

The *Pulse* of Long Island



March 1, 2004 - Vol. 54 No. 3

Chairman's Message

By *Christian DiFranco*
c.difranco@ieee.org



I hope everyone has managed to stay warm this winter. It certainly has been a challenge!

I am pleased to report that we have a number of members who have recently volunteered their time and joined the 2004 Executive Committee. They are (in no particular order):

LI Section Secretary.....Basiru Samba (Morgan Stanley)
LI Section Treasurer.....William DeAgro (Northrup Grumman)
Electromagnetic Compatibility Chapter Chair.....Richard Mohr (R.J. Mohr Assoc.)
Electromagnetic Compatibility Chapter Vice Chair.....Santo Mazzola (BAE Systems)
Nuclear & Plasma Sciences Chapter Chair.....Dr. Ralph James (Brookhaven National Laboratory)
Nuclear & Plasma Sciences Treasurer/Secretary.....Dr. Bo Yu (Brookhaven National Laboratory)

On behalf of the entire Long Island Section, Welcome!

In April, the IEEE Long Island Section Annual Awards Banquet is to be held at the Huntington Hilton. As always, this promises to be an exciting event. Thanks to the engineering talent on Long Island and the hard work of the Awards Committee (Jesse Taub, Chair), we once again are proud to present a number of awards acknowledging the accomplishments of individuals devoted to the Engineering profession.

Actually, now is a good time to consider nominating a fellow IEEE member for an award in 2005. Below is a summary of the Awards categories put together by Jesse Taub:

LI Section Awards

1. *Harold Wheeler Award* – Awarded for outstanding technical & management accomplishments.
2. *Alex Gruenwald Award* – Awarded for important contributions to our profession on Long Island, and to the IEEE at large.
3. *Charles Hirsch Award* – Awarded for an outstanding technical contribution that has benefited Long Island.

Continued on page 8)

The PULSE is now available on-line!

To get the on-line PULSE and get up-to-date information about the Section, visit our web site at: **www.IEEE.LI**

You can also register for IEEE LI Section events online at this web site!

Registration Form

2004 Awards Banquet

Make checks payable to "IEEE Long Island Section".

Cost is \$15.00 per person. Please send form to:

David Wolff

IEEE Awards Banquet

255 Bow Drive

Hauppauge, NY 11788-1626

Name: _____

Guest Name: _____

Guest Name: _____

Guest Name: _____

Company: _____

Address: _____

City and Zip: _____

Hphone: _____ Bphone: _____

Fax: _____

IEEE Long Island Section Employment Assistance Committee Report
Bruce Willard -- Chair

After a long hiatus, the IEEE Long Island Section Employment Assistance Committee is being reactivated. As of this writing, the scope of the committee has been discussed within the ExCom, and the planning of various activities is underway. The Long Island Section Employment Assistance Committee will be focusing upon the needs of those who have found that working for a Long Island employer is a better "fit" than independent consulting, and with this in mind, will provide meetings and workshops that address the various issues that arise from that choice. Topics are expected to include:

- o Professional Development of those who have chosen an engineering career path through an employer.
- o Retaining and increasing the number of engineering employment opportunities on Long Island.
- o Efforts that stress the "Value of an Engineer" and encourage more local students to go into the engineering field.
- o Strategies that engineers can use to maintain employment in an uncertain job market.
- o Benefit, compensation and work environment issues that engineers face.
- o Retirement issues faced by those who have been employed as engineers.
- o Non-technical topics that may be of interest to employed engineers.
- o The needs of unemployed engineers.

If you have any input or thoughts that you would like to share with this newly reactivated committee, please do not hesitate to contact me at willard@ieee.org or (631)265-2282.

Long Island Section Officers

- Chair. Christian DiFranco
- 1st Vice Chair Daniel Rogers
- 2nd Vice Chair. . . . David Wolff
- Secretary. Basiru Samba
- Treasurer. William DeAgro

Address All Correspondence to:

PULSE EDITOR

Babak Beheshti
101 Caffrey Avenue
Bethpage, NY 11714-1435
Phone: 516-939-0249
Email: b.beheshti@ieee.org

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Send Address Changes to:

The PULSE of Long Island
phone: (800) 678-IEEE
PO BOX 1331
PISCATAWAY NJ 08855-1331

PULSE Deadlines

For Apr. 2004: 3-5-04
For May. 2004 4-5-04

Consultants
Network of LI

The Consultants Network of LI maintains a referral service of Engineering, Computer, Managerial and Technical Professionals. Call or write for more information. There is no charge to the client for this service.

Voice Mail 516-379-1678
P.O. Box 931
Patchogue, NY 11772-0931
www.consult-li.com

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Full Page.....\$575.00 per issue
Half Page.....\$430.00 per issue
1/3 Page \$280.00 per issue
Business Card.....\$95.00 per issue

other size ads.....Contact the editor

IEEE Long Island Section Calendar

(No membership requirements, no registration, no fees at meeting unless otherwise noted.)

Please visit our website at www.IEEE.LI and click on the calendar for online registration (as available) and for listing updates

March 3, 2003 - LI Consultant's Network at 7:00 PM at Briarcliffe College. For See Announcement on page 4.

March 18, 2004 - "Tutorial on Precision Frequency Generation, using OCXO and Rubidium Atomic Standards", Olie Mancini - Frequency Electronics, to be held at Telephonics Corporation located at 815 Broad Hollow Road in Farmingdale. Registration is required, and is available online only. Please visit the IEEE Long Island Website www.IEEE.LI, click on the calendar, click on the registration link, and fill out the form. (See full page announcement in this issue.)

March 29, 2004 - Long Island Section Executive Committee (ExCom) meeting at 6:00 PM, Telephonics Corp. on Route 110 in Farmingdale- This meeting is OPEN and FREE TO ALL IEEE members- Please contact Chris DiFranco for reserving a space in the meeting (c.difranco@ieee.org)

April 5,12, 2004 - "Windows™ Programming Using Visual Basic" Workshop, babak Beheshti, See full page announcement in this issue.

April 16, 2004 - IEEE Long Islan Section Awards Banquet. See Page 2.

April 17, 2004 - Region 1 Student Paper Contest and Micro-Mouse Competition, SUNY Stony Brook. For details visit www.ieee.li/student

April 24, 2004 and also May 14, 2004 - "Leadership Skills for Engineers in the Workplace", Charles P. Rubenstein, Ph.D. See full page announcement in this issue. For further information contact Irwin Weitman at 631 266-2651 or at i.weitman@ieee.org .

April 26, 2004 - Long Island Section Executive Committee (ExCom) meeting at 6:00 PM, Telephonics Corp. on Route 110 in Farmingdale- This meeting is OPEN and FREE TO ALL IEEE members- Please contact Chris DiFranco for reserving a space in the meeting (c.difranco@ieee.org)

Retlif
Ad

MEETING NOTICE

On the **First Wednesday of each month** at 7 PM, the IEEE Consultants Network of Long Island will Meet.

The program will be held at Briarcliffe College,
1055 Stewart Avenue, Bethpage, NY.

Admission is free (no charge).

No pre-registration is required.

For last minute announcements and updates visit:

www.consult-li.com

Announcement for the Next Meeting of the Consultants Network

On Wednesday, March 3, 2004 at 7 PM, the IEEE Consultants Network of Long Island will host a lecture "Developing New Business Opportunities", presented by Ms. Adrian Miller of Adrian Miller Direct Marketing, Port Washington, NY. The program will be held at Briarcliffe College, 1055 Stewart Avenue, Bethpage, NY. Admission is free (no charge). No pre-registration is required. For information, contact John Dunn at (516)378-2149.

Professional Activities Report for November, 2003

By: Irwin Weitman, P.E. , PACE Chairman

Many of our members are Licensed Professional Engineers. The following new regulations affect all of them.

Effective January 1, 2004 licensed professional engineers and land surveyors renewing registration of a license on or after January 1, 2005 will be required to complete continuing education requirements.

- If your registration is due for renewal before January 1, 2007, the number of contact hours you will be required to complete will vary, but will not exceed 36 hours for professional engineers or 24 hours for land surveyors.
- If your registration is due for renewal on and after January 1, 2007, professional engineers will be required to complete 36 contact hours of continuing education and land surveyors will be required to complete 24 contact hours of continuing education for, in each three-year registration period.

The statutes and regulations that apply to the continuing education requirements are available on this Web site:

<http://www.op.nysed.gov/peceques.htm>

In addition, you may request them by phone (518)-474-3817 ext. 140 or fax (518)-473-6282 or by writing to the New York State Education Department, Office of Professions, State Board for Engineering and Land Surveying, 89 Washington Avenue, 2nd Floor Mezzanine East Wing, Albany, NY 12234.

PACE and the Long Island Section is sponsoring the very successful "Leadership Workshop" presented by Dr. Charles Rubenstein again this spring. Look for announcements in the Pulse. PACE and the IEEE Consultants' Network are in the process of filing the paperwork required to make the CEU's (Continuing Education Units) available to individuals who take this class. One continuing education unit (CEU) equals 10 contact hours.

The Key Benefits for our members (and friends) are the following:

This workshop will help participants recognize and develop interpersonal, group, team and individual leadership skills. The format is through interactive participation, also using exercises and case studies. The skills developed are appropriate for application in management or leadership positions in various types of organizations, including business, industry and volunteer activities.

The social issue:

Since our manufacturing sector is shrinking what will the less educated masses living in the United States do to earn a living? Unemployment and welfare are not viable alternatives.

It has been suggested that:

Offshore programmers could make information technology affordable to business sectors that haven't yet joined the productivity boom, such as small and medium-size businesses, health care and construction.

I ask – Is the next step, lay-off the clerical help?

Our military now depends heavily on the latest technology. Will working with foreign countries that have cheap high tech labor give us the security we need. Will software expert in a foreign country, that designs a military product for us have the opportunity to embed a routine in our product that could render the product useless?

Could our health records be stored in India to save us money? Would they be safe and secure. And would our privacy be maintained to our benefit?

Globalization (Big Brother) may be coming to town.

You may contact me with questions or comments at
or (631)266-2651.

Irwin Weitman, P.E.

“Windows™ Programming Using Visual Basic” Workshop

Rescheduled to April 5, 12—2004

6:00 - 9:00 PM

Overview

The role of programming tools has evolved over the past 45 years along with computer hardware. A programming language today, such as Visual Basic, differs greatly from programming languages of just a few years ago. The visual nature of the Windows operating system requires more advanced tools than were available a few years ago. Before windowed environments, a programming language was a simple text-based tool with which you wrote programs. Today you need much more than just a language; you need a graphical development tool that can work inside the Windows system and create applications that take advantage of all the graphical, multimedia, online, and multiprocessed activities that Windows offers. Visual Basic is such a tool. More than a language, Visual Basic lets you generate applications that interact with every aspect of today's Windows operating systems. A **FREE TEXT** will be given to each attendee at no additional cost.

Who Should Attend

This course is intended for engineers and developers who have a background in any programming language and who would like to embark on visual programming in the Windows environment.

Key Benefits

- Obtain a working knowledge of visual programming and programming constructs in Windows™
- Learn the terminology and fundamental key concepts

Contents

What you will learn:

- Visual Basic at Work
- Analyzing Visual Basic Programs
- Controls and Properties
- Examining Labels, Buttons, and Text Boxes
- Putting Code into Visual Basic
- Improving Code: Message and Input Boxes
- Making Decisions , Visual Basic Looping
- Combining Code and Controls
- List Boxes and Data Lists
- Dialog Box Basics
- Modular Programming
- Built-in Functions Save Time
- Printing with Visual Basic
- Menus in VB Applications
- Visual Basic and ActiveX
- Distributing Your Applications

Seminar Coordinator and Instructor

Babak D. Beheshti is the Senior Past Chair of IEEE Long Island section, the Seminars Coordinator and the Chair of the Signal Processing Chapter.

Location and Times

The seminar will be given in Nassau County (location TBD), 6:00 to 9:00 PM. Registrants will be advised of the exact location and receive an acknowledgment by mail shortly after registration. The seminar is wholly the responsibility of IEEE Long Island Section and the instructor.

For further information contact Babak Beheshti via email at b.beheshti@ieee.org or by phone at 516-686-7437.

Fees will be refunded in full if the seminar is canceled or the registrant cannot be accommodated due to capacity limitations. Other refunds will be considered.

Registration Fees

If Paid..	Non-IEEE	IEEE Member	Student/Life
Before Apr 1	\$335	\$285	\$200
OR			
After Apr 1	\$385	\$335	\$230

Registration Form

Visual Basic Prog. , Apr. 2004

Make checks payable to “IEEE Long Island Section”.
Send form to Babak Beheshti, 101 Caffrey Avenue,
Bethpage, NY 11714-1435

Name: _____

Company: _____

Home Address: _____

City and Zip: _____

Hphone: _____, Bphone: _____

email: _____

Member #: _____ Grade: _____

Amount enclosed: _\$ _____

The Long Island Chapter of the IEEE Microwave Theory & Techniques Society is presenting a lecture titled:

Tutorial on Precision Frequency Generation Using OCXO and Rubidium Atomic Standards

Olie Mancini - Frequency Electronics

Thursday, 2004 March 18 at 6:30 PM

(This seminar is free and all are invited. Appetizers/snacks/beverages will be served at 6:00 PM.)

Who Should Attend?

Technical professions interested in the fundamentals of Precision Frequency Generation and its application in space, military, GPS and commercial hardware.

Abstract:

The presentation will provide a tutorial on the technology for achieving high precision frequency sources using quartz crystals and atomic materials, such as Rubidium. The vibration effects on clock stabilities will also be presented, and breakthrough technology in the field of vibration insensitive oscillators will be explored. The lecture will then move into broadband compensation techniques - a new technology that greatly improves acquisition of targets in RADARs installed on moving/vibrating platforms such as helicopters, fixed wing aircrafts, unmanned aerial vehicles and ships. This technology is also ideal for missile guidance systems, SATCOM, and other applications where motion and vibration severely limit accuracy.

Seminar Coordinator:

James Colotti, Chair of the IEEE Microwave Theory and Techniques Society, LI Section

Speaker Bio:

Olie Mancini joined Frequency Electronics, Inc. (FEI) in 2000 as Vice President of Business Development. He has overall responsibility for expanding the customer base of FEI and introducing new technologies into the military and commercial community. Prior to joining FEI, Olie held the position of Vice President of Engineering at Cardion, a former division of Siemens GmbH. Olie has an extensive engineering background in RF/Microwave circuits and RADAR system design. He holds a BSEE from Columbia University, and is a member of the Tau Beta Pi National Engineering Honor Society and the Eta Kappa Nu National Electrical Engineering Honor Society.

Location:

This seminar will be held at Telephonics Corporation located at 815 Broad Hollow Road in Farmingdale. Appetizers, snacks & beverages will be served starting at 6:00 PM, and the presentation will begin at 6:30 PM. (Please try to join us early and enjoy networking with your colleagues before the seminar begins.) The seminar is expected to last 1 to 1.5 hours. The seminar is free and all are invited.

Directions:

Southern State Parkway, Exit 32 North (Broad Hollow Road, Route 110), Pass 56th Fighter Group, Telephonics is on the Right, #815

LIE, Exit 49 South (Broad Hollow Road, Route 110), Pass Airport Plaza, Telephonics is on the Left, #815

Registration:

Registration is required, and is available online only. Please visit the IEEE Long Island Website www.IEEE.LI, click on the Calendar page, click on the registration link, and fill out the form.

The Long Island Chapter of the IEEE Communications Society
and
The Long Island IEEE Professional Activities Committee for Engineers (PACE)
present a workshop on:

Leadership Skills for Engineers in the Workplace

conducted by
Charles P. Rubenstein, Ph.D.

Sponsored in part by IEEE Regional and Division/Society PACE Project Funds

Overview

The IEEE Long Island Section PACE committee is presenting a workshop on leadership skills for engineers. There will be two sections of the workshop.



Who Should Attend

In an effort to support the technology-development industry on Long Island, this course is intended to help engineers and engineering managers achieve advancements for themselves, and successes for the companies they work for.

Key Benefits

This workshop will help participants recognize and develop interpersonal, group, team and individual leadership skills. The format is through interactive participation, also using exercises and case studies. The skills developed are appropriate for application in management or leadership positions in various types of organizations, including business, industry and volunteer activities.

Content

The course will address such issues as: What are the attributes of a leader? What does a leader do? What motivates people? What motivates volunteers? What is the relationship between management and leadership? Holistic communications and active listening. Keys to leadership problem identification and solution techniques. Identification of personal interactive skills (Jungian types). Identifying conflict styles and managing conflict. Brainstorming for building teams and consensus. Coaching and persuasion. Basic presentation skills.

Seminar Coordinator

Irwin Weitman is currently the Chairman of the LI Chapter of IEEE PACE, as well as the Chairman of the IEEE LI Consultants Network.

Instructor

Charles Rubenstein is a tenured professor of engineering and information science at the Pratt Institute graduate School of Information and Library Science. He has an earned doctorate in Bioengineering from the Polytechnic Institute of New York and a master's degree in Library and Information Science from Pratt Institute.

Dr. Rubenstein is a senior member of the IEEE. He has been a member of the IEEE-USA PACE Committees since 1999, currently serving as Vice-Chair, and a member of the Engineering Management Society Board of Governors since 1988, currently serving his fourth term as Vice President, Member Relations. Dr. Rubenstein has been an Engineering Management Society Distinguished Visitor since 1997.

Location and Times

9:00am – 4:00pm Saturday 24 April
And another identical session
9:00am – 4:00pm Friday 14 May 2004
(Lunch will be served.)

Location is Polytechnic University in Melville, NY.
For further information contact Irwin Weitman at 631 266-2651 or at i.weitman@ieee.org.

Registration Fees

Non-Member	Member	Student or Life member	Out-of-work member
\$75	\$50	\$25	\$10

Registration Form

Leadership Skills Workshop, Apr/May, 2004

Make checks payable to "IEEE Long Island Section". Submit check and registration form to Irwin Weitman, 196 Cedrus Avenue, East Northport, NY 11731

Mr./Mrs./Ms. _____

Home Address: _____

City and Zip: _____

Phone: _____ E-mail: _____

Member #: _____ Grade: _____

Amount enclosed: \$ _____

(Continued from page 1)

1. *Outstanding Young Engineer Award* – Awarded for important technical contributions before the age of 35.
2. *Athanasios Papoulis Award* – Awarded to educators in engineering, science, or mathematics, either living or teaching within the boundaries of the LI Section, who have demonstrated innovative teaching techniques.

IEEE Region 1 Awards

1. *New Technical Concepts in Electrical Engineering* – Awarded for significant patents, for discoveries of new devices or applications, and for significant reductions in components or processes.
2. *Electrical Engineering Professionalism* – Awarded for personal, high level leadership in research & design performance in support of all phases of the Electrical Engineering Profession.
3. *Promotion of Self-Development for Practicing Electrical Engineers* – Awarded for enhancing the educational level and competence of practicing electrical engineers by arranging courses, seminars & tutorials.
4. *Enhancement of IEEE in Industry and Community Service* – Awarded for outstanding service to the IEEE at the Chapter, Section, Region & National level, and for major contributions to the industry and community.
5. *Electrical Engineering Management* – Awarded for managerial excellence in organization, leadership, design & development.
6. *Electrical Engineering Support for Student Activities* – Awarded for improving communications between the IEEE and Student Branch or Student Group; for support and service to a Student Branch or Student Group; for service & leadership to the student community.
7. *William Terry Distinguished Lifetime Service Award* – This Award recognizes those whose personal efforts have provided leadership, creativity, guidance, hard work, and inspiration in a wide range of IEEE activities over a long period of time.

IEEE Fellow Award

The IEEE Grade of Fellow is conferred by the Board of Directors upon a person with an extraordinary record of accomplishments in any of the IEEE fields of interest. The total number of Fellows selected in any single year does not exceed one-tenth percent of the total voting Institute membership.

To find out how to nominate an IEEE member for an award, please contact Jesse Taub (jtaub@aol.com). More information on Awards can be found at <http://www.ieee.li/awards/awards.htm> (LI Section Awards) and <http://www.ewh.ieee.org/reg/1> (Region 1 Awards). Nominations for 2005 must be submitted to the Long Island Section Awards Committee before December 31, 2004.

Christian DiFranco, Chairman

EDA AD

**PLEASE JOIN US AT THE IEEE LONG ISLAND SECTION AWARDS BANQUET
TO RECOGNIZE THE ACHIEVEMENTS OF THE FOLLOWING MEMBERS, AND
THEIR CONTRIBUTIONS TO THE PROFESSION AND TO THE LONG ISLAND
SECTION:**

Arie E. Kaufman, SUNY Stony Brook
Long Island Section Harold Wheeler Award

Charles P. Rubenstein, Pratt Institute
Long Island Section Alex Gruenwald Award

Raj Bridgelall, Symbol Technology
Long Island Section Charles Hirsch Award

Jonathan Garruba, Northrop Grumman
Long Island Section Outstanding Young Engineer Award

Peter Voltz, Polytechnic University
Long Island Section Athanasios Papoulis Award

Raymond Lackey, BAE SYSTEMS
Region 1 Award for Electrical Engineering Management

Melvin Sandler, Cooper Union
Region 1 Award for Electrical Engineering Professionalism

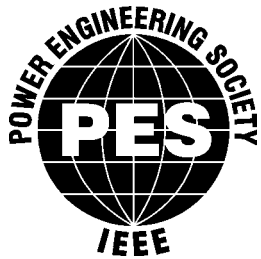
Kenneth Frank, EDO
Region 1 Award for New Technical Concepts in Electrical Engineering

James Colotti, Telephonics
Region 1 Award for New Technical Concepts in Electrical Engineering

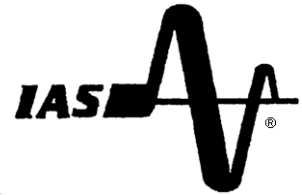
Wu-Tsung Weng, Brookhaven National Lab
Newly Elected Fellow

Spencer Kuo, Polytechnic University
Newly Elected Fellow

The banquet will be held on Friday, April 16, 2004, at 6 PM at the Huntington Hilton in Melville, NY



**POWER ENGINEERING SOCIETY AND
INDUSTRIAL APPLICATIONS SOCIETY
NEW YORK & LONG ISLAND CHAPTER**



**YOU ARE INVITED TO A JOINT MEETING
of the IEEE and Edison Engineering Society
Thursday, March 18th, 2004**

**PRESENTING:
Programmable Lighting Control Solutions**

The March meeting will feature John Berry, Business Development Specialist for Square D Company. John works in the Power Management Organization at Square D, specializing in PowerLink intelligent lighting control panels. With territorial responsibility from New York to Virginia, he interfaces with consultants, contractors, and end-users from a wide variety of industries to help them with their lighting control interests.

Presentation will Cover:

- Changes in building codes driving energy awareness.
- Alternative methods of controlling loads
- Integration into building automation systems
- Networking and software solutions
- Programming options with various sensors and controls
- Conclusion – Q&A

Thursday, March 18th, 2004

Refreshments: 5:15 pm

Program: Starting at 5:45 pm

**Location: Con Edison Executive Dining Room, 19th Floor
4 Irving Place, NY 10003**

Nearest Subway: Union Square



Reservation to :
Sukumar Alampur @ 212-563-7400
Salampur@Loringengineers.com
Jim Nucito @ 732-380-1100 x4149



All Invited !

 **IEEE** THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.

Editor's Notes

(From volume 8 number 3 issue (November 1959) issue of The Pulse of Long Island)

Judging by the recent performance of the stock market, the call to disarmament voiced by Premier Krushchev in his September 18th speech before the United Nations Assembly has not unduly alarmed the American Public. Unlikely as it seems to us that the government will capriciously disband our military establishment it appears equally probable that a future genuine lessening of world tension would and should allow us to reduce our expenditures for defense. Superimposed on the spending pattern based upon this premise will most likely appear a series of relatively minor but sudden perturbations in our military budget caused by domestic political considerations, inter-service rivalry, poor planning and sometimes unavoidable blunders.

Whereas, living in a free economy, most of us are prepared to accept the risks of the usual economic cycles, dislocations caused by purely arbitrary bureaucratic decisions are especially painful. The defense industry and those employed in it have been and still are particularly vulnerable to this type of behavior. How many of us will soon forget the year of 1949 when a vintage class of engineers was graduated into a world barren of defense contracts and jobs? All who experienced those discouraging days will recall the attenuating effect that they had on engineering school enrollments in the immediately succeeding years. It took the Korean War to correct the situation. It is worth noting that today, in all of our relative prosperity, enrollments have fallen 11% as a direct consequence of the relatively minor "cut-back" of 1957.

From a purely logical view-point and from the doctrine of "supply and demand" it is most desirable to decrease the number of engineers available as job opportunities are diminished. Unfortunately the world we live in does not behave rationally, consequently there is a direct conflict between what is good for us as individual engineers and what is good for us as citizens. The members of our profession should be highly commended and quite proud of the fact that we have placed the demands of citizenship above that of selfish interest. What other profession strives so hard to attract new blood, what other profession gives so freely of its time and energies towards encouraging young people to join its ranks? The sad truth is that some other professions seem to actively strive for exactly the opposite effect in order to maintain a monopolistic elite.

Our rather altruistic behavior should, however, entitle us to some consideration by the government. There should be a voice in Washington that will represent the best interests of our profession—a voice that will be heard and listened to. There are over 60,000 electronic engineers in the country today. Our common desires and problems, our responsibilities toward the defense of our way of life, make it imperative for us to speak in unison. Our contributions to our society give us the right to do so.

The I.R.E. is the largest and most inclusive organization of electronic engineers in the entire country. This organization can justifiably look back with pride upon its past accomplishments. Is it not time for us, however, to realize that we are entering into a new period—a period when a new dimension in our activities is called for. Section 2 of Article 1 of our constitution says that our "aims shall include the advancement of the theory and practice of radio and allied branches of engineering and of the related arts and sciences their application to human need, and the maintenance of a high professional standing among its members." We feel that very few believe that in today's world these aims are being fully met by the activities envisioned by our founding fathers in the year 1913.

Only a very narrow interpretation would insist that the sociological climate has no effect upon the advancement of the art and the professional standing of the electronic engineer. The need exists for a re-evaluation of our activities—let it be answered.

Herb Kulik

Editor (at the time)

IEEE 2004 Region 1 Student Paper Contest/ Micro-mouse Competition



Presented by the Student Branches of State SUNY Stony Brook
& SUNY Farmingdale



Date and Time

Date: April 17, 2004
Place: State University of New York at Stony Brook, Stony Brook, Long Island, New York

Deadlines:

For registration: March 15, 2004
For paper submission: March 20, 2004 (post marked)

First Place: \$800
Second Place: \$500
Third Place: \$200

Contact Information

Gregory Hovagim
President, IEEE Student Branch at USB
631-632-7257
email: ghovagim@ieee.org

Or:
Babak Beheshti
Region 1 Student Activities Chair
Email: bbehesht@nyit.edu
Phone: 516-686-7437

Prepared 2/1/04

Contest Overview

This competition offers undergraduate IEEE Student Member opportunities to exercise and improve both written and verbal communication skills.

For detailed information and registration visit:

www.ieee.li/student

FAQs

- 1. Do we have to register for this event?**
Absolutely! The accommodations are on a "first come first served" basis, so please register as soon as possible.
- 2. Who can take advantage of the benefits, such as hotel, travel, banquet... ?**
For each participating school, a maximum of 2 rooms per school. It is expected that rooms will be shared among the school participants. Please note that this is per school, not per entry.
- 3. If we do not participate (i.e. no entries), can we still attend?**
We will continue the policy of allowing a non-participating school to attend, however, only one room will be allocated.
- 4. Is there a limit in the number of entries?**
Each Branch/school may enter up to 2 papers that are approved and certified by the local Branch Counselor for the Paper Contest.
- 5. Which hotel is everyone staying in?**
Holiday Inn Express Stony Brook
3131 Nesconset Highway Centereach, Long Island, New York 11720
Telephone Hotel Direct:
(631) 471-8000 Fax: (631) 471-8623
Toll Free: (800) HOLIDAY



Contact: Chris McManes
Senior Marketing Communications/Public Relations Coordinator
Phone: + 1 202 785 0017, ext. 8356
E-Mail: c.mcmanes@ieee.org

University of South Alabama Dean Becomes IEEE-USA President Amid Concerns About the Offshoring of High-Tech Jobs

WASHINGTON (23 January 2004) — Dr. John W. Steadman, Dean of the College of Engineering at the University of South Alabama, became president of IEEE-USA on New Year's Day. Steadman served as the organization's president-elect in 2003.

Steadman began his one-year term concerned about the continuing transfer of engineering and other high-tech jobs overseas (offshoring), and its impact not only on U.S. IEEE members, but also on U.S. national security and economic growth. IEEE-USA is in the process of developing a formal offshoring position statement that will include public-policy recommendations.

"The problem facing the United States is not how to stop offshoring, but how to ensure that the nation remains a technology leader in the face of strong international competition fueled by offshoring American technology and intellectual property," Steadman said. "To do that, the U.S. government needs an innovative strategy that makes it advantageous for industry to create and retain high-wage, high-value-added manufacturing and service-sector jobs here."

See www.ieeeusa.org/forum/issues/H1bvisa/steadmanq&a04.html for more on Steadman's views on offshoring.

Before joining South Alabama in August 2003, Steadman served as head of the Department of Electrical and Computer Engineering at the University of Wyoming since 1989. He had worked at the university in various capacities, including faculty member and associate dean of engineering, for 32 years. Steadman also worked for General Dynamics in San Diego, and served as a distinguished visiting professor at the United States Air Force Academy.

A licensed professional engineer, Steadman was appointed to the Engineering Registration Board in Wyoming and served 16 years for three Wyoming governors. He chaired several committees in the National Council of Examiners for Engineering and Surveying (NCEES), and was president in 1993-94. His awards include the IEEE-USA Citation of Honor, the NCEES Distinguished Service Award and the AT&T Award for Excellence in Teaching.

Steadman, a native of Cody, Wyo., received his bachelor's and master's degrees in electrical engineering from the University of Wyoming, and his doctorate from Colorado State University. He has served as chair of IEEE-USA's Licensure and Registration Committee and is a former IEEE-USA vice president for career activities. As IEEE-USA president, he will work closely with Past President Jim Leonard of St. Charles, Mo., and President-Elect Gerard Alphonse of Princeton, N.J.

Steadman and his wife Sally, an engineering faculty member at South Alabama, live in Daphne, Ala. Read Steadman's first IEEE-USA President's column at: www.ieeeusa.org/newspubs/presidentscolumn/Steadman/steadmanjan04.html

IEEE-USA is an organizational unit of The Institute of Electrical and Electronics Engineers, Inc., created in 1973 to advance the public good, while promoting the careers and public-policy interests of the more than 225,000 electrical, electronics, computer and software engineers who are U.S. members of the IEEE. The IEEE is the world's largest technical professional society with more than 360,000 members in 150 countries. For more information, go to www.ieeeusa.org.

30 YEARS AGO By: Rod Lowman, Historian

To bring us up to date on the latest in flight control systems for aircraft a Midwesterner, D. W. Mineck, a Senior Systems Engineer in the Flight Control Division of Collins Radio Company in Cedar Rapids, Iowa, described for us the **Avionic Flight Control System for the Lockheed L-1011 Tristar Aircraft.**

The Avionic Flight Control System (AFCS) provided integrated flight guidance and control from take-off through low visibility Category III automatic landing. It consisted of four integrated subsystems: autopilot flight director system, stability augmentation system, flight control electronic system, and speed control system. To accomplish this it used a combination of nine integrated analog and digital computers.

On descent the system provided automatic approach, runway alignment, flair and rollout guidance. From selection of landing flaps and landing gear lowering to dead stop on the runway centerline, the only action necessary by the pilot was application of the brakes and reverse thrust of the engine. The success of the system can best be judged by those involved – pilots, the passengers and those observing from the ground. Passengers have ridden numerous automatic landings without ever realizing that the “smooth” pilot handling the plane was really a black box. To a ground observer an L-1011 landing in a gusty crosswind appeared to be “riding on rails”. For the pilot the system provides ease of operation, accurate touchdown and consistent performance under difficult wind conditions.

Mr. Mineck had a BSEE degree from Northwestern University and an MSEE from the University of Michigan. He joined Collins on the Lockheed L-1011 in 1968 after working at Bell Telephone Laboratories in Naperville, IL. Involved in the L-1011 program from the initial design phases through final certification, he was responsible for overall system evaluation including simulator flight test programs. Holding several patents in flight control his current responsibilities were in the field of advanced system research and development.

The Lockheed L-1011 was a very successful competitor to Boeing’s 747 at first but lost out later. Both were very successful jumbo jets which greatly expanded the airlines capability on popular high traffic routes. I remember well the concern expressed by Aviation Week on their introduction that to unload that many people the airlines would probably need to apply for a local parade permit.

Startling at the time, commonplace 30 years later and now the European Union consortium is considering even bigger aircraft.



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