

Region 3



http://ewh.ieee.org/reg/3/

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Message from the Region 3 Director....



George F. McClure Region 3 Director 2006-2007

We had a very productive and enjoyable time at Southeastcon 2006. Attendees at the region meeting specifically mentioned appreciating the opportunity to meet members from other sections. The side trip to Graceland, the authentic Memphis barbeque, and the Elvis contest were highlights that reminded us of the unique location. Kudos to Allan Long and his conference team for their energy, enthusiasm, and the long hours expended in putting together this most successful conference.

The Awards program was very well done, thanks to Mary Ellen Randall. She has put out a call for award nominations for 2006, and I hope you will consider making at least one nomination. Awards and Recognition are the only tangible way we have to show our volunteers how much we appreciate their efforts. Some sections submit their own local awards winners for area/council and region consideration, saving on the overall amount of

effort required. Mary Ellen notes that there are awards made by IEEE-USA that may not overlap into other categories. Check out site http://www.ewh.ieee.org/reg/3/awards/ for R3 awards descriptions and www.ieeeusa.org/volunteers/awards/index.html for the IEEE-USA awards.

At the Region 3 meeting, the nine initiatives undertaken by the region for the benefit of members were described, and time lines presented. Bill Ratcliff describes these further in his Director-Elect report.

A few sections continue to have problems with their officer listings in the IEEE Geographic Roster. The first report for a new year should include all officers, including those holding over from the previous year. The system is set up to expunge any listing for which no name is received. Even if there is no change to report other than is updated for another year with the same slate of officers, the entire list must be transmitted. After the first report of the year, changes to report new officers or appointments for a section can be made individually. Each section should verify that the information shown in the roster is current and correct. Some problem in roster access, and remedies, are discussed at http://ieee.org/organizations/rab/rosterfaq.html Check your section's listing at http://www.ieee.org/organizations/vols/rosters/. An overview of section reporting requirements is given at http://www.ieee.org/organizations/rab/scs/Officer_Training/Brief_Guidelines.doc.

The Region 3 Forum is an online community for the use of Region 3 volunteers to aid them in communicating with other volunteers in the performance of their jobs. If you are not yet a member, you can sign up with your IEEE Web Account. See https://www.ieeecommunities.org/region3

Finally, the Region 3 meeting in Memphis was near unanimous in its support for another region meeting in the fall. Accordingly, plans have been made for a region meeting in Atlanta the weekend of October 27-29. Please mark your calendars and keep this weekend free for Region 3. Thank you for your continued enthusiasm and support!

Membership Drive Participation from IEEE President



Dear Colleague:

I have the distinct pleasure of serving you as the 2006 President of IEEE. Today I am writing to ask for your help and participation in the 2006 drive to help increase our membership.

The foundation and strength of the IEEE is a strong and growing base of members. IEEE does not have a professional sales and marketing force for membership. Rather, we depend on word of mouth to communicate our organization and that means you. To continue to grow and build the IEEE, we need your help. Here's what you can do.

Participate in the <u>Member-Get-A-Member</u> program. This program is available with incentives for finding new members. You will get a \$5.00 credit voucher for every member that you recruit. But the real reward is more than a credit voucher. It's a stronger, better IEEE with enhanced connections into industry and the community. These connections help to build the IEEE Network that supports our careers and the profession.

There are many tangible benefits associated with membership: career and professional development tools, discounts on products and services (both technical and non-technical), the award-winning Spectrum magazine, reduced conference registration fees, multiple opportunities to network with the leaders of the field, access to top technical information, an ever increasing number of continuing education courses, and much more. The list continues to grow each year. In 2005 we launched a members-only web portal, myleEE. This portal puts all your membership benefits together in one, easily-accessible place.

In 2006 you will see the launch of IEEE.tv, which, through streaming video, can place conference presentations, technical seminars, and other items of general interest directly on your desktop. We also have plans to launch a new, online member directory to help our members get in touch, and stay in touch with each other.

With all of that, I thank you for maintaining your membership in IEEE this year and hopefully in the future. I also urge you to recommend IEEE to your colleagues and co-workers. Please direct your colleagues to http://www.ieee.org/join to become a part of the IEEE Network. Remind them that if they join between now and 15 August 2006, they can join for just one-half the normal dues rate.

This is your organization. Help us to grow it and to keep it as vital and vibrant in the future as it has been in the past. Thank you for your participation in the 2006 Membership Drive.

Very truly yours,

Michael Lightner, Ph. D. President and CEO IEEE



IEEE SoutheastCon 2007

Engineering - Linking Future with Past 22 March - 25 March 2007

SoutheastCon 2007 General Information Richmond Marriott Hotel 500 East Broad Street Richmond, VA 23219 USA

The Southeast's Premier Technical Conference

IEEE Region 3, IEEE Virginia Council, and the IEEE Hampton Roads, Richmond, Central Virginia, and Virginia Mountain Sections are honored to host SoutheastCon 2007.

SoutheastCon is the annual IEEE Region 3 Technical, Professional, and Student Conference. As the premier conference for the IEEE Region encompassing Jamaica and the Southeastern United States, it brings together electrical, computer and other engineering and science professionals, faculty and students to share the latest information through technical sessions, tutorials, and exhibits. This conference is the most influential conference in Region 3 for promoting awareness of the technical contributions made by our profession and the advancement of engineering and science and to the community. Attendance and technical program participation from areas outside IEEE Region 3 are also cordially encouraged and welcomed.

The conference schedule includes:

- > Technical program with seminars, tutorials and workshops
- Exhibits
- > Student program with student competitions
- ➤ IEEE regional meetings

The Call for Papers has been issued and can be viewed on the web site: http://www.southeastcon.org/2007/

Southeastcon 2007 will feature Engineering and Technology in a Historic Setting.

The conference will be held 22 Mar - 25 Mar 2007 at the spectacular Richmond Marriott in historic downtown Richmond. Richmond, the state capital, is located centrally in the Commonwealth of Virginia. Richmond, while a mid-sized city, offers cultural opportunities typically found only in large metropolitan areas, such as first-class museums, prominent universities, numerous theater companies and art galleries, and its own symphony, professional ballet and opera.

Richmond and Virginia also have their historical engineering achievements. For instance, the area was home to the first U.S. canal system and the world's first commercially successful electric street railway system. Indeed, it is often its long, distinguished history that characterizes the region. Nearby is America's Historic Triangle of Virginia: Jamestown, Williamsburg, and Yorktown. This tiny place in Virginia gave birth to a great nation. In 2007, Jamestown, Virginia and America's first permanent English Settlement will turn 400. Come to Virginia and join us in commemorating America's 400th Anniversary.

Thanks.

Don Hill PPD 215B Peterson, 40506-0005 859.257.8487 O 859.323.3287 F dhill@uky.edu www.ppd.uky.edu





Region 3 Awards Ceremony

By Mary Ellen Randall, Awards & Recognition Chair

The 2006 Awards Ceremony for Region 3 took place in Memphis on Saturday, April 1, 2006. After an opening welcome from **Allan Long**, SoutheastCon 2006 General Chair, Region 3 Director, **George McClure**, presided over a the ceremony. The Awards were given in front of a standing-room-only crowd of both Professional and Student IEEE members.

Congratulations to the Award recipients who were:

Eric R. Grigorian, P.E. – Outstanding Engineer for leading-edge technology development and integrating this technology into both military and commercial products.

Eric is a registered professional engineer with wide experience in design, development, and integration of systems. As a Chief of Engineering and Technology for Applied Data Trends, Inc., Eric provides technical lead for the organizations' systems and products development.

Carl Leonard Hussey, PE – Outstanding Service for long-standing and faithful service to IEEE Region 3.

Carl is a registered professional engineer with the Palm Beach County Engineering & Public works department. Carl has held a multitude of volunteer positions for our region over many years.

Reza Adhami, Ph.D. - **Joseph M. Biedenbach Outstanding Engineering Educator** for pioneering initiatives in Electrical & Computer Engineering and for enhancing the relationship between students, university & industry.

This award is given in honor of **Dr. Joseph M. Biedenbach** (F) who served the Institute in numerous offices at the Section, Society, Council, Region, and Institute level before his death on April 17, 1990, at age sixty-three. Dr. Biedenbach, through his dedication and innovation, exemplified the dedication of the Region 3 and Institute volunteer.

Dr. Adhami is Professor and Chair of the Electrical and Computer Engineering Dept. at the University of Alabama in Huntsville.

Northrop Grumman, Airborne Ground Surveillance and Battle Management Systems – Employer Professional Development Award. This award is given to recognize an employer who has made substantial contributions to employee continuing education and professional development as evidenced by their quality, comprehensiveness, innovation, and impact.

Jim Howard, David Green & Quang Tang each received a Special Director's Award for outstanding contributions to the world-wide Sections Congress which was held last October in Tampa, Florida.

A special tribute to **K. Reed Thompson** was given where **Robert Duggan** presented **Mrs. Reed (Margaret) Thompson** with Reed's **IEEE Fellow** certificate and pin. Reed passed away shortly after he was elevated to IEEE Fellow. Reed's entire family participated in this touching tribute.

We also recognized our IEEE-USA recipients who received their awards at the Leadership Development Conference in Saint Louis:

Ralph W. Russell, II - **Citation of Honor** - For promotion of engineering to young people through IEEE's emeritbadges.org program at the National Scout Jamboree

Ralph D. Painter – **Regional Professional Leadership Award** - For promoting and developing teacher in-service training in support of providing technology experiences to young people in Region 3

Linda Bailey Hayden, Ph.D. – **Professional Achievement Award** -For outstanding accomplishments in cultivating student interests in engineering and supporting career development

Srinivas Katkoori, Ph.D. – **Professional Achievement Award** - For outstanding accomplishments in cultivating student interests in engineering and providing hands-on engineering experiences for students.

Region 3 Section Anniversary Awards

By Mary Ellen Randall, Awards & Recognition Chair

Jacksonville Section - 75 Years Tri Cities Section - 25 Years Virginia Council Section - 25 Years

Region 3 Student Activities Chair, Dr. Eric Ackerman presented a host of Student Awards.

Congratulations to our new Region 3 Fellows:

Dr. Bruce Archambeault

Dr. Issa Batarseh

Prof. Dushan Boroyevich

Prof. Paul Franzon

Prof. Qin (Alex) Huang

Prof. Muhammad Khan

Dr. Ye Li

Dr. Gary May

Prof. Steven McLaughlin

Dr. Edward Petersen

Prof. Amit Sheth

Prof. Madhavan Swaminathan

K. Reed Thompson, MSEE

Dr. David Townsend

Prof. Ian Walker

Dr. Murty Yalla

Prof. Madhavan Swaminathan

Congratulations to our recent Institute Level Award Recipients:

Institute Level Awards

IEEE Richard M. Emberson Award
IEEE Electromagnetics Award
IEEE Herman Halperin Electric
Transmission and Distribution Award
IEEE Richard H. Kaufmann Award
IEEE Components, Packaging and
Manufacturing Technology Award
IEEE Charles Proteus Steinmetz Award
IEEE William E. Newell Power
Electronics Award

DR. Lloyd A. (Pete) Morley Clayton R. Paul James J. Burke

A.P. Meliopoulos Dr. C. P. (Ching Ping) Wong

Dr. S. Mark Halpin Dr. Deepakraj M. Divan



IEEE / IAS 41st Annual Meeting

October 8 - 12, 2006, Marriott Waterside Hotel, Tampa Florida

Greetings from the beautiful city on the bay!

Conference and Hotel Registration

We are open for business, register now!

Continuing Education Opportunities (tutorials)

The members of the Florida West Coast IAS Chapter welcome you to Tampa.

This conference is aimed to the industry applications oriented engineer and engineers in academia interested in this arena. It should be of interest to many Region 3 members.

The Preliminary Technical Session Schedule is coming to the web site soon.

See the web site www.ieee.org/ias2006





Precollege Education Committee Teacher Grant Program

By Mark McKeage, Mark.McKeage@pgnmail.com

Promoting Novel Ideas to Introduce Engineering to Precollege Students: How Teachers Can Win a \$1,500 IEEE-USA Grant

IEEE-USA's Precollege Education Committee's Precollege Teacher Grant Program awards grants to teachers to sponsor innovation and creativity in or outside of the classroom. The Grants provide small amounts of funding up to a maximum of \$1,500 for novel ideas that introduce engineering to students.

Grant Requirements:

The program/project must be a new and/or unique idea*

The program/project must take place in 2006†

The teacher must work with an IEEE member (the IEEE member can be a partner, mentor, or a resource member)

* Note: The purpose of the PEC Teacher Grants is to fund unique and new ideas/projects/programs/products. Grants will not be provided for pre-existing or "canned" projects such as FIRST Robotics Competitions, BEST Competitions, and Project Lead the Way implementation unless it is an IEEE program such as implementation of an IEEE Teacher In-Service Program. Grants will also not be provided for capital goods such as laptops, video recorders, etc.

† Note: There is no specific deadline to apply for a grant. Approval is on a rolling basis. However, the teacher should apply before the completion of the project.

Grants will be awarded based on:

- ✓ Innovation
- ✓ Creativity
- ✓ Widespread classroom applicability
- ✓ Engineering collaboration
- ✓ Shared results, outcomes
- ✓ Science, Technology, Engineering, Mathematics (STEM) content, application

Get the application form from either of these URLs:

MS Word: http://www.ieeeusa.org/volunteers/committees/pec/resources/PEC-tg-form.doc

PDF: http://www.ieeeusa.org/volunteers/committees/pec/resources/PEC-tg-form.pdf

IEEE-USA Precollege Education Committee Teacher-Engineer Partnership Award

By Mark McKeage, Mark.McKeage@pgnmail.com

The IEEE-USA Precollege Education Committee Teacher-Engineer Partnership Award is to recognize collaborative activities between K-12 teachers and technical professionals who are IEEE members. This collaboration should reflect the achievements of a teacher and engineer partnership that helped improve professional, technical and literary contributions to precollege students. This distinguished award is administered under the IEEE-USA Awards and Recognition Committee and approved by the IEEE-USA Board of Directors.

For more information, visit the IEEE-USA Awards and Recognition Web page at: http://www.ieeeusa.org/volunteers/awards/award11.html, or by contacting your Region 3 Precollege Education Committee representative, Mark McKeage at m.d.mckeage@ieee.org.

Nominations forms can be found at: http://www.ieeeusa.org/volunteers/awards/forms.html.

We are accepting submissions for the 2006 awards. The deadline is 31 July 2006.

Region 3 – Strategic Thinking 2006

By William Ratcliff, Director Elect 2006-2007

In previous articles and reports, I have referenced the strategic planning activities that took place in Atlanta In January 2006 with one of the output products being the definition of the Strategic Initiatives for 2006. The intent of thinking strategically is primarily to focus on the direction we are going and the factors affecting that direction to avoid the pitfalls and potholes. Otherwise we are destined to be constantly in a reactive state. Table 1 summarizes the 2006 Strategic Initiatives and provides a contact for each. Please consider supporting an initiative and the people who are expending effort on your behalf.

In this article I would like to go beyond the Initiatives for 2006 and discuss how strategic thinking impacts all of our live... careers and how our association with IEEE can play a big part.

Table 1: List of 2006 Initiatives and Contacts

Contact	Initiative
Mary Ellen Randall (merandall@ieee.org)	Improve use of existing capabilities R3 Awards and Recognition
Bill Marshall (bill.marshall@gtri.gatech.edu)	Engineer Region 3 Organization and Operations - R3 Help Desk
Charles Lord (c.j.lord@ieee.org)	Knowledge Capture and Document Management
George McClure (<u>g.mcclure@ieee.org</u>)	4. Enhance Volunteer Recruitment
Charles Lord (c.j.lord@ieee.org) Lee Stogner (l.stogner@ieee.org)	5. Leadership by Developing Others
Pat Donohoe (j.donohoe@ieee.org)	6. Membership Initiative
Bob Duggan (<u>r.duggan@ieee.org</u>)	7. Teacher In-Service Initiative
Charles Hickman (<u>c.hickman@ieee.org</u>)	8. Embrace Flat World Reality9. Enhance R3 Capability to Increase Income

So, with all of the 2006 initiatives you might ask, how does this help me in my career and with the changing environment around me? Let's explore that question and maybe generate some understanding as well as more questions.

What do we as members of IEEE need to do to manage our career? Well to begin with, as the title of this article would imply, apply strategic thinking to our own careers...

- o What is our direction (Vision and Mission)?
- o What are the Values and Principles that drive our professional lives?
- o What are the Strengths, Weaknesses, Opportunities and Threats that influence the direction?

Yes, the same questions that were asked about Region 3 in January in Atlanta. We need the answer to those same questions to chart the course for our own lives and careers especially in these times of unprecedented change.

So, can we do this alone? Well, in the final analysis, we are all responsible for our own career choices but gaining insight requires external input and validation. Hence, one of your networks can be your association with the other members in IEEE – if you build it.

Does IEEE supply these networks and all you have to do is plug in? The answer is yes and no... Yes, IEEE provides the capability for you to plug in but you must have the skills to build and nourish the relationships that make the network function. To do this, IEEE again provides capability through the Initiatives like

- o Leadership by Developing Others (mentoring, developing team skills...)
- o Professional Activities (career planning, employment assistance...)
- o Technical Activities (participation in Technical Societies, Standards ...

These are but a few opportunities to get involved with and use the capabilities IEEE provides at all levels local, national and international. But it requires your direct, hands-on involvement. Your membership is the "passkey" – it gets you through the door. Beyond that, what you get out of IEEE is directly proportional to the work you put into using that capability.

I hope the linkage between some of the Initiatives for 2006 and the impact to your career is becoming evident. In future installments I hope to explore the other initiatives in a little more depth and tie them to your career and mine. Living and working in today's world involves a variety of skills and support that IEEE can help provide because "The Member is IEEE and IEEE is the Members.

Get involved ... the Gain is positive... You'll get out of IEEE much more than you'll put in.



William Ratcliff, Region 3 Director-Elect 2006-2007 w.ratcliff@ieee.org

Mark your Calendar!!!

IEEE-USA Precollege Education Committee Teacher-Engineer Partnership Award

July 31, 2006 - Nomination Deadline

IEEE / IAS 41st Annual Meeting

October 8 - 12, 2006, Marriott Waterside Hotel, Tampa, Florida

SoutheastCon 2007

March 22 – 25, 2007, Richmond Marriott Hotel, Richmond, Virginia

Adding to Your Membership with Women in Engineering

By Mary Ellen Randall IEEE WIE Committee Chair

IEEE's Women in Engineering (WIE) is one of the fastest growing areas in IEEE. From January to December 2005, WIE added 43 new Affinity groups, bringing the year end 2005 to a total of 103.

You do not have to be a woman to support WIE. Today, nearly 30% of WIE members are men. WIE Membership is comprised of over 66% students. Retaining those student members is key to IEEE's future success. Outreach is an important part of WIE's mission.

The WIE Scopes of Interest include:

- Facilitating the development of programs and activities that promote the entry into and retention of women in engineering programs.
- Promoting IEEE membership and retention of IEEE women members.
- Enhancing the career advancement of women in the profession.

It is very easy to form an Affinity Group. It takes only 6 member signatures to start a local Affinity Group, but that spark can really take off. In some regions, the Student WIE Affinity Group meets regularly with the Professional WIE Affinity Group for networking and technical exchange. The lack of this type of supportive environment is a major inhibitor to more women going into and staying in engineering, according to social scientists.

Membership in WIE is only \$25 a year. Student and Life Membership in WIE is free. Members may be male or female.

If I can assist you in setting up an Affinity Group or a WIE event at your Section or University, please contact me at merandall@ieee.org.

Our Flat World Initiative

Robert S. (Bob) Duggan, Jr. r.duggan@ieee.org

How many of you have read Thomas Friedman's best seller "The World Is Flat: A Brief History of the Twenty-first Century"? I highly recommend it to every IEEE member.

In January the Region 3 ExCom defined several initiatives to be addressed. I was tabbed as the champion for the one titled "Embrace the Flat World Reality".

A first step was to set up a webpage to describe the background for the initiative, make some observations of the transnational involvement we see now in Region 3, and most importantly offer some suggestions as to how IEEE members, chapters, and sections might help us promote and adapt to the Flat World in which we now find ourselves.

Check out the initiative webpage at http://www.ewh.ieee.org/reg/3/spc/flatworld.htm.

I challenge each IEEE member to review this page and decide how he or she may be able to participate in this initiative.

The IEEE is a transnational society. Region 3 is a leading region in IEEE. Let's show the way by embracing the flat world reality -- and at the same time strengthen IEEE's and our country's transnational bonds with others around the world!

I solicit your support and your participation in this important initiative.

SoutheastCon 2006

By Allan Long, General Chair SEC 2006 along@mlgw.org

Whew! It's over. We pulled off a great conference! I heard many compliments about how smoothly the hardware contest went, how friendly our registration staff was, how much attendees appreciated the snack sacks, how nice the name tags were, how much fun Graceland was, etc. That is fantastic, because we really tried to extend exceptional hospitality to our guests and exceed the level of service that they had been accustomed to at past conferences.

But that was yesterday. Today, I'm back at the office. I made the remark this morning that today is kind of like the day after Christmas -- all the packages are open, there's nothing to do and "I'm bored." :-)

While we probably feel the least stressed we've been since maybe November, there really is a lot left to do, Including paying bills, collecting donations, and thanking all those who helped make this conference a success.

And then there is the work in our "real" jobs that piled up whiles we were busy preparing for the conference :-(

I want all of you -- and your support teams -- to know how much I appreciated all of you pulling together to make the conference a success. You worked hard, stayed up to the wee hours of the morning, slept on sofas, skipped meals, and coped with a multitude of on-the-spot crises. Yet you did it without complaining and kept your cool. You are a great team to work with. Thank you.

What's New with Florida Council?

By Kathy Rinehart k.rinehart@ieee.org

Congratulations to our Jacksonville section on its 75th Anniversary. The nearly 10,000 Florida IEEE members, as well as the other 11 sections, owe a tremendous debt to the visionaries who started Florida's first section back in 1931.

We were quite fortunate: 11 of the 12 Florida sections were represented at SouthEastCon06 in Memphis. The one section that was absent, Daytona, was busy preparing for an inaugural day-long seminar on cybersecurity less than a week after SoutheastCon, a seminar that will hopefully become a permanent addition to the educational opportunities within the state. The engineers and others eligible for IEEE membership in Florida will be better served by their volunteer leaders' attendance at SoutheastCon and other regional meetings.

We were also quite fortunate to have our own Carl Hussey of the Palm Beach section recognized with the Region 3 Outstanding Service Award. He has previously been recognized for service to the Florida Council with the Dorrell Shirley Outstanding Service Award.

Additionally, Northrup Grumman Corporation was the recipient of the Region 3 Employer Professional Development Award. This company was nominated by Dr. Bruce Crain and others within the Melbourne section, and it is the understanding of the current Florida Council Chair that this was the first time a Florida section had nominated a company. She joins with Dr. Donohoe and Region 3 Awards Chair Mary Ellen Randall in encouraging other sections and areas/councils to recognize the exceptional employers and engineers within their awareness with nominations for appropriate awards.

Several sections were represented at the IEEE-USA Leadership Workshop in St. Louis the first week of March. A chief organizer of this meeting was Florida Council Vice-Chair Joey Duvall. As a result of several reps attending this meeting, a formal invitation was extended to Dr. Russell Lefevre, IEEE-USA Vice-President, and Technology Policy to visit the Canaveral, Miami, and Orlando sections within Florida, which he did during April. We are very optimistic this exposure will result in greater knowledge of PACE activities and greater utilization and appreciation of these important activities.

The next anticipated Florida Council meeting is 19 August in Orlando, hurricane season permitting. (A firm date should be publicized the week of the 4th of July.) If anyone has questions, ideas, or comments about the Florida Council or any of its sections or activities, please contact k.rinehart@ieee.org.

Snap shots from SoutheastCon 2006



















More Snap shots from SoutheastCon 2006























Snap shots from 2006 IEEE-USA Leadership Workshop















IEEE Region 3 Executive Committee – 2006

Director * Director Elect * Past Director * George F. McClure William (Bill) Ratcliff Bill Harrison

Treasurer * Secretary * Charles E. Hickman, Ph.D., P.E. David G. Green

Area 1 Virginia Council * Area 2 North Carolina Council * Area 3 Georgia * Adeeb Hamzey Charles Lord Chris Hardy

Area 4 Florida Council * Area 5 Tennessee Council * Area 6 Alabama/Mississippi *

Kathy Rinehart Philip Lim Elizabeth Kuhn

Area 7 South Carolina Council * Area 8 Kentucky & Indiana * Area 9 Jamaica *

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Awards & Recognition * Conference * Communications * Mary Ellen Randall Donald W. Hill Bill Clayton

Educational Activities * Finance Committee Membership Development *

J. Patrick Donohoe, Ph.D., P.E. Charles E. Hickman, Ph.D., P.E. Lee Stogner

Nominations & Appointments Professional Activities * Strategic Planning * Bill Harrison Adeeb Hamzey Richard Riddle

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Charles J. Lord, P.E. Charles Lord David McLaren

Section/Chapter Coordination Sections Congress Coordinators Special Projects

William (Bill) Ratcliff Butch Shadwell / Sean A. Haynes TBD

Special Review Southcon Representative (senior) Southcon Representative (junior)

Roy H. Harris James H. Beall James M. Howard

Southeastcon Chairs

Southeastcon 2005 Chair Southeastcon 2006 Chair Southeastcon 2007 Chair Eric Ackerman, Ph. D. Alan Long Sean Haynes / Adeeb Hamzey

To contact any of the above members, please go to this website

http://www.ewh.ieee.org/reg/3/excom/comp.html

* Denotes voting member of Region 3 Executive Committee

Brain Teaser Challenge Solution - March 2006

Butch Shadwell

I hope it's clear now that I am not a Trekkie. The phaser we discussed last month used "...a laser diode that puts out a thin beam at 640 nm wavelength, and (is) shined ... through a single slit between two razor blades producing a nice pattern on a wall that was 33 feet away from the slit device. There was a very bright spot in the center and then dark and light patches extending to each side. The distance on the wall from the brightest point in the center to the darkest point in the first dark patch to the right was 5". It seemed that there were several more dark areas at the same distance from each other, in both directions. Can you tell me what the gap diameter was between the razor blades, based on the observations above? Can you say Fraunhofer single slit diffraction?" Optical interferometry is such a fascinating science. For this type of geometry the equation for the distance from the center to the first dark spot in the diffraction pattern is y = (L*D)/a, where L is the wavelength, D is the distance to the projected pattern, and a is the diameter of the slit. From the observations above y=5", L=640nm, and D=33'. When you solve for a, you get a=50.7 um. But I bet you already knew that.

Brain Teaser Challenge - April 2006

Butch Shadwell

Doodling can be a great pastime. In the process of otherwise wasting time, one can exercise one's creative urges with nothing more than a piece of paper and a pencil or pen. But there could be a dark side. When you let your imagination run wild, your doodles can sometimes reveal the inner most parts of who we are ... that dark place at the core of our being, where we dare not look too closely. I have heard that some religious orders forbid doodling because they believe it may allow demons to take control while your guard is down. There are testimonials from people who claim that in a doodle induced trance, they would produce sketches of exaggerated figures of the opposite sex. Alarmed spouses have had to procure exorcisms for their doodle damaged mates. Just such a victim was Orville Greenbush. He had heard the stories as a child, but he found it hard to believe the sinister nature of the doodle syndrome. Perhaps rebellion was in his nature. In Orville's case his doodles took the form of electronic circuit configurations, one of the symptoms of the final stages of doodle dementia. During a particularly bad spell, Orville found himself involuntarily drawing an inverting Schmidt Trigger built around a linear comparator. His design used three resistors and the three terminal comparator. The input impedance was equal to the open terminal input of the comparator. The design changed state at 1/3 and 2/3 of Vdd. Describe the circuit configuration and calculate the resistor values. Let's limit the feedback current to 1 mA, and Vdd is 5 vdc. Remember, don't think that doodling in the dark is safe just because no one can see you. If you must doodle, be sure to use an erasable ink.

Reply to Butch Shadwell@ieee.org (email), 904-223-4510 (fax), 904-223-4465 (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.

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Editor – Quang Tang P.O. Box 270756, Tampa, FL 33688-0756 Voice: (813) 739-1222 Fax: (813) 264-7906 E-MAIL: q.tang@ieee.org Copyright 2006

Membership Development Update

George McClure, Region 3 Director, g.mcclure@ieee.org

We need your help in 2006 to expand our Membership Development program. The foundation and strength of the IEEE is a growing base of Members. While the current Region 3 Membership (as of January 31, 2006) is about 31,000, that number could change if we don't encourage old Members to renew and find prospective new Members. It is estimated that there are several hundred thousand potential IEEE Members in Region 3 alone. Just think of what we could do as an organization if just half of that number joined. To support this growth, we need your help. Here's what you can do:

First, Every Section has a list of Members that have not paid their dues and are now in "arrears". Please contact your local Section Chair and volunteer your time in contacting these Members and encouraging their renewal. Many will renew if you just ask. For help in answering renewal questions, please visit the Membership Development web page at, http://www.ieee.org/portal/pages/membership/benefits.html

Second, Promote the Member-Get-A-Member program. This program is available with incentives for finding new IEEE Members. You will get a \$5.00 IEEE credit voucher for every Member that you recruit. Make it a challenge within your Section to see who the best at Membership Development is. The reward is more than a credit voucher; it's a bigger organization with better connections into industry and community. These connections help to build the IEEE Network that supports our careers and the profession. More information on this program can be found at, http://www.ieee.org/web/volunteers/membership_dev/mgm.html

Third, The Class of 2006 will graduate in several months. Go participate in a Student meeting. Have a joint Section / Branch meeting and answer their questions about life after graduation. You will help them start their Network and it will re-enforce their commitment to the IEEE. The Student Branch near you can be found at,

http://www.ieee.org/portal/pages/membership/students/lists/R3.html

In closing, we need your help with Membership Development in Region 3. Our goal is to increase Region 3 Membership 5% over the January count of 31,000. If each of us recruited just one new Member, we would double our size in one year. Remember, without Membership Development, we can't build the IEEE of tomorrow. For further information, please contact Lee Stogner, Region 3 Membership Development Chair at L.stogner@ieee.org

Institute of Electrical and Electronics Engineers, Inc. Florida West Coast Section 3133 W. Paris Tampa, Florida 33614

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