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INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC

30 Years Ago

by Rod Lowman, Historian

In July 1966, Henry Bachman started his term as Chairman of the Section. Since that time he has gone on to national activities services as IEEE president and a number of terms on the Board of Directors. Henry was as protege of Harold Wheeler, an industry giant from Long Island who died in April after a long and most successful career in electronics. Henry was also a staff member of Wheeler Laboratories, an independent laboratory started by Wheeler in 1946. Henry was atypical product of Wheeler Labs, which I prefer to call A Training Ground for Excellence. In addition to his tremendous contributions to electronics, Mr. Wheeler left a marvelous legacy to Long Island industry in excellently trained electronics personnel.

In the half century of operation of Wheeler Labs, I have often reflected on the number of important leaders of the electronics industry on LI who are or were Wheeler Labs staff members. In the IEEE, over the years, under my various responsibilities I have needed to search the records for those engineers with outstanding records of achievement. Here are some facts about my observations.

Out of the estimated 10,000 electrical engineers on LI I assumed Wheeler Labs employed an average of 40, only 0.4% of the electrical engineers in Nassau and Suffolk. The table below summarizes the IEEE awards for outstanding achievement presented to LI engineers and the % of them who are or were employed by Wheeler Labs.

Fellows of the IEEE	6%
Recipients of the Hirsch Award	22%
Recipients of the Wheeler Award	33%
Chairmen of the Long Island Section	17%
Recipients of Region 1 Awards	12%
IEEE Medalists, highest possible national awards	11%
Centennial Medals for service to the profession	17%

A mighty impressive record and ample justification for characterizing Wheeler Laboratories as A Training Ground for Excellence. And for all you estate planners, Mr. Wheeler has left a tremendous legacy to LI industry that cannot be touched by the IRS or tapped by attorneys for the estate. A marvelous example for all of us to follow!

IEEE Long Island Section as the Corporate Training Department

by Walt Whipple

For many companies, an internal training department cannot be justified beyond one or two core courses given to all. The costs of hiring and managing a trainer with all the support that entails is just too much. Often, the results obtained from classes composed exclusively of the company's own employees are disappointing.

The IEEE Long Island Section is offering an expanding series of seminars and workshops. Companies of all sizes are sending employees to these events because of the superior value, the local nature, and the fact that they are offered outside of normal business hours. When all the costs are considered, these events are simply the best value.

These companies are sending their employees at company expense because one or two members sought approval and the response was to open it up to others in the company. Members wishing to attend at employer expense usually need only point to the significant savings for appropriate training. For help in presenting the case, call Walt Whipple at (516) 738-3114 or via internet: w.whipple@ieee.org.

IEEE Long Island Section Offers Continuing Education Units

The Long Island Section now offers Continuing Education Units (CEUs) equal to one unit for each 10 hours of instruction for selected seminars and workshops. Approval is sought at the time plans are firm. Approval will not always be obtained in time for advertising. The certificate will be awarded when approved to those attending a minimum number of sessions and passing an exam in the last session.

The Institute of Electrical and Electronics Engineers, Inc., is an Authorized CEU Sponsor Member of the International Association for Continuing Education and Training. The IEEE maintains records of CEUs for at least seven years through their CEU registry. Certificates are mailed directly from IEEE Educational Activities after the section notifies them of those who qualify.

For information, watch *The Pulse* for announcements or call the coordinator, Walter L. Whipple, Ph.D., P.E., at (516) 738-3114 or via internet: w.whipple@ieee.org

CHAIRMAN'S MESSAGE

by Nader Bolourchi

Greetings all! I hope all of you had a most pleasant summer and are ready to join us for IEEE Long Island Section activities. As I begin my year of service as Section Chairman, I can not help but to look back at the accomplishments of my predecessor, Tom Campbell and realize that I have a tough act to follow. Under his leadership, this Section established the joint AIL Long Island Section Distinguished Lecture Series, and hosted the International 1995 IEEE Wireless Communications Systems Symposium. In addition to these successful activities, this Section has continued to provide diverse educational professional programs. Looking forward, I am committed the goals and ideals set forth by Tom as well as his predecessors in providing cutting edge technical and professional activities.

Long Island Section officers for 1996-1997 administrative year are: Nader Bolourchi (Chair), Harvey Altstadter (2nd Vice Chair), Amnon Gilaad (1st Vice Chair), Walter Whipple (Secretary), Babak Beheshti (Treasurer). In addition, I have made some new assignments on our Executive Committee roster for the coming year. Professor Lazaros Pavlidis will be the new Pulse Editor. Tish Tishkevich, our past Membership development Chair, has agreed to accept the position of Local Arrangement Chair. Amnon Gilaad has accepted to serve also as Membership Development Chair. Antoni Natoli agreed to be our Legal Affairs Chair. All other EXCOM agreed to continue one more year with their past responsibilities. I would like to thank all volunteers for their continuous support.

EDITORIAL

by Lazaros Pavlidis

It was the Electro '96 show that did it. I still remember the Electro '85 show in Boston, MA. What a fabulous show. What an extraordinary event for a young individual like me enthusiastic and crazy about electronics and computers. There were thousands of companies demonstrating their products on every aspect of engineering. For the entire time that I spent at that show I felt I was in heaven. You see, for me electronics and computers are art. I collect them. I can never throw away old parts even if I know that I will never use them again. Since the Electro '85 show in Boston I never missed an Electro show. Every other obligation that was scheduled those days had to be rescheduled or canceled. My wife knows this very well by now and she never argues with me on the subject. Over the last few years I have taken many of my students along. I wanted to excite and mentor them about engineering and electronics. There were twelve of us in a three car caravan to the last Electro show. They were not impressed. That's all they asked? Well, I said, this show used to be huge you know. How can I explain to young engineers and technologists all the things that are happening to the engineering field and manufacturing in our country? The way I see it we will become an endangered species in the near future.

I accepted the position of the Pulse Editor as an honor but mostly as a challenge. In reality it was the Electro '96 show that did it. I want to get more involved with our profession. I want to help it survive. I want to participate in altering the public's perception of engineers so more young people will be attracted to the profession.

Two years ago I initiated a collaboration with two local high schools (Jericho and Manhasset) in helping young students with their science projects and in participating in nationwide competitions. I can't describe the kind of feelings I felt when I saw the excitement in those students when slowly but surely their ideas were transformed to a device or circuit that worked.

We need to mentor young students, create partnerships with industry and academia, organize events for fun and learning and promote this wonderful profession. Engineering and electronics in general is my hobby since high school. I remember someone saying "find a job you really like and you do not have to work a day". It has been a lot of fun for me since high school. I want to pass the torch to the next generation to help them and to help ourselves to a better tomorrow.

Long Island Section Officers

Chair. Dr. Nader Bolourchi 1st Vice Chair . . Harvey Altstadter 2nd Vice Chair. Amnon Gilaad Secretary..... Walter Whipple Treasurer......Babak Beheshti

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	for	November 1996	10-1-96
V	for	December 1996	11-2-96
	for	January 1997	12-1-96
13	for	February 1997	1-1-97
	for	March 1997	2-1-97
	for	April 1997	3-1-97
	for	May 1997	4-1-97
1		June 1997	5-1-97

PULSE ADVERTISING RATES

Full Page	\$500.00 per issue
Half Page	\$350.00 per issue
	\$ 75.00 per issue

- ◆ Call or write for other size ads.
- ◆ 25% discount on employment advertisement listings for which our members qualify.

LONG ISLAND IEEE CALENDAR

(No membership requirements, no registration, no fees at meeting unless otherwise noted. IEEE Office is in the AIL Main Building on Commack Road, Deer Park, LIE exit 52.)

September 4, 7:00 PM — Networking - LI Consultants Network — Robert J. Kennelly of LinkTech, Inc. will give a talk on IEEE 1073, a standard for medical digital communications. LILCO training center, off L.I.E. exit 57. For further information call Peter Buitenkant at (516) 491-3414.

September 18, 7:00 PM — Employment Assistance Committee — Polytechnic University. For further information call Victor George at (718) 831-0266.

September 30, 6:00 PM —- XCOM meeting — - at AIL, Commack Rd, Commack.

October 7, 7:00 PM — Networking - LI Consultants Network — General Networking meeting. Coffee, bagels and more talk at local diner after the meeting. LILCO training center, off L.I.E. exit 57. For further information call Peter Buitenkant at (516) 491-3414.

October 8 - 24, 6:00 - 9:00 PM — Windows /Office '95 Seminar, by Walt Whipple, Ph.D., P.E. The seminar will be given on Tuesday and Thursday in the general vicinity of Farmingdale. See information on Page 6. For more information call Walt Whipple (516)738-3114 or e-mail at w.whipple@ieee.org ple@ieee.org.

October 21, 24, 31, November 4, 7, 6:00 - 9:00 PM — Microprocessors and Software Seminar, See advertisement in next issue. For more information call Babak Beheshti (516) 686-7437 or e-mail b.beheshti@ieee.org

November 9 - 23, 8:00 AM- 5:00 PM, — Introductory C Workshop 11, by Walt Whipple, Ph.D., P.E. The workshop will be given on Saturdays at SUNY Farmingdale. For more information call Walt Whipple (516)738-3114 or e-mail at w.whipple@ieee.org. **ADVERTISEMENT**

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September, 1996

PACE Newsletter

by Irwin Weitman, P.E.

I hope all of our members and families had a good summer. Although it still has three weeks to go, most of us consider Labor Day the end of summer.

Several items that may be of interest to our members have come to my attention. The IRS has recently announced three measures designed to make life a little easier for independent consultants. The law remains the same, however, IRS Auditors will use a new training manual. One item, "Approach the issue of worker classification in a fair and impartial manner". A second is, that working full-time for a single business is not inconsistent with being a consultant. Third, the place where work is performed is not a factor of great importance. The last item could make it more difficult for independent consultants since many employees now work out of their homes.

From many reports in the newspapers and in IEEE internal mail, the employment situation has stabilized and improved. Engineers are in demand again in most areas and in short supply in some specialty areas. Engineers who have not stayed current in the latest technology may still have difficulty.

Along these lines, the Long Island Section has sponsored several seminars and is currently organizing more in an effort to keep our members up-to-date with those skills in most demand. The second benefit to our Section is that the funds we earn are being added to our general fund to replace the moneys we no longer get from the annual Electro conferences.

Employment Assistance Committee

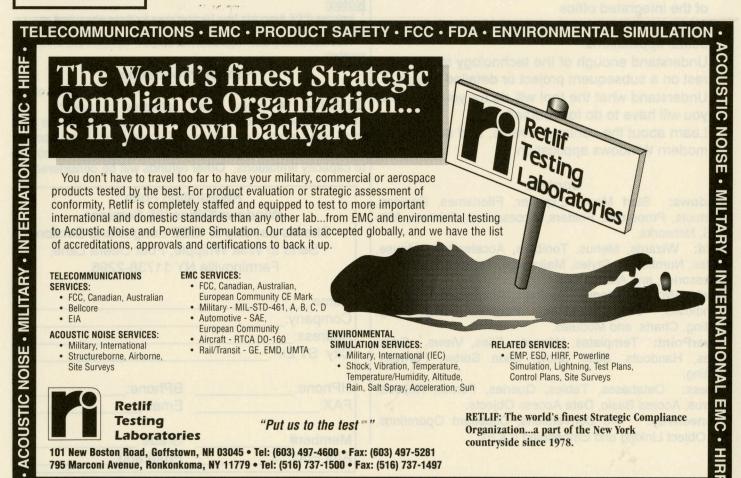
by Victor George

Before I start, I would like to congratulate Dr. Walter Whipple for his successful term as the EAC Chairman. He has done a great job. Thank you for the offer and I am pleased to accept the position as the EAC Chairman. Your confidence in selecting me will be well founded. Your decision to grant me full control will enable me to give first priority to help our members land a job of their choice.

We had very successful meetings every month by inviting human resource professionals from companies including Periphonics Corp., Telephonics Corp., Computer Associates International, Veeco Instruments, etc. Our members made tremendous results when networking directly with human resource professionals from individual companies we had invited. This effective promotion will continue, so our members can utilize this program as a way to improve their career search.

If you have any comments or suggestions, you can contact me at (718) 831-0266 or e-mail 103000.2060@compuserve.com.

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IEEE Long Island Section Windows/Office '95 Seminar

October 8-24, 1996

Overview

In this seminar, you will gain a familiarity with the Walter L. Whipple, Ph.D., P.E. leading office environment, Microsoft Windows '95 and its Office'95 suite of applications programs. The seminar and Connectivity portions of the seminar and coordinates progresses from a description and demonstrations of the program. Windows '95 through Word, Excel, PowerPoint, and Access to the cooperation of these programs in the Windows '95 environment. The intent is to enable attendees to rapidly Farmingdale on Tuesday and Thursday evenings, 6-9 p.m. apply these tools of the modern office. Emphasis will be on the new and changed features of these applications. Attendees will need to learn and practice the required skills | September 7. Instructions for finding the seminar will also on actual projects that are beyond the scope of this seminar.

Who Should Attend

The seminar benefits employees, managers, and others who need integrated support in the modern workplace. Managers who must lead teams into better ways of communicating, engineers who must build applications upon these tools, and users who must apply the tools to the office situation should take this seminar. There are no prerequisites.

Key Benefits

- Learn the vocabulary and elementary techniques of the integrated office
- Sample some advanced techniques needed for actual applications
- Understand enough of the technology to learn the rest on a subsequent project or detailed course
- Understand what the tool will do for you and what you will have to do for yourself
- Learn about the controls, events, and actions of a modern Windows application.

Content

Windows: Start Menu, Explorer, Filenames, Desktop, Shortcuts, Properties, Folders, Accessories, Printers, MS-DOS. Networks

Word: Wizards, Menus, Toolbars, Accelerators, Mouse, Tables, Numbering, Styles, Mailmerge, Templates, Macros, Accessories, and Access Basic.

Excel: Wizards, Menus, Toolbars, Accelerators, Mouse, Workbooks, Cell Operations, Formulas, Formatting Printing, Charts, and Modules,

PowerPoint: Templates, Wizards, Files, Views, Edits, Notes, Handouts, Slide Show, Slide Sorter, Formats, Printing.

Access: Databases, Tables, Queries, Forms, Reports, Macros, Access Basic, Data Access Objects.

Connectivity: File Conversions, Clipboard Operations, and Object Linking and Embedding (OLE).

Seminar Coordinator

Dr. Whipple plans to teach the Windows, Access,

Location and Times

The seminar will be given in the general vicinity of Registrants will be advised of the exact location and receive an acknowledgment by mail shortly after be provided. A light supper will be provided at about 5:30 p.m. The seminar is wholly the responsibility of IEEE LIS and the instructors. Approval to offer 2.4 CEUs has been requested.

Registration Fees

Payment	might sevice	IEEE members ²	
<u>Date</u>	Public ¹	member	student/life
Sept 7	\$350	\$250	\$200
Sept 7 Sept 21	\$400	\$300	\$250
Oct 8 Notes:	\$450	\$350	\$300

Includes IEEE Associate New Member dues for those who submit an application at the seminar

1996 membership card required at first session. Not applicable to Affiliate

Further Information

Contact Walt Whipple via E Mail at w.whipple@ieee.org or (516)738-3114 (voice mail activates a pager). An acknowledgement containing travel directions will be sent to all registrants. 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 Form

Windows/Office '95 Seminar

Checks payable to IEEE Long Island Section Send to Walt Whipple, Four Deera Lane, Farmingville NY 11738-2296.

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ADVANCE PROGRAM ANNOUNCEMENT

WEDNESDAY September 11, 1996		THURSDAY September 12, 1996		FRIDAY September 13, 1996
SESSION I		SESS	ION VI	SESSION XI
OPENING SESSION		MICROWAVE PHOTONICS M. King, Chair		INTEGRABLE RADIATING ELEMENTS AND PHASED ARRAYS S. Sanzgiri, Chair
9-00-10	0:20AM	9:00-10:40AM COFFEE BREAK SESSION VII		9:00-10:40AM COFFEE BREAK SESSION XII
	E BREAK			
	ION II			
PACKAGING AND INTERCONNECT TECHNOLOGY		NEW SURFACE-WAVE AND LEAKY-WAVE EFFECTS IN PRINTED CIRCUITS		PACKAGING AND INTERCONNECT MODELING
G. Jerin	G. Jerinic, Chair		er, Chair	V.K. Tripathi, Chair 11:00-12:40PM LUNCH
10:40-1	2:40PM	11:00-12:40PM LUNCH		
LUI	VCH			
SESSION III	SESSION IV	SESSION VIII	SESSION IX	SESSION XIII
NOVEL MICROSTRIP ANTENNAS	Si-Ge MMICs	MILLIMETER WAVE APPLICATIONS	NUMERICAL/ CAD TECHNIQUES	NEXT GENERATION OF CAD
A. Hessel, Chair	JF. Luy, Chair	C. Gupta, Chair	J. Shmoys, Chair	K.C. Gupta, Chair
2:00-3:40PM	2:00-3:40PM	2:00-3:40PM	2:00-3:40PM	2:00-3:40PM
COFFEE BREAK SESSION V ADVANCED INTEGRATION CONCEPTS J. Harvey, Chair		COFFEE BREAK		COFFEE BREAK
		SESSI	ON X	
		PANEL DISCUSSION ON FUTURE DIRECTIONS FOR MMIC RESEARCH AND TECHNOLOGY J. Harvey, Chair D. Bolle, Co-Chair		NO SESSION (Early conclusion due to Rosh Hashana observance)
4:00-5:	40PM	4:00-5:: BANQ 7:00-9:	UET	POTEAD AVERUE PAIX (616) Docume, NY 91570 E-scolb probability

ADDITIONAL INFORMATION: For additional updated information please check the World Wide Web site at URL http://rama.poly.edu/wrisymp (or, http://rama.poly.edu/wrisymp/webind.html.) For questions about technical program contact Prof. Nirod K. Das, Tel: (516) 755-4228, Fax: (516) 755-4404, E-mail: ndas@prism.poly.edu. For registration material and general information contact Ms. Carol Walsh, (516) 755-4263, Fax: (516) 755-4404, Email: cwalsh@rama.poly.edu.

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