PACE REPORTER
by Irwin Weisman

The past month has been very busy and productive for professional activities in our section. The Long Island Economic Development Committee held its first meeting with LIFT and a very cooperative spirit was evident. All attendees agreed on the things that are needed to be done to get the Long Island economy moving forward on the road to a thriving economy. LIFT was planning to establish a database for companies to rapidly find the sources for products and services on Long Island. Jim Smith, Executive Director of LIFT, suggested that IEEE provide LIFT with our Section's calendar of events, and LIFT would publish it in their monthly newsletter. They also requested a copy of our Consultants Network members so that they could provide companies with a ready source of qualified consultants. We are already looking into some means to link our Employment Assistance Committee to their needs.

"U.S. Activities" of IEEE has published, and is directing toward the Federal Government, a number of white papers and reports relating to professional concerns of its members. Among these I would like to highlight the following: rising immigration of technically trained people, industrial competitiveness, unfair international trade restrictions, cutbacks in research and development, defense conversion, inadequate education to compete internationally, intellectual property, retirement income policy and many others. IEEE-USA has just published its 104th Congress Public Policy Agenda. This pamphlet is available from the Washington office. This, as well as plenty of other material, is available via the Internet by obtaining an "autoresponse" file by simply sending a message to ieeusa@ieee.org

For those who have an interest and access to the World Wide Web, you can now directly contact the White House (yes, the one in Washington D.C.) at:

http://www.whitehouse.gov

or

http://www.whitehouse.gov/OSTP.html

You can subscribe to notices, reports, testimonies, etc. from the White House by sending an e-mail message to:

publications@research.ai.mit.edu

It looks like the information highway is starting to get many road signs in place. My comment is, beware of the potholes and unpaved portions, but persevere and you will get to your destination.

30 YEARS AGO
By Rod Lowman (Historian)

In the Section meeting, Dr. Sidney Weinstein of Albert Einstein College discussed the subject of Sensory Deprivation and Dermo-Optical Perception. Sensory Deprivation had been studied for a decade since the original studies began at McGill University. Dermo-optical perception, the ability to sense visual data within the skin, while known in the Soviet Union had only recently aroused interest here. This is the type of program that broadens the interests of electrical engineers and is something In the last 30 years, there has been a tremendous increase in attempts to aid the handicapped, and it would certainly be interesting to learn the status of these subjects now, especially since much more information would be available from Russian sources.

In the more conventional electronic subjects, the Section and the Computer Society sponsored a talk at Grumman on the Orbiting Astronomical Observatory (the one that worked the first time!) by Victor Navon. The presentation was followed by a plant tour of the AOA and the Grumman space facilities. It was a most interesting Saturday afternoon enjoyed by many engineers and spouses.

NEW SECTION OFFICERS BALLOT

The following people were selected as candidates for the 1995-1996 Long Island Section office by the Nominating Committee. Although, there were no petition candidates, provision has been made on the ballot for write-ins. Please send completed ballots to Mannie Schweisberg, 132 Melville Road, Huntington Station, NY 11746. Your name, address, signature and membership number must appear on the envelope.

**BALLOT: 1995-1996**

**LONG ISLAND SECTION OFFICERS**

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<tr>
<th>OFFICER</th>
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<td>CHAIRMAN</td>
<td>Thomas Campbell</td>
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<td>1st VICE CHAIR</td>
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EMPLOYMENT ASSISTANCE COMMITTEE
A CLARIFICATION
By Harvey Altman

In my column that appeared in the February issue of The Pulse, I discussed a possible scam involving answering blind newspaper ads, which led to the request for a "goodwill" fee for finding a job. In that article, I indicated that when an agency places a professional in a position, they will collect their fees from the employer, or depend- ing on the agency fee, from the candidate. Some of our local search firms may ask the candidate to make the payment, but this should only be done if the employer is going to make the payment. Other sources indicated that the norm for a professional placement is that the employer pays all the fees. When you deal with an agency of any type, it is your responsibility to make sure you are expected to pay the fee. If the agency requests that you pay the fee, then determine the fee structure and conditions before you commit. Be cautious about any situation which requires fees to be paid in advance of making a commitment.

At our March meeting, we viewed the second video in the SkillStalker series. This tape builds an approach for self-defense, and we should be sure that we are in a list of the most important skills. Most of us could not describe more than 5 or 6 of our attributes. The process described in this tape starts with simple questions. The answers to the questions lead to a list of the attributes and we start working on the specific issues to be dealt with. We will have the third tape at a future meeting.

The results of the canvassing letter asking the members to confirm their continued interest are flowing in. By next month I will be able to report the results. For those of you whose letters required a response, you have not done so, you still can do so now. Just send in the questionnaire and you will be reinstated.

If you have not yet joined our Skills Inventory Database, please get in touch with us. The job search service is currently available to current and recent local IEEE members or IEEE membership holders if you or your friends should need them.

Garvey Corp. is the first of the meeting schedule for 1995. It is scheduled for the last Tuesday in the month at the IEEE offices at AIL in Deer Park. Won't you join us at our next meeting on Wednesday, May 17, 1995 at 7:00 pm.

COMPUTER SOCIETY AND AI WILL HOST TALK ON ARTIFICIAL INTELLIGENCE

The Computer Society and the Artificial Intelligence Technical Committee will host a talk entitled Artificial Intelligence - Alive and Well, on June 1, 1995, in the Auditorium of Polytechnic University, Route 110, Brooklyn College, at 7:00 pm. This is probably one of the most important meetings we have ever held. It is the first of two meetings on software by Genysm Corp. The second meeting will be given by their technical vice president Genysm has received several outstanding awards such as the Reader's Choice Award for Export System from Control Magazine, and for innovation development from Chemical Processing Magazine. Their products have been sold and used in more than 10 countries, and exhibited at many international conferences.

While much has been heard about the demise of Artificial Intelligence since it was brought into the limelight in the 1970s. AI is back in vogue. Genysm is based on a combination of an AI and an AI-free technology, and it is being used in a variety of industries including software, communications, transportation, and defense systems. The talk will be given by Genysm's president and COO, who will discuss the current state of AI and how it is being used in the real world.

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

EMBS ANNUAL ELECTION MEETING

Nominations received as of April 1, 1995:
Chairman: Joel H. Levit
Vice-Chairman: Andrew Baxt
Secretary: Susan Baxt
Treasurer: Joe Bovine
Member-at-Large: Open
Nominations for any position may still be made, up to and including the time of the meeting.

Note: This brief meeting will be followed by Prof. J.H. Levit discussing "Domestic Violence and Sugar Metabolism - What's the Connection?" See below for information about meeting details.

EMBS TO PRESENT TALK ON DOMESTIC VIOLENCE AND SUGAR METABOLISM - WHAT'S THE CONNECTION?

The Engineering in Medicine and Biology Society (NY/North Jersey/Li Chapter) will present a talk on "Domestic Violence and Sugar Metabolism - What's the Connection?" The talk will be held on Thursday, May 25, 1995, at Rockefeller University, Toll Building, Room 305, 220 York Avenue at 7:30 pm. In this free tutorial session Professor Levit will hypoclycemia (reactive hypoglycemia - low blood sugar at certain times during the day) and violent behavior. Domestic violence is especially worth examining because where there is a support person or family, positive steps are especially practical. The relationship has been known for a long time, certainly since June 1977 when Barbara Reed, Ph.D, testified before the Select Committee on Nutrition and Human Needs of the U.S. Senate. (Actually, the connection was known as early as 1935 when Dr. J.M. Jones described a woman who threw things at her husband. (Her violent spells were nearly always accompanied by a craving for sweets.) Some of the things that will be discussed:

1. Violent behavior with periodic bouts of low blood sugar must AVOID SUGAR
2. What other dietary changes are needed?
3. Why this approach is almost always ignored or denierd?
4. What helpful reference books are available?

Professor Levit holds four degrees from Columbia University and has been a member of the faculty of Emory University for over 25 years. He is serving his third year as Chairman of this EMBS chapter. He teaches two health-related courses at the Brooklyn College Institute for Retired Professionals. Professor Levit is a member of the New York Academy of Medicine and he serves on the Board of Directors of the Endocrine Society of New York City. He and his wife have been married for 30 years.

The speaker, Professor Levit, received his M.S. degree in Computer Science from RPI (1992), and his B.S. degree in Mechanical Engineering from the University of Massachusetts at Dartmouth (1985). He has extensive experience in system development, jet engine technology, C/M, and nuclear fluids systems analysis. For more information, please contact Robert Hong, Chairman, at (516) 921-4446.

The PULSE OF Long Island

LONG ISLAND IEEE CALENDAR

May 3 -- Networking - LI Consultants Network - 7:00 pm - LILCO Training Center, 131 Hoffman Lane, Hauppauge. For info, call Stewart Senator at (516) 654-1426.

May 17 -- Employment Assistance Committee - 7:00 pm - IEEE Office. For information, call Harvey at (516) 595-5608.

May 18 -- Wireless Personal Communications - Communications Society (NY Chapter) - 8:30 am - 4:30 pm - Unitized Engineering Center, 345 47th Street, New York City.

May 24 -- Peer-To-Peer Networking - Communications Society (LI Chapter) - 6:00 pm - Polytechnic University Auditorium, Route 110, Farmingdale - A talk by Allan L. Reynolds. See article in this issue for details.

May 25 -- Domestic Violence and Sugar Metabolism -- What's the Connection? -- EMBS - 7:30 pm - A talk by Professor Levit - See article in this issue for details. For further information please call Joel Levit, at (718) 891-6460, Andrew Baxt, at (516) 764-2660, or Susan Baxt, at (516) 678-5653. (Please note that the annual EMBS election meeting will be held before the talk.)

May 29 -- EXCOM meeting at 6:00 pm - IEEE Office.

June 1 -- Artificial Intelligence Alive and Well -- Computer Society and AI Technical Committee - 7:00 pm - Polytechnic University Auditorium, Route 110, Farmingdale - A talk by Scott Weaver - See article in this issue. For further information, please call Robert Hong (516) 921-4446.

June 1 -- Call for Papers - 1995 Wireless Communications Systems Symposium (Wireless Trens in the 21st Century). See announcement in this issue. For further information, please call Donald Greco, Technical Program Chair at (516) 773-1900 or Dr. Nader Boroluch, General Chair at (516) 680-7863.

PULSE DEADLINE for September
July 31

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CHAIRMAN'S MESSAGE
by Ed Palacio

One of the Long Island Section's most important functions is to bring world-class speakers with interesting technical areas of expertise to our area so that our membership can benefit from their presentations.

Last month we had Dr. S.Y. Kung talk on Neural Networks for Artificial Eyes. This month we will have Mr. Scott Weaver, Vice President of Engineering for Gensym Corp., to talk about a new and very powerful Artificial Intelligence technology that uses a unique real-time expert system called G2. Bob Hong, our AI Chair, was so excited about this event that he told me, "If you have time to make just one technical meeting on Artificial Intelligence this year, make it this one." Somewhere in the body of this issue, you will find the specifics on the time and place. I encourage you to take advantage of these talks on leading-edge technology.

I was recently contacted by Dr. Velio Marsocchi, Distinguished Service Professor of Engineering & Clinical Professor of Health Sciences at Stony Brook University, and an old friend and past L.I. Section Chairman. He is excited about the renewed interest in Biomedical Engineering on Long Island, and especially on the work being conducted in Stony Brook. He is currently investigating activating an Engineering in Medicine and Biology Society on Long Island. Currently, we have a joint chapter with New York and North Jersey, but with the proper level of interest and involvement, we can break away and form a chapter on our own. Please contact me or Dr. Marsocchi if you have any interest in getting involved.

Lastly, our Section continues to look for ways in which to serve you, our membership. We encourage your ideas, your comments and your involvement.

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COMMUNICATIONS SOCIETY (LI CHAPTER) HOSTS TALK ON PEER-TO-PEER NETWORKING

The Communications Society will host a talk on peer-to-peer networking on May 24, 1995, 6:00 pm in the Auditorium of Polytechnic University, Route 110, Farmingdale.

There are many communication requirements that are optimally suited for peer-to-peer networking rather than by concentrating limited public switched telephone network (PSTN). These applications include mobile radio operations such as fire and police departments, emergency medical services, and way packaging and stock operations to name a few. The ability to support both voice and data is crucial in many of these applications as is communications privacy. In addition, achieving communication robustness in the urban or internal building environment can be a challenging task. To address these issues, Telephonics has developed a unique hand-held digital peer-to-peer radio communication system which can simultaneously support up to 8 users in full-duplex as well as a full-duplex data channel. The system is currently designed to operate in the 902 to 928 MHz band set aside for unlicensed operations under FCC Part 15. The novel combination of operational features is achieved through the use of frequency-hopped spread spectrum with BFSK modulation and TDMA formatting.

The speaker, Allan L. Reynolds (Engineering Manager), has over 25 years of experience in the design and development of communication systems including both hardware and software. He received both the BSEE and the MS Electrophysics degrees from the Polytechnic Institute of Brooklyn. Before joining Telephonics, Mr. Reynolds was with AT&T-Bell Laboratories in Whippany, N.J., where he was involved in the design and development of CDMA spread spectrum base stations. Mr. Reynolds has received four patents in the field of microwave and RF circuit design.

COMMUNICATIONS SOCIETY (NEW YORK CHAPTER) TO HOST A SEMINAR ON WIRELESS PERSONAL COMMUNICATIONS

The Communications Society is hosting a seminar on wireless personal communications on May 18, 1995, 8:30 AM at 4:30 PM at the United Enertech Center, 345 East 47th Street, in New York City. The telecommunications industry is undergoing a revolution: markets, players, and business opportunities are all being redefined. Future telecommunications providers will need to possess a clear understanding of competing technologies, emerging applications, and future network technologies.

This seminar brings together speakers from some of the major equipment suppliers, service providers and current users of wireless networks, and will provide a clear picture of wireless communications technology and applications. Telecommunications executives, communication managers, engineers and members of the financial services community will benefit from this seminar. The advanced registration fee schedule is $150 for members and $175 for nonmembers. For further information, please call Jim Barbera at (212) 954-7688.

ELECTRO '95

Electro International has announced that it has significantly expanded the scope of its upcoming Electro '95 trade show to include a major emphasis on surface mount technology and contract manufacturing. The show will be held at the Hynes Convention Center (Boston, MA) on June 21-23, 1995.

Electro '95 is sponsored by Region 1, METSAC and CNEC of the IEEE, and the New York and New England Chapters of the Electronic Representatives Association (ERA).

Electro '95 will feature:
• Over 600 exhibit booths displaying products including all facets of design, advanced packaging, Surface Mount Technology, test fabrication & assembly, contract manufacturing and components.
• Innovative demonstrations on the showroom floor!
• An in-line working SMT line producing a product from design to completion.
• A soldering demo showing the latest in technique and equipment.
• The new products showcase highlighting up-to-the-minute support up to 8 users in full-duplex as well as a full
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IEEE Long Island Section

The IEEE Long Island Section invites prospective authors to submit papers addressing topics of interest for presentation at the 1995 Wireless Communication Systems Symposium. Of particular interest is the theme of this symposium reflects the most recent wireless trends all over the world.

Papers submitted for consideration should emphasize a system engineering perspective. The symposium will cover all aspects of wireless technology, including mobile radio, personal communication networks, wireless PBX, mobile data, wireless LANs, IVHS, and mobile satellite services. Examples of topics of interest include, but are limited to, the following categories:

- System Performance Methodology
- Propagation Models
- Modulation and coding
- Multiple access Technologies
- Security and Privacy
- Antenna and RF subsystems
- VLSI and ASIC Design
- Experimental Trials
- Network Signaling
- Services and Standards
- Intelligent Networks

INSTRUCTIONS:
Contributors should submit a 500 words abstract including authors' names and affiliations. The summary should indicate which author is to be responsible for the symposium correspondence, and the address, telephone, and facsimile number of that author.

SCHEDULE:
Notification of acceptance:
Camera-ready paper due:

June 1, 1995
July 15, 1995
October 1, 1995

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The PULSE of Long Island
May, 1995

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