



# Region 3



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

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## *Message from the Region 3 Director....*

Before describing our priorities for the coming year, I want to recognize Bill Harrison's vision and achievements as director during the past two years in keeping Region 3 in the forefront of IEEE regions. IEEE adopted a program to encourage interest in engineering among precollege students, and selected Region 3 to be the trailblazer in expanding the teacher in-service training program. Twenty-three sections were present for the kick-off training in Atlanta. Southeastcon 2005 was our biggest and best regional conference to date. Region 3 led all regions by exceeding its goal 2005 for senior member elevations by over 20 percent. The triennial Sections Congress held in Tampa in October was the capstone of Bill's tenure. A list of the top twenty recommendations from the 2005 Sections Congress is posted at [http://www.ieee.org/organizations/rab/sc/2005/SC05\\_Recommendations.htm](http://www.ieee.org/organizations/rab/sc/2005/SC05_Recommendations.htm)



*George F. McClure  
Region 3 Director  
2006-2007*

For 2006, we want to continue to emphasize providing member value for the dues paid, to stem the decline in higher-grade membership. IEEE exists to serve its members. This involves everyone in the region – areas, councils, sections, and society chapters. Activities, meetings, networking, affording opportunities for continuing education, and opportunities for growth through volunteering can all play a role. The value proposition for membership is the focus of the IEEE Membership Development Committee, giving special attention to rewarding long-time members.

Region 3 is blessed with many retired and life members. With their knowledge of IEEE and their available time for volunteer activities, they represent a mostly unused resource for sections. A couple of life members on the section committee can aid in tapping this reservoir for the benefit of the section. Life member affinity groups can be formed with as few as six life members, and just two meetings per year for such groups adds to the section rebate. A new initiative in 2006 will be enlisting knowledgeable members to assist in showing students visiting museums the value of engineering and science. A brochure is being prepared for distribution to museums with children's programs to further "hook" the interest of students.

As part of its precollege promotion of engineering, IEEE has enlisted IBM to develop a website to be called [tryengineering.org](http://tryengineering.org), along the lines of one that already exists, called [tryscience.org](http://tryscience.org).

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### *Message from the Director... Continued.*

The cutbacks in industry over the past decade reduced the middle management ranks where mentoring was strongest. Region 3 has filled the mentoring void with its program of Leadership by Developing Others (LDO), now entering Phase 2. Experienced members can provide perspective and advice to younger members when they are not in a reporting relationship, permitting a freer exchange of ideas. Mentoring at the section level can thus become a member benefit for new grads and those in the early stages of their careers.

Continuing its leadership in electronic communications, Region 3 will refine the technology for remote meetings, and provide training in hosting them.

Continuing education will benefit from the Expert Now IEEE program, rolling out in 2006 – first for corporate users then for members. Expert Now IEEE is a new, innovative product line which features the best of IEEE's educational content delivered in one-hour long online learning modules. It contains the latest information on emerging technologies and seminal works presented at the best of IEEE's conference tutorials, short courses and workshops and is available 24x7 worldwide with the benefit of eliminating time away from work and travel costs. Further information is available at [http://www.ieee.org/portal/pages/education/Expert\\_Now\\_IEEE/index.html](http://www.ieee.org/portal/pages/education/Expert_Now_IEEE/index.html) . Fifty modules will be accessible to sections, chapters and individual members in 2006, with three demonstration modules available at no cost now, at <http://xell.ieee.org/>

Continuing Education Units (CEUs) are awarded to aid in maintaining professional licensure and certifications (.3 CEUs / 3 PDHs issued for successful completion of a module -- .6 CEUs / 6 PDHs for 2 part modules). Modules are available and planned on topics in the following areas: Aerospace; Artificial Intelligence; Circuits & Devices; Communications; Computer Engineering / Networking; Instrumentation & Measurement; Lasers & Optics; Management; Manufacturing; Power; Professional Development; Reliability; and Signal Processing.

Other certifications have been called for, such as for soft skills and Six Sigma training. [http://www.isixsigma.com/ca/mbb\\_bb/](http://www.isixsigma.com/ca/mbb_bb/) Their feasibility will be pursued.

A truism is that you get out of an activity or association what you put into it, and nowhere is that truer than with IEEE and the benefit it can provide for your career, not just in technical activities but in professional activities, standards, personal recognition, and an array of other benefits available to members. In addition to our leadership training, the region supports professional awareness conferences for both students and mid-career members, grassroots activism, and volunteerism. An awards and recognition program acknowledges volunteer activity at every level; sections are encouraged to provide mementoes for service of section and chapter officers completing their terms of service.

A Volunteer Recruitment Toolkit is available, to assist in recruiting members for IEEE activities. A survey of long-time active volunteers last year found that most got started because they were asked to take on a task at the section or chapter level. Tips on asking are found at <http://www.ieee.org/organizations/rab/scs/volunteer/index.htm> where there are also brochures that can be printed out and a useful PowerPoint presentation.

A new development recently is the return of the Government Activities Committee for grassroots activism at the state level. Members in or near state capitals are needed to monitor and report state-level legislation or regulations that may affect the interests of IEEE members. Also needed is a Region 3 chair for the GAC. Please contact me if you are interested in participating.

A comment heard sometimes is "I'm just one member – it won't make any difference whether I participate or just read the literature." Can you make a difference? The answer is an emphatic YES! Two recent books contain relevant examples. "The Tipping Point" shows how small individual changes cumulatively have a big effect, whether in public health, fashions, crime rates or other areas. "The Wisdom of Crowds" illustrates why people working together are smarter than the few.

Working together, we can improve the quality of your IEEE membership experience. I solicit your comments, insights and suggestions to help keep Region 3 and its members at the vanguard of IEEE. You CAN make a difference. The Region 3 Forum is a good medium for exchanging ideas and information. To sign on, go to [www.ieeecommunities.org/region3](http://www.ieeecommunities.org/region3) .

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## ***Message from the Region 3 Past Director....***



*Bill Harrison  
Region 3 Director  
2004-2005*

It has been an honor and a pleasure serving as IEEE Region 3 Director for the past two years. The job is demanding, with travel to three week-long Board caucuses and meetings, Region 3 meetings, and a number of IEEE committee and special project meetings; plus lots and lots of email activities. I consider it well worth the investment of time and effort, with all the professional contacts and personal friendships developed during the course of doing IEEE's business. Thank you for allowing me to serve in this position.

As I pass the gavel to 2006-2007 Director George McClure, I would ask the R3 ExCom, Region representatives from our 41 Sections, and R3 members to continue to provide to your incoming Director the same high level of support I received. George has years of IEEE experience in many areas from local to IEEE-USA to world-wide IEEE events and activities. We all can look forward to George's outstanding leadership for the next two years.

Region 3 held its second face-to-face Region Meeting for 2005 in conjunction with Sections Congress 2005 in Tampa. Jim Howard, Dave Green, Quang Tang, John Twitchell, and their team did a great job preparing for the event and running SC2005. I have heard nothing but positive feedback from all quarters: "**BEST SECTIONS CONGRESS EVER!**"

Bill Ratcliff was elected as 2006-2007 Region 3 Director-Elect, then will serve as 2008-2009 Region 3 Director, and then 2010-2011 as Past Director. That is quite a commitment to our professional association. Congratulations to Bill!

Thanks again for the honor of serving as your Region 3 Director and Delegate.

### **2005 REGION 3 ACTIVITIES**

Much of my 2005 Region 3 activity report was published in prior electronic issues of the Region 3 Newsletter. Here is a summary of 2005 activities in case you missed the electronic version.

#### **LEADERSHIP AWARD FOR REED THOMPSON**

Reed Thompson was a long term, dedicated, Region 3 volunteer. Reed died of prostate cancer. Bob Duggan, R3 Strategic Planning Committee Chairman, took the lead to expedite approval and presentation of a Regional Activities Board Leadership award for him. Marc Apter, RAB VP, and IEEE HQ staff worked diligently to make this award happen quickly. It was presented to Reed shortly before his death. Bob Duggan, his wife Kathleen, Dick Riddle, Margaret Thompson, and I were there for the presentation of the award at a Charleston, SC hospital– an extremely moving ceremony.

#### **OUTSTANDING ENGINEER AWARD TO DR. ROBERT MOOG.**

Past Region 3 Director Dick Riddle, my wife Joan, and I attended the Western North Carolina Section Awards Banquet on November 15. Along with a number of other WNC Section awards, I had the distinct honor of presenting the 2004 Region 3 Outstanding Engineer Award posthumously to Dr. Robert Moog's wife, Ileana Grams. Bob's daughter, Michelle Moog, also attended the ceremony.

#### **ONGOING REGION 3 ACTIVITIES**

Ongoing Region 3 Committee and R3 ExCom areas of concentration include:

- Leadership Development (ongoing and special leadership training activities)
- Special Project - Leadership by Developing Others (LDO)
- Membership Development Challenges
- Newsletter/Communications with Members
- SSVR (Section Support Via Regions) funds for Section-initiated projects
- Preparation for Sections Congress 2005

*Message from the Past Director... Continued.*

## **TEACHER IN-SERVICE PROGRAM (TISP)**

Region 3, especially the Florida West Coast Section, and some other Florida Sections, was involved in early pilot activities with the Teacher In-Service Program. Region 3 was asked to expand to a second phase of the pilot, and then it will be further expanded to other regions. Doug Gorham and Moshe Kam attended our Region Meeting at SECon in Ft. Lauderdale and explained the plans and objectives of TISP.

More than half of our 41 sections were represented at the 23 July TISP meeting in Atlanta. Again Region 3's volunteers have stepped forward to lead the Institute. Funding will continue in 2006 for this program.

## **CONGRESSIONAL VISITS DAY**

Bill Harrison, R3 Director, and George McClure, Director Elect, along with about 20 other IEEE volunteers, participated in IEEE-USA's Tenth Annual Congressional Visits Day in Washington, DC on 10 - 11 May. The core issue presented to Senators and Representatives was that the US must continue to invest in basic research if our country is to provide technological leadership in the global economy. Over 40 other scientific and technical societies, represented by 250 persons, also participated in CVD.



*George McClure, 2006 – 2007 Region 3 Director  
Bill Harrison, 2004 – 2005 Region 3 Director*

## **SCOUT JAMBOREE**

Bill Harrison and Joey Duvall attended the Scout Jamboree in R3 at Ft. A. P. Hill in Virginia in July. Regional Activities Board (RAB) VP Marc Apter, IEEE President Cleon Anderson, and a number of other IEEE dignitaries joined the 40,000 plus scouts. IEEE was instrumental in staging a merit badge program for electricity, electronics and computers. Ralph Russell has led this activity for 25 years. Region 3 and IEEE have provided continuing support, both at the region level, and at the RAB level with motions and monetary support. Ralph and his associates are to be highly commended for their dedication and hard, hard work.

## **INDUSTRY RELATIONS**

I have continued to serve on the Ad Hoc Industry Relations Committee at the IEEE Board of Directors level. Lee Stogner, R3 ExCom Membership Director (including Industry Relations and Public Relations), and I attended an IR Committee meeting in late August. The Ad Hoc IR committee is working towards Memoranda of Understanding with large companies such as Boeing.

Lee and I took the position that we should not only work with giant corporations that employ EE's, but we should also work with smaller companies who employ IEEE members, or prospective members.

Bill Harrison  
Region 3 Past Director  
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### Today's New Products . . . Tomorrow's Innovative Solutions

Southcon, Florida's leading OEM electronics event, has long been the industry event where engineering and purchasing professionals come to see, touch, compare and learn about new cutting-edge products and innovative solutions. Southcon/2006 will feature product demonstrations, vendor exhibits and a high-quality conference program offering answers and solutions for the entire design, manufacturing and test team.

### Co-Locating with AMCON

Your Southcon badge also gains you free access to the American Contract Manufacturers Show (AMCON).

### When and Where?

#### Orange County Convention Center

West Complex - Hall F  
9800 International Drive  
Orlando, Florida 32819

Exhibit Hours	Conference Hours
Tuesday, March 7 9:30am-4pm	Tuesday, March 7 9am-5pm
Wednesday, March 8 9:30am-4pm	Wednesday, March 8 9am-5pm
Thursday, March 9 9:30am-1pm	Thursday, March 9 9am-5pm

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Stay in touch with your industry...learn about the trends, changes and opportunities that will impact your professional career.
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For more information on Southcon

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Southcon is sponsored by the Florida Council and Region 3, Institute of Electrical & Electronics Engineers and the Florida Sunshine Chapter of Electronics Representatives Association (ERA)

Exhibit Hours			9:30-4		9:30-4		9:30-1	
Day Planner			Tues. 3/7		Weds. 3/8		Thurs. 3/9	
			AM	PM	AM	PM	AM	PM
Conference Hours			COST		9-5		9-5	
Blue Ribbon Panel Discussion (1:00 to 3:00 pm)								
K1	How to Survive Outsourcing and Offshore Design/Manufacturing	N/C						
Engineering Application Tutorials (Include Lunch)								
T1	EMC Printed Circuit Board Design Practices (6 Hrs.)	\$315						
T2	ESD Design & Test (3 Hrs.)	\$165						
T3	High-Frequency Digital Design & PCB Layout (12 Hrs.)	\$700*						
T4	IEEE 802.15.4 & ZigBee - What's the Buzz? (6 Hrs.)	\$315						
T5	Manufacturing Implications of Lead-Free (3 Hrs.)	\$165						
T6	MIL-STD-461E & MIL-STD-464A Evaluation & Compliance (6 Hrs.)	\$315						
T7	Wireless Protocols - An Introduction and Overview (6 Hrs.)	\$315						
T8	Wireless Security (4 Hrs.)	\$195						
Exhibitor Workshops (1 Hour Each) – No Charge to Attend								
Workshop titles to date: Using Technology to Grow Your Business; Use More Than 10% of Microsoft Office; Streamline Business Processes with Microsoft Business Solutions								

\* Includes Textbook



## Technical Conference

Southcon's industry-relevant, affordable technical tutorials address issues that concern design, manufacturing and test departments. Instructors are leading experts in the topics they present.

Tutorial fees include lunch.



CEUs are awarded for all tutorials. (The IEEE is an authorized CEU Sponsor Member of the International Association for Continuing Education and Training.) IEEE membership is not required to receive CEUs.

Tuesday, March 7	Wednesday, March 8	Thursday, March 9
<p><b>Application Engineering Tutorial - T3</b>  <b>Fee: \$700 (Includes Book) - 1.2 CEUs will be Awarded</b>  <b>Tuesday &amp; Wednesday - March 7 &amp; 8, 2006 - 9:00 am - 5:00 pm</b></p> <p><b>High-Frequency Digital Design &amp; PCB Layout (2 Days)</b></p> <p>Mr. Robert Hanson, Americom Seminars, Inc.</p> <p>This tutorial is for the serious digital designer who wants the design to meet SI the first time. Causes and elimination of the high-speed concerns (ground bounce, metastability, Q CKT ringing, reflections, cables, crosstalk, bypassing, EMI/EMC problems with connectors, split planes (analog fidelity) and differential noise/crosstalk/jitter) will be explored. Methods for design and layout of 4, 6 and 10-layer PCB stackups to control characteristic impedance and crosstalk also will be discussed.</p> <p><b>Application Engineering Tutorial - T6</b>  <b>Fee: \$315 - .6 CEUs will be Awarded</b>  <b>Tuesday - March 7, 2006 - 9:00 am - 5:00 pm</b></p> <p><b>MIL-STD-461E and MIL-STD-464A Evaluation and Compliance (6 Hrs.)</b></p> <p>Mr. Ronald W. Brewer, NCE, Consultant</p> <p>The primary MIL-STD-461E design and measurement requirements will be explored along with an overview of MIL-STD-461E contractual and CDRL items. Practical EMC design methodology will help attendees understand major Control Plan requirements. Because of the DOD's strong emphasis on COTS equipment, FCC and EU EMC test/evaluation methods will be summarized and compared with MIL-STD-461E, followed by an overview of the MIL-STD-461E conducted and radiated emission and susceptibility tests most frequently required by military procurement specifications.</p> <p><b>Application Engineering Tutorial - T7</b>  <b>Fee: \$315 - .6 CEUs will be Awarded</b>  <b>Tuesday - March 7, 2006 - 9:00 am - 5:00 pm</b></p> <p><b>Wireless Protocols - An Introduction and Overview (6 Hrs.)</b></p> <p>Mr. Charles J. Lord, P.E., CQ Manager, QA Engineer, Inlet Technologies, Inc.</p> <p>The various wireless communications protocols that are currently being designed into products or under discussion will be overviewed. Presented from an applications engineering viewpoint, we will examine the strengths, weaknesses and limitations of all popular formats. Protocols to be covered will include the IEEE 802.11 (a-n), 802.15.1 (Bluetooth), 802.15.4 (including ZigBee) and various others. Participants will gain a good understanding of how to select a protocol for developing their application and how to weigh the trade-offs involved in making that selection.</p>	<p><b>Application Engineering Tutorial - T1</b>  <b>Fee: \$315 - .6 CEUs will be Awarded</b>  <b>Wednesday - March 8, 2006 - 9:00 am - 5:00 pm</b></p> <p><b>EMC Printed Circuit Board Design Practices (6 Hrs.)</b></p> <p>Mr. Ronald W. Brewer, NCE, Consultant</p> <p>PCB design practices to reduce RF emission and susceptibility (immunity) will be explored. Both analog and digital PCBs will be discussed, but EMC design practices for high-speed logic circuits requiring transmission line techniques will be emphasized.</p> <p><b>Application Engineering Tutorial - T4</b>  <b>Fee: \$315 - .6 CEUs will be Awarded</b>  <b>Wednesday - March 8, 2006 - 9:00 am - 5:00 pm</b></p> <p><b>IEEE 802.15.4 and ZigBee - What's the Buzz? (6 Hrs.)</b></p> <p>Mr. Charles J. Lord, P.E., CQ Manager, QA Engineer, Inlet Technologies, Inc.</p> <p>The IEEE 802.15.4 low-speed/low-power communications protocol and the implementation of that protocol by the ZigBee Alliance for Worldwide Interoperability will be explored. Able in some applications to work from a single battery for years, 802.15.4 devices show promise for enabling "set and forget" sensors and controls in places that previously required running wires or changing batteries often. Presented from the perspective of an embedded systems developer, hardware applications as well as code development for devices at all complexities from a simple control layer of only 4K of code, through the 802.15.4 protocol, to a full ZigBee-compliant network will be demonstrated.</p>	<p><b>Thursday, March 9</b>  <b>Application Engineering Tutorial - T2</b>  <b>Fee: \$165 - .3 CEUs will be Awarded</b>  <b>Thursday - March 9, 2006 - 9:00 am - Noon</b></p> <p><b>ESD Design for Electronic Systems, Subsystems and Equipment (3 Hrs.)</b></p> <p>Mr. Ronald W. Brewer, NCE, Consultant</p> <p>This tutorial will provide techniques for properly handling ESD susceptibility (immunity) control problems in electronic systems, with emphasis placed on ESD protection design of high-speed, logic-based systems.</p> <p><b>Application Engineering Tutorial - T5</b>  <b>Fee: \$165 - .3 CEUs will be Awarded</b>  <b>Thursday - March 9, 2006 - 9:00 am - Noon</b></p> <p><b>Manufacturing Implications of Lead-Free (3 Hrs.)</b></p> <p>Mr. Robert Hanson, Americom Seminars, Inc.</p> <p>This tutorial will emphasize practical application and information, and will show you how to resolve the business and technical issues (principles as well as practice) for an effective implementation of lead-free at lower cost and higher yield.</p> <p><b>Application Engineering Tutorial - T8</b>  <b>Fee: \$195 - .4 CEUs will be Awarded</b>  <b>Thursday - March 9, 2006 - 9:00 am to 1:00 pm</b></p> <p><b>Wireless Security (4 Hrs.)</b></p> <p>Mr. Charles J. Lord, P.E., CQ Manager, QA Engineer, Inlet Technologies, Inc.</p> <p>The design and implementation of security measures in a wireless network will be explored from a system designer's perspective. An overview of all basic wired and wireless network methods and protocols will be followed by concentration on the wireless security methods for 802.11 (wi-fi) as well as 802.15 (Bluetooth, 802.15.4 and ZigBee). With the growing popularity of these protocols, all sharing the same radio spectrum, there is an ever-increasing need for tighter security, particularly in applications involving financial, identity or mission-critical data.</p>

**For Expanded Conference  
Information and Registration  
visit  
[www.southcon.org](http://www.southcon.org)**

## BLUE RIBBON PANEL TO DISCUSS OUTSOURCING AND OFF SHORE MANUFACTURING

**Tues, March 7 – 1:00 pm – 3:00 pm – Fee: No Charge**

Please join us for this Blue Ribbon Panel Discussion – "How to Survive Outsourcing and Off Shore Design and Manufacturing" – Moderating a panel of manufacturers, contract manufacturers, and design engineers, Butch Shadwell, member of the Board of Directors of Southcon and a design engineer, will explore the issues facing Design and Manufacturing today. As Southcon is co-located with AmCon (American Contract Manufacturers show), this discussion promises to be a lively and productive event.

**Sign up using the registration form in this preview.**





March 7-9, 2006  
Orange County Convention Center  
Orlando, FL

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#### How to Register

##### Mail Deadline - February 3, 2006

Southcon 2006  
1514 First Street  
Manhattan Beach, California 90266

##### FAX Deadline - March 3, 2006

813-996-4460  
Please do not both fax and mail

##### Electronically [www.southcon.org](http://www.southcon.org)

After February 17, 2006 badges will be held for pick-up at the Orange County Convention Center.

##### On-Site

Bring this form with you to Southcon/2006 for FREE admittance.

First Name	Last Name		
Job Title	E-mail		
Company			
Mailing Address		Mail Stop	
City	State	Zip	Country
( )	( )		
Telephone	Fax		

**Register Early:** Prices shown are effective through February 24, 2006.

Beginning on February 25, the cost of "T" events will increase by \$50 each.

\_\_\_\_\_ Southcon Exhibits (Tues., Wed., Thurs., Mar. 7-9, 2006)

No Charge

\_\_\_\_\_ Blue Ribbon Panel Discussion (Tues., Mar. 7, 1 to 3:00 PM)

No Charge

#### Application Engineering Tutorials (include lunch)

\_\_\_\_\_ T1 - \$315 - EMC Printed Circuit Board Design Practices

\_\_\_\_\_ T5 - \$165 - Manufacturing Implications of Lead-Free

\_\_\_\_\_ T2 - \$165 - ESD Design for Electronic Subsystems & Equipment

\_\_\_\_\_ T6 - \$315 - MIL-STD-461E & MIL-STD-464A...

\_\_\_\_\_ T3 - \$700 - Highfrequency-Digital Design & PCB Layout

\_\_\_\_\_ T7 - \$315 - Wireless Protocols - An Introduction & Overview

\_\_\_\_\_ T4 - \$315 - IEEE 802.15.4 and ZigBee - What's the Buzz?

\_\_\_\_\_ T8 - \$195 - Wireless Security

10% discount for IEEE & ERA members or companies sending more than three attendees

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IEEE Membership # \_\_\_\_\_

**Special Assistance:** If you require special assistance covered under the

Americans with Disabilities Act, please call (310) 937-1006 by January 31, 2006.

**Cancellation:** No refunds after February 4, 2006. However you may send a colleague in your place.

Grand Total \$ \_\_\_\_\_

#### Method of Payment

\_\_\_\_\_ Check (payable to Southcon 2006).

\_\_\_\_\_ I agree to pay the total amount according to my credit card issuer (circle one)

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Persons under 18 years of age not admitted. Students 18 or older admitted on Thursday, March 9, only.

**For Complete Conference Information and Registration visit [www.southcon.org](http://www.southcon.org)**

### Southcon and Amcon Exhibit Floor & Conference Companies

Partial List as of 11-1-05.

A.M. Metal Finishing, Inc.  
A.P.P.I.  
AAK Corporation\*  
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American Plastic Molding Corp.  
APEM Components\*  
Applied Manufacturing Concepts, Inc.  
APX Technologies, Inc.\*  
Arlink\*  
Armstrong Mold Corp.  
ASH Industries  
B.A. Precision  
Bardane Aluminum Foundry  
Bare Board Group  
Bartlett Manufacturing Company\*  
C-MAC Microelectronics\*  
CET Technology  
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Chapman Tool & Mold  
Cincinnati Sub-Zero Products  
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Clairson Plastics  
CLOW Stamping\*  
CompuLink Cable Assembly, Inc.

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Fab Masters Co.  
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Noah Industries, Inc.  
North Penn Technology, Inc.  
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PCM Products, Inc.  
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Powerstax plc\*  
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ProSource Industries  
Quaker Plastic Corporation  
Rapid Product Solutions  
Rapid Sheet Metal, Inc.  
Ranco Electronics, Inc.  
RMI-F, Div. of Rotronics  
Rubycon\*  
Saint-Gobain  
Sanyou Relays\*  
Sealing Devices, Inc.  
Seaway Plastics Engineering  
SRC Devices\*  
Shoulder Electronics Group\*

Sibex, Inc.  
Soldering Technology International  
Somec Corp.  
Sonetcom\*  
Southern Spring & Stamping, Inc.  
SSI Electronics, Inc.  
Static Control Components\*  
Steinel\*  
Sun Rep.  
Surehold\*  
Surface Finishes Co., Inc.  
Swanstrom Tools USA\*  
Synpis Test and Measurement  
T.L. Fahringer Co.  
Technical Specialties Co., Inc.  
Technical Systems Integrators, Inc.  
Time-Compression Technology  
Tocos America\*  
Tri-Mag\*  
Tropic Fasteners  
Truex, Inc.  
UDT Sensors\*  
Universal Sales Company  
US Tech  
Vaga Industries  
Weber Manufacturing & Supplies, Inc.  
Williams Soud\*  
Wilson Machine Products, Inc.  
Wisconsin Tool & Mold  
Wrico Stamping Co.  
You Eal\*

\*Products shown through representative or distributor.

# Leadership by Developing Others goes to Atlanta

By Leadership by Developing Others (LDO) Project Team

On a rainy Saturday (3 December 2005), member / volunteers of the Atlanta Section and associated chapters of Technical Societies met for an introduction and discussion of the Leadership by Developing Others (LDO) Project. Members of the LDO Project Team Charles Lord, Dave Green and Bill Ratcliff conducted the LDO Workshop.

Bill Marshall, the Atlanta Section Chair for 2005, was most kind in organizing the meeting and the logistics and providing time in their workshop for LDO.

As a brief review of LDO from previous articles ...

- Is IEEE concerned about the effective use of technology... yes.
- Is technology all that IEEE is concerned about... No.
- IEEE is about you the member because **you are IEEE**.
- IEEE is a member owned and operated organization.
- Are you a silent member? Are you getting the most out of your membership?
- Do you want to get more out of your membership? Leadership By Developing Others is expanding to include your Section

The Atlanta Workshop was the first in a series to begin the process of introducing the Principles of LDO where the maximum benefit can be derived ... within the local Section. LDO is primarily aimed at developing an active membership because the member is IEEE.

If IEEE is to have an impact in the professional life and career of the individual member ... YOU... then the implementation must occur at the “grass roots” level where you live.

The Region 3 Project Team learned as much or more from the meeting with the Atlanta members than they learned from us. Participating in activities that focus on the member can bridge the gap between the Technical side of IEEE and the Regional Activities.

- Increasing the value of membership in IEEE
- Developing a collaborative working environment
- Enhancing the Mentoring Spirit and Networks

*In order to “get” IEEE ... direct participation is required.*

So when the Leadership By Developing Others (LDO) Workshop comes to your Section be sure and sign up to attend. In the mean time please avail yourself of the electronic capabilities to collaborate.

On the road again ... just can't wait to get on the road again... introducing LDO with my friends ... just can't wait to get on the road again.

Dick Riddle  
[r.riddle@ieee.org](mailto:r.riddle@ieee.org)

Bill Ratcliff  
[w.ratcliff@ieee.org](mailto:w.ratcliff@ieee.org)

David Green  
[d.green@ieee.org](mailto:d.green@ieee.org)

Charles J. Lord  
[c.j.lord@ieee.org](mailto:c.j.lord@ieee.org)





**Check the SoutheastCon 2006 website for full details on conference activities and schedules!**

**[www.secon06.org](http://www.secon06.org)**

SoutheastCon is the premier technical conference sponsored annually by Region 3. Hundreds of students from the most outstanding engineering programs in the Southeastern U.S. and Jamaica will engage in robotics, software, website design, and technical paper competitions at this conference, along with two full days of technical presentations by professionals. Students will have the opportunity to participate in a job fair and a resume/interviewing competition, as well. Region 3 also holds its annual meeting at this event, and several pre-conference tutorials will be offered. As an added bonus, the Memphis Area Engineering and Sciences Conference is being held concurrently at the conference hotel, with discounted registration for conference attendees. Full details of all of our events are described on the website.

Obviously, there will be a lot going on at the conference – but there is also a lot going on in Memphis, and we want you to experience the flavor of our city while you are here. What could this mean? Barbecue? Music? Elvis? Yes – all three, and more! Memphis is the Birthplace of Rock and Roll and the Home of the Blues, and you can sample both on world-famous Beale Street. The King – Elvis, that is – made his home here, and today more people visit Graceland than any other home in the country, including the White House. Memphis's history is rich, with a heritage built on cotton and commerce. FedEx is headquartered here, making us the busiest freight airport in the world, and you'll want to visit the Memphis Cotton Exchange Museum to see how Memphis became the leading cotton market in the world. Important recent history also happened here, as you can see when you visit the National Civil Rights Museum, the Stax Museum, or the Smithsonian's Rock 'n Soul Museum. Have fun with your family at the Children's Museum, the Pink Palace museum, or the Memphis Fire Museum. Feeling more artistic? One of the world's premier collections of Chinese art and jade is here, and other museums feature everything from Impressionists to the world's top metalsmiths. Visit Mud Island to experience a four-block long working scale model of the Mississippi River, then take a paddlewheel boat ride on the real thing. Oh, and don't forget to eat – Memphis-style pork barbecue!

We'll keep you educated and entertained! We know you'll want to come to SoutheastCon 2006!

#### **ACCOMMODATIONS**

**Our host hotel is the Memphis Marriott at 2625 Thousand Oaks Boulevard, Memphis, TN 38118**

**Phone: 1-901-362-6200 / Fax: 1-901-360-8836**

**To make reservations on-line: [www.secon06.org/accom.php](http://www.secon06.org/accom.php)**

#### **Registration Options:**

Includes Category	MAESC Conference	Professional Conference Sessions	Student Conference Sessions	Conference CD	Region 3 Meetings	Opening Reception	Awards Program/ Closing Event	Author's Breakfast on Day of Presentation
Full Professional Conference		X		X		X	X	
Student Conference			X				X	
Student with Professional Conference		X	X	X		X	X	
MAESC Conference	X							
Professional Conference Author		X		X		X	X	X
Life/ Unemployed Member		X		X		X		
Region 3 Committee/ EXCOM					X	X	X	
Companion						X	X	

Registration for tutorials and tours, as well as additional tickets to certain meal functions are available for individual sale and may be limited to space available.

# IEEE SOUTHEASTCON 2006 REGISTRATION FORM

Register Online – It is quicker, easier, more accurate, and safe on our secure server!  
Full details and the latest conference activity updates are also available.  
Go to: **www.secon06.org**

NAME: (First) \_\_\_\_\_ (Last) \_\_\_\_\_ IEEE MEMBER #: \_\_\_\_\_  
(Print names as you wish printed on badge) (Enter "NONE" if not a member)

COMPANION NAME: (First) \_\_\_\_\_ (Last) \_\_\_\_\_

COMPANY/ STUDENT BRANCH: \_\_\_\_\_  
(If a student, list competitions & events you are engaging in.)

ADDRESS: \_\_\_\_\_  
\_\_\_\_\_

CITY: \_\_\_\_\_ STATE/PROV: \_\_\_\_\_ ZIP/POSTAL CODE: \_\_\_\_\_

TELEPHONE: (\_\_\_\_) \_\_\_\_\_ FAX (\_\_\_\_) \_\_\_\_\_ E-MAIL: \_\_\_\_\_

Please describe any special dietary or physical needs: \_\_\_\_\_

IEEE MEMBERS	Qty	Advance	On-Site	Subtotal	TUTORIALS (See Website)	Qty	Advance	On-Site	Subtotal
Full Professional Conference	___	\$380	\$450	\$_____	_____	___	\$ _____	\$ _____	\$ _____
Student Conference Basic	___	\$57	\$67	\$_____	_____	___	\$ _____	\$ _____	\$ _____
Student with Professional Conference Package	___	\$80	\$90	\$_____	_____	___	\$ _____	\$ _____	\$ _____
Professional Conference Author	___	\$380	\$450	\$_____	<b>ADDITIONAL ITEMS</b>				
Additional paper after first	___	\$300	n/a	\$_____	_____	___	\$ _____	\$ _____	\$ _____
Life/Unemployed Member	___	\$57	\$67	\$_____	Friday/MAESC Luncheon	___	\$30	\$40	\$_____
Region 3 Committee/EXCOM	___	\$165	\$175	\$_____	Opening Reception	___	\$27	\$40	\$_____
<b>NON-IEEE MEMBERS</b>					Saturday Luncheon	___	\$24	\$35	\$_____
Full Professional Conference/Author	___	\$425	\$495	\$_____	Awards Program/Closing Event	___	\$48	\$58	\$_____
Companion	___	\$75	\$85	\$_____	Conference Proceedings CD	___	\$10	\$10	\$_____
<b>ADDITIONAL TECHNICAL PROGRAM</b>					Conference Proceedings Printed	___	\$50	\$50	\$_____
MAESC Conference (See www.maesc.org)	___	\$150	\$210	\$_____	_____	___	\$ _____	\$ _____	\$ _____

Total Amount .....\$ \_\_\_\_\_

**ADVANCE REGISTRATION CUT-OFF DATE IS MARCH 19, 2006.** See website for cancellation policy.  
**Make all checks payable to IEEE SoutheastCon 2006. All fees are payable in \$U.S.**

Credit Card (Please Circle One)      MasterCard      VISA      Discover      American Express

Credit Card Number: \_\_\_\_\_ Expiration Date: \_\_\_\_\_ / \_\_\_\_\_

Cardholder's name exactly as it appears on the card (print): \_\_\_\_\_

Cardholder's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Mail to: IEEE SoutheastCon 2006, c/o Electric Distribution Engineering, Memphis Light, Gas & Water Division,  
P.O. Box 430, Memphis, TN 38101-0430, USA or fax to (901) 528-7774**



# IEEE / IAS 41st Annual Meeting

## Greetings from the beautiful city on the bay!

The members of the Florida West Coast IAS Chapter welcome Region 3 IAS members and other interested Region 3 members to Tampa. Come and join us for the IEEE / Industry Applications Society's 41<sup>st</sup> Annual Meeting, October 8 - 12, 2006, at the Marriott Waterside Hotel, in Tampa.

As many Region 3 members already know, Tampa Bay is a cosmopolitan community with great cultural attractions, on all sides of the bay, from theatre to Dali. It is also a land of major first class shopping centers. Busch Gardens in Tampa and the theme parks of Orlando compliment the area.

General Chair, Mark Halpin, and the Society Technical Committees promise great sessions and tutorials, including exciting technical paper presentations, panel discussions, and vendor presentations spanning a very broad range of industrial applications, such as, lighting, mining, metals, petroleum & chemical, electric machines, power electronics and drives, power systems, and many others. These presentation forums will focus on product applications, industry standards, manufacturing and production strategies and techniques, and research advances.

This meeting brings engineers and others from around the world to its Annual Technical Conference. A chance to meet and interact with engineers from many countries in a single location.

In addition to the technical program, the Social Program will be just as exciting. It starts with a Sunday evening reception for all attendees. The Myron Zucker Luncheon honoring students will be at noon on Monday. Tuesday noon we will honor many of our members at the Awards Luncheon. The Great and Grand Presidents Banquet is of course Wednesday evening. We are informed that at least one high level IEEE Award will be presented that evening.

Bring your spouse/companion. We will have an active program for them operating on Monday, Tuesday and Wednesday with a possible short tour on Thursday. Be sure they check in to the Spousepitality Suite, to meet old friends and make new friends. While plans are not firm at this writing we are sure all the spouse/companions will enjoy their visit and have a good time.

For more up to date information, please check out our web site [www.ieee.org/ias2006](http://www.ieee.org/ias2006)





## Ratcliff's Remarks – Director Elect 2006-07

By the time you receive this Newsletter, the New Year 2006 will have started and Christmas 2005 will be a memory (a happy one I hope). The New Year brings many opportunities and challenges but rather than making New Years Resolutions, I believe it is more beneficial to examine our journey and possible course corrections.

I would suggest that the focus on the Member formed the basis for most of the initiatives that were brought forth to the Sections Congress 2005 in Tampa, remains a major component of the direction for 2006.

The forces both internal and external affecting the Member are somewhat different than those in 2005. Those forces that impact your working life, home life, volunteer activities must be identified, the impact understood and ranked. The only way your perspectives will come forth is if you are an “active member”.

There are many opportunities for you to get involved...

- With your local Section and Chapter activities... Monthly Meetings, Special Projects, Conferences
- Attending SouthCon 2006 – Orlando, FL - March 7-9, 2006 - <http://www.southcon.org/>
- Participating in SoutheastCon – Memphis, TN March 30 – April 2, 2006 – <http://www.secon06.org/>
- Participation in the IEEE On Line Communities <https://www.ieeecommunities.org>
- Engineers Week 2006 - contact Lee Stogner Region 3 Membership Development Committee Chair <mailto:l.stogner@ieee.org>
- The Leadership by Developing Others Project is planned to be coming to a Section near you. See the article in this edition of the newsletter about the Atlanta Workshop. Your involvement is essential.

If none of the above have appeal. I am sure we can find something for you.

In future editions of the Region 3 Newsletter you will hear a great deal more about diverse subjects like Strategic Management, Mentoring, Project Planning and Control, Engineered Change...but Enough for now.

I am looking forward to working with all of the volunteers in Region 3 as Director – Elect 2006-2007 and wish to add my thanks to Bill Harrison – Immediate Past Director for his service to the members of Region 3 and the Institute.

Take care and remember, “Decisions are made by those who show up”.

William B. Ratcliff  
912-356-5379  
[w.ratcliff@ieee.org](mailto:w.ratcliff@ieee.org)

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### ***Is It True “The World Is Flat?” 2006 IEEE-USA Annual Meeting & Leadership Workshop 3 -5 March 2006***

Section and PACE Chairs are encouraged to attend the **2006 IEEE- USA Annual Meeting and Leadership Workshop: Is It True “The World Is Flat?”** to be held on **3-5 March 2006** at the Hyatt Regency Hotel at Union Station in St. Louis, MO.

This year's workshop will focus on the global market and what that means for you and your local members. Sessions will be geared toward helping you and your local members prepare for the Flattening of the Global Market. During the weekend, members will be challenged to think about the changes in the global environment within which they work. Interactive workshops will be provided, that will offer new strategies to think about their role in society and how they can make a difference in their own lives and careers. In addition, participants will have the opportunity to hear from IEEE and IEEE-USA President-Elect Candidates, take part in the IEEE-USA Awards Dinner and Ceremony, and make recommendations to the IEEE-USA Board of Directors on the last day of the workshop.

Please contact the Region 3 PACE Coordinator, Adeeb Hamzey, for information on funding and procedures - [adeeb\\_hamzey@dom.com](mailto:adeeb_hamzey@dom.com). Or visit <http://www.ieeeusa.org/calendar/conferences/2006workshop>.



# 2006 Leadership Workshop and Annual Meeting

Is It True "The World Is Flat?"

3 -5 March 2006

Hyatt Regency St. Louis at Union Station  
One St. Louis Union Station, St. Louis MO 63103

<http://www.ieeeusa.org/calendar/conferences/2006workshop>



# In Tampa, Sections Congress Creates Sharp Leaders

By Erica Vonderheid, The Institute – January 5, 2006

IEEE Senior Member Jim Howard calls it “the best and the greatest IEEE meeting there is.” Hyperbole aside, IEEE Sections Congress 2005, held 14-17 October 2005 in Tampa, Fla., brought together hundreds of volunteers from all over the world to sharpen leadership skills, enhance knowledge of the IEEE, and network with other volunteers.

Hosted by the Florida West Coast Section and Region 3, the Sections Congress, a triennial gathering of section leadership sponsored by the Regional Activities Board, drew more than 900 attendees—the most since the first meeting was held in 1984. The delegates, mostly section chairs and other officers, represented 269 sections, or approximately 89 percent of all IEEE sections.

At Friday’s opening ceremony, Vice President of Regional Activities Marc T. Apter focused on the theme of the congress, “Promoting a World Class Volunteer Community,” and encouraged the delegates to improve their leadership skills by attending informational sessions and to voice their opinions about issues the IEEE needs to address.

Howard, chair of the Steering Committee, added: “This is your congress. All the work that went into this meeting is for you, and now you have to make the most of it.”

The delegates gathered in Tampa to learn how to be more effective volunteer leaders. All delegates attended a core of training sessions, which included the essential information that local leaders need to run a section. Attendees learned about the IEEE’s products and services, its financial reporting rules, and its organizational structure. Speakers also presented news on products and services in the works, such as a redesigned IEEE home page, e-mail balloting for IEEE officers, and new continuing education programs.

Delegates then attended breakout sessions, which were divided into three tracks—Membership, Section Operations, and Relationships. During the Membership track, attendees heard from volunteers from Canada, Chile, Russia, and South Korea about the challenges of keeping members involved in sections outside the United States. Other delegates explored the results of the latest IEEE member survey, which showed that overall satisfaction with IEEE products is increasing. Those interested in more of the nuts and bolts of Section Operations attended sessions on planning successful conferences or rejuvenating inactive sections and chapters. On Relationships track, delegates discussed how to work successfully with student branches and use IEEE resources to develop educational courses.

Besides gathering information on behalf of their sections, delegates also provided their recommendations for improving the IEEE. After much brainstorm and debate they compiled a list of 10 practical measures for the IEEE Board of Directors to consider to better serve members’ needs. While the board is not required to act on the recommendations, Apter said during his “Report to the Sections” on Saturday morning, most of the recommendations from Sections Congress 2002 have been implemented—including one to train preuniversity educators to teach engineering and another to work with industry to determine how the IEEE can develop educational programs that companies would want their employees to attend.

“We must continue to serve our members, serve our profession, and bring benefit to humanity,” Apter said. “Our performance in the IEEE and our careers define who we are as professionals.”

**FRESH IMPRESSIONS** For first-time attendees, the congress presented an opportunity for members to learn about new IEEE products and services.

At the Section Operations session on electronic services, Member William Bonaparte, vice president of the Puerto Rico and Caribbean Section, learned about such products as e-notices, listserves, and Internet conferencing, that he hadn’t known about before. “The Sections Congress is the best way for new volunteers who will be in charge of the section to know more about the applications the IEEE has, the different Web sites to look for, and all the information that we didn’t know about,” Bonaparte said.

For Member Jawad Salehi, chair of the IEEE Iran Section, most of the information presented was fresh. His section has been inactive for the past three years because of legal issues involving the governments of the United States and Iran.

“Practically everything for me is new,” Salehi said. “While gathering all this information, I did a lot of networking and I got to know a lot of people.”



As the meeting wound down on Monday morning, Member Matt Long of the University of South Florida in Tampa described his work with robots in search-and-rescue operations. He talked about how robots were used to search for survivors in the aftermath of the recent hurricanes in the southeastern United States. He even brought in some of the robots and showed how they worked.

IEEE's 2005 President Cleon Anderson closed the meeting by encouraging attendees to continue the good work started at the Sections Congress.

"Volunteers make it possible to fulfill the IEEE mission," Anderson said. "The need for volunteers has never been greater and I encourage all volunteers to strengthen the IEEE community by involving and motivating new volunteers."

The next Sections Congress will be held in 2008 in Quebec City, Que., Canada.

For more information on the Sections Congress, including presentations, photos, and a list of the delegates' recommendations, visit <http://www.ieee.org/organizations/rab/sc/2005/index.htm>.

## *Snap shots from Sections Congress 2005*



### *Clockwise from top*

- Michael R. Lightner, IEEE President
- Marc Apter, Vice President Regional Activities
- Jim Howard, SC 2005 Steering Committee Chair
- Bill Harrison, Past Region 3 Director
- Robert Allen of i.d.e.a.s.
- Sections Congress 2005 Steering Committee
- Region 3 Members Group Photo
- Center photo – David Green, SC 2005 Program Committee Chair

For more photos from Sections Congress 2005, please visit  
<http://www.ieee.org/organizations/rab/sc/2005/SC05-Pictures.htm>



## Region 3 Outstanding Engineer Award to Dr. Robert Moog

The Western North Carolina Section of IEEE held an Awards Banquet on November 15, 2005 at the Country Club of Asheville, Asheville, NC

Along with several section awards the feature award presentation was the 2004 Region 3 “Outstanding Engineer” Award to Dr. Robert Moog.

Dr. Moog died at age 71 in August 2005. The award was posthumously presented by Region 3 Director Bill Harrison to Moog's widow, Ileana Grams and his daughter Michelle Moog. Also present at the ceremony were Michael Adams, President of Moog Music, and Dick Riddle, Region3 past director.

Ileana Grams indicated that Bob Moog would have especially valued this “Outstanding Engineer” award coming from the IEEE Technical Community recognizing his technical innovations and developments.



*From left to right: Dick Riddle, Michelle Moog, Ileana Grams and Bill Harrison*

Dr. Robert Moog has become a legend in the keyboard music industry. His innovative electronic designs and the development of the “Moog Synthesizer” are responsible for a long list of patents, numerous awards and citations, and an enormous impact on the music industry. He was a pioneer in the world of electronic musical instruments. The analog “Moog Synthesizer” has become the “Standard” against which all other keyboard synthesizers are measured.

We are honored to have had such a distinguished member in our section. He is an inspiration to all of us. He had a remarkable mixture of technical genius, adaptive insight, and personal humility. His work ethic, unpretentious attitude and connection with the basics of life were some of his spiritual gifts to those that knew him.

We are pleased to have the opportunity celebrate his life and his great achievements. Bob, we are grateful to have known you and you will be missed.

The Banquet program included a slide and video clips of equipment development history and several interviews with Dr Moog. A Moog Voyager Synthesizer, Theremin and other electronic musical equipment were demonstrated by Michael Adams and his staff.

The section also recognized several past and present section elected officers with IEEE engraved plaques for their service and dedication over many years to bring our section to where it is today. Certificates of Recognition were awarded to 8 members for exceptional service. Examples are the following successful programs: “Engineering Career Round Table”, UNCA and WCU Senior Class Project Design Reviews, Section Newsletter, Professionalism and Ethics Tutorial, and the launching of the WNC Local Consultants Network.

Respectfully submitted,

Fred Orland  
Chair, IEEE Western North Carolina Section  
Email: [fredorland@ieee.org](mailto:fredorland@ieee.org)

# **A SALUTE TO K. REED THOMPSON (1931-2005)**



On September 27 Region 3 lost a long time volunteer, leader, and friend. Today we share a few memories of Kenneth Reed Thompson with you.

Reed was Region 3 Director from 1982-83. He retired in 1994 after 40 years with General Electric, where he worked after receiving his BEE & MSEE from Georgia Tech.

An IEEE Life Senior Member, Reed filled numerous Region 3 and Institute positions and committees both before and after he ended his term as Director. An important contribution was writing software for the Reg. 3 Treasurer with an instruction book, programming which was adaptable to all IEEE sections. Three editions were written. In addition to Reg. 3 service, Reed filled many slots with the Institute and the Virginia Mountain Section.

He was also an active member of various non-IEEE organizations, including NSPE, VSPE, GE Mgmt Assn, and five NEMA standards committees. He was a Registered Professional Engineer. After eight years service in the U.S. Army Reserve, he was discharged as 1st LT.

He authored 12 papers and publications both for GE and at IEEE conferences.

Reed also received a string of awards, including the RAB Leadership Award (twice!), the IEEE Centennial Award, the Reg 3 Outstanding Service Award, The Reg. 3 Dan Jackson Award, various GE awards, Tau Beta Pi and Eta Kappa Nu at Georgia Tech, and listing in several Who's Whos.

Of particular note, Reed received 7 US patents, 2 French patents, and one each from UK, Sweden, Germany, Italy, & Japan!

Busy in his community, Reed was the first Eagle Scout in Bacon Co., GA and served as a merit badge counselor in several fields. To prove he still had the right stuff, he even took the MENSA exam at age 68 and passed with flying colors!

Of particular note: After being diagnosed with prostate cancer in 1996, Reed became an active spokesman and advocate, alerting all men to get checkups for early diagnosis so as to avoid ending up with the disease too advanced to get a cure. Through managing his own disease he became a great resource for information and comfort for others to draw upon. He was also an information source for doctors, helping them learn about the latest treatments -- and they called on him to counsel some of their patients. His treatments were sometimes a doctor's first use of them -- and the doctors learned from him!

Reed was nominated as an IEEE Fellow early in 2005, and in November the IEEE BoD endorsed and announced his selection by the Fellows Committee. His Fellow Award is planned to be made to his wife Margaret and his family 4/1 at SECon06 in Memphis.

Reed's family includes his wife Margaret of 53+ years, two sons, and three grandchildren. His varied interests included astronomy, bee-keeping, canoeing, exercising, farming, genealogy, scouting, travel, and playing several musical instruments.

Margaret liked to refer to Reed as a Renaissance Man because of the wide diversity of his interests and talents. He also sets an example which we would all do well to emulate!



# IEEE Region 3 Executive Committee – 2006

Director \*  
*George F. McClure*

Director Elect \*  
*William (Bill) Ratcliff*

Past Director \*  
*Bill Harrison*

Treasurer \*  
*Charles E. Hickman, Ph.D., P.E.*

Secretary \*  
*David G. Green*

Area 1 Virginia Council \*  
*Adeeb Hamzey*

Area 2 North Carolina Council \*  
*Carlisle 'Chip' Dawson*

Area 3 Georgia \*  
*Chris Hardy*

Area 4 Florida Council \*  
*Kathy Rinehart*

Area 5 Tennessee Council \*  
*Philip Lim*

Area 6 Alabama/Mississippi \*  
*Elizabeth Kuhn*

Area 7 South Carolina Council \*  
*Stephen G. Carroll*

Area 8 Kentucky & Indiana \*  
*John Parr*

Area 9 Jamaica \*  
*Devon Gayle*

Awards & Recognition \*  
*Mary Ellen Randall*

Conference \*  
*Donald W. Hill*

Communications \*  
*Bill Clayton*

Educational Activities \*  
*J. Patrick Donohoe, Ph.D., P.E.*

Finance Committee  
*Charles E. Hickman, Ph.D., P.E.*

Membership Development \*  
*Lee Stogner*

Nominations & Appointments  
*Bill Harrison*

Professional Activities \*  
*Adeeb Hamzey*

Strategic Planning \*  
*Richard Riddle*

Student Activities \*  
*Eric Ackerman, Ph. D.*

Student Representative \*  
*TBD*

Government Activities  
*TBD*

## **Communications Subcommittees**

Archive Management  
*TBD*

Electronic Comm. Systems Coordinator  
*David G. Green*

Newsletter Editor  
*Quang Tang*

Public Information  
*David L. Bower*

Webmaster  
*Carlisle 'Chip' Dawson*

## **Professional Activities Subcommittees**

PACE

*Adeeb Hamzey*

IEEE USA Career & Employment Assistance Committee Chair  
*David T. Macchiarolo*

## **Ad Hoc Committees**

GOLD Representative  
*Joey A. Duvall*

History  
*Vernon Powers*

Industry Relations  
*Alan Thomas*

Leadership Development  
*Charles J. Lord, P.E.*

Leadership by Developing Others  
*Richard L. (Dick) Riddle*

Regional Life Member Coordinator  
*David McLaren*

Section/Chapter Coordination  
*William (Bill) Ratcliff*

Sections Congress Coordinators  
*Butch Shadwell / Sean A. Haynes*

Special Projects  
*TBD*

Special Review  
*Roy H. Harris*

Southcon Representative (senior)  
*James H. Beall*

Southcon Representative (junior)  
*James M. Howard*

## **Southeastcon Chairs**

Southeastcon 2005 Chair  
*Eric Ackerman, Ph. D.*

Southeastcon 2006 Chair  
*Alan Long*

Southeastcon 2007 Chair  
*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 - October 2005

Butch Shadwell

Last time I was discussing a special TES device employing an “infrared photo-detector, or QWIP. ...., we illuminated it with an IR LED at 1 meter distance, with the sensor in the center and perpendicular to the transmission axis of the LED. Our QWIP has an area of 0.1 cm<sup>2</sup> and the LED emits 20 mw/Sr. With a photo-responsivity at this wavelength of 0.6 A/W, what current should we see from this detector during this test?”

This problem is really a pretty simple matter of calculating the number of steradians subtended by the area of the receiver and then multiplying that figure times the emitter output power per steradian and then the receiver responsivity.

So to calculate the steradians on the receiver we take the distance in cm and square it, which gives us 10,000 cm<sup>2</sup>. Then this figure is divided into the area of the receiver, yielding a solid angle of  $1 \times 10^{-5}$  steradians. This figure times the output power per steradian tells us that the receiver will be exposed to  $2 \times 10^{-7}$  watts of IR illumination. The final step is to apply the receiver photo-responsivity value, which tells that the receiver current in this case will be  $1.2 \times 10^{-7}$  amps. But I bet you already knew that.

# Brain Teaser Challenge - December 2005

Butch Shadwell

Have you ever really considered the importance of toes? I have recently had occasion to visit a podiatrist and he went on at some length about how I had some messed up toes. I would never have given them a second thought if this medical genius hadn't decided to give me an emotional trauma that I may never get over. If your toes are healthy and normal, you should thank your lucky stars. Believe me, the heartbreak and embarrassment one can experience when forced to wear flip-flops is not for the faint of heart. You find yourself watching everyone's eyes to see if they are glancing downward excessively. And you know that if they drop something, it can only be a ruse to get a closer look at your physical deformity.

I have to go back on Tuesday to see about getting orthotics fitted. I suspect they are of little value, but you like to humor these people. I noticed on my last visit, the doctor had his assistant take a series of xrays with their own special foot xray machine. In an xray tube the xrays are produced by bombarding a metal plate with an electron beam. If the assistant controls the xray flux density by setting the current of the beam, who can tell me what happens when she adjusts the voltage? I'll let you know how the orthotics workout in a future column.

Reply to Butch Shadwell at [b.shadwell@ieee.org](mailto:b.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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# Membership Development Update

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Once again I would like to thank all of you for your support of the 2005 Region 3 Senior Member Upgrade Drive. We have reached 121.8% percent of the yearly goal of 206 new Senior Members. This program is very important in that it allows us to recognize the contributions of our fellow Members. And the Senior Member program encourages other Members to continue their support of the IEEE.

The full statistics of the Senior Member program can be found at, [http://www.ieee.org/organizations/rab/md/smgoals/2005region\\_goals.htm](http://www.ieee.org/organizations/rab/md/smgoals/2005region_goals.htm)

I would also like to announce the winners of the Senior Member Upgrade competition, the Section winners are,

- Atlanta - Section with the most Senior upgrades, 25
- Western North Carolina - Section with the most upgrades as a percentage of their size, 17

Please start discussing your local Section 2006 total Membership program and ensure that your local Membership Chairs are ready to support the challenge.



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