

## Chairman's Message

By Babak Beheshti

[b.beheshti@ieee.org](mailto:b.beheshti@ieee.org)



It is with a heavy heart that I must report the news of passing of Sandy Farber to the Long Island Section membership. In this issue you will read about Sandy and her past, her accomplishments and her career. I want to take a minute and tell you about my impressions of Sandy. Marlene Sandra Farber was an active member of IEEE Long Island Section when I first joined the EXCOM years ago. Her presence at the Executive Committee was continuous until recently. She was helpful, friendly and took her responsibilities seriously. She had a friendly demeanor, yet she spoke her mind. EXCOM meetings would not be the same without her. She will be missed...

Have a prosperous December and a joyous Holiday Season to all.

Babak Beheshti

## 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:

[http://www.ewh.ieee.org/r1/long\\_island/](http://www.ewh.ieee.org/r1/long_island/)

## IEEE Election Results

By: Robert Bruce

As member of the Tellers Committee, I have the pleasure of announcing the election results. However, the results are not official until the Board of Directors accepts them (on December 3).

### IEEE YEAR-2000 ELECTION WINNERS:

IEEE President-Elect, 2001 - Raymond D. Findlay  
Division II Delegate-Director 2001-2002 –  
Thomas M. Jahns  
Division VI Delegate-Director 2001-2002-  
Loretta J. Arellano  
Division X Delegate-Director 2001-2002-  
Toshio Fukuda  
Division V Delegate-Director-Elect 2001 –  
Guylaine M. Pollock  
Region 2 Delegate-Director-Elect 2001-2002 –  
Moshe Kam  
Region 4 Delegate-Director-Elect 2001-2002 –  
Barton J. Loupee  
Region 6 Delegate-Director-Elect 2001-2002 –  
Evelyn H. Hirt  
Region 10 Delegate-Director-Elect 2001-2002 –  
**The Pulse of Long Island**

Jung U. Seo  
IEEE Standards Association President-Elect 2001 –  
Ben C. Johnson  
IEEE Standards Association Board of Governors}  
Members-At-Large 2001-2002 }  
Stephen L. Diamond  
IEEE Standards Association Board of Governors}  
Members-At-Large 2001-2002}  
E. G. Kiener  
IEEE Standards Association Board of Governors}  
Members-At-Large 2001-2002}  
Dennis Bodson, P.E.  
IEEE Standards Association Board of Governors}  
Members-At-Large 2001-2002}  
Daniel R. Benigni  
Technical Activities Vice President-Elect 2001 –  
Michael R. Lightner  
IEEE-USA President-Elect 2001 -  
LeEarl Bryant  
IEEE-USA Member-At-Large 2001-2002 –  
Shelly R. Born

## Marlene Sandra Farber

John Dunn's e-mail to members@consult-LI relayed Irwin Share's telephone message that Sandy had passed away.

Bob Bruce wrote the following obituary: "On the evening of October 14, 2000, Marlene Sandra Farber succumbed to congestive heart failure at South Nassau Hospital. She was an esteemed member of the Long Island Section Executive Committee and the Long Island IEEE Consultants' Network, having performed the functions of publicity and public relations for both organizations. Marlene obtained her BS from Rensselaer Polytechnic Institute and her MS from Brooklyn Polytechnic Institute. She worked as an electronic design engineer for a number of aerospace companies on Long Island, including Sperry and Hazeltine, and became extremely active in IEEE after her retirement. She is survived by four children and three grandchildren."

The rest of this article is an attempt to describe what we remember about our fellow member, and to express our feelings toward her.

Bob Bruce wrote, "Both John Peterson and I met her frequently before and during her final illness. She was kind, gentle and dedicated."

John Dunn wrote, "Sandy was one grand human being. We're all going to miss her very, very much."

Rich Augeri wrote, "I remember Sandy as one who approached people and tried to make them feel at ease. When I first joined the LI Consultants' Network, Sandy was the first person to introduce herself and try to welcome me into the group. She was also very fond of giving out her MSF Electronics complimentary pocket calendars, which contain a lot of useful information."

Peter Buitenkant wrote, "I will always remember Sandy as a good-natured individual, always ready to do whatever was within her ability to assist the LICN organization and its members, as well as the IEEE Long Island Section and its members. Her help and contributions to our efforts will be missed by all of us."

Bill Wilkes wrote, "Sandy was very involved in the Center for Practical Solutions. She was among the creators of CPS and was a member of the Board of Directors for quite a few years. Sandy was involved in the creation of the employment assistance committee and it was part of that activity, along with the creation of the Consultants' Network, that led to the creation of the Center for Practical Solutions. She worked tirelessly on behalf of engineers, and she will be missed."

One of our Consultants' Network members recalled that Sandy had welcomed him to meetings of the employment assistance committee and was helpful to him when he was unemployed.

We hope Sandy has received the following message:

"Dear Sandy,

This E-mail is for you!

You have been a great inspiration to us all at the LI Consulting Network.

You will be greatly missed by all the members.

Sam Sadinsky."

In addition to Sperry and Hazeltine, Sandy also worked at Edo and Fairchild, according to her daughter, Laurie Farber. She had a series of patents on color separation equipment. These dated back to the 50's and 60's and were assigned to Fairchild. Laurie recalled that Sandy installed and tested some equipment on a Navy ship for one of her employers.

Sandy was an important part of the unsung infrastructure of the LI Section and the Consultants' Network. She did the desktop publishing of the Pulse, and when her health was better, she picked up the 3500 copies from the printer, put the mailing address labels on with her machine, put them into sacks, and lugged them to the bulk mail office of the Hicksville post office. John Peterson said she stopped doing the heavy lifting as her physical condition deteriorated. The printer now handles this part of the job, which results in more humane treatment of the newsletter editor/publisher. Sandy also printed and mailed the Consultants' Network newsletter until her poor health intervened.

Laurie Farber would like us to remember her mother as a very pleasant woman who was helpful with what she knew.

As for myself, I appreciate the advice she gave me when Betty and I were learning how to bulk mail the directories. True to her reputation for helpfulness, Sandy came to meetings prepared to pass along bits of information about electric vehicle activities, one of my interests.

So Sandy, till we meet again, I'll keep your MSF pocket calendars around to remind me that we can all extend ourselves a little more to help each other.

With love,

Dick LaRosa

### Long Island Section Officers

Chair. . . . . Babak Beheshti  
1st Vice Chair . . . . Robert Bruce  
2nd Vice Chair. . . William Rooney  
Secretary. . . . . Lisa Zannella  
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### Send Address Changes to:

The PULSE of Long Island  
phone: (800) 678-IEEE  
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### PULSE Deadlines

For Jan. 2001: **12-5-00**  
For Feb. 2001: **1-5-01**

## 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 1072  
Commack, NY 11725-1072  
[www.consult-li.com](http://www.consult-li.com)

### PULSE ADVERTISING RATES

Full Page.....\$500.00 per issue  
Half Page.....\$350.0 per issue  
Business Card.....\$75.00 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 web site at [http://www.ewh.ieee.org/long\\_island/](http://www.ewh.ieee.org/long_island/) for up to date listings, changes and corrections.

December 6, 2000 - "Uncooled BLIP Detector", speaker Richard C. Augeri, LI Consultant's Network at 7:00 PM at Polytechnic Auditorium on Route 110 in Farmingdale. No pre-registration is required. For further info call John Dunn at (631) 549-6555

December 18, 2000 - EXCOM meeting at 6:00 PM, Huntington Hilton

January 29, 2000 - EXCOM meeting at 6:00 PM, Huntington Hilton

February 7,8, 2001 - Multi-Threaded Programming for Embedded Systems Seminar, Melville, NY. For registration and more info, contact Babak Beheshti (516) 686-7437, [b.Beheshti@ieee.org](mailto:b.Beheshti@ieee.org). 6:00 - 9:00 PM

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## Professional Activities Report

By: Irwin Weitman

IEEE is a VOLUNTEER organization!

What that means is that it is run by volunteers. Every member of IEEE is a potential volunteer. That means YOU are a potential volunteer. I am a volunteer and just like you, I am very busy with my work, and family. I make the time to work for those functions of IEEE that I find interesting and needed by our members. For about three years I have been looking for volunteers to operate a skeleton *Employment Assistance Committee* (EAC). You might ask WHY? Because I was here when there was the last recession and the two before that. In the early 90's, members came forward asking for help. We tried, but the infrastructure that we had in operation was not prepared. By the time EAC was working smoothly, the recession was beginning to abate. Lets not be caught with our pants down. By now, our old data is totally outdated and the database may also be obsolete. We have members who presently involved in other volunteer capacities who can help a newly constituted committee setup and get it into operation. There is no emergency now so not one will be overworked but that is not grounds for neglecting to do anything until the emergency is upon us. Volunteers should contact me at the address below and I will help get things started. As an aside, You don't want me to run it or tell you how to run it (I'm a consultant, so what do I know!) (I was an employee for 35 years before I decided to be a consultant). All positions, you can even make or choose your own titles. First come first served.

I would also like to see the section get a chapter of the IEEE Management Society set up and become operational. Also, a chapter of the Life Member Society would be a welcome addition to our section. I am sure that the members of these two groups would be a source of immeasurable value to our other committees and members.

The IEEE Consultants' Network of Long Island will hold it's monthly meeting on December 6<sup>th</sup> 2000 in the Polytechnic University auditorium at 7 PM. The speaker Richard C. Augeri one of our own members and an excellent presenter will speak on the subject of "Uncooled BLIP Detector". This is a very low noise infra-red detector.

You can reach me at (631)266-2428 almost any evening or at [i.weitman@ieee.org](mailto:i.weitman@ieee.org)

## JOHN PARRY DIES IN CALIFORNIA

By: Rod Lowman

A former section member and long time AIL employee, John Parry had retired from AIL about 20 years ago and died recently in California at the age of 78. John was a good electronics engineer who worked in the Applied Electronics Dept. at AIL for many years and then in the commercial Electronic Measurements Equipment Dept. He was a most likable person who would do anything to help a friend. He was not only a good engineer but had a remarkable capability as a promoter of engineering ideas. John could sell the Brooklyn Bridge to a native New

Yorker. This made him a very valuable Advertising Editor for the PULSE in the 70's and promoter of other IEEE activities. After leaving AIL John did consulting work and teaching at maritime colleges for several years then moved to California about 15 years ago. There he taught in some maritime colleges and consulted for the Department of Transportation and overseas clients. He is survived by his wife Joan, two daughters and a son.

## PES AND IAS TALKS ON LONG ISLAND

Robert Bruce, L.I. Liaison to PES/IAS

Membership lists of the IEEE Power Engineering Society (PES) and of the Industry Applications Society (IAS) show that there are PES and IAS members living on Long Island. I am the Long Island Section liaison to the joint New York City/Long Island Chapter of PES/IAS. Almost all of the PES/IAS technical meetings are at Consolidated Edison in New York City, and they are advertised in PULSE, the Long Island Section newsletter. However few Long Island members attend these meetings, possibly because of the trip to New York City.

I would like to learn what sort of technical meetings would appeal to Long Island members of PES or IAS. The Long Island Section could arrange such meetings. What technical presentations would readers of this newsletter like to attend - power generation, power distribution, relaying, motor control, power quality, system maintenance, protective devices, digital control of AC drives? This list is only a sample of the possible lecture topics.

Attendance at such lectures would benefit the attending engineers and their employers. Interested persons can contact me at <[r.n.bruce@ieee.org](mailto:r.n.bruce@ieee.org)>.

*IEEE Computer Society and  
IEEE Long Island Section*  
Present

**Multi-Threaded Programming for Embedded Systems Seminar**

*February 7,8, 2001  
6:00 - 9:00 PM*

**Overview**

As the embedded applications become more complex, use of commercially available RTOSes is becoming more popular, particularly in mid to high end applications. The Long Island Section of IEEE and its Computer Society are presenting a two session (3 hours per session) training course “*Multi-Threaded Programming for Embedded Systems*”. This seminar is intended to familiarize engineers with this tool.

**Who Should Attend**

This course is intended for engineers and developers who have a background in embedded systems programming (using microprocessors and microcontrollers) and programming in a high level language (preferably C, but not required). No background in multi-tasking or multi-threaded programming is necessary.

**Key Benefits**

- Learn the advantages of using Real-Time-Operating-Systems (RTOS) in solving embedded applications that require multiple concurrent tasks to execute
- Learn the terminology and fundamental key concepts of RTOSes
- Learn the limitations and requirements an RTOS puts on the processor

**Content**

**What you will learn:** Review of fundamentals, Traditional approaches to executing multiple tasks and their shortfalls, how an RTOS solves these shortfalls by means of task synchronization and inter-task communication, RTOS terminology: queues, tasks, semaphores, review of currently available commercial RTOS vendors.

**Seminar Coordinator and Instructor**

Babak D. Beheshti has been designing embedded systems hardware and software using Motorola, Intel, Microchip and TI chips. He has also instructed the basic and intermediate microprocessor seminars for IEEE in the past.

**Location and Times**

The seminar will be given in Melville, 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**

Payment Due	Public	IEEE Member	Student/Life
Before Feb.1	\$285	\$235	\$190
After Feb. 1	\$335	\$285	\$200

**Notes:**

1. 2001 membership card required at first session. Not applicable to affiliate members.

<b>Registration Form</b>	
<b>Multi-Thr. Prog. For Embedded Systems</b>	
<b>Feb 2001</b>	
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: _____
Fax: _____ email: _____	
Member #: _____ Grade: _____	
Amount enclosed: _\$ _____	

## **MARLENE SANDRA FARBER**

By: Robert Bruce

On the evening of October 14, 2000, Marlene Sandra Farber succumbed to congestive heart failure at South Nassau Hospital. She was an esteemed member of the Long Island Section Executive Committee and the Long Island IEEE Consultants Network, having performed the functions of publicity and public relations for both organizations. Marlene obtained her BS from Rensselaer Polytechnic Institute and her MS from Brooklyn Polytechnic Institute. She worked as an electronic design engineer for a number of aerospace companies on Long Island, including Arma and Hazeltine, and became extremely active in IEEE after her retirement. She is survived by four children and three grandchildren.

## **MARLENE SANDRA FARBER**

By: Rod Lowman

In October the Executive Committee of the L. I. Section lost a most hard working member when "Sandy" Farber succumbed to a myriad of physical impairments which until the very last she refused to let deter her from her responsibilities as Coordinator of Public Relations, keeper of the IEEE membership files, and doing the layout work for each PULSE issue. From the time she graduated from Rensselaer Polytechnic Institute in 1942, Sandy became a prolific electronic circuit designer and for 53 years she produced outstanding designs for a number of local companies. These included Whitney Chain in Hartford, Fairchild Camera, Arma, Vogue Instruments, Edo Corp., Telephonics, Bobst Graphic, Hazeltine, all on L.I.. In this work she acquired 13 U.S. patents and a number of foreign ones. In 1986 she became a consultant for a few years until her eyes went bad and she turned to typesetting which she did for the IEEE, the Archery Society and other volunteer groups. Shortly after becoming a consultant she joined the Executive Committee as the Coordinator of Public Relations and worked to publicize section events in outside publications and raise the public image of electrical engineering. She also started a committee that became the Employment Assistance Committee and led a small business committee. Her persistent efforts were most appreciated by the section and she will be sorely missed.

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Retlif Ad

## 30 Years Ago *Rod Lowman, Historian*

The 1970's will be remembered as the decade of the race to put a man on the moon. Consistent with the L. I. Section's desire to bring the latest technical information to its members, Dr. Gran of Grumman was invited to speak on "DESIGN PRINCIPLES OF A SPACE SHUTTLE DIGITAL AUTOPILOT". This is a unique problem as the shuttle is a hybrid vehicle, flying as an airplane as it lands and as a spacecraft for most of its mission. Until that time, digital autopilots had been built only for space vehicles but not yet for aircraft. Dr. Gran discussed how for many applications modern theories of optimal control and optimum estimation (Kalman filtering) can be utilized to determine design parameters such as sampling time, optimal linear control system for limited number of parameter measurements, effects of random disturbances like wind gusts and measurement noise. He concluded that a blending of these modern techniques with the more traditional root locus and Bode Plot analysis led to significant improvement in design and permits answers to questions previously unanswerable. His reasoning was apparently good as the shuttle made it to the moon and back several times and is still flying useful missions of putting all sort of useful hardware in space

Dr. Gran received his BEE degree in 1962 and PhD in System Science in 1969 both from Brooklyn Poly. He worked for a year at Brookhaven National Labs as a design engineer and in 1962 joined Grumman where he was currently employed as a research scientist working in the area of optimal stochastic control and the theory of Markov processes. He was also Adjunct Assistant Professor in the Applied Math Dept. at SUNY, Stony Brook.

As was usual at that time some of the attendees joined with Dr. Gran and Section officers at a pre-meeting dinner at the Marcpiere restaurant in Melville before adjourning to Brooklyn Poly for the presentation. In the PULSE issues of the 70's I note that John Parry (see Parry obituary) was on the PULSE staff in those days.



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