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Official Publication of the Chicago Section • Institute of Electrical & Electronics Engineers • January 1984

CALENDAR OF EVENTS

For reservations call the IEEE office at 236-4609
(unless otherwise indicated)

COPY DEADLINE: NO LATER THAN THE 25th OF THE MONTH

JAN. 4	"Industrial Robots - Today & Future"	Industry Appls./ Industl. Elec. Soc. (j/w ISA)	Mr. Peter's Rest. 1018 Mt. Prospect Plaza Rand & Central Rds.	Social Dinner Meeting	5:30 PM 6:15 PM 7:15 PM
10	Monthly Meeting - ALL WELCOME	IEEE Executive Cte.	McDonald's Plaza NE corner McDonald Dr. at 22nd, Oak Brook	Meeting	7:30 PM
11	"Engineering Liability"	Power Engrng. Soc.	Carson Pirie Scott Wabash & Monroe Sts. Highland Rm., 8th Fl.	Social Lunch Meeting	11:30 AM 12:00 PM 12:30 PM
17	"Medical Electronics"	Northwest Sub.	Mr. Peter's Rest. 1018 Mt. Prospect Plaza Rand & Central Rds.	Social Dinner Meeting	6:00 PM 7:00 PM 8:00 PM
25	"Comparison of Software Design Methodologies"	Fox Valley Sub.	Wilton Manor 2200 N. Main St. at Geneva Rd., Wheaton	Social Dinner Meeting	6:00 PM 7:00 PM 8:00 PM
28	Tutorial Seminar - "Personal Computers"	Power Engrng. Soc. (joint with) Fox Valley Sub.	Wilton Manor 2200 N. Main St. at Geneva Rd., Wheaton	9:00 AM--4:00 PM (See full pg.art. in this issue)	
FEB. 8	"Rider 26 Interruptible Power"	Industry Appls./ Industrial Electronics Soc.	Mr. Peter's Rest. 1018 Mt. Prospect Plaza Rand & Central Rds.	Social Dinner Meeting	5:30 PM 6:15 PM 7:15 PM
8	"Computer-Aided Design"	Power Engrng. Soc.	Carson Pirie Scott Wabash & Monroe Sts. Highland Rm., 8th Fl.	Social Lunch Meeting	11:30 AM 12:00 PM 12:30 PM
14	Monthly Meeting - ALL WELCOME	IEEE Executive Cte.	McDonald's Plaza NE corner McDonald Dr. at 22nd, Oak Brook	Meeting	7:30 PM
19-25	34th Annual National Engineers' Week -	"Engineers: Partners for Progress"			
19	Valentine's Day Matinee & Dinner	Power Engrng. Soc. (joint with) Fox Valley Sub.	Marriott's Lincolnshire		
29	"Experiences in Power Applications"	Fox Valley Sub.	Wilton Manor 2200 N. Main St. at Geneva Rd., Wheaton	Social Dinner Meeting	6:00 PM 7:00 PM 8:00 PM

CONGRATULATIONS, NEW FELLOWS! - As of January 1, the following IEEE members were elected to Fellow Grade: Chicago: Wolfgang-Martin Boerner "for advancement in inverse methods in sensing systems and in high-resolution broad band Doppler radar polarimetry." Northwest Subsection: Edward A. Roberts "for contributions to frequency control and advancements in magnetic recording technology." Being a Fellow in the IEEE is the epitome of peer recognition. Gentlemen, the Chicago Section salutes you!

CHAIRMAN'S CORNER - Happy New Year to all. The Chicago Section is alive and well, and looking forward to another good year.

The active Society Chapters have lots of interesting programs planned and we hope you will support them by your attendance and participation in Chapter activities.

If your favorite Society is not active locally, I suggest you get some of your colleagues together and form a chapter. Contact our Vice Chairman, George Thomas (963-7070) for information.

This month we're beginning a new placement service for members -- free ads in Scanfax. Details/form in this issue.

We're approaching the time when the Section and Chapters assemble their slates of officers for elections. We are always looking for volunteers to help with the planning and organizing work necessary to conduct the IEEE activities in our area. Contact any Chapter or Section officer, or Howard Wolfman, Nominating Committee Chairman at 354-1040.

WE Everson

William E. Everson, Chairman
IEEE Chicago Section

IEEE CENTENNIAL MEDAL WINNERS - We are proud to announce that 15 members from the Chicago Section will receive an IEEE Centennial Medal. The medals are being awarded to commemorate the Institute's 100th birthday. Our local winners were nominated on the basis of their service to the Section. Each will receive their medal and certificate at the Chicago Section IEEE Recognition Dinner to be held on April 28, 1984.

The winners, listed in alphabetical order, are: George W. Austin • James H. Beall • Richard A. Bulley • Paul F. Carroll • Hugh C. Edfors • Edward H. Horn • Paul E. Jahn • Keith W. Klontz • Edward F. Koncel • Dennis W. Lamont • Peter A. Mantas • Norbert R. Orszula • James P. Ralston • John E. Waters • Howard L. Wolfman.

"INDUSTRIAL ROBOTS - TODAY & FUTURE" - The dinner meeting on January 4, 1984 of the Industry Applications Society/Industrial Electronics Society (joint with ISA) will cover a general discussion of robots: what they are and are not - how they are used, and other general aspects. Economic projections include past and future shipments (worldwide), current U.S. figures and future (1990) projections. A wide assortment of applications will be presented to illustrate actual in-plant use of robots. Finally, a "look into the future:" the total automated factory, Japan, etc. The speaker will be J. Timothy Heile. Mr. Heile is Manager, Marketing Communications, Cincinnati Milacron, Industrial Robot Division. See Calendar of Events for location and time.

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Change of Address

A change of address form is included in each issue of **SPECTRUM**. Your local post office will also supply you with cards; mail to Roseann Schulz, 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.

• **POSTMASTER**, send address changes to: Roseann Schulz, Member Services, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854.

NEW! IEEE CHICAGO SECTION PLACEMENT SERVICE - The Chicago Section is pleased to announce a new service for members. We will be providing space, free of charge, for members who are seeking employment.

Members who wish to participate should fill out the form below and send it to the IEEE office. Your one line description will be printed in the next three issues of Scanfax. Employers who are interested, can phone the IEEE office, (236-4609), and will be given your name and phone number. If you have noted "confidential" on the form, we will take the names and numbers of the company representatives that call and inform you who they are so that you may contact them.

Sample ads: AA - Hybrid Microcircuit Designer - thick and thin film.
AB - Heavy Electric Power Equipment Rep - proven sales record.
AC - Technical Writer - specialized in military radar manuals.

We feel this is a positive step to help our members who are out of work. The program is intended for those who are at Member Grade and above.

IEEE CHICAGO SECTION
SCANFAX PLACEMENT SERVICE

The information on this form will be given to prospective employers who call unless you note "CONFIDENTIAL" on the top of the form. If you accept employment, please notify us immediately so that we may clear our files.

Each ad will run in three consecutive issues of Scanfax. Deadline is the 25th of the second month preceeding issue. For example, an application received on February 20 will be in the April issue; one received March 3 will be in the May issue. Scanfax is not published in July or August.

NAME _____ IEEE No. _____ EXPIRA. DATE _____

ADDRESS _____ IEEE GRADE _____

CITY/STATE _____ ZIP _____ PHONE _____

Please note your ad in the 70 spaces provided:

[illegible]

The IEEE and Electric Association waive any responsibility in determining the credibility, accuracy or qualifications of applicants or employers. Send this application to:

IEEE Placement Service
c/o Electric Association
125 S. Clark Street - Room 1545
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UPDATE

IEEE NATIONAL ELECTION RESULTS - *President-Elect*: Hans C. Cherney (12,375); *Jerrier* A. Haddad (9,317); *Donald D. King* (15,664) *Executive Vice President*: Henry L. Bachman (18,864); *George P. Rodrique* (17,906) *Region I Director*: Alex Gruenwald (3,979); *Michael J. Whitelaw* (3,902) *Region 3 Director*: Robert S. Duggan Jr. (2,661); *Ronald J. Wojtasinski* (1,695) *Region 5 Director*: John A. Green (1,780); *Charles R. Wright* (1,860) *Region 7 Director*: Wallace S. Read (1,303) *Region 9 Director*: Ramiro Garcia Sosa (582) *Division I Director*: Lee D. Davisson (960); *Bede Liu* (1,195); *Harold W. Sorenson* (1,147) *Division III Director*: Alan F. Culbertson (1,963); *Sajjad H. Durrani* (1,383) *Kiyo Tomiyasu* (1,455) *Division V Director*: Oscar N. Garcia (3,332) *Division VII Director*: Robert F. Lawrence (4,619) *Region 3 Vice Chairman*: George F. Abbott (2,347); *James W. Joyner* (1,918) *Region 4 Vice Chairman*: Bill F. Rider (2,322); *Lawrence W. VonTersch* (1,395) *Region 8 Vice Chairman*: Basil W. Osborne (836); *Emmanuel N. Protonotarios* (759) *Region 9 Vice Chairman*: Sergio E. Fronterotta (255); *Carlos E. Rodriguez* (191); *Jose F. Valdez* (164). *Proposed Constitutional Amendment*: For (5,511); Against (28,339).

WELL DONE, CHICAGO SECTION - Our Section has had the fifth (5th) largest growth in Senior Members for the first seven (7) months of 1983. The rankings include: Boston - 44 new Senior Members; Santa Clara - 37; Tokyo - 26; Washington, D.C. - 24 and Chicago with 22.

We've also had the third (3rd) largest number of renewals of members in arrears. Others include: Santa Clara - 745 arrears renewals; Boston - 682; Chicago - 374.

Contact the Section Membership Chairman, Doug Smith, (789-3750) for information on upgrading, renewing or joining for the first time.

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MEETING:

To form "Engineers and Designers Benevolent Assoc., (New non-profit organization by and for engineers and designers.)

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2. Job shoppers and independent engineers and designers.
3. Those interested in seeing history being made!

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WHERE AND WHEN:

Wed., Jan. 11, 1984 — 7:30 p.m.

In WALNUT ROOM (Lower level)

FOREST PARK MALL
7600 West Roosevelt Road
(Roosevelt and Harlem)
Forest Park, Illinois

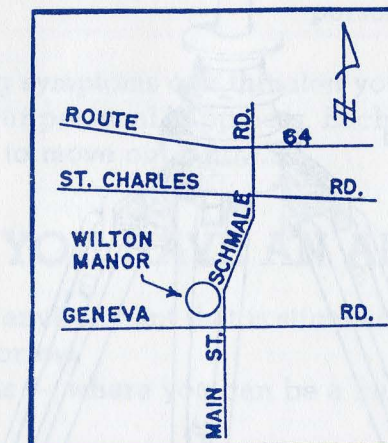
TUTORIAL SEMINAR "PERSONAL COMPUTERS"

SATURDAY - JANUARY 28, 1984

9:00 A.M. - 4:00 P.M.

WILTON MANOR, 2200 NORTH MAIN ST. AT GENEVA RD.
WHEATON, ILLINOIS

- PROGRAM:**
- 9:00 A.M.- 9:30 A.M.-Introduction What is a Computer, Computers Generically, Dollar Value, Generic Information on Peripheral Equip.
 - 9:30 A.M.-10:00 A.M.-Personal Computers, Define Needs of a Personal Computer and its Applications for the Individual.
 - 10:20 A.M.-11:15 A.M.-Home Computer Selection, Peripheral Equipment Available for PC. Transferability of the Computer and Peripheral Equip.
 - 11:15 A.M.-12:00 NOON-Software, Capability, Transferability and Operating Systems (User Friendly)
 - 12:45 P.M.- 2:00 P.M.-How to buy a Personal Computer, Dollar Value, Need for Expansion, Specification, Service, Documentation and Schools.
 - 2:00 P.M.- 2:45 P.M.-Maintainability of Personal Computers (HEY MA, WHAT DO I DO NOW?)
 - 3:00 P.M.- 3:30 P.M.-Learning More About Personal Computers, Literature, Magazines and Schools.
 - 3:30 P.M.- 3:45 P.M.-Introduction of User Groups (Ex. IBM, Apple, etc.)



REGISTRATION: Includes seminar admission, lecture notes, lunch and break refreshments. Registration will be accepted until January 14, or until class is full. In the event an individual must cancel, a full refund will be made after the seminar date provided notification is received before January 18, 1984.

I would like to attend the tutorial seminar, "Personal Computers." Please send registration materials to me as follows: Fee in the amount of \$ _____ is enclosed.

NAME _____ TITLE _____

COMPANY _____ MAIL STOP _____

ADDRESS _____ PHONE _____

CITY _____ STATE _____ ZIP _____

Please enclose check or money order payable to IEEE-PES/FVSS Chapter, using the following fee schedule: Students \$30, IEEE members \$40, non-IEEE \$50. Return to: Mr. Dennis J. Massar, Panlmatic Company, 79 Bond Street, Elk Grove Village, Illinois 60007. (312) 439-4030

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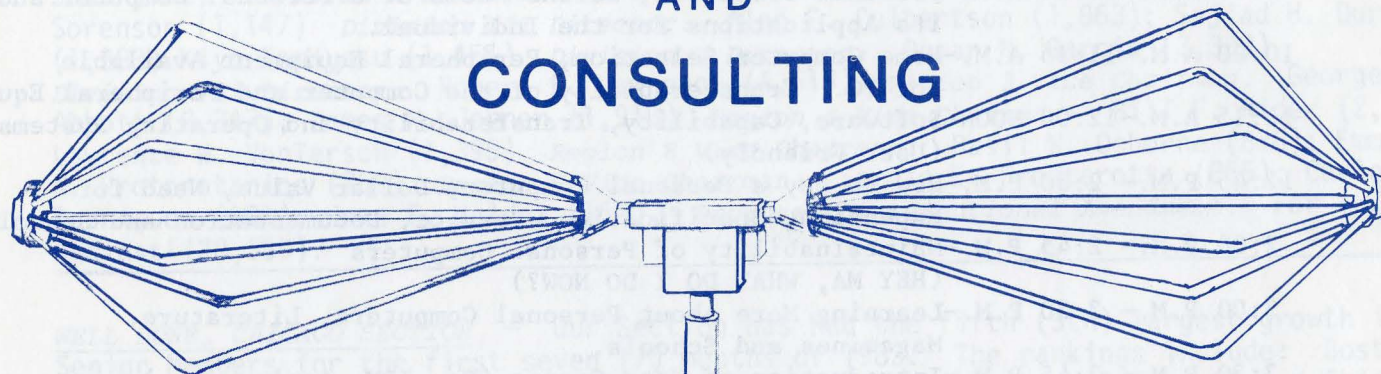
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VDE

TESTING

AND

CONSULTING



TESTING

Compliance Testing of FCC
Docket 20780 Part 15 Subpart J
Industrial (Class A) and
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- ☐ Your company has become more a follower than a leader.
- ☐ You feel you have "been there before" in facing a new project.
- ☐ Your support staff is unqualified or insufficient, forcing too many details on your shoulders.
- ☐ You spend more time "putting out fires" than in finding innovative solutions.
- ☐ Your environment lacks professionalism.
- ☐ Your input is less frequently sought. You're becoming "lost in the crowd."
- ☐ Internal politics intrude upon your work and the organization's functioning.
- ☐ Every workday seems interminable, leaving you without enthusiasm, zest and cheer.
- ☐ You feel your work—and possibly your personal life—is suffering.

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"ENGINEERS: PARTNERS FOR PROGRESS" —

The week of February 19-25, 1983 has been designated as the 34th Annual National Engineers' Week. Its purpose is to familiarize the public with the work of engineers and to honor outstanding members of the engineering profession.

The Chicago Chapter of the Illinois Society of Professional Engineers will once again be coordinating the display of engineering exhibits in downtown public buildings in observance of NEW. These exhibits will be on display in the lobbies of City Hall, Loop Federal buildings and others. The Week of February 12 through the 18th will be reserved for exhibitors to set up their displays.

If your organization wishes to participate, call Phillip Iverson, Engineers' Weeks Chairman at 372-3600, extension 406.

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U.S. POSTAL SERVICE

STATEMENT OF OWNERSHIP, MANAGEMENT AND CIRCULATION
(ACT OF AUGUST 12, 1970: SECTION 3685, TITLE 39, UNITED STATES CODE)

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7. Owner (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding 1 percent or more of total amount of stock. If not owned by a corporation, the

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9. For optional completion by publishers mailing at the regular rates (Section 132.121, Postal Service Manual).

10. For completion by nonprofit organizations authorized to mail at special rates (Section 132.122, Postal Manual). The purpose, function, and nonprofit status of this organization and the exempt status for Federal income tax purposes have not changed during preceding 12 months.

11. Extent and nature of circulation

	Average No. Copies Each Issue During Preceding 12 Months	Actual No. of Copies of Single Issue Published Nearest to Filing Date
A. Total number copies printed (net press run)	5,733	5,625
B. Paid circulation		
1. Sales through dealers and carriers, street vendors and counter sales	0	0
2. Mail subscriptions	5,655	5,551
C. Total paid circulation	5,655	5,551
D. Free distribution by mail, carrier or other means. Samples, complimentary, and other free copies	7	7
E. Total distribution (sum of C and D)	5,662	5,558
F. Copies not distributed		
1. Office use, left-over, unaccounted, spoiled after printing	71	67
2. Returns from news agents	0	0
G. Total (Sum of E & F — should equal net press run shown in A) •	5,733	5,625