IEEE Region 3 Newsletter

Message from the Region Director

2004 IS HERE – LET'S LOOK BACK AND LET'S LOOK FORWARD

Following Jim Howard's leadership as Director for the IEEE Region 3 is an awesome challenge for me as 2004 – 2005 IEEE Region 3 Director. I look forward to serving the members residing in our region. Please do not hesitate to contact me with your ideas, suggestions, complaints (I am sure there are a few). I live in Decatur, GA, adjoining Atlanta. Email: w.harrison@ieee.org; telephone: 404-378-5553; Fax: 404-378-4447.

Jim Howard has served the IEEE in numerous capacities for many years. In addition to his IEEE Board of Directors and IEEE Committee work, Jim continues to work with his local section, his technical society (Power Engineering), student branches, section newsletters, you name it. Jim's wife, Donna, is his mainstay. Donna was recently described by IEEE President-Elect Cleon Anderson as the "IEEE volunteer's volunteer". Help me applaud Jim and Donna Howard for their indefatigable support of the IEEE (j.howard@ieee.org).

Region 3 has been recognized by our peers in the USA, and around the world, for our innovative projects and programs. Notably, the R3 Communications Committee has devised ways for us to develop projects and to conduct Region 3 business via electronic meeting technologies. The tools and techniques they have developed allow us to file and access our committee and project reports on the Internet. It speeds up handling our routine operational matters, and it makes us more efficient and proficient in taking care of the region's business.

Region 3 has taken the lead in Membership Development activities, IEEE Employment Assistance for members whose careers have taken unexpected turns, and Industry Relations projects. We think we are pretty good at member support and membership development – but we need your input and help. There is a lot more that could be done in these areas.

VIP (Volunteers in Philanthropy) or (Very Important People)

Because of our active, and proactive, involvement in IEEE projects and programs over the years, Region 3 was asked to participate in an IEEE Foundation effort called Volunteers in Philanthropy. The IEEE's VIP philanthropic program encourages IEEE members to think about ways we can give back to our profession.

Personally, I think of this as a way to honor our parents, professors, mentors and friends who nudged and encouraged us into our rewarding careers and professional lives. They made our personal and financial successes possible. The IEEE Foundation VIP Program will help us to spread the word about the important efforts of the IEEE Foundation and the programs

Bill Harrison,
Region 3 Director 2004-2005

they fund that help to encourage the bright women and men following in our footsteps to engage in engineering and technology jobs. The bottom line is that we would be investing a few of our accumulated dollars in the futures of our young friends, and in the continuation of our rich technological heritage. Have you thought about putting the IEEE in your will? Maybe you have some other form of charitable contribution to the IEEE in mind.

Check the interesting IEEE Foundation article on Region 3's VIP involvement at http://ewh.ieee.org/reg/3/enewsletter/vol18no3

To put you in the mood for further thinking about your personal legacy and your professional heritage, go visit the IEEE Virtual Museum at http:/www.ieee-virtual-museum.org/.

Jim Howard
R3 Past Director
J.howard@ieee.org

"Over the last two years we have accomplished a great deal, and I am proud to have been part of those accomplishments"

Past Director's Comments
Jim Howard

As we begin a new year, I just wanted to take the opportunity to say thank you for allowing me to serve as your Director for 2002-2003. It has been an honor and a pleasure to work with the other elected IEEE volunteers at all levels, and I continue to be amazed at their dedication and volunteer spirit.

Over the last two years we have accomplished a great deal, and I am proud to have been part of those accomplishments. These included our first ever Jamaica Section sponsored SoutheastCon held in Jamaica, the holding of two Regional meetings during 2003 (it had been years since we had done this), the 100% compliance of our Sections, Councils, and Chapters with filing reports and having the required signature cards – this was all done by our volunteers and it was extremely gratifying to be part of the process.

Bill Harrison, your incoming Director for 2004-2005, has been working with me to make sure we accomplish as much or more as we have during the past two years, and I believe he will do it with your help. Bill and I will continue to work together, as Dick Riddle, your Past Director from 2001-2002, and I did. Bill has many very good ideas and plans for the Region and I will work with him, and you, to make these happen.

One of the key items that helps Region 3 stand out amongst all ten Regions in the world, is our key reliance on past Region 3 Directors to help and guide us as we move forward. Their knowledge has been invaluable to me during my directorship and will be invaluable as we move forward. These past directors are assigned as Mentors to Region 3 Committees and they do a outstanding job of sharing their knowledge and leadership skills with others through this, as well as through other methods.

Should you have ideas, suggestions, or comments to share with your elected leadership, please don't hesitate to send them

to us – it will just help us help you! And please, get involved with your local Sections. They can, and do offer you unparalleled access to meetings, seminars, and networking opportunities.

As I end my term as your Director know that I will be working closely with Bill Harrison as he begins his Directorship. I will continue to be involved and available to assist you in any way I can, so please let us know what you, your Sections, Chapters, and Student Branch's need and it will be shared with your Region Executive Committee.

Wishing you the best New Year ever,

Jim Howard
Region 3 Director 2002-2003
j.howard@ieee.org

Job-hunting tips for mid-career professionals

• Assume that the person interviewing you will be younger. Come prepared to counter assumptions that your age is a drawback.

• Emphasize that you're up to date with the relevant technology. Include specific examples on your resume.

• Dress professionally and as fashionably as reasonable. Walk, stand and sit with confidence. Offer a firm handshake to the interviewer. Smile. Remember that impressions made in the first few seconds are extraordinarily influential.

• Project enthusiasm and high energy. Don't complain about your former employer, no matter how shabbily you feel you were treated.

• Cite specific examples of how your past experiences can help meet specific needs of your target employer.

• Continue networking with everyone you know. Many job opportunities come through word of mouth from smaller employers who may not be advertising, posting on Internet job boards or attending job fairs.

Section Support for Mid-Career Members

Many members are aware of Student Professional Awareness Conferences, organized by student branches and bringing in several speakers on topics selected by the students themselves for sessions ranging in length from one evening to a weekend day and a half.   Not as many members know about the Member Professional Awareness Conference, organized by a section, to bring vital career information to the mid-career engineer.

Member Professional Awareness Conference

Support is available through Region 3 and IEEE-USA to assist a section in producing an M-PAC. Information on how to get started in planning such an event is found at http://www.ieeeusa.org/pace/mpac.asp , along with an extensive list of speakers and topics. A logical starting place is an informal survey of members of the Section Executive Committee to compare notes on what content would be most useful to section members, then having the PACE Committee develop a project proposal to kick it off. The Region 3 PACE Coordinator (g.mcclure@ieee.org) can help with the paperwork for a funding request.

Career Transition Aid

Local university resources may be available to assist in putting on an M-PAC that can provide members with overviews of the processes in planning a career transition. For example, in several sections there has been recent growth in interest in biotechnology, as a result of expansion of work by local companies in this field. There may be interest by a section where the downturn in telecommunications has left many members jobless in mapping the education steps to qualify for jobs in the new field.

Industry Links a Two-way Benefit

The section PACE committee may survey local employers of engineers to establish links with their Human Resources departments, both to understand what the current company engineering needs are and to open a communication channel with the HR groups that can be useful when future job needs arise – the section is well-positioned to put out the word to its members who may be qualified.

Promote the Section and its Services

Business cards can be prepared locally with contact information for the Section and listing the URL for its Web site. The PACE chair can spearhead this preparation, then provide the cards to the local HR departments contacted, and have supplies available for distribution at local job fairs – for outreach to both employers and non-members who could benefit from the networking available through section activities.

In addition, as a standard part of community outreach, the section Publicity Committee should be publicizing its schedule for both professional and technical programs through weekly event listings in the local newspaper (business section, high-technology). This publicity is usually available as a free service for non-profit groups, if the information is provided a week or two in advance. The listing should include the Section's Web site URL and a contact telephone number. Weekly mailings to the local newspaper will require less than an hour per month and $2.00 – well within the capabilities of sections.

Other resources to assist Sections in developing life-long learning programs and in organizing a local industry relations program are found at the Web site for the Sections Congress 2002, http://www.ieee.org/organizations/rab/sc/2002/Presentations/Greenindex.html where PowerPoint presentations by Bill Harrison, George McClure, and John Meredith are available.

Newsletters Continue the Message

Section newsletter editors can spotlight information available at the IEEE-USA or Region 3 Employment Assistance Web sites. For example, the PowerPoint presentations available to assist in organizing a job search, found at the Career Navigator page. Sections with high or persistent engineering unemployment may wish to organize meetings every week or two for those in job searches to exchange information that may assist other members. This would be an ideal way to publicize new and on-going needs received from the corporate HR departments that had been contacted earlier.

George F McClure
Region 3
Director-Elect 2004-5
(g.mcclure@ieee.org)

......Engineering Connects..... **SoutheastCon 2004**

March 26 - 28, 2004   Greensboro Downtown Marriott   Greensboro, North Carolina
http://www.southeastcon.com

SoutheastCon 2004 Update
David Macchiarolo, SoutheastCon 2004 Publicity Chair

SOUTHEASTCON 2004, the annual IEEE Southeastern regional technical, professional, and student conference, will be held March 26-28, 2004, at the Greensboro, North Carolina Marriott Downtown hotel. The theme of the conference is *"...Engineering Connects...".* With a wide variety of technical and educational programs, and other activities , there is something for everyone at SoutheastCon!

 The conference is being co-hosted by the IEEE Central North Carolina Section, Guilford Technical Community College, North Carolina A&T State University and the University of North Carolina at Greensboro. It will include sessions for presentation of technical papers, tutorials and workshops, industrial exhibits, professional training, and social events. Detailed planning for the conference has been underway since 2002.

 New to SoutheastCon 2004 this year is a program for high school math & science students, "The Walking Robot Challenge". Teams of 2-8 high school students will design and build a motor powered robot that walks under direction. A kit for the robot will be provided at NO CHARGE for up to 20 schools that apply. The competition involves four main components: a written report, the construction of the entry, the robot's performance on a course in competition with other entries, and an oral report. The IEEE Central North Carolina Section will provide training materials, mentors, blueprints and instructions.

 As always, one of the highlights of the conference will be the Student Competitions. Teams of engineering students from colleges and universities from across the southeast United States will compete in the Hardware Contest to overcome a pre-defined robot obstacle course. The autonomous (self-guiding) robots are required to start on the course when directed by a "traffic signal", travel to a station to receive instructions, and proceed on the course according to the instructions received, capturing metal objects in the correct sequence, and delivering the captured objects at the end of the course. Team points are awarded for correct operation within the time limits specified.

 Along with the Hardware Contest, the Software Programming competition will challenge teams of engineering and computer science students. After being given a series of defined programming problems to solve, using Java, C, or C++, the programming teams are ranked according to the most problems solved in the least amount of time. At least six problems will be posed, which avoid, as much as possible, dependence on detailed knowledge of a particular applications area or a particular contest language. The purpose of the contest is to test the teams' skill in adapting programming algorithms to solve the specified problems. No outside network connections will be used during the contest.

 The Technical Program for SoutheastCon 2004 includes: Technical Sessions, Tutorials and Workshops. The Technical Sessions will feature authors presenting original papers on all aspects of electrical, computer, and communications engineering that have not been published or presented elsewhere.   At least one author per paper must register as an author for the professional conference. Author Registration includes: published Conference Proceedings and a CD copy, Professional Conference, Friday Reception, Saturday Banquet, and Sunday Awards Lunch.

 On Friday, March 26th, a series of day-long Professional Development Seminars and tutorials will be presented. One morning session will feature noted career consultant Joyce Richman on learning how to interview more effectively, how to be more effective at promoting yourself within your existing organization, and how to turn negatives into positives. An afternoon session features financial consultants Jeri D'Lugin and Robert Payne with a Financial Checkup to help you prepare for your financial future. For registered professional engineers, these seminars will provide PDH credits.

One 4 hour tutorial by Wiremold and its other companies will cover many areas of wiring, both power and communication. A 3 hour tutorial from DuPont will cover "Low Temperature Cofired Ceramic (LTCC) Technology".

 As an added attraction, social events and special events are also planned. The conference will sponsor a reception on Friday March 26th and a banquet on Saturday March 27th . There are also special events planned for spouses, and others who are interested:

Friday March 27th
1:30 PM: Tour of Richard Petty Museum, Randleman, NC
8:00PM: "The Spencers: Theatre of Illusion" at the Carolina Theater

Sat. March 28th
10:00AM: Tour of Replacements Limited: the world's largest selection of old & new china, crystal, silver, and collectibles

 The source for everything you need to know can be found at the home for SoutheastCon 2004: www.southeastcon.com Here you can find details of the programs and student competitions, author's information, special event details, day-by-day schedules, on-line registration, tutorials and professional development, and everything else you need to plan your SoutheastCon 2004 visit.   We post updated information on the website, so check it often!

 On behalf of all of the participating organizations and sponsors, the SoutheastCon 2004 Committee wants you to join us in the most influential conference in Region 3 for promoting awareness of the technical contributions made by our profession to the advancement of engineering, science, and to the community.

 Don't wait- register today for SoutheastCon 2004! On-line registration is available at www.southeastcon.com .

REGISTRATION FORM
IEEE SoutheastCon 2004
March 26-28, 2004

Register Online – it is Quicker, Easier, more accurate, and <u>safe</u> on our secure server! Go to:
http://www.southeastcon.com/register

NAME_____IEEE MEMBER NO._____

(Print name as you wish printed on badge)   (PUT "NONE" IF NOT A MEMBER)

COMPANY/ SCHOOL_____

ADDRESS_____

CITY_____STATE/PROV_____POSTAL/ZIP_____COUNTRY_____

PHONE (_____) _____FAX (_____) _____E-MAIL_____

Please describe any special dietary or physical needs._____

Please state any medical conditions that may require attention._____

Registration:

Member and Non-Member Registration includes: Conference, Reception, Banquet, Conference Proceedings, Conference CD.
Region Meeting Registration includes: Region 3 Meetings, Reception, Region lunch Sat.,Banquet, Awards Lunch, CD.
Student Conference registration includes: Reception, Student Conference..
Student Professional Conference registration includes Reception, Technical Sessions, Conference CD.
Life Members and Unemployed Members may register for professional conference at the Student Rates (not R3 meetings)
Life / Unemployed Member Conference registration includes Reception, Technical Sessions, Conference CD.

IEEE Members:	Qty	Advance	On-Site	Subtotal	Non-IEEE Members:	Qty	Advance	On-Site	Subtotal
Conference	___	$225	$275	$_____	Conference	___	$275	$325	$_____
Student					**Additional Items:**				
Student Conference	___	$30	$35	$_____	Banquet Saturday	___	$30	$45	$_____
Professional Conference	___	$30	$35	$_____	Student Party Saturday	___	$15	$20	$_____
Life Member Conference	___	$30	$35	$_____	Awards Lunch Sunday	___	$30	$45	$_____
(not Region 3 mtg)					Conference Proceeding (hardcopy)	___	$30	$30	$_____
Companion Conference	___	$45	$55	$_____	Conference CD	___	$5	$5	$_____
Petty Museum Tour	___	$25	$25	$_____	**Region 3 Committee, Excom, & PACE**	___	$100	$110	$_____

Total Amount Charged or Enclosed……………………………………………………………… $ _____

<u>ADVANCE REGISTRATION CUT-OFF DATE IS MARCH 5, 2004.</u> See website for cancellation policy.

Make all checks payable to IEEE SoutheastCon. All fees payable in $U.S.

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

Credit Card Number: _____ Expiration Date: _____

Card holders name exactly as it appears ont the card: _____

Cardholder's Signature: _____ Date: _____

Mail to: IEEE SoutheastCon 2004, 108 Huntington Circle, Cary, NC 27513 or fax to 919-319-1707

Last Rev 12/12/2003

Director's Column

(continued from Page 1)

TAKE ACTION: NEXT, contact Karen Nowicki, VIP Coordinator, at k.nowicki@ieee.org, or call her at 732-562-3939. Karen or I can refer you to legal advisors to help you handle the paperwork. Make sure you take advantage of any Federal or state tax laws relevant to your particular situation. Another contact for advice on how to structure your personal contribution is Kristina Collmann, k.collmann@ieee.org or call 732- 562-3915.

Many of us think of a circle of giving. FIRST, in the inner circle, we want to leave a significant portion of our assets to our children or other family members. SECOND, we think of our church or other significant charitable or professional organizations we may have been involved with over the years. I firmly believe the IEEE should be in our second circle of giving. How much would you consider putting in that circle for the IEEE? I welcome conversations about charitable giving – telephone call or email – you have my numbers, above.

2004 – 2005 INITIATIVES AND PROJECTS

As incoming Director for the Region, I presented several priorities and initiatives to the Region 3 Meeting November 21-23, 2003. Region 3 Committees and many other R3 volunteers will be involved in implementing these initiatives and ongoing projects. Please contact me if you have questions or would like to be involved. You will hear more as these important Region activities progress.

In addition to our regular Region 3 committee work, the initiatives and ongoing projects include the following:
Leadership by Developing Others (LDO)
Membership Development Challenge, including coordinated efforts in:
Industry Relations
Public Relations
Employment Assistance
SoutheastCon/Conference Registration System
Remote Meetings Project(s)
Newsletter/Communications with Members
Others – Remember, SSVR (Section Support Via Regions) funds are available for Section-initiated projects – contact me for funding guidelines

IMPORTANT EVENTS IN 2004

The Atlanta Section celebrates its Centennial Anniversary (14 January 1904 – 14 January 2004) with a series of activities during 2004, starting with the section's annual banquet in January.

The Alabama Section was born 22 May 1929 and celebrates its 75th anniversary in 2004.

Region 3 will host the IEEE Board of Directors series of meetings in Savannah: 12–15 February, 2004.

The Savannah Section celebrates its 50th Anniversary with a section dinner, banner presentation, and celebration in conjunction with IEEE Board Meeting Series.

IEEE Membership Renewal and Retention 2004

Lee Stogner
Region 3 Membership Development Chair
l.stogner@ieee.org

Beginning in October of each year, the IEEE mails out membership renewal packages to every member. This begins a yearly campaign to encourage most members to renew early and avoid the year end rush. Members that renewed their membership online by November 14 were entered into a contest to win a Dell Notebook computer. Some members renew late in the year and run the risk of interruptions in their membership and subscriptions. And there are some members that do not renew for financial and other reasons.

Two-thirds of IEEE members that do not renew their membership in any given year are Students and Young Professionals. In talking to IEEE members in this group, the consensus was that this percentage can be substantially reduced through PERSONAL CONTACT from their IEEE colleagues. Personal contact is important in curtailing member attrition at these two important junctures:
- when a student is nearing graduation
- when a new GOLD member enters a Section

What can Sections do?

- Start with your SAMIEEE disk to obtain contact lists for personal outreaches to these individuals. See instructions at http://www.ieee.org/organizations/rab/md/samieee_query.html
- on how you can formulate queries to create these lists.
- Send an email message to the people on these lists with offers of congratulations or help, or invitations to a meeting or a GOLD Affinity Group activity.

To complete this retention effort and to ensure success, follow-up with the all-important PERSONAL CONTACT You may need to discuss the value of IEEE membership. More information on IEEE Benefits & Services can be found at,

http://www.ieee.org/organizations/rab/md/mdprograms.html

More information on the overall IEEE Membership Renewal program can be found at,

http://www.ieee.org/portal/index.jsp?pageID=corp_level1&path=membership/renewal&file=index.xml&xsl=generic.xsl

Please encourage your young and old members to stay with the IEEE. Let me know if there is anything that I can do to help.

Region 3 Executive Committee 2004

Director - Bill Harrison (w.harrison@ieee.org)

Director Elect - George McClure (g.mcclure@ieee.org)

Secretary - David Green (d.green@ieee.org)

Treasurer - Charles Hickman (c.hickman@ieee.org)

Past Director - James M. Howard (j.howard@ieee.org)

Area 1 Virginia Council - David Geer (d.geer@ieee.org)

Area 2 North Carolina Council - Carlisle 'Chip' Dawson (c.t.dawson@ieee.org)

Area 3 Georgia - Chris Hardy (c.hardy@ieee.org)

Area 4 Florida Council - G. Thomas Bellarmine (tbellarm@cis.famu.edu)

Area 5 Tennessee Council - Philip Lim (plim@mlgw.org)

Area 6 Alabama/Mississippi - R. Brian Skelton (b.skelton@ieee.org)

Area 7 South Carolina Council - Stephen G. Carroll (scarroll@ieee.org)

Area 8 Kentucky - John Parr (j.parr@ieee.org)

Area 9 Jamaica - Halden A Morris (hmorris@uwimona.edu.jm)

Awards & Recognition - John Twitchell (j.twitchell@ieee.org)

Conference - Don Hill (d.w.hill@ieee.org)

Communications - Bill Ratcliff (w.ratcliff@ieee.org)

Electronic Communications Coordinator - David Green (d.green@ieee.org)

Newsletter Editor - Quang Tang (q.tang@ieee.org)

Public Information - David L. Bower (d.bower@ieee.org)

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Educational Activities - Pat Donohoe (p.donohoe@ieee.org)

Finance - Charles Hickman (c.hickman@ieee.org)

Gold Representative - Joey Duvall (j.duvall@ieee.org)

Leadership Development - Charles Lord (c.j.lord@ieee.org)

Regional Life Member Coordinator - Dave McLaren (d.mclaren@ieee.org)

Membership Development - Lee Stogner (l.stogner@ieee.org)

Nominations & Appointments - James M. Howard (j.howard@ieee.org)

Professional Activities Chair - George McClure (g.mcclure@ieee.org)

Career Activities - Charles Lord (c.j.lord@ieee.org)

PACE - George McClure (g.mcclure@ieee.org)

IEEE-USA Employment Assistance Chair - David Macchiarolo (dmacchiarolo@triad.rr.com)

Sections Congress Co-Coordinator - Sean Haynes (s.a.haynes@ieee.org)

Sections Congress Co-Coordinator - Butch Shadwell (b.shadwell@ieee.org)

Southcon Representative - Jim Beall (j.beall@ieee.org)

Southcon Representative - Jim Howard (j.howard@ieee.org)

Special Review - Roy Harris (r.harris@ieee.org)

Strategic Planning - Bob Duggan (r.duggan@ieee.org)

Student Activities - Bruce Walcott (walcott@engr.uky.edu)

Student Representative - Patricia (Trish) Davis (padavis0@engr.sc.edu)

Conferences

Don Hill
Chair, Region 3 Conference Committee

Have you ever thought about having a conference in your section or chapter?

Scary isn't it! Love a challenge? But oh so rewarding!

Your local members (and potential members) could benefit from the knowledge and training that comes with a conference.

Where do you start? Societies and your region are always looking for future conference locations and topics. Societies tend to have conference committees already structured and would entertain your bid to host their conference in your section or chapter. This is where you can provide knowledge and training to local member and future members in their backyards.

You and your team would develop new skills and meet like minded members.

You would work hand-in-hand with their conference committee to provide them with advance local planning and logistics.

Region 3 (your region) annually sponsors SoutheastCon. You may remember that Jamaica hosted the 2003 SEC. Future SEC's will be in Greensboro NC, Ft. Lauderdale FL, and Memphis TN. Other sections like yours are expressing interest to host a future SEC.

Be bold! Form a committee and prepare a bid for SEC or other conference. The learning is intense; the work hard; and the reward priceless.

We can help you. Email me at d.w.hill@ieee.org to get things started.

I challenge you to make yourself and your section/chapter a better place to learn and expand your horizons.

Have a great year 2004,

Employment Assistance Resources

David Macchiarolo
R3 Employment Assistance Chair
d.macchiarolo@ieee.org

You may not be aware of the wealth of information and services available to you through your IEEE membership, to aid in job searches, in continuing education, and in coaching to find a new position. The portal to remember is http://www.ieee.org/r3jobs

If you are unemployed through involuntary termination and actively seeking employment, or if your income has fallen below certain levels, you can request a 50% reduction in your IEEE and society dues/assessments (including publications). Contact IEEE Member Services at 1-800-678-IEEE for details.

The IEEE has updated the resources available to members who are in need of employment and career assistance. The new *IEEE-USA Career Navigator* web site is now available at: http://www.ieeeusa.org/careers.

Services offered on the new Career Navigator page include:

- Access to the new & improved *IEEE Job Site, which is now supported by CareerCast, and has been relaunched* with an updated look-and-feel that improves user navigation, and ease of use.
- Employment & Career Strategies Forum – an online virtual community where members can network and collaborate with one another on employment and career strategies. This community provides members with discussion groups, chat rooms and other resources.
- Resources for consultants, and those seeking to enter that field
- Access to the IEEE Salary Service, including the former Salary Calculator – how do you stack up against your peers?
- Career Asset Manager Index (CAMindex), a resource to help you keep records of all the educational, professional and personal activities that might be helpful in quickly putting together a resume or job application.
- PowerPoint packages with tips on resume-writing, interviewing, e.g

    Resume and Cover Letter Writing
    Interviewing Types & Preparation
    It's Time For the Interview
    Networking
    Career Transitions
    Career Planning and Maintenance

- Other online and printed resources

In addition, Region 3 has also developed a web site specifically targeted at Region 3 members who may need additional employment and career assistance: http://www.ieee.org/r3jobs

This site contains some key resources targeted to Region 3 members, including:

- Searchable database of local companies
- Links to local area jobs and companies
- Employment / Economic News Links
- Links to Industry Associations
- Links to Continuing Education

All of the resources mentioned above can be accessed through links from the Region 3 Employment Assistance Web site.

Employment and career assistance is one of the many benefits that IEEE provides to its members. Check out the new and updated resources resources available to you today.

New Fellows

Each year, the IEEE Board of Directors elects a select few members (less than 0.1% of the membership) for election as Fellow Member of the IEEE. Join us in congratulating the following Region 3 members who are part of the Fellows Class of 2004.

MIROSLAV MIODRAG BEGOVIC
Georgia Institute of Technology
Atlanta, GA, USA
For leadership in developing analysis tools and protection techniques for electric power transmission systems and renewable generation.

KEVIN FRANCIS BRENNAN
Georgia Tech
Atlanta, GA, USA
For contributions to the modeling of impact ionization in heterostructures and multiquantum well structures.

MICHAEL JESSE BUCKLER
Lucent Technologies
Cary, NC, USA
For contributions to optical communications technology and engineering education.

GARY ROY ENGMAN
Black & Veatch
Orlando, FL, USA
For leadership in the development of analytical methods and standards for power systems.

JAMES FARMER
Wave 7 Optics
Alpharetta, GA, USA
For technical leadership in the cable television industry.

ALY E. FATHY
University of Tennessee
Knoxville, TN, USA
For contributions to advanced antenna concepts and implementations.

STEPHEN D. GEDNEY
University of Kentucky
Lexington, KY, USA
For contributions to computational electromagnetics.

JERRY HUDGINS
University of South Carolina
Columbia, SC, USA
For contributions to the design, modeling, and teaching of semiconductor devices for power electronics.

R. WAYNE JOHNSON
Auburn University
Auburn, AL, USA
For contributions to electronics that must operate in harsh environments.

YILU LIU
Virginia Polytechnic Institute & State University
Blacksburg, VA, USA
For contributions to modeling and diagnostic techniques for power equipment.

KRISHNA PALEM
Georgia Institute of Technology
Atlanta, GA, USA
For contributions to embedded computing.

JUSTIN SCHWARTZ
Florida State University
Tallahassee, FL, USA
For contributions to high temperature superconductors and magnet systems.

PAUL GREGORY STEFFES
Georgia Institute of Technology
Atlanta, GA, USA
For contributions to the understanding of planetary atmospheres.

IFEANYI CHARLES UME
Georgia Institute of Technology
Atlanta, GA, USA
For contributions to the thermomechanical reliability of microelectronic packaging.

DANIEL WARD
Dominion Virginia Power
Richmond, VA, USA
For contributions to electric power distribution systems.

DWIGHT L. WOOLARD
US Army Research Laboratory
Research Triangle Park, NC, USA
For leadership in the discovery and development of novel sensing methodologies and advanced electronic devices at terahertz frequencies.

SHIN-TSON WU
University of Central Florida
Orlando, FL, USA
For contributions to liquid crystal displays and tunable photonic devices.

The Best Kept Secret

Charles J. Lord, P.E.
Region 3 Leadership Development Chair
c.j.lord@ieee.org

How would you like to help shape the future? Would you like to make a difference in how our profession goes forward? Do you like to work with people and to help people? What about a risk-free environment to hone your leadership and management skills? You should seriously consider a volunteer position in your local IEEE section.

Being a leader in the IEEE is one of the best jobs in the world. Note that I did not say hobby or pastime; this is a job with much greater rewards than salary; or, as the US Peace Corps likes to say, it's the toughest job you'll ever love. Engineers volunteer in the IEEE because of their love and support for the profession. We are driven by a belief in technology and in those who will use it to shape the future. But we need tools to succeed at that job, and that is why the position of Leadership Development exists in our Region.

Mentoring is Not Dead

Long ago, on the first day of my first engineering job, my hiring manager took me aside and taught me one of the most valuable lessons I ever learned in engineering. He told me to always watch carefully the engineers around me and look for the best of the best, to associate myself with them, to ask them to mentor me. Secondly, he told me to watch for those who were eager and in need of mentoring or coaching and offer to mentor them. Thirdly, he cautioned me to watch for the "bad" engineers and avoid them whenever possible. Little did I know that the worst engineer in our company - who I had taken to shunning regularly - would succeed my boss and become my new boss. Soon I learned another job skill: changing employers. However, the first two lessons I learned have stuck with me, guided me, and made my engineering career richer and more rewarding. And I want to share those two lessons with you.

What is leadership? Leadership is about learning and teaching, mentoring and being mentored, serving and being served, sowing seeds and reaping 100-fold. In his best-selling book <u>Rich Dad, Poor Dad</u>, Robert Kiyosaki tells of his best friend's father, who chose to mentor him on financial matters. The author recounts one of his most valuable lessons:

> "*In addition to being good learners, sellers, and marketers, we need to be good teachers as well as good students. To be truly rich, we need to be able to give as well as receive. In cases of financial or professional struggle, there is often a lack of giving and receiving. I know many people who are poor because they are neither good students nor good teachers*"

Leadership Development in Region 3

So what is leadership development in Region 3? Is it the wisest sage in the region teaching you all he or she knows about doing business with the IEEE? If that were the case, I would certainly not have been asked to be the region's Leadership Development Chair. Leadership Development is about all of us being willing to teach and to mentor others while being willing to learn and be mentored ourselves. Just as there is more to electrical engineering than the simple flow of electrons or the sequence of computer code execution, leadership and the process of developing leaders is more than just learning the mechanics of IEEE (which are, of course, important and are part of our training). Rather it is the process of helping volunteers learn how to become leaders - great leaders, successful leaders - acquiring and honing skills that you will carry (and will carry you) for the rest of your lives. ***It is my true and honest belief that the best kept secret in our profession is that the best management school for EE's is not at any university but is right here right now: active volunteer leadership in the IEEE.***

But how do we get started? Where are the tools to help us succeed as IEEE volunteer leaders? They are found in many places. First off, there are bylaws at every level of the IEEE, including your local section or area/council. These are the "rules" of how things need to operate. There are also great resources available at my website at http://ewh.ieee.org/r3/leadership/ . Here we have links to a number of documents and PowerPoint presentations that can be presented as part of leadership training by myself or one of many other experienced leaders in Region 3. We are continuously working to improve the resources that we have available in Region 3 and elsewhere, both within and outside the IEEE. We are also listening to you, the leaders, to see what needs you think we may need and what ways we can make you and your fellow leaders, potential leaders, and future leaders more successful - in your IEEE career, your paying career, and in life itself.

Be a Legacy

I recently went on a family vacation that was a mixture of emotions; this was the first trip together since a parent had died, and the mood went from mourning loss to celebrating a life. The thing that became apparent during the trip, however, was that I soon saw the missing parent in all of the people there: the humor, the skills, the ready knowledge had been imparted over the

years, creating a legacy that will live on. Indeed, as Max Dupree of the Drucker organization put it, a great leader - or a successful organization for that matter - leaves a legacy that all can see. Looking around, I see a lot of legacies that have been left and are currently being created within the IEEE. In many cases, these legacies are created by the never-ending process of developing others within the IEEE to be current and future leaders. A great example of this can be seen in the legacy of Dan Jackson, who is remembered and honored in this newsletter. Can you become a legacy in the IEEE and in the profession? Sure you can. Look around you for tomorrow's leaders, tomorrow's stars; take one by the hand, be a coach, be a friend, be a mentor. Need help? Take a star by the hand. Can't find one? Ask me or any of the other leaders you see listed in this newsletter.

What Do We Offer?

Leadership Development can take many forms, from a few hours of training at an administrative meeting to a full weekend retreat that rivals anything in Corporate America. We are constantly updating and creating new modules to meet the needs of our many volunteers. Here are some of the modules that make up Region 3's Leadership Training:

Intro to IEEE Region 3 Leadership - where do we fit in the "big picture" and why are we here?

IEEE Leadership 2004 - the "nuts and bolts" of how a section operates, who to call for what and where the resources are.

Communications Basics for Sections - how we use all the communication "tools" available to us to communicate and work with one another and how we communicate-both ways-with our members.

Time Management - we can't give you an extra hour each day but we can help you find it.

Learning Styles - How to teach someone if they are aural, visual, or kinetic- and how to tell.

Presentation Skills - Yes, it scares all of us. But come and learn in a fun, safe environment. In the long version, you get to practice! Requires some advance pre-work.

Personality Types - Uses Jungian (Myers-Briggs) type and teaches not only what you are and how you interact with people but how to deal with the other types. Requires pre-work (a fun, easy test to determine your personality type). Long version includes a group activity to discuss a case study to practice "typing" and determining best course of action.

Conflict Styles - Teaches Thomas-Kearney Conflict Styles and what your native style is and how you have to adapt to different situations. Requires pre-work (a fun, easy test to determine your natural conflict style). Long version includes a group activity to discuss a case study to practice resolving conflict and determining others' styles.

Projects - A quick look at a little-known fun activity and on-the-job training for management: Projects! Ideas for section / area / council / region level projects, including examples of past projects and sources for funding.

Conference Basics - One of the best projects a section, area, or council can carry out is a seminar, workshop, or conference. Whether you want to host an existing conference or "roll your own", we give you the basics of how to plan and carry out a successful conference, including a look at the rules as well as the many resources available throughout the IEEE.

Project Management - How to plan, manage, and carry out successful projects.

Vision, Mission, and Strategic Planning - Does your section have a vision of where it wants to be? Do you have a plan? Goals? Have you ever done strategic planning? Come learn how!

So how do you get started? Check your local section newsletter or web site for upcoming meetings and get involved. Call or e-mail your local section chair. Not sure who to call or what your local section is? Contact me and I will get you in contact with the right people. Already a volunteer and want to find out more about training? Contact your area / council chair - or, again, contact me if you are not sure where to go. We are here to help you succeed. Together we will help one another be the future, the legacy of the IEEE.

It is my true and honest belief that the best kept secret in our profession is that the best management school for EE's is not at any university but is right here right now: active volunteer leadership in the IEEE.

Tribute to Daniel W. Jackson

K. Reed Thompson

I would like to celebrate with you the life of a good friend to each of us and the IEEE, Dan Jackson. Dan died last August 10th of prostate cancer.

As you can see from the picture, Dan always wore a smile on his face. He was a happy man. I remember when he came to see me last year at my SC home, he had just completed a difficult chemo-therapy treatment, and he looked pale and weak, but he came in the door smiling, ready to join in the festivities that were going on. He was under treatment for ten years, and all this time he kept working for the future of the Institute. He kept smiling even in his darkest days.

Dan never complained about his disease and did not speak about it in conversations unless asked. However he did on more than one occasion urge male members of the Region 3 Executive Committee and others to get the screening tests, PSA and DRE, regularly after age 40 so that if anyone developed this disease, it could be diagnosed early when the prognosis is better and a cure may be possible. We should all carry on this vigil on Dan's behalf against this disease and remember him each time you urge a buddy to get his tests each year.

This is a tribute to a life well lived, fully lived. He was energetic in his pursuits. He kept his appointments and was always well prepared. He was steadfast. Dan received a B.S. in Electrical Engineering from Lehigh University in 1950 and then served as a First Lieutenant in the U.S. Army in Korea from 1951 to 1953. He achieved the level of Captain in the Army Reserves in 1960. Following the active duty service he began a 41 year career with General Electric Company, primarily in Roanoke, Virginia where he retired from GE in 1991. Dan has a long and distinguished record of service to IEEE and Region 3. He had a huge talent for service and leadership that was recognized when he was elected Director of Region 3. His achievements were many but I would like to highlight a few that center around his term as Region 3 Delegate/Director for 1990 and 1991. Prior to that he served in all the elected positions in the Virginia Mountain Section and some additional committees. During his term as Director he also worked diligently at the Institute Board of Directors level and contributed to the Educational Activities Board where he had a strong interest in continuing education. Altogether while on the Board and during the following 12 years he accumulated over 100 man-years of service at the Institute level on various boards and committees. That's an average of over 8 Board and committee positions simultaneously every year!

At Region 3 he also served in many leadership and committee roles including the Strategic Planning and Educational Activities committees and was the Region 3 Sections' Congress Coordinator. He was definitely not shy when he had a point to make. He spoke up for his ideas and negotiated with good humor while respecting new ideas. After his term as director he also continued to serve the Virginia Mountain Section in many positions including another term as Section Chair.

For this tireless service he received Outstanding Service Awards from Region 3, the Virginia Council, the Virginia Mountain Section

**Daniel W. Jackson
1929-2003**

and the IEEE Educational Activities Board.

In order to further honor this record of service by Dan, and perhaps others with similar records, this year Region 3 created a new award to be known as the Daniel W. Jackson Award, for exemplary and dedicated service to IEEE and the engineering profession. Dan was the first recipient of this award on July 26, 2003 at his home in Roanoke. Following receipt of this award I am told that one of his children asked what he had done to earn it. His reply was "I never did anything that I did not feel it was my duty to do."

Although being busy with all this IEEE activity, he also found time to serve on the Virginia Society of Professional Engineers Board of Directors and as President of their Roanoke Chapter. He received the VSPE Outstanding Service Award in 1976.

Also he accumulated over 25 years service as an adult leader in the Boy Scouts of America. He received the Blue Ridge Council BSA Silver Beaver Award in 1979.

He was a leader in his church where he served as deacon and later as an elder. Dan was known for his integrity, dedication, generosity and ready sense of humor.

Dan and Doris had three children, daughter Barbara, sons David and Gordon who together provided them with four grandchildren. The children following Dan's example are all well educated professionals making a strong contribution to their professions. Dan was proud of his father in whose footsteps he followed and he celebrated his life to us. His dad was a fellow of the Institute and a distinguished educator who also died of prostate cancer. Dan's grandfather was also a distinguished educator who in the early 1900's worked with Thomas Edison and Steinmetz and others to develop an appropriate curriculum for electrical engineers. His grandfather was also at one time the Department Head of Electrical Engineering at MIT.

Even with all this, Dan was not all "work and no play". I remember Dan just loved to tell funny stories. I sometimes missed the point but Dan, at least, always got a hearty laugh from his stories. He must have loved to travel, he did so much of it. He reluctantly embraced the computer chat sessions that replaced some of the meetings because he was a people person. He enjoyed being with his friends and colleagues.

Although when the occasion required it he would wear a tie, he preferred to wear a bolo. He liked nothing better than to go square dancing with his wife Doris. He and Doris were very active in Square Dancing in Roanoke and frequently participated in exhibitions and competitions. He could "allemande left and do-si-do" with the best of them

He often spoke of the good times with his family. He shared with his brothers and sisters a cabin on the coast of Maine where he very much enjoyed visiting and relaxing with them.

In conclusion I would like to say to Dan, "You will be deeply missed and long remembered."

REGION 3

IEEE   **IEEE**

VOLUME 6   NUMBER 2   SPRING 1991

From the Director...

Daniel W. Jackson, P.E.
Region 3 Director

It is the best of times; it is the worst of times! As members of the IEEE, we all belong to the greatest technical professional society in the world. Those of us who participated in Sections Congress '90 were part of one of the most exciting IEEE events ever held. Although this occurs every three years, in Region 3 we have the opportunity each year to attend our own event. The professional conference at Southeastcon is our chance to tell our colleagues about new discoveries, new applications, new methods. Holding the student conference at the same time provides students and professionals the opportunity to renew our enthusiasm and excitement at being involved in the world's most exciting profession. The opportunities for achievement and service to mankind are unlimited and reach from the greatest ocean depths to the end of the universe. Electrical power and control are required in water purification, in launch and control of communication satellites, in magnetic resonance imaging, and almost every other activity you can think of. What other profession provides such widespread opportunities to those just starting out and to those who may be reaching the end of a long career?

The IEEE provides to its members the chance to help each other, other professionals, and the general public. There are many conferences and seminars sponsored by the technical societies within Region 3, for the spreading of knowledge. We also hold many meetings to discuss matters such as ethics, career planning, technology policy, pensions, and all the other topics with which concerned engineers are involved. All engineers can become involved in the local section or chapter and in serving others improve their own leadership skills, technical knowledge, and professional attitude. The chance to meet and know leaders in your field, local and worldwide, is

> *As members of the IEEE, we all belong to the greatest technical professional society in the world.*

probably the greatest advantage of membership and one which we should all promote.

It is the best of times, it is the worst of times! The critical political and economic conditions worldwide are very much affecting IEEE members whether in Kuwait or Poland or Singapore or Florida. Many of our members here in Region 3 have been or will be directly affected by cutbacks in em-

ployment. The crisis in the Middle East is affecting travel and company expenditures on conferences and exhibitions. The global recession has affected the membership growth of the IEEE and thereby the income. For these and other reasons, the funds allocated to Region 3 from the IEEE general fund will be the same in 1991 as last year. Other funds from headquarters are likely to be similarly restricted. Therefore, funds from the Region to the areas, councils and sections will be more limited than in the past. All of us must find creative and innovative ways to improve income for the sections and area/councils, as well as reducing expenditures without decreasing the services which our members need and deserve. We need not be discouraged but should accept these challenges as opportunities to stretch our talents.

All the challenges and difficulties can be turned into great opportunities. I look forward to working with all of you to serve our members during this exciting challenging year of 1991.

> **Dan was always dedicated to the IEEE and our Region. As you can read here in his Director's Column in 1991, his views and insight was as applicable to today as it was in 1991.**

Attention Region 3 Members
Don't forget to _REGISTER_ for
Southcon/2004

For complimentary admittance to Southcon exhibits, complete this form and **Fax to (310) 643-7328 prior to January 9th** or bring this completed form to the show for complimentary admittance. DO NOT MAIL

For complete CONFERENCE information, visit our website at **www.southcon.org**

(Form may be duplicated)

Southcon®/2004

Orange County Convention Center, Hall E
Orlando, Florida

Exhibition Hours

Wednesday, January 14
9:30am - 4pm

Thursday, January 15
9:30am - 4pm

Save $25

Southcon®/2004 Registration Form

1. General Information: Persons under 18 years of age not admitted. Students 18 or older admitted on Thursday, January 15, 2004 only.

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Last Name

Job Title

E-mail

Company

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Mail Stop

City

State   Zip   Country

(   )

(   )

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How to Register

FAX Deadline - January 9, 2004
310-643-7328
Please do not both fax and mail

Electronically www.southcon.org
Your badge will be held for pick-up at the Orange County Convention Center.

On-Site
Bring this form with you to Southcon/2004 for FREE admittance. (Save $25.)

Day Planner			Tues. 1/13		Weds. 1/14		Thurs. 1/15	
			AM	PM	AM	PM	AM	PM
Southcon Conference Hours			9-4		9-5		9-5	
Keynote Luncheon (Noon to 2:00 pm)								
K1	What Lies Ahead for the Electronics Industry?, Susan Mulcahy, Vice President and Director of Research, Reed Electronics Group	$25				■		
Special Events								
SP1	Workshop in a Box: An Introduction to Designing with PICmicros using the PICkit1 Starter Board - Presented by Microchip Technology, Inc.	$50			■	■		
SP2	Take the Low Power Challenge: Develop Ultra Low-Power Embedded MCU Application - Presented by Texas Instruments, MSP430 Div.	$50					■	■
Design and Manufacturing Tutorials (Lunch Included)								
SC1	Analog Electronic Design	$310	■	■				
SC2	Advanced Signal Conditioning Design	$310	■	■				
SC3	BGAs - Layout Techniques, Routing, PCB Stackups and Rework Issues	$310	■	■				
SC4	EMC Printed Circuit Board Design Practices	$310	■	■				
SC5	FPGA Design with VHDL - Basics for Design Engineers	$310			■	■		
SC6	FPGA Design with VHDL - Advanced Topics	$310			■	■		
SC7	FPGA Design with VHDL - Test Benches and Design Verification	$310			■	■		
SC8	Grounding, Bonding and Shielding	$310			■	■		
SC9	Opto-Electronic Design Considerations	$160					■	
SC10	Reflow and Wave Soldering with Emphasis on BGAs	$310					■	■
SC11	Thermal Aspects of Electronics Cooling	$160					■	
SC12	Troubleshooting the SMT Manufacturing Line - Defect Causes & Solutions	$310					■	■

CEUs will be awarded for all tutorials.

Register Early – _Prices above effective through December 23, 2003._ Beginning 12/24/03, the cost of each course increases by $50.

Special Assistance - If you require special assistance covered under the Americans with Disabilities Act, please contact us at (310) 524.4100, Ext. 218 by December 24, 2003.

FOR UPDATED SHOW INFORMATION, VISIT www.southcon.org

Brain Teaser Challenge - January 2004
Butch Shadwell

My calculator is overheated from the last two BTCs, so this time let's do a little trivia. In my younger days I had occasion to visit one of my Arkansas cousins who was trying to make a killing selling surplus military equipment. You younger folks may not know, but it was a common practice in those days for the military to sell expensive electronic parts and equipment for pennies per pound. It was amazing the good deals you could find. Well my cousin Otis, had just scored 317 pounds of little glass bulbs with five wires protruding radially around the outside of each one. The thing looked like it could have been the hub and spokes of a very tiny spinning wheel.

Anyway, Otis wanted me to help write the ad for the ham swap meet that was coming up and wasn't sure how to describe his bounty. I gave him a hint that these vacuum tubes were named for the fruit/nut of a common tree. With just this much information, can you tell me what the common name for this type of tube was? And to really impress me, what were the five leads connected to inside the envelope?

Reply to Butch Shadwell by January 26 at 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. The solution to this challenge will be published in the February Region 3 Newsletter, which will be available in February (surprise!) at http://ewh.ieee.org/reg/3/enewsletter

Brain Teaser Challenge Solution - September 2003
Butch Shadwell

The BTC last issue was about interplanetary travel, in a very simplified form. It had to do with the fact that Mars is in perigee and what if visiting Martians were traveling in a space craft as described. "It is a mere 30 million miles away…accelerate your craft at a constant rate of 9.8 meters per second squared, how long will it take to arrive and stop at Mars orbit? Fortunately, you can swing your ship around so that the thruster can be used to slow as well as speed up your ship. For extra credit, tell the highest speed you ship will reach on this trip. Let's ignore the fact that the target is actually moving during this flight and any gravitational effects. If you're really feeling intelligent today, tell me the total amount of energy used for the trip in kilowatt-hours if our craft has a mass of 5000Kg."

This one takes more number crunching than most, so here we go. First the acceleration curve is only half the trip long, so I convert 15E6 miles into 24.1E9 meters. Then we know that $X=1/2(At^2)$, so $t=(2X/A)^{1/2}$. We get t=70.1E3 seconds for half the journey. This means that the whole trip takes about 39 hours. In case you didn't catch it, 9.8 m/s^2 also happens to be the rate at which the pavement accelerates toward your face when you trip over the chalk line in a field sobriety test. Then V=At, since the highest speed is at the midpoint we get Vmax=687E3 m/s or 1.54E6 mph (c/435). Note that we are also ignoring the relativistic change in mass of our space ship. So for the last part you should know that 1 watt-second = 1 joule = 1 Newton-meter. Our ship's engine is exerting a constant force of 49E3 Newtons for the entire trip (F=ma). Times the distance of 48.2E9 meters, we get 2.36E15 watt-seconds. After one more conversion we get 656E6 KWH, but I bet you already knew that. – Live long and prosper.

<u>Mark Your Calendars!</u>

Southcon 2004: January 13-15, Orlando, FL. http://www.southcon.org

The IEEE-USA Leadership Workshop (formerly called PACE Workshop) meets in Atlanta: 19–21 March 2004.
http://www.ieeeusa.org/conferences/2004workshop/

SoutheastCon 2004, March 26-28, Greensboro, NC
http://www.southeastcon.com

Fall Region 3 Meeting in Atlanta, tentative date: 15-17 October 2004.

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C. T. Dawson, Web Edition Editor
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http://ewh.ieee.org/reg/3