blair is a Senior Member of IEEE.



Grounding and Bonding Best Practices

- Date:** Friday, February 19, 2016
- Time:** 8:30am-9am Registration, 9am-3pm Seminar
- Cost:** \$100 members, \$200 Non-Members, \$20 Students (Includes Breakfast & Lunch)
Make checks payable to IEEE FWCS and mail a check in advance to:
John Stankowich
IEEE PE/IA Chapter Treasurer
2593 Forest Run Court Clearwater, FL 33761-3716
- Speakers:** Ralph D. Painter, Esq., P.E, Engineering Fellow, Tampa Electric Company
- Pdh's:** 4 Pdh's (CEH's) will be awarded for this seminar. Be sure to enter your name and PE number on the signup website as it appears on your license. IEEE Florida Provider Number is 3849
- Location:** FRCC Headquarters, 3000 Bayport Dr #600, Tampa, FL 33607
Parking: Use parking lot for Hyatt (North side only).
- RSVP:** Online at: <http://time2meet.com/fwcs-pes2/index.html> Space limited to the first 45 registrants!!!
Cancellation must be submitted online 24 Hrs prior to the seminar at:
<http://time2meet.com/fwcs-pesX/index.html>
No shows will be invoiced for the total cost of the seminar.
- Questions:** Tom Blair at 813-228-1111, ext 48179 or tom_blair@ieee.org

This training will cover the various types of grounding configurations such as solidly grounded, low and high impedance grounded and ungrounded systems. We will review NEC terms and IEEE standards that apply to grounding. We will cover IEC susceptibility curves and mold case circuit breaker operation for GFCI protection. We will discuss the difference between the grounded conductor and grounding conductor and the function of each along with NEC requirements for sizing. We will explain requirements for grounding and bonding equipment enclosures and how to terminate shields on medium voltage cables correctly. Lastly we will discuss basic lightning protection and will review instrument grounding systems.

Ralph D. Painter, Esq., P.E. graduated from the University of South Florida, Tampa, Fl. in 1977 with a MSEE degree and from Stetson University College of Law, Tampa Fl., in 2008 with a Juris Doctor degree. He is a senior member of the IEEE. He has over 35 years of electrical engineering experience in the design, commissioning, operation and maintenance of electric utility large coal and natural gas fired power plants. He is currently an Engineering Fellow at Tampa Electric Company and he is a licensed Professional Engineer in the State of Florida.



Laws & Rules and Ethics for Professional Engineers

Date: Monday, March 21, 2016

Time: 11:00am-11:30 am Registration, 11:30-12 Lunch, 12pm-2pm Meeting

Cost: \$30 members, \$50 Non-Members, \$20 Students (Includes Lunch)

Make checks payable to IEEE FWCS and mail a check in advance to:

John Stankowich

IEEE PE/IA Chapter Treasurer

2593 Forest Run Court

Clearwater, FL 33761-3716

Speakers: Mr. William C. Bracken, PE, SI, CFM, Chair of the Florida Board of Professional Engineers

Presentations: The Rules and Laws That Govern the Practice of Engineering in Florida
Ethics and the Practice of Engineering in Florida

CEHs: One Rules & Laws CEH will be awarded, One Ethics CEH will be awarded, which will meet the current requirements for PE Renewals. Be sure to enter your name and PE number on the signup website as it appears on your license.

Location: FRCC Headquarters, 3000 Bayport Dr #600, Tampa, FL 33607

Parking: Use parking lot for Hyatt (North side only).

RSVP: Online at: <http://time2meet.com/fwcs-pes4/index.html>

Space limited to the first 65 registrants!!!

Cancellation must be submitted online 24 Hrs prior to the seminar at:

<http://time2meet.com/fwcs-pesX/index.html>

No shows will be invoiced for the total cost of the seminar.

Questions: Jim Howard at 863-834-6585 or jim.howard@lakelandelectric.com.

IEEE is fortunate to have **Mr. William Bracken**, PE, Chair of the Florida Board of Professional Engineers, join us for two presentations: The Rules and Laws That Govern the Practice of Engineering in Florida and Ethics and the Practice of Engineering in Florida. This is a unique opportunity to hear Mr. Bracken's perspective as the Chair of the Florida Board on these topics.

Bill Bracken is president of Bracken Engineering in Tampa. He has been a structural engineer for more than 25 years and is licensed in 35 states. His career has centered on the practice of structural engineering, forensics, building-related codes and disaster response. Bill is a structures specialist with the state of Florida, a member of Hillsborough County Fire Rescue and has been an instructor for ICC for the last 15 years and currently serves as the chair of Florida's engineering licensure board.

FWCS Officers Elected for 2016

At the FWCS Executive Committee held on November 3rd, 2015, the following officers were elected for the 2016 calendar year:

Chair – Claude Pitts
Vice-Chair – Jim Cavanaugh
Secretary – Sean Denny
Treasurer – Jim Howard

FWCS PE/IA Chapter Officer Elected for 2016

At the FWCS PE/IA Executive Committee held on October 29th, 2015, the following officers were elected for the 2016 calendar year:

Chair – Serge Beauzile
Vice-Chair – Jim Howard
Secretary/Treasurer – John Stankowich

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January 2016 Calendar of Events (For more information see P. 1) in this Signal...

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
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3	4	5 <i>EXCOM Meeting</i> 5:30PM TECO Plaza	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22 Protection and coordination of Industrial and Commercial Power Systems --See page 6	23
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