

The *Pulse* of Long Island



June 1, 2002 - Vol. 52 No. 6

The monthly newsletter of the Long Island Section of the Institute of Electrical and Electronics Engineers, Inc.

Chair's Message

By the time this Pulse arrives in the mail, the Nassau County Cradle of Aviation Museum in Garden City, should be open to the public. I had the good fortune of attending the ceremony this past April in which the American Society of Mechanical Engineers (ASME) designated the Lunar Module as a National Historic Mechanical Engineering Landmark. My first job as an Engineer was working on the LM in the Integration and Test area at Grumman, so it brought back a lot of personal memories. I was too naïve at the time to think that we couldn't land a man on the moon and bring him back. There were speeches from the management at that time that were very insightful, as well as a movie and display of an actual Lunar Module. But most of all, it is an inspiration to any Engineer who dares to have a dream. I recommend that you take time to visit this museum, and bring your children. They will love the exhibits, which are spectacular, as will you. It's amazing how much of the history of aviation occurred on Long Island, and how little our young people know about it.

Chris DiFranco planned and executed a flawless Awards Banquet, which is undoubtedly the premier event for this Section. When my daughter gets married, hopefully not for another ten years at least (she's only 16), I'm going to ask Chris to help with the arrangements. Our Keynote Speaker from industry, John Young, Jr., Vice President and Deputy Business Area Leader of Northrop Grumman Corporation gave an excellent speech on the state of the Defense Industry. Our Keynote Speaker from the IEEE, Dr. Alphonse, our Region 1 Director, discussed the need for the IEEE to modify the criteria on how Fellow titles are awarded, as members from industry who don't publish to the extent that those in academics do, are at a distinct disadvantage. Dr. Alphonse is an excellent Region 1 Director and I hope his views are considered by IEEE Headquarters. We had one of our best turnouts for this event, and congratulations to all the deserving recipients. Hopefully, we'll be able to share pictures of this event with you in a future Pulse.

(Continued on Page 3)

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/



Call for Nominations

(2003-2004 IEEE-USA Officers)

Dear Colleague:

I am writing as chair of the IEEE-USA Nominations and Appointments Committee to ask for your help in identifying U.S. IEEE members who may be interested in, and well-qualified for, service in the following IEEE-USA offices:

- IEEE-USA President-Elect (2004)
- IEEE-USA Member-At-Large (2004-2005)
- IEEE-USA Secretary/Treasurer (2003)
- IEEE-USA Vice President - Career Activities (2003)
- IEEE-USA Vice President - Member Activities (2003)
- IEEE-USA Vice President - Professional Activities (2003)
- IEEE-USA Vice President - Technology Policy Activities (2003)

These are the officers who direct the day-to-day operations of IEEE-USA, provide leadership for our volunteer committees, oversee their financial performance, and promote new entrepreneurial activities. Nominees must be IEEE Senior member grade or higher, and must be from IEEE Region 1-6. We are especially interested in nominations of Senior members who are also Graduates of the Last Decade (GOLD) members.

If IEEE-USA is to achieve its vision of promoting U.S. prosperity through public and electrotechnology policy and becoming the technical professional's best resource for achieving lifelong career vitality, we need to identify candidates who share this vision, have strong leadership skills, and are willing to invest the time and energy required to get the job done. Because of your leadership position in IEEE, you are well situated to know who these individuals are. We greatly appreciate your help in identifying and nominating them.

Nomination forms and a more detailed description of each position for which nominations are being sought is available on the web at: <http://www.ieeeusa.org/elections/nominations.html> or can be obtained from Bessy Burch in the IEEE-USA office at (202) 785-0017, ext. 8329. If you're not able to submit formal nominations for any reason, we would still like to have the names of candidates whom you would recommend for consideration. We will follow-up to confirm their interest and compile the necessary background information.

For individuals to be considered in this year's nominating process, the IEEE-USA N&A Committee will need to receive nominations (or just names) by 17 May 2002. Your recommendations, however, are welcome at any time as we plan to create a database of prospective candidates that we can call upon in the future.

Sincerely,

Paul J. Kostek

Chair, IEEE-USA Nominations and Appointments Committee

Long Island Section Officers

Chair. William Rooney
 1st Vice Chair Dave Mesecher
 2nd Vice Chair. Christian DiFranco
 Secretary. Lisa Zannella
 Treasurer. Daniel Rogers

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The PULSE of Long Island is published monthly except July and August by the Institute of Electrical and Electronics Engineers, Inc. Headquarters: 445 Hoes Lane, Piscataway, NJ 08855-1331. \$1.00 per member per year (included in annual dues) for each member of the Long Island Section. Periodical postage paid at New York, NY, and at additional mailing offices. Postmaster send address changes to IEEE PULSE, 445 Hoes Lane, P.O. Box 1331, Piscataway, NJ 08855-1331. (USPS 450-540). The opinions expressed in this newsletter are those of the authors, and no endorsement by the Institute, its officials, or its members is implied.

Send Address Changes to:

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

PULSE Deadlines

For Sept. 2002: **8-5-02**
 For Oct. 2002: **9-5-02**

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
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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/ for up to date listings, changes and corrections.

June 5, 2002 - LI Consultant's Network at 7:00 PM at Weeping Willow on Route 110 in Farmingdale, No pre-registration is required. For further info call Irwin Weitman (631) 266-2428.

August 26, 2002 - EXCOM meeting at 6:00 PM, The Weeping Willow on Route 110 in Farmingdale

Chair's Message—Continued from page 1

In my column in the March Pulse, I mentioned that there is a case before the Supreme Court, the Festo case, that will significantly impact patent rights. The result could have enormous impact on the technical and economic future of our country if the Supreme Court upholds the Appeals Court's decision. Because of its importance, the IEEE-USA has filed an amicus curie brief as well. Thanks go to Dave Mesecher, our first vice chair, for arranging for a lecture by the patent attorneys involved in the case. Gerald Bodner, counsel for Festo Corp and David Carter presented a lively discussion on the case that was appreciated by all who attended.

Summer time is on us again and many of you will be enjoying a well earned vacation. The Pulse isn't published over this time period. So mark August 6th on your calendar to join us as the Computer Society presents a lecture on Mobile Ad Hoc Networks (see notice on page 7). In a couple of months we will be back with plans for more lectures, including IEEE Distinguished Lecturers from the several of our Societies.

Bill Rooney, Chair
W.Rooney@ieee.org

EDA AD
here

FIRST INTERNATIONAL CONFERENCE ON INFORMATION TECHNOLOGY & APPLICATIONS (ICITA2002)

DATE – Sun. Nov. 24 to Thu. Nov. 28, 2002

PLACE – Bathurst, NSW Australia (200KM west of Sydney)

CONTACT: David Tien, General Chair, dtien@csu.edu.au
School of Information Technology
Charles Sturt University, Bathurst, NSW 2795
Phone: (+612) 6338-4862
Fax: (+614) 6338-4649
Mobile: (+614) 05-212-291
Website <http://odysseus.esu.edu.au> for registration and more information

Those interested in organizing new tracks in this conference can email the Chair or look on the web site.

NEW YORK NETWORKING GROUP JOIN NOW FOR FREE!

Networking For Professionals is a new online networking group comprised of select professionals in the New York area. Members can search through a database of professionals and arrange their own meetings with selected members for the purpose of building relationships and generating a new source of referrals.

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THREE BOARDS SEEK NOMINATIONS FOR OPEN POSITIONS

Nominations are being sought for the following positions.

REGIONAL ACTIVITIES BOARD:

2003 Vice President - Regional Activities/Chair - Regional Activities Board.

Nomination Deadline: 1 May

Send nominations to Antonio C. Bastos, RAB N&A Committee Chair, at [MailTo:a.bastos@ieee.org](mailto:a.bastos@ieee.org) and a copy to Dan Toland, IEEE Regional Activities, at [MailTo:d.toland@ieee.org](mailto:d.toland@ieee.org).

Additional information is in the RAB Operations Manual, Section 2, at

<http://www.ieee.org/organizations/rab/rab/RABOpsMan/OpMan-index.html>

TECHNICAL ACTIVITIES BOARD:

2004 TAB Vice President-Elect

Nomination Deadline: 13 May

To request a nomination form and/or to obtain additional information contact Paula Dunne, IEEE Technical Activities, telephone +1 732 562 3919; or e-mail [MailTo:p.dunne@ieee.org](mailto:p.dunne@ieee.org).

PUBLICATION SERVICES AND PRODUCTS BOARD:

2003 Vice President, Publication Services and Products

Three Member at Large Positions to serve from 1 Jan. 2003 to 31 Dec. 2005

Nomination Deadline: 17 May.

For functions, duties and responsibilities, visit <http://www.ieee.org/organizations/pubs/pab/index.html> and link to the Operations Manual and then scroll to Section 2 .

For more information, contact Josephine Germano, IEEE Publications Activities, at [MailTo:j.germano@ieee.org](mailto:j.germano@ieee.org).

Professional Activities Report

by Irwin Weitman, P.E.

Are you getting tired of hearing what I have to say and think is important. I have been writing this column for so long that I have forgotten when I started. If anyone would like to write or suggest a new subject for one of these columns, I would be thankful. I would be even more thankful if several people come forward with such offers.

Polytechnic University is shutting down its Farmingdale facility effective June, 1 2002. The new location of Polytechnic University will be in a building east of building #1 of the Huntington Quadrangle. The address is 105 Maxess Road. Meetings of the "IEEE Consultants' Network of Long Island" will be held there on the first Wednesday of each month from July through August. The school is on the second floor. The building is just east of Bld.#1 of the Huntington Quad. Attendees to evening meeting should be aware that the entrance doors to the building are locked at 7:00 PM. GET THERE EARLIER. I will try to find out if there is an accessible phone so that late comers can call. Since they have limited space we will still have to find accommodations for large meetings.

The June meeting of LICN will be held at the Weeping Willow at 7:00 PM (631)293-0059. There will be coffee and Danish. The speaker will be one of our members, Harvey Altstadter. He will discuss "Reliability Calculations" and some deeply rooted misconceptions.

An overview of some of the more common Reliability Calculations requested by customers will be presented. Reliability Prediction, or MTBF, is the best known (and most controversial), and most of the community believes that they understand what that calculation is, and what value it has. Some deeply rooted misconceptions could be exposed. The discussion will cover reliability Prediction, Stress Analysis, Failure Mode and Effects Analysis (FMEA) and Failure Mode and Criticality Analysis (FMECA) from the practitioners' view.

The value obtained from each type of reliability calculation is a function of when and how often the calculations are performed during the program development cycle. The discussion will be centered on what the calculations are for, how to satisfy customer needs (which range from legitimate value added to window dressing) and when and how often to do them. The discussion will include a very light once over on the methodology for making these calculations. HEAVY MATHEMATICS NOT REQUIRED, RELIABILITY THEORY WILL NOT BE DISCUSSED.

All meetings of the Consultants' Network are open to all IEEE members and their guests. All technical meeting subjects are of interest to engineers. Details of future meetings are listed on the LICN web newsletter. [HTTP://WWW.CONCONSULT-LI.COM](http://www.consult-li.com)

To help get a network of employed engineers started contact me by e-mail, see below or call Bruce Willard at (631) 265-2282, [mailto: willard@ieee.org](mailto:willard@ieee.org)

Get last minute IEEE L.I. Section news, such as, program cancellations due to snow, etc. Do this by updating your IEEE personal registration data to include your e-mail address, click on: <http://services1.ieee.org/membersvc/coa/intro.htm>

Hopefully we can have this service of our Section operating soon. To make changes to your IEEE registration information by phone, you can call IEEE member services at 1-800-678-4333.

Update service is also available on the web at <http://www.ieee.org>

If you need further info, please contact me at (631)266-2428 or at i.weitman@ieee.org.

IEEE-USA NEWS “Building Careers & Shaping Public Policy”

Contact: Greg Hill, Member & Electronic Communications Coordinator
g.hill@ieee.org, 202 785 0017, ext. 8335 <http://www.ieeeusa.org>

NEW EDITION OF *IEEE-USA TODAY'S ENGINEER* IS LIVE ON THE WEB
<http://www.todaysengineer.org>

IEEE-USA TODAY'S ENGINEER has a new look and now includes content formerly published in IEEE-USA POLICY PERSPECTIVES, including articles and commentary on the topics that are shaping legislation, the technology workplace, and the engineering world. This month's edition of TODAY'S ENGINEER includes:

Building Careers

- JOB SEARCH STRATEGIES -- PLANNING FOR RESULTS
- IEEE SOCIETY CONFERENCES & THEIR VALUE TO YOUR CAREER
- BACKSCATTER: REALITY AND THE VIRTUAL ENGINEER

Shaping Public Policy

- INTELLIGENCE: BALANCING THE TECHNIQUES AND THE COSTS
- CONGRESSIONAL VISITS DAY: THEME ATTUNED TO THE TIMES

Also this month in TE:

- Engineering Trends: Do Engineers and Customers Mix?
- Engineering Hall of Fame: Hugo Gernsback
- World Bytes: How Can You Value What You Cannot Touch?

To read TODAY'S ENGINEER, visit: <http://www.todaysengineer.org>

Retlif Ad
Here!

The Long Island Section of IEEE Computer Society is presenting a seminar titled:

Mobile Ad Hoc Networks

Tuesday, August 6, 2002



WHO SHOULD ATTEND? Persons who are interested in the upcoming mobile networking technology based on ad hoc networks.

WHAT ARE THE KEY BENEFITS? Learning about Mobile Ad Hoc Networks.

Speaker:

Samir R. Das, University of Cincinnati

Abstract:

A mobile ad hoc network is an autonomous system of mobile hosts connected by wireless links. There is no static infrastructure such as base stations. If two hosts are not within radio range, all message communication between them must pass through one or more intermediate hosts that double as routers. Since the hosts are mobile, the routing protocols must be adaptive and able to maintain routes in spite of changing network connectivity. In addition, the protocols must be of low-overhead because of low bandwidth of wireless links and limited battery power of the mobile hosts. Aside from routing, another challenging issue is designing medium-access control protocols for efficient access to the shared radio medium. This talk will introduce mobile ad hoc networks and their applications, describe prominent dynamic routing protocols and medium-access control protocols for ad hoc networks and comment on their performances.

Seminar Coordinator:

Daniel Rogers, Computer Society Chair of the IEEE Long Island Section.

Speaker Bio:

Samir R. Das is currently an Associate Professor in the Department of Electrical & Computer Engineering and Computer Science at University of Cincinnati. He received his Ph.D. degree in computer science from the Georgia Institute of Technology, Atlanta, in 1994. His research interests include mobile/wireless networking, performance evaluation and parallel discrete event simulation. Samir Das received the NSF Faculty Early CAREER award in 1998. He is a speaker in the Distinguished Visitor program of the IEEE Computer Society. He co-chaired the Technical Program Committee for the 2001 ACM Symposium on Mobile Ad Hoc Networking and Computing (MobiHoC). He also served on the program or organizing committees of several prominent workshops and conferences related to networking, distributed computing, simulation and performance evaluation, including PADS, MASCOTS, IC3N, ICDCS, MobiHoC and MobiCom. More information about him and his research can be found at <http://www.ececs.uc.edu/~sdas/>.

Location and Time:

The seminar will be presented from 6 to 8:30 PM Tuesday, August 6, 2002 tentatively located at Telephonics Corporation on Route 110 in Farmingdale, New York. Refreshments will be provided. If you wish to attend, please contact the coordinator Daniel Rogers by email at drogers@ieee.org (please indicate if you are not an American Citizen, as the facility must badge Foreign Nationals differently). A confirmation email will be sent. The seminar is wholly the responsibility of IEEE Long Island Section and the speaker.

30 Years Ago By Rod Lowman, Historian

Early in the first of his two years as chairman of the section, Joel Snyder started a campaign to influence congress to enact regulation of pensions. He encouraged every member to write their congressman and recommend legislation that would make pensions more portable. The pension plan approved by the executive committee included a maximum of one year of employment before being included in a company pension plan, a goal of immediate vesting with a requirement of vesting in 5 years with 20% after the first year and 20% more each year until complete vesting in 5 years. It also included the extension of the Keogh Act to include salaried employees permitting investment of \$2,500 tax free. It encouraged industry to voluntarily correct their own pension practices and to enter into reciprocal agreements which would permit the unobstructed transfer of pension benefits between the plans of consenting employers.

Bob Barden headed a task force who promoted these goals with legislative committees, individual congressmen, legislative experts who could influence legislation and bring about improvement. Bob spent a lot of time in Washington appearing before legislative committees informing them of the plight of engineering employees. After several years of hard work we accomplished at least some of these objectives and improved the retirement benefits of engineers through the Individual Retirement Accounts. In addition to benefiting engineers, our efforts improved the pension situation for all employees as well.

To improve the camaraderie of our membership and to have the opportunity for spouses to meet other engineers, the section planned a family picnic at Wantaugh Park on a sunny Saturday in June. Families brought their picnic baskets, the section provided the sodas, beer, and prizes to award to the winners of athletic contests. Whole families enjoyed the swimming, boating, and the softball games. The children filled the playground and participated in the three legged races and other games.

I think it is time for another family activity. It is good to give those home bound spouses and children a chance to meet those engineers that are keeping their working spouses out at night at technical meetings and seminars.



VOL. 52, No. 6

(USPS 450-540)

For
June
2002:

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IEEE Pulse
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