New Communication Systems Developments

New Jersey – New York – Boston – Dallas
Washington, D.C. – Los Angeles – San Francisco

To $60,000 with Stock, and Relocation Assistance

Electronic & Software Engineers

Product Manager — Communications (325-788) Fast-growth vendor of communications link systems seeks experienced Telecommunications Product Manager familiar with large data communications networks. Opportunity to identify product and marketing opportunities. To $55,000.

Production Manager — Microwave Tube (315-32) International medical technology company seeks Technical Manager to oversee production of microwave vacuum electron tubes. Offers excellent work environment. To $40,000.

SATCOM Systems Engineer (325-15) Major contractor seeks to double department of Systems Engineers in the area of communications. BSEE and five years experience sought for senior level openings. Customer interface opportunity as well as design. To $80,000.

Senior Hardware Engineer — Networking (363-21) Growing manufacturer of imaging systems seeks Engineer to develop new microprocessor-based imaging system. Network design experience preferred. To $55,000.

Digital Design Engineer (315-15) Growing manufacturer of microprocessor-based PXI systems seeks Digital Designer to develop hardwaredesign for new products. BSEE desired. To $40,000.

RF Design Engineer (315-09) Established electronics firm leading the industry in cellular/radio communications desires RF/digital Design Engineers. Rural living in mountain community with low housing cost. To $45,000.

Hardware/Software Engineer (325-02) Prestigious consulting firm seeks professional with BSEE or equivalent and hardware/software integration skills using mini and micro-computers. Communications experience in commercial or military application desired. To $50,000.

Software Engineers (325-07) Highly visible division of major firm seeks BSEE with DEC 11/700 and Intel 8086 background for large systems in telecommunications and electronic warfare design. Excellent benefits and an exceptional suburban location. To $40,000.

Electrical Engineer — Communications (325-07) Leading manufacturer of equipment seeks RF analog and Circuit Design Engineers for new product design. Will work with RF transmitters, analog amplifiers, and maintain liaison with manufacturing in design completion. BSEE desired. To $40,000.

Projects Engineer (315-07) Dallas corporate office seeks engineering with cellular radios. Will provide engineering liaison and market support. Three years microwave/RF experience and BSEE background and a BSEE sought. High visibility. To $45,000.

Communications Software Design (315-15) Well-known electronics firm seeks talented Software Engineer for their research center. Will develop software for new communication systems and become involved with “C”, FASCAL, ALGOL, X-25, Graphics, LAN’s. Excellent peer group. To $50,000.

Reliability Engineer — Optics (315-21) Aerospace firm seeks BSEE, ME or Computer Science background and reliability engineering experience with computer modeling, optical and printed circuit boards. Fiber optics knowledge desired. To $30,000.

Hardware/Software Engineer (325-01) Progressive firm seeks Engineers to take research and development projects, using TTL logic and microcomputers, from concept through implementation for this vendor of sophisticated military systems. BSEE and ‘Top Secret’ clearance required. To $50,000.

Senior Manufacturing Engineer — Telecommunications (315-04) BSEE with injection molded plastics manufacturing experience sought for aggressive engineer. Will be involved with contemporary telecommunications products. To $40,000.

Manufacturing Engineer (315-09) Fortune 500 company expanding seeks individual with experience in supervision of F, T, or ME with knowledge of telecommunications and computer in a production environment. To $40,000.

Software Communications — Free Airline Travel (315-14) International leading telecommunications equipment manufacturer seeks Engineers to develop UNIX-based communications systems. New facility. To $50,000.

RF Engineer (315-29) Telecommunications firm seeks Product Development Engineer to head project team developing miniature RF radio receivers and transmitters. Challenging assignment in RF design. To $40,000.

Hardware Systems Architect (325-18) Sophisticated manufacturer of high-tech telephony equipment seeks experienced Design Engineer with direct experience in microprocessor-based software applications development. Extensive systems specifications. BSEE or MSSEE sought. To $41,000.

Software Engineer (325-02) Expanding telecommunications company seeks BSEE with experience in design and implement firmware-based applications in real-time assembly. Real-time applications using 8 or 16-bit microprocessors. To $35,000.

Communications Systems Engineers (325-28) Join nationally respected consulting firm for duties in fast-growing area of systems, A.I., telecommunications, satellite communications and computer security. PhD preferred. To $50,000.

Call this week:

Wayne: 201-628-7220
1044 Route 523
Wayne, New Jersey 07470

Edison: 201-246-0480

*Leading national recruiting firm that specializes exclusively in engineering. Offices in Boston, Dallas, San Francisco, Los Angeles, Washington, D.C. Charges include advertising costs.

Fuel Cells For Efficient Energy Conversion

The North Jersey Chapter of the Power Engineering Society will feature a talk on “Fuel Cells For Efficient Energy Conversion” at its December 5, 1984 meeting. The speaker will be Peter A. Lewis of PSEG.

Call this week:

Wayne: 201-628-7220
1044 Route 523
Wayne, New Jersey 07470

Edison: 201-246-0480

*Leading national recruiting firm that specializes exclusively in engineering. Offices in Boston, Dallas, San Francisco, Los Angeles, Washington, D.C. Charges include advertising costs.
“Expert Systems” is the topic of the meeting of the North Jersey Joint Chapter of the Computer & Communication Societies. Speakers for the event will be Joseph M. Fox, Andrew B. Ferrentino, or Anthony M. Magliero; all from Architecture and Engineering Inc. Members and non-members of IEEE are all invited to attend.

About The Talk

General Overview: What is AI, its subfields, and its promise? What is the state of the practice?

Expert Systems: What are they, how do you use them, and how do you build them? The hardware and the software, The development tools and the run-time package. The expert and the knowledge engineer. The knowledge base. The applications to date. How long does it take and how hard is it to develop a working Expert System?

Inferencing Engines: Their future in real world systems and elsewhere.

About The Speakers

Joseph M. Fox is Chairman of Software Architecture and Engineering Inc. (Software A&E), an Oakton, Illinois firm which specializes in software engineering and artificial intelligence. He was formerly Vice President of IBM Federal Systems Division.

Andrew B. Ferrentino is President of Software A&E. He has had primary responsibility for the development of Artificial Intelligence Center. Previously, he was with IBM’s Federal Systems Division. Anthony J. Magliero is a Knowledge Engineer with Software A&E. He holds a Ph.D. in cognitive psychology.

Time: 7:30 PM, Wednesday, November 14th, 1984.
Place: ITT Auditorium, 500 Washington Avenue, Nutley, N.J.
Directions and/or Dinner Reservations: George P. Pick (1991) 884-0040 or B.S. Gourley (201) 783-5570.

Electro/85 and Mini/Micro Northeast Seek Volunteers for Elite “Inner Circle” Group

When Electro/85 and Mini/Micro Northeast return to New York April 23-25, 1985, their success will largely depend on the active support of IEEE members and the engineering community. This is the opinion voiced by Bernard Kantor, Chairman of the Attendance Committee, of the technical conferences and Board members in general.

A select group of volunteers are now being recruited to help increase attendance by distributing free preregistration forms within plants and other electronic establishments in the New York metropolitan area. By pre-registering long in advance at the Coliseum and the Shefton Center are eliminated. Many companies can expect more time in the exhibit areas and at the technical sessions.

Members of the “Inner Circle” (whose efforts do not go unappreciated) receive special Electro/85 and Mini/Micro Northeast badges and company affiliations are acknowledged in the official show program. Volunteers will be invited to a meeting held in their area to receive kits containing preregistration forms, programs and posters for distribution in their organization. Additional material will be sent to them in response to their needs.

It cannot be overemphasized that this task does not demand much of a person’s time, but the effectiveness of such a program is most rewarding for those participating.

Elctro/85 and Mini/Micro Northeast are sponsored by Region One. METSAC Council and the Central New England Council of the IEEE and the New York and New England Chapters of the EIA under the show management of Electronic Conventions Management, Inc.

To join the elite “Inner Circle” or to obtain more information, call Enzie Witzcy, Special Operations Manager of Electro, at 800-833-3613 (inside Massachusetts) (617) 232-4193 (inside Massachusetts) or write to 614147 Street, Chestnut Hill, MA 02167.

NJ PACE Meetings

Monthly meetings of the North Jersey Chapter of the Institute of Electrical and Electronics Engineers (NJ PACE) will be held at the ITT Tower, 666 Avenue of the Americas, New York, on the 2ND Wednesday of every month. Free refreshments will be served.

There are many active hot PACE Projects funded by IEEE/USA from which you benefit. Here’s your chance to learn about them and give your input.

Call Maistaid McIain, PACE Chairman at (201) 335-6874 for additional information.

A couple of letters by the same author in September’s issue include rather startling assertions: “Fifty percent of the members of the (North Jersey) Section are foreign students or former foreign students” and “Iranian students went through a great deal of unconstitutionally imposed discrimination and hardships during the hostage crisis.” “A clear majority of American and Foreign engineers indicated that they were against the return home amendment.”

The author of those letters may have difficulty understanding why the influx of foreign workers into relatively desirable jobs has caused so much concern among citizens. When someone can get a full page in the Newsletter to air strongly pro-immigration views, criticize this country for what was overall highly civilized behavior toward Iranian nationals here despite their making problems during the hostage crisis, and imply that foreign members can and will work to make IEEE policy strongly pro-immigration, it seems clear to me that there is cause for concern.

GLENN PICKARD, Ringwood, N.J.

The Branch sponsored talks on the following subjects: “Computer Graphics”– George Chakari; “Professionals in Engineering”– R. ’Connell; “UNIX Operating System”– Robert Hopkins; “Consulting Engineering”– Dr. Steinuck; and “Data Bases”– Frank Ullrich. All of these talks were well received. The field trips were made to RCA at Princeton, J. N. Perry Corporation at Great Neck, N.Y., and Bell Laboratories at Murray Hill, N.J.

One of the most important events of the year was a Summer Job Conference with alumni Dean O’Neill. The program once again outlined the essentials of applying for summer jobs, and in addition students who had worked for various companies during the previous summer shared their experiences.

The Branch plans to continue its excellent programs this year under the leadership of its new officers: James Reilly, Chairman; Jennifer Lee, Vice-Chairman; Richard Mirsola, Secretary; Douglas Carline, Treasurer.

New York City Technical College Region 1 of the IEEE is presenting the CUNY Technical College Fall Fair 1984, in cooperation with the United States Activities Board (USAB) for its outstanding activities during 1983. The award was based on the superior quality of the Branch programs as well as its increased membership, 270 members at the close of 1983. November 15th is the tentative date for the presentation award.

Edward B. Farkas, Branch Chairman stated that the Branch has a library of nearly 400 films that it has obtained from various companies, military services, etc. In particular it has been offering two film series that serve to complement the electronic courses offered by CUNY TECH, “Digital Electronics” and “DC Networks.” Congratulations to NYC Tech Student Branch for a job well done!
Student Activities

By STELLA LAWRENCE

METROPOLITAN STUDENT COUNCIL PROFESSIONAL AWARENESS CONFERENCES

The Metropolitan Student Council, has many programs oriented towards increasing the professional awareness of its members. In particular, the Council has sponsored several successful Professional Awareness Conferences. Foremost amongst these last year has been those at the New York City Technical College and the Penta Hotel, sponsored by the Technical career Institute IEEE Student Branch.

Suppose that it is your first year at your first job after graduating from the college of engineering. You have recently begun to realize that you do not know very much about your department is doing, and as a matter of fact you are getting tired of working on such a limited aspect of it. It is very likely that you should be allowed to take on greater responsibility. Your annual review is scheduled for next week and you are hoping for a promotion. Suddenly your supervisor tells you that you have to go out of town unexpectedly and asks you to take his place at the meeting.

He also tells you that it is vital that more money be allocated to the project to which you are presently involved. Your performance at this meeting would probably be decisive in your promotion. You must decide whether you will gamble your possible advancement for your ability to perform effectively at this meeting.

Your ability to do so will depend not only on your technical ability but also on the level of your professional development.

Many engineers might have difficulty with the decision outlined in the above situation, however a professional would not hesitate to take the opportunity to see what he could do. Perhaps you should begin to prepare yourself now for this kind of situation. Become a professional, become involved with your professional society, the IEEE.

Professional awareness includes the expectations and professional responsibilities of engineers and the social and economic considerations of an engineering career. Professional awareness should supplement the traditional technical training and education.

The areas addressed include:

A. Professional Development
   1. Environmental factors
   2. Education
   3. Work experience
   4. Extra-curricular activities
   5. Personal attributes development
   6. Career planning
   B. Useful Skills Development
      Topics to be addressed include important personal skills:
      1. Problem solving tools for industry
      2. Understanding corporate structures
      3. Communications skills: oral and written
      4. Human relations skills
      5. Presentation skills
      6. Observation skills
      7. Listening skills
      8. Flexibility as an asset not an excuse
      9. Delegation techniques
   C. Decision making/accepting responsibilities

Economic Considerations

Probably the most important concerns of the young engineer is financial independence and the ability to support himself or herself and, in many cases a family. For this reason, it would be an invaluable service to many if this program would assist in explaining topics such as:

1. Compensation and the cost of living in a given geographical area
2. Compensation in terms of dollars vs. the value of the benefits offered
3. Job market/Finding employment
4. Employer/Employee relations
5. Promotional paths and the criteria for determining advancement
6. Salary trends
7. Professional Practice—Expectations and Responsibilities of Engineering

Many young engineers, in their enthusiasm to work for a given company, unknowingly waive their rights to their inventions

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NJ Section Awards Committee Report

The IEEE North Jersey Section Awards Committee is a standing committee of the North Jersey Section. The Section Executive Committee has empowered the Awards Committee with the responsibility of identifying Section members who should be submitted for Fellow awards or other IEEE national or sectional awards. In addition, the Awards Committee also reviews nominees for Fellow awards submitted by individuals, and suggests a few candidates to the nominators on improving these submissions. The Committee also has the option to endorse these candidates as the facts warrant.

The Section Awards Committee’s work typically begins in October when solicitation for candidates for Fellow are made by members of the Committee. The Committee meets on a monthly basis from December through April. Each member of the Committee is assigned various candidates to see that the nominees meet all IEEE requirements in preparing cases for Fellow. Progress of all cases is followed with final drafts being submitted prior to the April Awards Committee Meeting. A calendar of the Awards Committee’s schedule is shown below.

In addition, Dr. Eugene I. Gordon, a member of the Section Awards Committee, has written a very informative essay on how to prepare a Fellow Case. This essay is printed in this newsletter.

The current members of the IEEE North Jersey Section Awards Committee are listed below:

Dr. George S. Eager, Jr. (191) 783-7281
Dr. Eugene I. Gordon (111) 685-2000
Prof. Gerald J. Flamm (191) 420-5605
Mr. Stephen A. Mallard (191) 430-6776
Mr. Robert L. Mattingly (191) 538-7493
Dr. Jerry B. Minter (191) 632-0790
Mr. Christopher O. Riedelberger (191) 388-2581
Mr. John Van Savage (191) 544-2324/2415
Dr. Joseph J. Suozzi, Chairman (191) 898-1200

If anyone is interested in submitting a Fellow nomination, please contact any member of the committee or the Chairman.

SCHEDULE OF EVENTS

The North Jersey MIT/AP, in conjunction with Princeton and Jersey Coast MIT/AP, is pleased to sponsor a “Gala” event on November 16, 1984 at ITT Avionics, Nutley, Clubhouse facility.

Two Distinguished Microwave Lecturers will be featured: Dr. Sander Weinreb—’“Radio Astronomy—A Challenge To The Microwave Engineer.”
Dr. Paul T. Greiling—’“High Speed Digital IC Performance Outlook.”

1:30 PM — Opening Mini-Show
1:45 PM — Dr. Paul Greiling
2:45 to 7:30 PM — Mini-Show
6:00 to 7:30 PM — Buffet Dinner — hot and cold, beer, soda, coffee and tea. FREE to first 300 registrants
7:30 PM — Dr. Sander Weinreb

Beer, soda, tea and coffee throughout the day. DOOR PRIZES and Grand Prize Drawing.

For Reservations: Dick Snyder (191) 492-1207, Wolfgang Schmidt (191) 284-2255
Har Dayal (191) 785-7651

The North Jersey MIT/AP, in conjunction with Princeton and Jersey Coast Chapter MIT/AP, is pleased to announce that on Friday, November 16 a “gala” gathering will be held including two Distinguished Lecturers and a manufacturers’ mini show. The site will be that of our success of last year, the ITT Avionics Club House facility in Nutley.

The mini-show and talk after will run from approximately 1:30 PM to 9:30 PM.

The following schedule is being planned:
1:30 to 1:45 PM — exhibition; 1:45 to 2:45 PM — first Distinguished Lecturer, Dr. Sander Weinreb will speak on “Radio Astronomy — A Challenge to the Microwave Engineer.”
2:45 to 7:30 PM — exhibition; 7:30 to 9:00 PM — FREE buffet dinner for the first 300 registrants; 7:30 to 9:00 PM — second Distinguished Lecturer, Dr. Paul Greiling whose topic is “High Speed Digital IC Performance Outlook.”

In addition, there will be beer, soda and coffee available during the course of the day — also free — and the exhibition will feature between 30 and 40 top ranking microwave companies.

This is an extraordinary affair and we expect our success of last year to be magnified. Please call either Dick Snyder (191) 492-1207, Wolfgang Schmidt (191) 284-2255 or Har Dayal (191) 785-7651 for reservations.

About Radio Astronomy

Radio astronomy is an exciting new science which has greatly increased our knowledge of the universe through recent discoveries of quasars, pulsars, molecular lines and the microwave cosmic background radiation. Dr. Weinreb’s talk will attempt to show the past and future roles of the microwave engineer in this field.

The talk will begin with a brief classification of radio astronomy sources in terms of their spectra and angular size. A few slides will illustrate the view of the sky a person would see if he or she could see at radio wavelengths. The current status and limitations of the search for signals from extraterrestrial civilizations will be reviewed.

This will be followed by an introduction to the use of antenna arrays and a description of some recent or in-progress radio astronomy facilities. Finally, the current status and future challenges in the areas of antennas, low-noise receivers, wide band and high speed data processing will be discussed.

About Sander Weinreb

Sander Weinreb received his BSEE and PhD in electrical engineering from Massachusetts Institute of Technology in 1968 and 1963, respectively. His thesis topic was a search for the galactic deuteron line using digital autocorrelation techniques. From 1960 to 1963, Dr. Weinreb was a Research Assistant at MIT engaged in investigations of varactor frequency multipliers and digital autocorrelation techniques. In 1963 he joined Lincoln Laboratory where he was responsible for the radio metric equipment for the Haystack antenna.

In 1975 he joined the National Radio Astronomy Observatory (NRAO) where, until 1977, he was head of the Electronics Division and responsible for the development of radio astronomy equipment for the Green Bank, West Virginia, and Arizona observatories. In 1976 he took a two year leave at the Radio Astronomy Laboratory of the University of California and then returned to NRAO to specialize in the development of low noise devices. Dr. Weinreb is the author of several publications in the area of radio astronomy observations, millimeter-wave receivers, and low-noise technology. He is a Fellow of the Institute of Electrical and Electronic Engineers (IEEE) and a member of Sigma Xi. He is active in many organizations such as the American Astronomical Society, the International Astronomical Union, and the Institute of Electrical and Electronic Engineers. His recent endeavors have been in the development of millimeter-wave radio astronomy and as a Research Professor at the University of Virginia.

About High Speed ICs

To meet the functional throughput requirements of future high speed signal processors, systems and commercial applications, GaAs digital integrated circuits are being developed. Applications for frequency counters, correlators, multiplexers, demultiplexers, time interval counters, and A-D and D-A converters with on-chip clock frequencies exceeding 1 GHz exist in the near-term. Such circuits are of MSI complexity, serv-
eral hundred gate equivalents. Future applications for high speed IC's in more complex computational systems, such as radar signal processors, will require stable random access memory, high speed memories, high density logic arrays, and spec-
ial purpose chips such as the multiplexers used in fast Fourier transform processors. For these future applications integration levels exceeding 1000 gates per chip are essential. In these advanced signal processes, the required system clock speed will be in the range from 250 MHz to 2.5 GHz. Logic gates with tens of picosecond gate delay, tens of micro-watts power dissipation, cryogenic to hundreds IC operating temperatures and greater than 10^6 rad radiation tolerance, will provide performance enhancements of one to two orders of magnitude for digital communica-
tions, memories and computers. The implementation of this technology in MSI/LSI chips requires stringent con-
ameter and process parameters for tight tolerances on device and circuit characteristics and high interconnect density. Ex- tremely short gate delays with large fan-in and fan-out low power dissipation for increas-
ed throughput rates.

In order to assess GaAs technology, this talk reviews the device technology and issues related to circuit/design and fabrication of MSI/LSI complexity. Circuit operating at gigahertz clock fre-
quencies, discuss limitations of the technol-
ogy, compares with computing tech-
ologies, and presents application where the technology will have a significant impact.

About Paul T. Greiling
Paul T. Greiling, BS'84 - MS'88 - SM'92 received the BSEE degree in 1983 and BS degree in mathematics in 1983, the MSEE degree in 1984 and the Ph.D. degree in 1970 from the University of Michigan, Ann Arbor, Michigan.

Paul joined the faculty of Electrical Engi-
neering at Northeastern University, Boston, MA, in 1970. While at Northeast-
erg a system application engineer in the area of IMAP-II devices. In 1972, he joined the faculty of Electrical Sciences and Engineering at the University of California, Los Angeles, where he did research on the theoretical and experimental characterization of micro-
wave solid state devices. He consulted for local industry on millimeter wave semi-

ductor devices. In 1976, he did re-
search on GaAs FETs at Sandia Labora-
tory, Albuquerque, NM, as a Visiting Faculty Member. In 1976 he joined the staff at Hughes Research Laboratory, Malibu, California, where he has been responsible for the design, modeling, and testing of GaAs digital IC's.

At present Dr. Greiling is an Adjunct Professor in the Electrical Engineering Science Department at UCLA and is head of the GaAs IC Design and Analysis Section working on both photolithography and electron-beam fabricated high-speed GaAs logic circuits. Dr. Greiling plays a

SIS Junctions, Circuits & Receivers
On Thursday, December 6, 1984 the Electronics Devices Chapter of the New Jer-
sey/Coastal Principles and the Improper AP Chapter of the North Jersey Section, and the Department of Electronic Engineering, Monmouth College, will sponsor a talk on "SIS Junctions, Circuits and Recei-
ers." The speaker will be Erik Kollen-
berg, Chalmers University, Goetaborg, Sweden.

Time: 7:30 PM Thursday, December 6, 1984
Place: Monmouth College, Edison Science Building, Room E2, West Long Branch, NJ
Pre-Meeting Snack: 5:15 PM, La Crepe Restaurant, Monmouth Mall, Eatontown, N.J. For reservations for snack call Martin Schneider (2101) 949-2603.

FET spectrum Analyzers In Control Systems
The November 29, 1984 meeting of the North Jersey Control Systems Society will feature a slide presentation and equipment demonstration to be given by John Cies of Hewlett-Packard Company. The focus will be on Fast Fourier Transform (FFT) based spectrum analyzers in the area of control systems. Some of the topics covered in the presentation will include the FFT based analyzers and how they differ from tradi-
tional swept sine analyzers; some basic con-
trol theory, and how a Dynamic Signal Analyzer (DSA) can measure the more commonly used control system performance criteria.

About the Speaker
John Cies is a Systems Application Engineer located in Hewlett-Packard's Paramus, New Jersey Sales Office. His primary function is advising DSA customers in the areas of structural analysis, control systems, rotat-
ing machinery and vibration control. Mr. Cies has held B.S. and M.S. degrees from NJIT and Rutgers respectively and spent 10 years working in the areas of vibration testing and structural analysis prior to joining Hewlett-Packard.

Time: 8 PM, Thursday, November 29, 1984
Place: Monmouth Center Public Light Co., Fork Lake, NJ
Information & Directions: Kulfi Jahan (2101) 265-2000; Daniel Tuyu (2101) 603-1381; (days) (2101) 603-1381 (evenings).

SUCCESSFUL IEEE FELLOW GRADE NOMINATIONS
By: Eugene I. Gordon, IEEE Fellow
North Jersey Section Awards Committee

Recognition by peers is one of the important reasons for the existence of IEEE. A person's contribution to the field of IEEE Fellow is the focus of much of the award activities. A successful nomination re-
turns two elements: (1) a qualified candidate, and (2) a well-prepared nomination form.

Assuming the (1) is satisfied, this document is designed to help produce a nomination form that will enhance the possibility of success.

A successful nomination is a tribute to the skills and efforts of the nominator as well as to the candidate. It represents consider-
able effort. Often the successful nominator experiences an unher-
ated accompanying sense of joy from a sense of quiet satisfaction for a tough job well done.

A key preliminary is a careful reading of the IEEE Guide for Fellow Grade Nominations. It is well written and complete, and is ignored at your own peril and potential success. Make sure that the Guide and nomination form are up to date; an out-of-date form is deathtaking. Give yourself ample time to prepare a proper form, including in the schedule a review by the North Jersey Section Awards Committee. In particular, don't impose on your references by making a last minute request for their support. A good reference is usually a busy individual with several such requests. When you do receive a request ask for a specific material, include a draft version of the nomination. Additional background informa-
tion can be helpful since it allows the reference to buttress the case.

Recognition by election to Fellow signifies demonstrated, outstanding effort in one case. Many good efforts do not replace one outstanding work. Many good efforts, added to one outstand-
ing work, do not enhance a nomination. Indeed, a laundry list of outstanding efforts reduces the opportunity to make a convincing case for the validity of one. Absent the demonstration and the nomination form, one's case is mute.

Therefore, the key decision in establishing the strategy for a successful nomination is the choice of a single outstanding effort which can be demonstrated convincingly. There is an opportunity to list other outstanding efforts, but they have little value unless they have some credibility.

Items 1 & 2 on the form require no comment. Item 3 (pro-
posal statement) is a key section that must be well written. Policies are allowed in the citation, a short, concise citation based on the one outstanding effort is more effective. Avoid the temptation to list more than one outstanding effort you have chosen to focus on. The number of items in the nomination document is simply the word history. Do not use it to add to the list of accomplishments or embellish the story. Keep to the point; position held by title and responsibilities. These may include number of people in your department, membership in the organization, courses taught, nature of the courses, etc.

Item 6A is your chance to tell the one outstanding accom-
plishment of your candidate. ONLY ONE is total. Don't expect the evaluation committee to be familiar with the area. Don't use jargon. Explain, and keep simple. Use the space pro-
vided. This section also allows you to explain why the outstanding accomplishment is important, and why it indicates performance substantially better than the average senior member.

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This is where you make the case. You win or lose here.

Item 6B (other contributions) is icing on the cake. But keep in mind, Item 6A is the cake, Item 6B is just a reminder. You should cross reference to tangible items listed in Item 7.

Item 7 requires TANGIBLE and VERIFIABLE evidence of the technical accomplishments listed in Item 6. This section is requested, on the up. The most effective and easiest exhibits involve books, publications in peer-reviewed journals, talks at meetings with published proceedings, and patents. Describe the degree of significance of the candidate, mission, and case. In the case of multiple authorship, describe the specific contribution of the candidate. The absence of books, papers, talks, or patents to support the case poses a challenge to the evaluation committee. Tange-
ible evidence includes archival reports, presentations to august bodies, published standards, minutes, designs, etc. It is important that the existence of these be verifiable. The maximum number of items is 18. These should be numbered in sequence for the sake of reference.

Item 10 (references) is important. Finding suitable references who are genuinely familiar with the work of the nominee, who also are members of the IEEE, is good work for organizations other than that of the candidate is such a demanding requirement that it provides credible indication of stature. However, references can also help to provide credible support for the basic case. For this reason, providing the reference with a draft copy of the nomination form is essential.

In summary, many of the mechanics can be found in the nomination guide. The key point is selecting success to prove a case of outstanding performance. Best of luck!

The item numbers in the essay refer to the item numbers on the Fellow Grade Nomination Form B-27.

CALENDAR

NORTH JERSEY SECTION AWARDS COMMITTEE 1984-1985 AWARDS YEAR

October - November 1984 Committee members solicit Fellow nominees from their organizations or other sources.

December 5, 1984 First Awards Committee meeting: AT&T Bell Labs, Morristown, N.J.

February 7, 1985 Awards Committee meeting.

March 10, 1985 Preliminary drafts for all Fellowships should be in the Chairman's hands.

March 15, 1985 Awards Committee meeting - Review of all drafts and recommendations to nominators.

April 4, 1985 Deadline for all final drafts of new Fellow.

April 9, 1985 Last meeting – Awards Committee Final vote on whether or not to endorse. Rank order listing of Fellow nominees will be made.

April 16-20, 1985 Letters of Endorsement sent to IEEE Fellow Secretary.

May 1985 Final report to Executive Section Committee made by Chairman.