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For reservations call the IEEE office at 236-4609
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Copy Deadline for October Scanfax is August 26.

USAB MEETS AT INDIAN LAKES

The United States Activity Board (USAB) met at Indian Lakes Country Club in Bloomingdale on Saturday, July 13th. Those officers that attended from the Chicago, Calumet and Rock River sections had a unique opportunity to meet the various members of the board. Those officers representing the Chicago section were George Thomas, Past Chairman; Bert Orszula, Vice-Chairman; Ed Barrett, Treasurer; Terry Sumner, Secretary and John Waters, Professional Activities Chairman.

Executive Committee Meeting

The September Chicago Section Executive Meeting will be held during MIDCON 85 at the Hyatt Regency O'Hare in the Pan Am "B" room from 4:30 P.M. - 6:30 P.M. on Wednesday, September 11th. Region 4 will also be holding a workshop concurrently in the Pan Am "A" room. These dates were chosen to coincide with MIDCON's All Committee Dinner on Wednesday night. Both Region 4 and the Chicago Section are co-sponsors of MIDCON.

A MESSAGE FROM THE EDITOR

Some of our more astute readers may notice some changes in SCANFAX. Starting with this issue, we are using a new printer with typesetting capabilities. This will allow us to be more flexible in our layouts, and may also make it possible to shorten our publication cycle so that stories do not have to be submitted as far in advance as they used to be.

For publicity directors and others who have information for SCANFAX, our deadline is noon of the fourth Monday of the month for legible material to be in Eleanore Burda's hands. Eleanore's address is on the masthead on page 2. both Eleanore and I will try to accommodate request for last-minute additions to SCANFAX, but it is unfair to those who submit their information on time to delay SCANFAX for last-minute additions.

Starting with this issue, there also are new SCANFAX editors. Jim Carroll, our new assistant editor, works in the

systems engineering area at AT&T Bell Labs in Naperville. I also work at Bell Labs, as the supervisor of the Electro-magnetic Compatibility Group.

To make SCANFAX more enjoyable to our readers, we would like to include more pictures and articles of Chicago area interest. To do this, we need input from you, our readers. Letters to the editor, preferably not libelous, but still controversial, are also welcomed. I do reserve the right to edit for length, however. Suggestions for improving SCANFAX, to make it more readable, or to provide some service that is currently unavailable are welcomed.

Finally, a word of thanks to John Tyner, who has been SCANFAX Editor for the past several years and to Tom Traub, who has served as Managing Editor. They have left behind a legacy of service to SCANFAX that Jim Carroll and I will be trying very hard to equal.

Bob Hofmann

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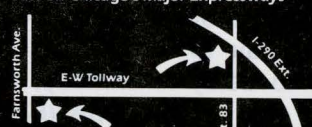


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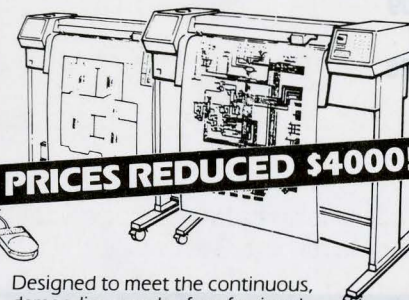
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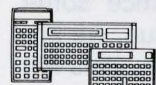
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Unless otherwise specified, Chicago Section IEEE neither endorses nor sanctions any positions or actions espoused in SCANFAX.

Bob Hofmann, Editor
979-3627

James Carroll, Assoc. Editor
979-5824

Eleanore Burda, Copy Manager
IEEE Office
(312) 236-4609

Change of Address

Send change of address to Roseann Schultz, Member Services, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. Include your SPECTRUM mailing label if possible. We cannot forward this information for you, so please do not send it to the local office.



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CALENDAR OF EVENTS

For reservations call the IEEE office at 236-4609
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Copy Deadline for October Scanfax is August 26.

1 9 8 5 SEPT. 11	Monthly Meeting - ALL WELCOME	IEEE Executive Committee	Hyatt Regency O'Hare Pan Am "B" Room	Meeting 4:30 - 6:30 PM
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10-12	MIDCON '85	Regions 4 & 5, Chicago & Dallas Sections	O'Hare Exposition Center 9301 Bryn Mawr Avenue Rosemont, IL
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18 CHICAGO SECTION JOINT MEETING

"Publication activities of IEEE" - Jose Cruz, IEEE
"Technical Development in Chicago Area" - Norm Peterson,
Director Governors Commission on Science & Tech
CONCURRENT TECHNICAL MEETINGS
"Vehicular CRT Displays" Northwest/Electron Devices
"Power Line Problems" Fox Valley/PES
"Industrial Control Documentation" IAS/IES

SEE DETAILS INSIDE

27-30	IEEE/EMBS 7th Annual Conference/ Frontiers of Engrng. & Computing in Health Care	Engineering in Medicine & Biology	Americana Congress Hotel 520 S. Michigan Avenue Chicago, IL
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30-10/2	IEEE Holm Conference on Electrical Contacts		Palmer House State & Monroe Streets Chicago, IL
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30-10/2	38th Annual Conference on Engineering in Medicine & Biology	Engineering in Medicine & Biology	Americana Congress Hotel 520 S. Michigan Avenue Chicago, IL
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OCT. 7-11	COMPSAC '85	Computer Society	Americana Congress Hotel 520 S. Michigan Avenue Chicago, IL
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9	"Quality Control for Professionals"	Industry Applications/ Industrial Electronics Society	Mr. Peter's Restaurant 1018 Mt. Prospect Plaza NE Corner Rand & Central Rds.	Social Dinner Meeting	5:30 6:15 7:15
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10	"Antennas" Ed Bronaugh of Electro-Metrics	EMC Society	Time and Place to be announced
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For Information — Bob Hofmann 979-3627

28-30	4th International Conference on Entity- Relationship Approach	Computer Society	Hyatt Regency O'Hare 9301 Bryn Mawr Avenue Rosemont, IL
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Statements by Candidates for 1986 President-Elect

The following independently written statements by the two candidates for President-Elect, Mr. Henry L. Bachman and Dr. Jose B. Cruz Jr., have been especially prepared for readers of IEEE newsletters. It is hoped that these statements will supplement the biographical sketches and other statements made by the candidates which appear elsewhere in the IEEE literature and that they will assist IEEE member voters in the election process.

Statement by Henry L. Bachman

My objective, as President of the Institute will be to assure that the Institute will provide the basis for the health and growth of the profession and its members, for their own benefit, for the benefit of the electrotechnology industry and supporting institutions and, as a result, for the benefit of the members of society at large.

Essential to accomplishing this objective is the need to maintain the vigor of the technical societies and to see that these activities are not compromised. The professional activities of the Institute must support these technical activities by encouraging and assisting able engineers to join and to prosper in a lifelong career within the profession. These activities together, must take action to strengthen the profession's image and its contribution to public policy and, by so doing, create the environment that is necessary to enhance the strength and stature of the profession and its members.

More specifically, there is a need to derive more benefit and broaden the impact of technical activities by better application of the resources and capabilities provided by the Regional and Educational activities, particularly as to the need to increase the utilization and make more productive the engineers that are already working, to prevent the loss of older engineers from the profession, and to be more responsive to the careers in industry with requirements for competitiveness in product cost and quality. This requires improving the ability of the Institute to deliver relevant technical information to the members, economically and effectively, both to individuals or local groups, and with emphasis on life-long learning through continuous education.

There is a need to assure the freest dissemination of technical information, as embodied in presentations or products, consistent with proprietary needs and national security, in order not to discourage the economic and intellectual pursuit of technological innovation. There is a further need to encourage the contributors of such innovation by proper recognition of their rights to intellectual property.

There is a need for the Institute to direct more attention to external affairs. With employers of engineers, for example, to further the understanding of the contribution of the Institute to all enterprises. With institutions at the local level, especially when certain member problems and concerns have more relevance and urgency regionally, than nationally, and with the media, and the public they serve, to combat the limited awareness and often, therefore, the low regard for technology, by speaking out knowledgeably about technology to the government and the public at large. The recently established Industrial Relations Committee, increased USAB interactions, through PACE, with local governments, an IEEE Annual Conference, and more media attention to Institute awards are examples of such public information programs which require more emphasis.

Statement by Jose B. Cruz, Jr.

Extend technical and educational services to a broader member base

IEEE is the largest technical professional society in the world. It disseminates numerous major advances in the field through its technical publications and technical conferences throughout the world. Our publications and conferences are preeminent but we need to extend our publications and conference activities to serve a broader member base. We should have more offerings of tutorial and practice-oriented material to assist our members in their career-long professional development. We need to develop effective delivery mechanisms using our own computer/communications technology.

Continuing education is for everyone—Advances in computers, communications, microelectronics, electronic materials, optoelectronics, electromagnetics, systems, power and energy, and other areas have been dramatic in recent years. IEEE members must continuously learn a significant amount of new material to maintain technical viability. The nature of our profession demands that life-long learning, in its broadest sense, occupy a central place in our individual activities.

Enhance opportunities for professional development—The most critical factor affecting the professional development of engineers is the presence of challenges for creativity and opportunities for growth in the work environment. IEEE should work with industry leaders to address the productivity problem through greater incentives for professional growth. We need to match our educational offerings with industrial challenges at the workplace.

Improve communications—We need to express our concerns and opinions to IEEE officers. Our representatives want to hear from us so that they can represent us more effectively. More communications with our local Section/Chapter officers, Society officers, and Institute officers should lead to a more effective organization.

Forecast engineering manpower demand—When demand exceeds supply, more high school graduates are induced to seek a career in engineering. Unfortunately, there is usually a lag of four to five years before an increase in supply is felt. This could then lead to an excess supply of engineers. We need longer term forecasts to improve stability. We must be very careful not to overestimate demand.

Fight Age Discrimination—IEEE should assist industry to achieve a more effective engineering manpower utilization. IEEE must assist its membership against age discrimination practices which may occur in advertising, early retirement, employment, promotion, transfer, or other forms. IEEE should support those industry leaders who create the necessary environment for employed engineers to have full and productive careers.

We Need Your Feedback

Based on my conversations with numerous IEEE members throughout the world I know that we need more services for technical and professional development in our stride for greater productivity, and we deserve improvement in our social and economic status. I believe that I have broad support for my goals to improve member services and to enhance the status of the engineering profession. I urge you to express your feedback by exercising your right to vote.

Statements by Candidates for 1986 Executive Vice President

The following independently written statements by the two candidates for Executive Vice President, Mr. Merrill W. Buckley, Jr. and Dr. Emerson W. Pugh, have been especially prepared for readers of IEEE newsletters. It is hoped that these statements will supplement the biographical sketches and other statements made by the candidates which appear elsewhere in the IEEE literature and that they will assist IEEE member voters in the election process.

Statement by Merrill W. Buckley, Jr.

The duties of the Executive V.P. are probably the least explicit of any of the IEEE corporate officers. This has been particularly evident since the adoption of the President-Elect concept in 1982. The value of the position therefore depends in large measure on how the person is elected approaches their term of office. If elected, I would enthusiastically undertake the usual functions of the office which are to assist the President, to chair the Conference Committee, and to coordinate and report on the activities of the committees assigned to the Executive V.P. But I would also spend a good deal of time on other important Institute issues. The recently completed Centennial Year survey of what our membership thinks should be done to improve the IEEE would be my agenda.

Since our bylaws state that "the Executive V.P. will be responsible for broad corporate matters and may appoint such ad hoc committees as may be required to discharge his/her duties" there is a ready made mechanism available to work on key issues.

I believe we need, and would initiate, ad hoc committees of our best people to address the membership's concerns and to develop specific recommendations for Board of Directors action on such issues as:

- Enhancing our professional image
- Low cost continuing education
- Application oriented publications
- Improving the IEEE/industry relationship
- Worldwide distinguished lecture program
- An affordable dues structure
- Priority review for professional activities
- Continuing support of AAES

Statement by Emerson W. Pugh

It is an honor to be considered for the office of Executive Vice President. If elected, I will devote myself to that position with four primary goals:

- Improve the volunteer structure of IEEE to attract our best members, to use their services wisely, and to assure that their efforts are applied to the good of all members.
- Help our members increase their technical competence through improved IEEE publications, conferences, and educational programs.
- Increase the monetary rewards and other recognition accorded to engineers through improved public awareness of their contributions and by developing broader opportunities for engineers.
- Make the international engineering community, and IEEE in particular, a force for promoting world peace and a better life for all.

In working to achieve these goals, I will seek the advice and help of as many members as possible; I will draw on my work experience in industry, government, academia, and international technology development and on my fifteen years of experience as an IEEE volunteer—including conference chairman, transactions editor, society president, Publications Board vice chairman, and member of the Board of Directors.

A specific function of the Executive Vice President is to chair the Conference Board, created last year to address a number of specific problems. As a member of that board this year, I am obtaining insights that will help me be more effective during the one-year term of the Executive Vice President.

WILFRED CORRIGAN TO KEYNOTE MIDCON/85

Wilfred J. Corrigan, chairman and chief executive officer of LSI Logic Corp. will be keynote speaker on Tuesday, September 10, the opening day of Midcon/85, in the Hyatt Regency O'Hare Hotel's Blue Max Room. Corrigan, a veteran of the electronics industry, has selected as his topic, "The Electronics Industry—Global Markets, Global Competitors." Before joining LSI, Corrigan had been president, chairman and chief executive officer of Fairchild Camera & Instrument Corp.

The three-day Midcon/85 — the Midwest's most comprehensive electronics exhibition and convention — is expected to draw about 25,000 attendees. Nearly 400 exhibitors will be showing their products in over 750 booths at the Rosemont/O'Hare Exposition Center. A full slate of 27 applications-oriented Professional Program Sessions is offered in addition to the exhibits.

Featured will be a series of paid tutorials designed to help attendees stay current in several electronics subject areas. Tutorial titles include "Advanced Topics in

Computer Architecture," "Robotics," "Systematic Design of Microcomputer Software," "Considerations for Installing and Replacing Surface Mounted Devices," "FCC Regulations," "Flexible Manufacturing Systems," "Computer Integrated Manufacturing," "Project Management for Small to Medium Projects and Sub-Projects," and a session on "Technical Writing."

On display will be products including active and passive components, microelectronics, instrumentation, test equipment, control systems, production equipment, mechanical and electronic packaging, power sources, computer board-level products, computer system peripherals, data communications equipment, and VME bus and Multibus products.

The annual program and lunch for the Midcon IEEE Life Members will take place on Wednesday, September 11 at the Hyatt Regency O'Hare Hotel.

For further information, contact Helen Schubert, area coordinator at 312/337-5076.

Northwest Subsection Hosts
Chicago Section Sponsored Technical Meeting
Wednesday, September 18, 1985
Mr. Peters Restaurant
1018 E. Mt. Prospect Plaza
(Route 12 - Rand Rd. and Central Rd.)
Mt. Prospect, Illinois
5:30 P.M. Cocktails - 6:30 Dinner

7:30 P.M.

General Topic Speeches

"Publication Activities of the IEEE"
Dr. Jose Cruz, IEEE Publications Vice-President
"Technical Development in the Chicagoland Area"
Mr. Norm Peterson
Executive Director of the Governor's Commission
on Science and Technology

8:30 P.M.

Concurrent Technical Talks

Northwest Subsection and Electron Devices Society
"Vehicular CRT Displays"
Mr. William Weissmueller, Director of Engineering
Zenith Electronics Corp.

Fox Valley Subsection and Power Engineering Society
"Power Line Problems - How to Protect Your Computer"
Mr. Dale Lamirard, Sales Manager, LorTec Power Systems, Inc.

Industry Applications Society and
Industrial Electronics Society
"Industrial Control Documentation"
Mr. John Brickley, President, Xcel Control, Inc.
Call Eleanore at 312/236-4609 for reservations

SATURDAY, OCTOBER 5, 1985 FACILITY TOUR: BRAIDWOOD NUCLEAR POWER STATION

The Braidwood Nuclear Power Station is the last Commonwealth Edison nuclear power plant under construction in Illinois. Braidwood will consist of two units which are rated at over 1100 megawatts each. According to present schedule, these units are to come on-line in 1986 and 1987. The first unit is over 85% complete and the second unit is approximately 65% complete.

On Saturday, October 5, we will have the opportunity to tour Commonwealth Edison's Braidwood Nuclear Power Station Project. The tour lasts approximately 2.5 hours which includes a video presentation, a question-and-answer period, and a tour of the plant. There is no charge for the tour. The tour includes about one mile of walking. Photographs are allowed. This is a unique opportunity to visit the project before security regulations are imposed, at which time, the station will be completely closed to the public. Also it may be many years before this opportunity is again available.

We are limited to 40 people for this tour, so reservations are required. Each attendee must sign a release form. The release form will be sent to each attendee after your reservation has been received. Each individual who attends is expected to provide their own transportation to Braidwood. (Plan on at least one hour's drive from the Naperville area.

There are several rules and regulations that must be followed since the station is still under construction. *Therefore, be prepared to step over cables and construction materials!*

Place: Braidwood Nuclear Power Plant
Location: 1910 South Briggs Street, Joliet, IL.
Time: Saturday, October 5, 1985
Arrive no later than: 9:30 a.m.
Tour starts: 10:00 a.m.

Please call (312) 236-4609 for reservations no later than Friday, September 20.

VEHICULAR CRT DISPLAYS

Vehicular CRT Displays will be the topic at the joint dinner meeting of the Electron Devices Society and Northwest Subsection on September 18, 1985.

Mr. William Weissmueller, Director of Engineering for Zenith Electronics Corp. Monochrome Video Display Operation will be the guest speaker. His talk will cover a brief history of vehicular CRT display development and Zenith's work with the automobile manufacturers, in particular the Buick Division of General Motors.

Dinner reservations, which are required, can be made by calling the IEEE Office (236-4609) by Friday, September 13, 1985.

SEPTEMBER 18th TECHNICAL MEETING

Each year the Chicago section "kicks off" its technical program by sponsoring a technical meeting for all its chapters. This gives engineers the opportunity to meet with other members outside their field of expertise. The program begins after dinner with short talks from general topic speakers. After these talks the general membership can attend various concurrent technical talks hosted by the individual chapters. This year we have two fine general topic speakers. The first talk will be by Dr. Jose Cruz from the University of Illinois. Dr. Cruz is the IEEE Publications Vice-President and he will speak on "Publication activities of the IEEE". This is an opportunity for our membership to understand the workings of IEEE's vast publishing activities. The second general topic speaker will be Mr. Norm Peterson, Executive Director of the Governor's Commission on Science and Technology. Mr. Peterson will speak on "Technical Development in the Chicagoland Area." Mr. Peterson will outline the state's affairs in stimulating high technology business development in and around our area. The state has initiated a number of programs to further this process. This is a timely topic appropriate for engineers in both industry and education.

After the general topic talks several of the chapters will sponsor technical talks. Dinner reservations must be made with Eleanor at 312/236-4609.

INDUSTRIAL CONTROL DOCUMENTATION

Since the advent of Programmable Logic Controllers (new common designation being advocated by industrial control manufacturers to avoid confusion with IBM "PC") in the early 1970's, the devices have continually expanded their share of the industrial control market. They have steadily assumed more complex tasks outside their original field of relay logic replacers. As PLC's proliferate on the plant floor, all persons involved with them (Design, Application, Management, Purchasing, etc.) are faced with the problem of clear documentation needed by the people who operate and maintain the equipment.

Documentation becomes an even greater problem as industry begins to use a variety of PLC makes at the plant. Each manufacturer has its own documentation system, some using special hardware and others using software packages written for various micro- and mini-computers. There is no standardization and the user is faced with large expenditures for a variety of incompatible hardware and software.

FOX VALLEY SUBSECTION / POWER ENGINEERING SOCIETY JOINT MEETING

POWER LINE PROBLEMS? HOW TO PROTECT YOUR COMPUTER (OR OTHER SENSITIVE LOADS).

Dale I. Larmirand of LorTec Power Systems, Inc. will present an overview of (1) the types of power line problems, and (2) the frequency of these problems. Various methods of protection which are commercially available will be described with the pros and cons of each. These include: details on the Uninterruptible Power Supply (UPS) systems and how they can eliminate the maximum amount of problems, a variety of types of inverter technologies used in UPS and various types of batteries coming on-stream in today's technology. Included in the discussion will be the Standby Power System (SPS) as a cost effective alternative to UPS on the very low power level.

Dale I. Larmirand is Sales Manager of LorTec Power Systems, Inc., a manufacturer of power conversion products for the telecommunications industry. He has thirteen years of experience in both sales and management in UPS applications for both the domestic and international markets.

The IAS/IES presentation on September 18 will explain and demonstrate the most universal PLC documentation system now available and the extension of this system to CADD preparation of control equipment construction diagrams.

Our speaker will be John H. Brickley, President of Xcel Controls, Inc., Mishawaka, Indiana. Mr. Brickley graduated with a BSME from Purdue in 1948 and, prior to his founding of Xcel in 1963, he held position at Allison Division of General Motors, Honeywell, and Koontz-Wagner in South Bend, Indiana.

Xcel began as a systems house and panel builder and, in the late 1970's, designed and marketed its own PLC, which has since been purchased by McGill Corporation. Xcel began its concentration on PLC documentation when it introduced the UP/DOC system in 1982. Currently UP/DOC supports equipment of 9 major PLC manufacturers. UP/DOC software is written for the IBM PC and it is marketed world-wide by IBM.

THE SEVENTH ANNUAL ENGINEERING IN MEDICINE AND BIOLOGY CONFERENCE

FRONTIERS OF ENGINEERING AND COMPUTING IN HEALTH CARE

The Seventh Annual IEEE/Engineering in Medicine and Biology Society Conference will be held in Chicago, September 27-30, 1985 at the Americana Congress Hotel. This will be the largest Biomedical Engineering conference in the country, offering many things of interest to the Chicago engineering community.

1. Plenary Address - The Evolution of Computers for the Laboratory
2. Laboratory Computer Architecture
3. Software Support Systems
4. Applications and Programming
5. Workshop on Laboratory Computer Requirements

The Engineering in Medicine and Biology Society is sponsoring eight short courses that will be of interest to engineers in areas other than biomedical engineering. The courses will be held at Americana Congress conference hotel. The course titles are:

1. Applications of Artificial Intelligence: The State of The Art
2. Mathematical Modeling and Computer Simulation of Physical Systems
3. Interfacing Sensors with the IBM PC
4. Computer Hardware/Software Systems for Image Processing
5. Robotics and Automation (½ day)

6. Starting a Small, New-Product Business
7. Principles and Practice of Clinical Engineering
8. Design, Analysis, and Realization of Elementary Digital Filters

The tuition for full day courses is \$100 for IEEE members and \$130 for nonmembers. Half day courses are \$55 and \$70. The tuition for these courses is unbundled from the conference registration.

To receive the advanced program containing all the information on the conference plus registration materials for these short courses, Symposium on Biomedical Laboratory Computers or the technical sessions write or call:

Ms. Patricia Horner
IEEE/EMBS Conference Manager
1101 Connecticut Ave., N.W.
Suite 700
Washington, DC 20036
Telephone: (202) 857-1199

Chicago Section members owe a debt of gratitude to the following supporters of the Recognition Dinner held April 27, 1985 at the Drake Oak Brook Hotel:

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AND A SPECIAL THANKS TO Beco Engineering Services Incorporated and Zenith Electronic Corporation

Outgoing Chairman's Report

Perception versus Reality

Prior to my election as chairman I had worked in various capacities within the Chicago section and observed the activities of the chairman. I felt I had a good understanding of the requirements of the position when I took office in July of 1984. I perceived the position as one requiring much paperwork and much time devoted to understanding the bureaucracy of our very large professional organization. While this perception held true, I really miscalculated the significance of the position. Now that my term of office is completed, I can say that the single most important function of the chairman is to promote the Chicago section. The Chicago section should be perceived by others as the voice of electrical engineers in the Chicagoland area. The chairman is in a unique position to accomplish this task. He is the one invited to represent the IEEE at Chicago area professional functions. He is the one who receives inquiries from the public. The chairman is the focal point of communications between headquarters, Region 4 and the societies. The services of a qualified executive committee is available to the chairman. The chairman must guide this committee throughout the year and insure that the goals of the section are met. This activity must not distract the chairman's attention from his primary goal of convincing the public that the Chicago section is well, active and represents electrical engineers in the Chicagoland area.

I had two major goals when I took office. One was to enhance our publication SCANFAX and the other was to tighten our financial policy. Although there were some disappointments during the year, I feel that I achieved my goals. This premiere issue of SCANFAX is the result of the efforts by the SCANFAX Committee headed by Bob Hofmann and Ed Barrett. Financial guidelines were also developed by our past Finance Chairman, Terry Sumner. The entire Executive Committee was instrumental in the section's success during the year. I enjoyed being a part of that effort.

I wish our new Chairman Hank Korman luck and thank all those former chairmen for their guidance and suggestions. Do not forget to attend MIDCON 85 and remember the September Videoconference and September technical meeting. All of these events sponsored by your active Chicago section.

George M. Thomas
Past Chairman
IEEE Chicago Section



This year the Chicago Section Chairman represented the IEEE at the 62nd Washington Award sponsored by the Western Society of Engineers. Guests of honor sitting from left, John Swearingen, 1981 recipient; Thomas Martin, Bechtel, Gene Randich, Marvin Camras, 1979 recipient, and Joseph Schudt, N.S.P.E. Standing from left, David L. Litten, WSE; C. R. Jackson, A.I.M.E.; Norman Weber, A.N.S.; Frank Scott, A.S.M.E.; Donald Dupies, A.S.C.E., and George Thomas, I.E.E.E.

1985 Salary Survey Published

The 1985 IEEE U.S. Membership Salary and Fringe Benefit Survey has just been published. Prepared under the direction and guidance of the United States Activities Board Salary Survey Task Force, the report is based on information gathered from a questionnaire sent in early January 1985 to 30,000 employed U.S. members. Data abstracted from the returns can be applied to the full non-student membership of over 170,000 with a 95-percent degree of confidence. The high response rate in prior years has given the Survey's results a notable degree of credibility with industry, government and academe.

Individual EE's as well as managers and salary administrators will find a wealth of information on trends that are helping to mold salary and compensation practices in the E/E and computer industries.

For more information, contact John Waters,
PACE Chairman, • IEEE Office
• 125 South Clark Street - Room 1545 •
Chicago, Illinois 60603.

"I'm selling more, yet going home earlier."

That's how David Meilahn, owner of The David Agency Insurance, Oak Park, Illinois summed up two of the many advantages he discovered after purchasing a revolutionary cellular mobile telephone for his car.

Meilahn was among the first businessmen in the Chicago area to benefit from the cellular telephone service offered by Ameritech Mobile Communications, Inc., Schaumburg, Illinois. In fact, on October 13, 1983, he became the first person in the nation to place a commercial cellular phone call. Ameritech's Chicago service was the first cellular system operational in the U.S.

"I hate to use the cliché 'time is money,' but this phone certainly has proven the accuracy of that tired old phrase," Meilahn said.

Meilahn's new cellular phone is not the first mobile phone the insurance executive has owned. Several years ago he subscribed to a less-sophisticated mobile telephone service which was the best available at the time, but tedious to use because of difficulty in finding a free line, and poor sound quality.

When the Ameritech service became available, Meilahn found it much improved over the earlier system and signed on immediately. He has been satisfied ever since.

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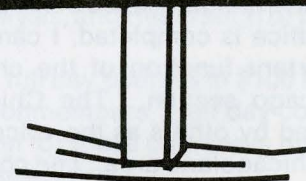
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PLACEMENT SERVICE

The Chicago Section is now offering a Placement Service for its members free of charge. The program is intended for those who are Member Grade and above and is a positive step to help our members who are unemployed. If interested in any of the applicants listed below, call the IEEE office (236-4609) for their name and phone number. If marked "confidential," the applicant will be contacted by the IEEE office so that he/she may contact the prospective employer.

- B7 — JC electronic design - control systems and active networks.
- B9 — Plant engineer - hi voltage and electronics specialties.
- B10 — HW - analog/digital. SW -c/unix/assembly/basic.

If you are an IEEE member and unemployed, call or write for the necessary form. Direct your request to: IEEE Placement Service • 125 S. Clark Street - Room 1545 • Chicago, Illinois 60603.

FIBER OPTIC VIDEOCONFERENCE

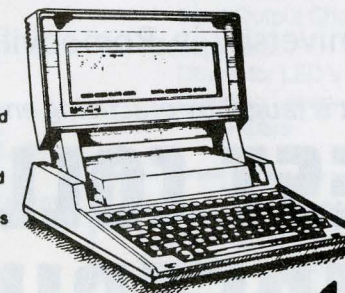
The Chicago section in conjunction with the DeVry Institute of Technology Alumni Association is sponsoring the 11th Videoconference on Fiber Optics - Technology and Applications. The videoconference will be held at the Oak Brook Terrace Holiday Inn at 17 W. 350 22nd Street. Attendees are encouraged to be present by 9:30 A.M. on September 19th. The \$45.00 fee includes a lunch and seminar notes. Reservations, which are required for the conference, can be made with Eleanore at 312-236-4609. A brochure detailing the videoconference is also available from Eleanore.



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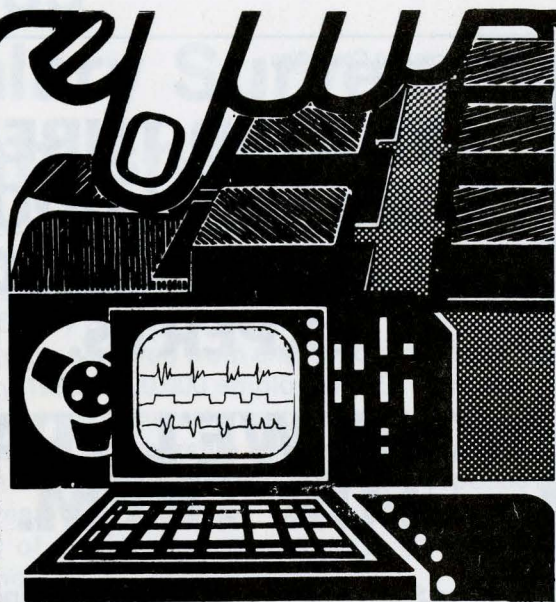
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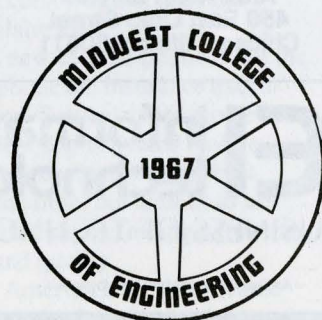
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IEEE 11th Videoconference

SPONSORED BY THE CHICAGO SECTION AND DeVRY INSTITUTE OF TECHNOLOGY

FIBER OPTICS TECHNOLOGY AND APPLICATIONS

September 19, 1985 11:00 A.M. - 4:00 P.M. Eastern Time

INTENDED AUDIENCE:

This videoconference is directed to working engineers, planners, and all others interested in understanding fiber optics technology and applications from the user's point of view.

KEY SEMINAR ELEMENTS:

- Overview of the Basic Fiber Technology (Components)
- Current Applications
- Emerging Applications
- Live Interaction with Presenter

SUPPORTING

DOCUMENTATION:

- A complete set of notes
- Hard copies of all slides
- References
- Presenter's biography

FUTURE TOPICS:

Expert Systems
December 4

1986 TOPICS:

Applications of
Artificial Intelligence
Data Communications Systems
High Technology Production:
Strategies and Applications
Process and Adaptive Control

LOCAL INFORMATION:

Location, Time, Fees,
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TECHNICAL CONSULTANT AND PRESENTER:

Dr. Stewart D. Personick

Dr. Personick is Division Manager for Transwitching Technology Research at Bell Communications Research, Inc. where he is responsible for advanced switching and multiplexing technology. He has published numerous fundamental and review papers in the area of fiber optics. He is a frequent lecturer on fiber technology and applications. He is the author of "Optical Fiber Transmission Systems", Plenum Press, NY, 1981; and chapters in several other books. He is a Fellow of the IEEE, and founder of the IEEE Communications Society's Committee on Fiber Optics. He was Technical Co-Chairman of OFC 83. He received an IEEE Centennial Medal in 1984, and is designated General Co-Chairman of OFC 85.

PROGRAM OUTLINE

Technology

Fibers
Principles of Propagation
Glass and Fiber Making
Loss
Delay Distortion
(Dispersion)
Cabling
Splicing and Connector-
ization
Sources and Transmitters
Lasers and LED's
Principles of Operations
Fabrication
Input-Output Characteristics
Transmitters
Drives for LED's and Lasers
Coupling Lasers and LED's
to Fibers

Detectors and Receivers
PIN and APD Detectors
Receiver Design for Optical
Detectors

Other Components

Applications

Point to Point Telecommuni-
cations Trunking
Local Area Networks
Broadband Networks (Bring
Fibers to End Users)
Data Links
Analog Links
Sensing Systems
Advanced Applications
Integrated Optics
Photonic Switching

REGISTRATION FORM

Please register me for the "Fiber Optics: Technology and Applications" videoconference on September 19, 1985.

Name _____

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