



**The Florida West Coast
Section of the IEEE**
Serving over 2,300 members in Charlotte,
Citrus, DeSoto, Hardee, Hernando,
Hillsborough, Lee, Manatee, Pasco, Pinellas,
Polk, and Sarasota Counties



THE SUNCOAST SIGNAL

THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.



**Inside This
Signal...**

Page 2

- * Editors Column
- * LightningMaster
- * Nolan Power Group
- * MetLife

Page 3

- * Siliconexion
- * Consultants Network
- * National Engineers
Week

Page 4

- * Computer Society
Meeting
- * December BTC

Page 5

- * January BTC
- * Robotics and
Automation Society

Page 6

- * Shunt Capacitor
Switching

Page 7

- * Fault Calculations
Seminar

Page 8

- * Engineers Week

Page 9

- * Signal Processing
Meeting

Page 10

- * Calendar

This Month's Meetings

Tuesday, March 2nd: EXCOM Meeting
Meeting starts at 5:30PM At TECO Plaza
Register online at <http://time2meet.com/fwcs-excom/index.html>

Meeting is open to all FWCS Members

Shunt-Capacitor Switching Meeting

Friday, March 12, 2010
Details on [Page 6](#)

Robotics and Automation Society Meeting

Tuesday, March 16, 2010
Details on [Page 5!](#)

Fault Calculations Seminar

Friday, March 26, 2010
Details on [Page 7](#)

Upcoming Events!

**Ninth Annual Wireless Telecommunications Symposium
(WTS 2010)**

April 21 – 23, 2010 -- Tampa, Florida
<http://wts2010.eng.usf.edu>

IEEE Computer Society & AESS Dinner Meeting

Identity Theft and Financial Cyber Fraud in the New Millennium
Details on [page 4](#)



This Month...(Editor's Column)

2010 IEEE EXECUTIVE COMMITTEE FLORIDA WEST COAST SECTION

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

VICE CHAIR: Serge Beauzile, Lakeland Electric,
(863) 834-6511 serge.beauzile@ieee.org.

SECRETARY: Ralph D. Painter, Esq., rdpainter@ieee.org (813) 228-4685

TREASURER: Dr. Paul Schnitzler (813) 974-5584
pauls@eng.usf.edu

SIGNAL EDITOR: Richard A. Sanchez,
Phone (813) 239-3849 rsancz@verizon.net

AWARDS & BYLAWS : Richard Beatie, PE, Lightning Master
(727) 580-3598 r.beatie@ieee.org

EDUCATION: Dr. Rudolf E. Henning and Zhen Tong
(813) 974-4782 or (727) 328-8777 (Ext: 333)
henning@eng.usf.edu or tong@ieee.org

MEMBERSHIP: Glen Davis,

TEACHER IN-SERVICE: Sean Denny: Venner20@ieee.org
(727) 678-0183

PES/IAS CHAPTER: Serge Beauzile, Lakeland Electric,
(863) 834-6511 serge.beauzile@ieee.org

MTT/AP/ED CHAPTER: Ken A. O' Connor
kenoconnor@ieee.org

COMP/AESS CHAPTER: James S. Lumia (813) 832-3501,
jlumia@ieee.org

EMBS: Engineering in Medicine & Biology: Dr. Ravi Sankar:
813-974-4769 sankar@eng.usf.edu

SP/COMM CHAPTER: Hector Martinez, abelhct@hotmail.com

WIE: Women in Engineering: Valerie Tur, (813) 840-3454,
Valerie.tur@tawinc.com

LIFE MEMBER AFFINITY GROUP: Bob Franklin
boatseven@aol.com

GOLD: Tim Doolittle, tdoolittle@tmdvault.fastmail.fm

PACE: Tim Donovan (813)991-5656,
tim.donovan@aim4best.com

STUDENT BRANCH CO-ADVISORS:
Dr. Paul Schnitzler, USF PS&A (813) 974-5584
pauls@eng.usf.edu

Dr. Ralph Fehr, USF, (813) 760-7204, fehr@eng.usf.edu
Dr. Srinivas Katkooi, USF, (813)-974-5737 katkooi@ieee.org

STUDENT BRANCH MENTOR: Jim Howard, Lakeland Electric
(863) 834-6585 jhoward@ieee.org (H) (813) 876-1748

STUDENT BRANCHES:

Alex Dunbar, Chair USF Student Branch alex.dunbar@ieee.org
(603) 303-3379

Joseph Easey Vice Chair USF Student Branch
jeeasey@mail.usf.edu (941) 539-2587

CONFERENCES: Jim Beall, j.beall@ieee.org

WEB PAGE: <http://www.ieee.org/fwcs>

WEB MASTER: Claude Pitts, III, Claude.Pitts-III@pgnmail.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:

Richard A. Sanchez
1018 Berry Avenue
Tampa, FL 33603
Home Phone 813-239-3849
E-MAIL: rsancz@verizon.net
The Signal, Copyright 2010

Well, the Engineering banquet is now history! Having it at MOSI was a great idea and they did a first class job of providing the space and all the other things needed to make it an event to remember. I am a volunteer at MOSI and I have to admit I wasn't sure how they were going to fit us all in and make it enjoyable. Jim Anderson was Master of Ceremonies again this time and Wit Ostrenko was the keynote speaker. Wit is the long time President of MOSI and has been instrumental in its growth. If you have not attended a banquet yet you should plan to do it next year. If you haven't been to MOSI recently you should do that as well since they are adding to permanent exhibits and have "DaVinci" as its current traveling exhibit.

We have lots of meetings this month and an article with some pictures from the banquet. I'll have more in coming months.



Richard E. Beatie, P.E.
Director Of Engineering
Structural - Bonding/Grounding - Surge

1351 N. Arcturas Ave. (800) 749-6800 Voice
Clearwater, FL 33765 (727) 580-3598 Cell
(727) 499-0138 Fax

www.LightningMaster.com RBeatie@LightningMaster.com

[Web Site](#) [Email Me](#) [Map to Us](#)



NOLAN POWER GROUP

Power Quality Specialists
Sales – Service

Batteries / Chargers / UPS
PM Service / Capacity Testing
Emergency Call Out

john.todora@nolanpower.com
Phone: 954-333-3040

Authorized EnerSys Representative

401(k) Rollovers Made Easy



Vincent Grippa, CFP®
Financial Services Representative
9530 Marketplace Drive, Ste. 105
Fort Myers, FL 33912
vgrippa@metlife.com
cwmg.metlife.com



Call Vincent today at (239) 896-1096.

For the if in life.®

MetLife

Metropolitan Life Insurance Company, 200 Park Avenue, New York, NY 10166. Securities products offered through MetLife Securities Inc., (FINRA/SIPC), New York, NY. A MetLife company. L09084204[exp1109][All States][DC] 0709-5871 ©UFS

IEEE-USA Awards \$5,000 Scholarships for Online Video Competition

WASHINGTON (12 February 2010) —IEEE-USA ONLINE VIDEO COMPETITION: According to Nita Patel, IEEE-USA vice president of communications and public awareness, \$5,000 in scholarship awards will be given to five undergraduates at three U.S. universities, who entered the organization's 2010 "How Engineers Make a World of Difference" online video competition: First Prize (\$2,000) to Sergio Flores Castro, Miguel Murillo and Carolina Flores of UNLV; Second Prize (\$1,500) to Zachary Phillips of LeTourneau University in Long View, Texas; and Third Prize (\$1,000) to Carrie Hunter of Pensacola (Fla.) Junior College.

The three video entries were deemed most effective in reinforcing for an 11-to-13-year-old audience how engineers improve quality of life. Entries in the third annual IEEE-USA video competition profiled an engineer or technologies.

Pensacola Junior College's Hunter will also receive a \$500 scholarship award for the most innovative and effective presentation of a video entry to the "tween" target audience. A representative of the first-prize team from UNLV will be recognized at the IEEE-USA Annual Meeting in Nashville, Tenn., on 6 March

The award-winning entries will also be featured in the first nationwide Web-based gathering of engineering students, an "Engineers Week Blast!" live from Howard University in Washington, D.C., on 18 Feb. from 8-9 p.m. ET, at <http://www.ibroadcasts.tv/asce-live-webcast.html>

The three-judge video competition panel included: Andrew Quecan, a Ph.D. student in electrical engineering at Stanford University; Suzette Aguilar, a Ph.D. student at the University of Wisconsin; and Nate Ball, mechanical engineer and host of PBS' "Design Squad."

According to IEEE-USA's Patel, the video competition was designed to be replicated in IEEE student sections both in and outside of the United States. IEEE-USA will launch its fourth video scholarship competition in September

To view all of this year's award entries, go to <http://www.youtube.com/ieeusavideo>





Siliconexion, Inc.
FPGA Design and Verification Experts

Siliconexion offers robust, on-time electronic design consulting services by experienced senior level professionals.

Applications Include:
Telecommunications / Data Communications
Aerospace and Military
Embedded Computer Systems

Services Include:
FPGA / CPLD Design and Verification
ASIC to FPGA Conversions
Training for FPGA Design, VHDL, Test Benches
Digital and Analog Board-level Hardware Design
Embedded Systems Software Development
High Speed Signal Integrity Analysis

Cost Effective sub-system or turnkey product development

Phone: 727 596-1990
E-mail: info@siliconexion.com
www.siliconexion.com

National Engineers Week Future City Competition

In an exciting finale to the National Engineers Week Future City Competition, several teams were invited to join President Obama and Congressional leaders at the White House yesterday, February 17. In a "long distance" video call, the President congratulated astronauts on the International Space Station and the Space Shuttle Endeavour on their successful ongoing mission. The students were also able to interact with the astronauts during the half hour they spent with the President. After the call the teams were invited into the Oval Office by President Obama.

The teams also met with the President's Science Advisor, Dr. John P. Holdren, for 30 minutes, and had an additional meeting with Adolfo Carrion, Director of the White House Office of Urban Affairs.

The middle school students were from North Carolina (national champions) Michigan, Florida, and Nebraska.



IEEE Computer Society & AESS Dinner Meeting

Identity Theft and Financial Cyber Fraud in the New Millennium

Distinguished Visitor Tour

WHEN: Tuesday, March 30, 2010 at 6:00 PM

WHERE: CDB's Southside Italian Restaurant

3671 S. West Shore Blvd. Tampa, FL 33629 Phone: 813-805-2327

TOPIC: Identity Theft and Financial Cyber Fraud in the New Millennium

SPEAKER: Hal Berghel, Professor and Director of the School of Informatics and Associate Dean of the Howard R. Hughes College of Engineering

SPONSOR: FWCS IEEE Computer Society & AESS

This is an open meeting. Take advantage of a chance to learn about the genesis of the problem of identity theft and financial cyber fraud, network with fellow engineers and have an excellent dinner at CDB's Southside Italian Restaurant in South Tampa. You may order salad/soup, entree, and sides from the special menu for only: \$20 for IEEE members, \$15 for student members, \$30 for guests of members or for non-members.

You will need to pay by check or cash at the meeting. Make checks to IEEE FWCS.

You get your dinner free if you join IEEE or add AESS or the Computer Society to your IEEE membership. Sign up and email JLumia@ieee.org (813)832-3501. Membership information is at:

<http://ewh.ieee.org/r3/floridawc/membership.html> and

<http://www.ieee.org/web/membership/societies/index.html>

Make your on-line reservation soon! <http://time2meet.com/fwcs-cs1/index.html>

Select "Make a Reservation" on the left of the web page.

Additional Information

The Topic: The genesis of the problem of identity theft and financial fraud is two inter-related phenomena: fungible credentials, and the technology that creates, validates, and authenticates them. Hal will explain the origins of modern ID theft and financial fraud and provide several examples of how they are perpetrated by modern e-criminals. Modern criminal exploits will be explained, and details of specific crimes will be given. Technologies that may be used to thwart these activities will be explained, and if possible, demonstrated.

About the Speaker: Hal Berghel currently Professor and Director of the School of Informatics and Associate Dean of the Howard R. Hughes College of Engineering, and Professor and past-Director of the School of Computer Science, at the University of Nevada, Las Vegas. He is also founding Director of both the Center for Cybersecurity Research, and the Identity Theft and Financial Fraud Research and Operations Center. His current research focuses on computing and network security, digital forensics, and digital crime.



Brain Teaser Challenge Solution - December 2009

Butch Shadwell



After complaining about the inaccuracies in Sci-Fi movies I asked the following question. "Today we improve the accuracy of air dropped ordnance, and reduce collateral damage, by using a target designator system. Can anyone tell me how these work?" Nearly all ordnance that comes from the air these days uses intelligence of some kind to direct them to the target. This improves the probability of realizing the desired effect and minimizing collateral damage. Most target designators employ a designator laser beam. These may be projected from a platform in the air, e.g.-spotter or bomber aircraft, or from the surface, e.g.- soldiers with their eyes on the target. This

beam is usually not in the visible light range and is modulated in some fashion to make it easier to distinguish from other natural or man made light sources. The ordnance then carries technology that can identify and then guide the device to the source of the reflected, properly modulated, light. But I bet you already knew that.

Brain Teaser Challenge – January 2010

Butch Shadwell

Parker Peter was a science nerd. One day his school went for a field trip to a laboratory where they experiment with genetically altered earthworms. As the students were visiting the specimen cases, he discovered that one of the slithering mutants had escaped. Then while he was distracted taking pictures of the lab assistants, the errant annelid managed to sink its fangs (I did say it was a mutant, right) into the unsuspecting Parker. Naturally, Parker experienced only mild side effects as his body was transformed into that of a superhuman with all of the powers of a very large earth worm. Aside from the ability to asexually reproduce, Wormboy also gained the ability to flatten his body so he could slide under the door to enter a locked room and burrow in the soil. His arch enemy, The Bass Fisherman, discovered that passing an electric current through the ground would force Wormboy to come to the surface and reveal his whereabouts. BF decided to measure the bulk resistivity of the soil with four probes 1 cm apart and got 20 ohms. What is the bulk resistivity of this soil?

Reply to Butch Shadwell at b.shadwell@ieee.org (email), 904-410-9751 (fax), 904-410-9750 (v), 3308 Queen Palm Dr., Jacksonville, FL 32250-2328. (<http://www.shadtechserv.com>) The names of correct respondents may be mentioned in the solution column.



Robotics and Automation Society

The FWCS now has its very own RAS Society chapter. Our mission statement is “Learn, Do & Teach (L.D.T.)”. The charter members met in January and did some initial planning for the chapter. They selected the dates and location for the general meetings that will be held the 3rd Tuesday of each month at Whiskey Joe’s on Courtney Campbell Causeway. Watch your email for more details.

The following officers will manage the Tampa Bay RAS Chapter:

- **Chairman – George Schott – george@imbedded.com**
- **Vice-Chairman – Ken Fiallos - kfiallos@tampabay.rr.com**
- **Treasurer - open**
- **Secretary – open**
- **Webmaster – Jim Anderson - dr.james.anderson@gmail.com**
- **Membership Coordinator - open**
- **Facilities Coordinator - open**
- **Publicity Coordinator - open**
- **Programs Coordinator – open**

Nominations from the floor will be taken for these open positions and will be voted on at our March meeting. If you would like to volunteer for one of the open positions or have any questions please contact: George Schott, george@Imbedded.com, 727-692-6440, Tampa Bay IEEE RAS Chapter Chairman.

A general discussion was held of what our Chapter can do to serve its members and the broader community at large. Several interesting ideas were discussed for our new chapter.

Lastly, Ken Fiallos, our Vice Chairman, gave a presentation about enabling his DIY Internet Accessible Wireless Security System for control from a cell phone using text messaging and simple batch files.

Our next meeting will be on Tuesday, March 16, at Whiskey Joe’s on Courtney Campbell Causeway. Networking and socialization starts at 6:00 pm with the dinner and business portion of the meeting starting promptly at 6:30 pm. Come and join the fun!

George Schott, Tampa Bay RAS Chapter Chairman





Shunt –Capacitor Switching For Power-Factor Improvement

Date: Friday, March 12, 2010
Time: 11:30am-1:00pm
Speaker: Clayton Reid, IAS Distinguished Lecture
Location: TECO Hall North
702 N. Franklin St, Tampa, FL
Cost: \$10 Members, \$20 Non-Members, \$5 Students. (Includes Lunch)
RSVP: Online at: <http://time2meet.com/fwcs-pes3/index.html>

Make checks payable to: IEEE FWCS
Send checks to: John Stankowich, IEEE PES/IAS Treasurer
2593 Forest Run Court
Clearwater, FL 33761-3716

Space limited to the first 45 registrants!!!

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

<http://time2meet.com/fwcs-pes2/index.html>

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

Questions: Jim Beall 727-376-2790 or J.Beall@ieee.org

Presentation:

This presentation will deal with the following aspects of shunt capacitor switching

1. The importance of selecting the correct size of capacitor to be switched with a given load in order to avoid over-voltages and torque transients that would result from self-excitation.
2. The location of capacitor connected points.
3. Capacitor switching for special motors and for special motor-starting applications.
4. Transient inrush and frequency for the following cases:
 - a) When a single capacitor is energized on a system.
 - b) When a capacitor is energized in parallel with capacitor banks which are already connected to the system.
5. The effect of the above transient currents on capacitor switching contactors
6. The use of air core reactors to limit the transient current in parallel switching of capacitors.

Clayton Reid, (Canada): (F'03), (chreid@ieee.org) was born in Canada in 1933. He received the Technologists degree in electrical engineering from Ryerson Institute of Technology in Toronto, Canada in 1955. He became a registered engineer in Ontario, Canada in 1971. In 1955 he joined Allen-Bradley Company and became Chief of Engineering in 1971. Mr. Reid became the Vice President of Engineering at Rockwell Automation in 1974. He moved into various positions at Rockwell, including Vice President of the Medium Voltage Business and an Executive Consultant on Industrial Power Engineering in 1994.

Mr. Reid has been active for many years as an officer within the Pulp and Paper Industry Technical Committee, culminating in Chair of the Committee for 1989 and 1990. He was Chair of the IAS Pulp & Paper Conference in 1984. Clayton has been a member of the IAS Executive Board in various functions since 1989, including IAS History Chair from 1989 – 1990, Member at Large from 1992 – 1993, Membership Chair from 1991 – 2001, IAS Awards Chair from 2002-2004, and now as the Process Industries Department Chair. Mr. Reid received the Pulp and Paper Industry Award for Meritorious Service in 1991.

Distinguished Lecture seminars:

"Medium Voltage Motor Drives for Industrial Applications"

"System Grounding and Ground Fault Protection in an Industrial Environment"

"Shunt Capacitor Switching and Power Factor Correction"

"Motor Protection"





Fault Calculations and Selection of Protective Equipment

- Date:** Friday, March 26, 2010
- Time:** Seminar: Registration 8:30am-9:00am, Speaker 9:00am-3:00pm
- Speaker:** Dr. Ralph E. Fehr III, Assistant Director – Clean Energy Research Center, University of South Florida.
- Location:** Seminole Electric, 16313 North Dale Mabry Hwy, Tampa, FL 33618
- Cost:** \$100 Members, \$150 Non-Members, \$50 Students. (Includes Lunch)
- PDH Credit** 5 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.
- RSVP:** Online at: <http://time2meet.com/fwcs-pes2/index.html>
- Make checks payable to:** IEEE FWCS
- Send checks to:** John Stankowich, IEEE PES/IAS Treasurer
2593 Forest Run Court
Clearwater, FL 33761-3716
- Space limited to the first 30 registrants!!!**
- Cancellation must be submitted online 24 Hrs prior to the seminar at:**
<http://time2meet.com/fwcs-pes2/index.html>
- No shows will be invoiced for the total cost of the seminar!**
- Questions:** Jim Howard at 863-834-6585 or J.Howard@ieee.org

This training session will be devoted to the calculation of fault currents and the sizing of protective equipment such as circuit breakers and fuses. The method of symmetrical components will be thoroughly explained and used to analyze unbalanced fault conditions.

Dr. Ralph Fehr earned his B.S. degree in electrical engineering from the Pennsylvania State University in 1983, his M.E. degree in electrical engineering (power) from the University of Colorado at Boulder in 1987, and his doctorate in electrical engineering from the University of South Florida in 2005. He has worked in the generation engineering field designing power distribution and control systems for nuclear and fossil-fired power plants. Dr. Fehr also has worked for electric utilities for over 15 years in the operations, planning, and design areas, including transmission, distribution, and substation engineering.

Dr. Fehr has taught courses ranging from computer operating systems to mathematics to power system analysis for several institutions, including the University of New Mexico at Albuquerque, the Pennsylvania State University, the University of Colorado at Boulder, St. Petersburg [Florida] Junior College, and the University of South Florida at Tampa. He has also taught review courses for candidates for the professional engineer examination through the Florida Engineering Society for over ten years.

Dr. Fehr is a Senior Member of IEEE and is a registered professional engineer in New Mexico and Florida. His biography is published in Who's Who in Science and Engineering and Who's Who in American Education, and he was named Outstanding Engineering Educator for 2009 by the IEEE Florida Council



Tampa Bay Engineers Week Banquet

The annual Tampa Bay Engineers Week Banquet was held on the 19th of February and it was a success! It was well attended with 318 guests and ten local engineering societies represented, including electrical, chemical, highway, civil, transportation and mechanical. The venue was something new. It was held at the Museum of Science and Industry which is across the street from USF. This was a great choice since one of the things that MOSI does is make science fun for kids while they learn. MOSI did a great job of putting all of this together and making it work.

It began in the Kids in Charge building with refreshments, live music and an opportunity to meet the various vendors and learn about their product offerings. To make sure people visited the vendors there was a sheet that participants took to each vendor and got a signature. When all the vendors had signed the sheet the sheet was put in to a drawing that was held at the banquet later in the evening.

After that the guests moved to the Grand Lobby in the main building of MOSI where tables had been arranged with the stage and lectern at one end. To make sure that everyone was able to see the speakers, video screens had been placed throughout the lobby. Guests could easily watch the proceedings while eating. The food was provided by MOSI's catering service.

The Master of Ceremonies was Dr. Jim Anderson, FWCS Chair and he kept the guests entertained while keeping things moving along. The keynote speaker was Wit Ostrenko, longtime President of MOSI. The most important topic of his presentation is the new energy technology demonstration center that will be constructed on MOSI's campus. Engineering work for each of the various clean/renewable energy technologies was done by outside organizations, USF being one of these and the results presented to MOSI. There will be technology demonstrators built onsite and a learning center that will explain how the technologies work. Wit also took time to talk about new exhibits at the museum and about the newest traveling exhibit, "DaVinci".

The awards portion was the next part of the banquet with Richard Beatie, Vice President of Engineering at LightningMaster Corporation and Awards and Bylaws Chair of FWCS, being selected as Engineer of the Year. Student Engineer of the Year was Michael Maiorana, of USF. The Lignell Outstanding Teachers were from Hillsborough County: William Ward of Strawberry Ridge High School, from Pasco County; Arthur David Hoffmann of River Ridge High School and from Pinellas County; Oliver S. Bailey of Gibbs High School.



Alexandra Oliveros and Bashar Salahia, Graduate Students at USF



Guests at the IEEE Table



Serge Beuzile and Richard Beatie

More photos will be in the next issue of the Signal!



Signal Processing and Communications Society Joint Meeting

City of Tampa Innovative Wireless Communications Project



Date: Thursday 4, March 2010

Time: 5:45 pm to 7:30 pm

Location: Urban Center one, 4830 W. Kennedy Blvd., Tampa, FL, (7th Floor-MITRE).

For meeting updates, contact carlomagno@ieee.org or follow the link to the meeting website:

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

ABSTRACT: A team in the City of Tampa recently finished deployment of an innovative wireless communications project on behalf of the Tampa Police Department. The project enables automated wireless transfers of data captured by digital video cameras from police vehicles to police station-based reception and processing centers. The project is a result of a requirement by the Police Department of the City of Tampa, Florida to upgrade the video surveillance camera systems installed in multiple police cars. The department selected digital cameras and identified numerous benefits to deploying an automated system for wireless data transfers between the digital camera systems and police districts. These data transfers require secure transmission with automated connection, minimal human intervention, automated bookmarking and “chain-of-custody” data controls.

BIOGRAPHY: Robert F. Austin, Ph.D., GISP, is the Manager of Enterprise Applications Integration at the City of Tampa, where he directs the City’s GIS, Web Development, Web Contents and RDBMS teams. Before joining the City of Tampa, Dr. Austin worked in the private sector as a GIS consultant and project manager for 23 years. Prior to that time, Dr. Austin was a professor at the University of Missouri-Columbia and a Senior Fulbright Fellow at Oxford Polytechnic. He is the author of more than 60 published professional papers, monographs, books and book chapters. He is a Senior Member of IEEE, a member of the Board of Directors of the GIS Certification Institute and the President-Elect of the Geospatial Information and Technology Association.

NOTES: This meeting is FREE for IEEE members. For non-members, there is a \$5 fee. A limited amount of food and drinks will be served to the meeting participants. Please sign up at the meeting website to suggest your food and drink choices. Signing up will also allow us to get a proper head count. Pending final confirmation the meeting location will most likely be at TECO Hall in downtown Tampa with a backup location at the MITRE facility near West Shore Plaza Mall.



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

March 2010 Calendar of Events (For more information see P. 1) *inside this Signal...*

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
28	1	2 <i>EXCOM Meeting at TECO Plaza</i>	3	4 <i>Signal Processing Meeting, see page 9</i>	5	6
7	8	9	10	11	12 <i>PES/IAS Meeting, see page 6</i>	13
14	15	16 <i>RAS Chapter Meeting, see page 5</i>	17 St Patrick's Day 	18	19	20
21	22	23	24	25	26 <i>Fault Calc. Seminar, see page 7</i>	27
28	29	30 <i>AESS and Computer Society Meeting, see page 4</i>	31	1	2	3