



Scanfax

CHICAGO SECTION • IEEE • INSTITUTE OF ELECTRICAL & ELECTRONICS ENGINEERS

JANUARY 1973

It's Showtime Again!

The curtain will rise on Sunday, February 11, at the IEEE 1973 SHOWTIME. Held once again at the Ivanhoe Theatre, the 1973 edition should prove to be the sell-out that the 1972 show was.

You can't afford to miss this event. If your friends can't make it — if your wife or girl friend is out of town — come yourself. The Ivanhoe Theatre is in the midst of the swinging North Side. We expect many singles to enjoy the play and stop at the Catacombs Bar afterwards. For a complete evening, New Town beckons just a few blocks away.

Reserve your tickets now for the best seats. Don't be disappointed and discover you can't be accommodated. Remember that last year was a sell-out and people were turned away!

Send your check for \$12.50 per person, for dinner and the play to IEEE Showtime, Box 9295, Chicago, Illinois 60690.

Because of the holidays, the Ivanhoe management is not sure yet what play will be featured. Details on the play will appear in the February issue. But if you wait until then, you may be too late. Send your check in today!

The Minicomputer In Data Acquisition And Process Control

On Wednesday, February 7, the Fox Valley Subsection will hold a joint meeting with the IEEE Computer Society. Dr. Lloyd Kusak, Hewlett-Packard, will be the featured speaker.

In his talk, Dr. Kusak will discuss "Practical Applications of the Minicomputer in Data Acquisition and Process Control." He will discuss typical operating systems, including software and hardware tradeoffs.

Lloyd Kusak received his PhD in chemical engineering from Cornell University. His experience in the computer industry includes optimization and simulation of refinery process using linear programming and other simulation methods, installation of process control systems in a number of industries, and acting as an advisor in the application of minicomputer systems. He is manager of Hewlett-Packard's Midwest Region Data Center.

The meeting will be at Stevens Steak House in Elmhurst. Social hour, 6:00 p.m.; dinner, 7:00 p.m.; meeting, 8:00

Computer Controlled Laser Trimming Systems

On Wednesday, January 17 the Northwest Subsection will feature a talk and video tape presentation on laser component trimming systems which use computer control. This will be in place of the formerly announced program.

The speaker will be Warren Cozzens, of Teradyne Applied Systems in Chicago. Mr. Cozzens is well known to many Chicago Section IEEE members through his numerous activities in this area.

Fellowship will be from 6:00 p.m.; dinner at 7:00 p.m., with the meeting commencing at 8:00 p.m. For further information and reservations call 263-5954 by Tuesday, January 16, 1973.

p.m. For reservations, please call 263-3776.

A special meeting of the Fox Valley Subsection, joint with the ASME, SAE, and ISPE, will be held during Engineers' Week. The Wankel Rotary Engine will be discussed at this meeting on February 21. Details in the February issue.

CHICAGO SECTION CALENDAR

PHONE 263-5954

JANUARY

- 10 IAS (S34) — Standby Generation
- 16 ECG (G-27) — Impact on Spectrum Management
- 17 N.W. Subsection — Laser Component Trimming Systems
- 18 Comp. Soc. (S-16) — Microprogramming
- 25 EIG (G-32) — Insulation Measurements

FEBRUARY

- 7 F.V. Subsection & Comp. Soc. (S-16) — Minicomputer Applications
- 11 SHOWTIME — Ivanhoe Theatre

A Message From

The Chairman

At the threshold of a new year, IEEE Activities are well under way. I would like to take this opportunity to bring some of these activities to your attention.

Societal Needs of Young Engineers

A survey is under way in the Section to discover what problems may exist in the relationship between the young engineer and his Section. The per-to-person interview method will be used in the survey. The same study is taking place in the Alabama, Atlanta, Charlotte, Nashville, North Jersey, Orange County, Philadelphia and San Francisco Sections. The results of the survey will be reported to the Regional Activity Board and the Board of Directors. Mr. Donald Owen is chairman of the Young Engineers Survey Committee. His committee is in the process of contacting many of the young engineers in the Section. If you are a young engineer thirty years of age or younger, and have not been contacted, you may arrange for an interview by phoning the chairman at 625-0020 ext. 233.

Chicago Section's Office

Effective this past July the IEEE's Chicago Section has a bonafide mailing address and phone number:

IEEE, Room 532
55 E. Washington Street
Chicago, Illinois 60602
Tel. (312) 263-5954

Mail, typing and telephone answering services are available to the Section at this address. Inquiries concerning IEEE business, membership forms, IEEE insurance information, **SCANFAX**, etc. should be addressed to the office. At our new home we share quarters with three other engineering organizations — Chicago Chapter of Illinois Society of Professional Engineers, Springfield Office of Illinois Society of Professional Engineers, and the American Society of Civil Engineers. Establishment of the joint office reflects an increasing emphasis upon coordination among various engineering groups. The office arrangement will continue on a trial basis for one year.

IEEE Constitutional Amendments Pass By Wide Margin

A substantial majority of votes has



been cast to amend the IEEE Constitution to add matters of professional concern to the Institute's activities, it was announced by Robert H. Tanner, IEEE President. Mr. Tanner went on to say, "The initial decision of the IEEE Board of Directors to proceed with the amendments was based in large part on a survey conducted at the beginning of last year, which indicated IEEE members in the USA favored such a move by better than 2 to 1. The vote now shows that members favor these activities by over 7 to 1, indicating a major upswing in the members' desire for the Institute to engage in matters of legislative, social, ethical and economic concern, in addition to its established and continuing technical activities." For a full report of the vote, see the December, 1972 issue of **SPECTRUM**.

As your Chairman, let me again urge you to become involved in IEEE activities. If you hold firm opinions, or if you know of a topic or speaker that would be appropriate for a group or section meeting, talk to one or more of the Section officers or committee chairmen. The list of officers and chairmen with phone numbers can be found in the September, 1972 issue of **SCANFAX**. If you cannot locate your back issue of **SCANFAX**, this information may be obtained by phoning our new office. The IEEE has become the world's largest engineering society through the interest, personal service and efforts of the membership who contribute to the betterment of the profession.

The new year promises to be a year of change for our engineering society. We again look to you to support the Section's functions and its endeavors during this year of change. May I take this opportunity to wish you and yours a **HAPPY NEW YEAR!**

Henry A. Setton
Chairman

SCANFAX BOARD OF DIRECTORS

George J. Mack, President
Illinois Bell Telephone Co.
727-3339

Joseph Feitler, Treasurer
Programming Methods,
c/o Automatic Electric
562-7100, ext. 2377

Ruth L. Oldfield, Secretary &
Executive Editor
Gardner, Jones & Company, Inc.
782-5000

Scanfax Office
Room 532
55 E. Washington Street
Chicago, Illinois 60602
(312) 263-5954

CHICAGO SECTION IEEE OFFICERS

Henry A. Setton, Chairman
University of Illinois
996-2202

Richard A. Bulley, Vice Chairman
Commonwealth Edison Co.
(815) 729-8126

James F. Ralston, Secretary
Allen-Bradley Company
922-9302

Daniel J. Veith, Treasurer
Argonne National Laboratory
739-7711

scanfax Dec. 1972, Volume 25, Number 4. **SCANFAX** is published monthly except July and August by Scanfax, Inc., Chicago, Illinois, for the information of the members of the Chicago Section, Institute of Electrical and Electronics Engineers. Scanfax, Inc., is a not-for-profit organization with editorial office at 1200 E. Madison Park, Chicago, Ill. 60615, and business office at 55 E. Washington Street, Chicago, Illinois 60602; telephone number (312) 263-5954. Subscription rate for IEEE members collected in dues, \$1.50; for others, \$3.00 per year. Second-class postage paid at Chicago, Illinois.

Stand-by Generation — Diesels vs. Gas Turbines

The Industrial Applications Society Group (S-34) on Industrial Electronics will meet on Wednesday, January 10, 1973, at Nielsen's Village, 7330 W. North Ave. Topic of the evening will be "Stand-by Generation — Diesels vs. Gas Turbines" by experts in the generating field.

Come join the group. Social hour, 5:30 p.m.; dinner, 6:15 p.m.; meeting, 7:15 p.m. All who attend the dinner will be guests for liquid refreshments. For reservations, call (312) 263-5954.

Featured speaker is Don Kearns, Chicago District Manager, Solar Division of International Harvester. His presentation will cover sizing of generator sets, in particular to starting motors requirements; how they connect into the system; how a gas turbine works and why it is especially suited to emergency power

Insulation Measurements and Their Interpretation

Electrical Insulation Group (G-32) will hold a lecture meeting on January 25th, 1973 at Nielsen's Restaurant, 6475 N. Mannheim Rd., Rosemont, Ill. (across from O'Hare Airport). The meeting will start at 7:30 with dinner at 6:30 and cocktails at 5:30; Call Bob Owen, 338-1000 for reservations.

Harold N. Miller, executive vice president of Associated Research, Inc., Chicago, will discuss the causes of electrical insulation failure and the mechanism of breakdown. He will explain the importance of high voltage testing, the relative merits of AC versus DC, the value of insulation resistance measurements, corona measurements, and the methods of performing the actual tests and interpretations of the results.

Mr. Miller was born in Boston, Mass. He received his SB degree in electrical engineering from the Massachusetts Institute of Technology and has done graduate work in aeronautical and mechanical engineering. He has been active in the fields of electrical testing and measuring since the days of World War II. As a consultant to many electrical and electronics firms, he has designed a wide range of test sets and equipment. He is a registered Professional Engineer in the state of Illinois, and a member of American Society for Testing and Materials. He has written many technical articles, is a frequent lecturer, and is the author of the book, "Nondestructive High Potential Testing".

applications; installation requirements for a gas turbine vs. a diesel; slides of typical installations; maintenance requirements; economics; how gas turbines will meet federal, state and local noise restrictions; effect of exhaust emission regulations on gas turbines and diesel engines. A 225 KW gas turbine emergency generator will be set on the parking lot to demonstrate its operation.

There will be a question and answer period after the talk.

Mr. Kearns received his Bachelor of Science degree in electrical engineering from Washington University in St. Louis. For the past six years he has been Chicago district manager for Solar Division of International Harvester. Don is married and has five children. He lives in Buffalo Grove, Illinois.

Electromagnetic Compatibility Group

On Tuesday, January 16, 1973, a meeting of the G-27 group on Electromagnetic Compatibility will be held at the Black Steer restaurant, 6446 W. North Ave. Dinner will be served at 7:00 and the meeting will start at 8:00 p.m.

Mr. William Tranavitch of the FCC, will present a paper on the FCC Regional Spectrum Management Program. Included will be engineering and data gathering methods and the impact on the spectrum management in the Chicago region. Following the meeting, the FCC van used for data gathering will be demonstrated.

For reservations, contact Howard Wolfman, 982-2240.

Lusk Named Research Director

George E. Lusk has been named research director of the Research and Development Division of the Electrical Products Group of Joslyn Mfg. and Supply Co., Chicago.

The announcement was made by Ronald F. Huber, vice president, Research and Development, who said Lusk is in charge of the research department with offices located at the Joslyn Research Center in Woodstock, Ill.

Prior to joining Joslyn, Lusk was manager of research and development for G&W Electric Specialty Co., Blue Island, Illinois, a company where he had been employed for nearly 23 years. He is a graduate of the Illinois Institute of Technology from where he holds both a BSEE degree and an MSEE degree. He also holds Eta Kappa Nu and Tau Beta Pi honors.

Call For Papers

CIRCUIT THEORY

The 1973 Midwest Symposium on Circuit Theory will be held April 12-13, 1973 at the University of Waterloo, Waterloo, Ontario, Canada. Research Papers on all aspects of circuit and system theory, control and communication theory, computer-aided circuit analysis and design are invited for presentation at the symposium and publication in the proceedings.

Authors are requested to submit a title and summary of their papers (the summary should be of sufficient length and detail to help careful review) before January 15, 1973 to Prof. P. H. Roe, Systems Design Department, University of Waterloo, Waterloo, Ontario, Canada.

Authors of accepted papers will be notified on or about February 2, 1973 to submit the full text of their papers by February 23, 1973 (10 typed pages maximum) so that the proceedings can be made available at the time of registration.

APPLIANCE

Prospective authors for the Appliance Technical Conference should submit their paper subject idea to the paper chairman, James Connolly, Sunbeam Appliance Co., 2001 S. York St., Oak Brook, Ill. 60521. The deadline is January 15.

Zenith Board Elects New Vice Presidents

Zenith Radio Corporation's Board of directors elected three executives to new corporate positions, Joseph S. Wright, chairman of the board, and John J. Nevin, president, announced.

Nathan W. Aram was elected vice president, consumer affairs. He was formerly vice president and chief engineer. Jerry K. Pearlman was named vice president and controller. He has served as controller since 1971. Joseph P. Fiore was elected vice president, component operations. He was formerly general manager of Zenith's TV picture tube operations.

Aram, in this senior level corporate position, as vice president, consumer affairs, will direct, coordinate and plan programs within the company and represent the corporation in a broad range of consumer affairs activities. He will also be responsible for Zenith's customer relations, parts and service departments, and the quality assurance department.

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

1. Title of publication: IEEE Scanfax.
2. Date of filing: Dec. 22, 1972.
3. Frequency of issue: Monthly, except July and August.
4. Location of known office of publication: 55 E. Washington St., Room 532, Chicago, Ill. 60602.
5. Location of the headquarters or general business offices of the publishers: 55 E. Washington St., Room 532, Chicago, Ill. 60602.
6. Names and addresses of publisher, editor, and managing editor: Publisher, George Spisak, Commonwealth Edison, 1 First Nat'l Plaza, Chicago, Ill. 60690; editor, Ruth Oldfield, 1200 Madison Park, Chicago, Ill. 60615; managing editor, Ruth Oldfield, 1200 Madison Park, Chicago, Ill. 60615.
7. Owner (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and address-

es of stockholders owning or holding 1 percent or more of total amount of stock. If not owned by a corporation, the name and addresses of the individual owners must be given. If owned by a partnership or other unincorporated firm, its name and address, as well as that of each individual must be given.) Institute of Electrical and Electronics Engineers, -Chicago Section, P.O. Box 9295, Chicago, Ill. 60690.

8. Known bondholders, mortgages, and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages or other securities: None.

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 132.121, Postal Manual) has not changed in 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)	5,200	5,200
B.	Paid circulation		
1.	Sales through dealers and carriers, street vendors and counter sales	—	—
2.	Mail subscriptions	4,650	4,729
C.	Total paid circulation	4,650	4,729
D.	Free distribution by mail, carrier or other means		
1.	Samples, complimentary, and other free copies	150	161
2.	Copies distributed to news agents, but not sold	—	—
E.	Total distribution (sum of C and D)	4,800	4,890
F.	Office use, left-over, unaccounted, spoiled after printing	400	310
G.	Total (Sum of E & F—should equal net press run shown in A)	5,200	5,200

MOVING?

If you are moving, your change of address for IEEE publications, including **SCANFAX**, must go to: Membership Services, Institute of Electrical and Electronics Engineers, 345 E. 47th St., New York, N.Y. 10017.

All mailing labels come off the IEEE computer. Membership lists in New York

are updated once a month. We cannot change local addresses for **SCANFAX** because we have no control over the labels.

Might be a good idea to specify what groups and/or subsections you belong to. Even a computer likes adequate data.

Professional Employment

Unemployed scientists, engineers, and technicians are urged to contact VEST-I, a volunteer self-help placement service affiliated with the Illinois State Employment Service, located in the Professional Career and Information Center, 208 S. LaSalle Street, Chicago. (Phone(312) 793-4807)

Since its inception in October of 1971, more than 500 unemployed professionals have participated in VEST-I activities. Twenty five percent of these individuals have returned to employment, incurring no service fees to either themselves or to their new employers. During this same period, VEST-I has processed approximately one thousand job orders from participating employers.

As VEST-I enters its second year, its services to its volunteer members have been expanded. The VEST-I candidate first attends an Employment Workshop in which he receives counselling to prepare him for the difficult task ahead. He is advised of the current employment situation and provided with the knowledge and techniques necessary for an effective re-employment campaign. He then joins the common efforts of his colleagues, remaining active and in constant contact with his profession. He is given the opportunity to develop a broad overview of current activities in the scientific and technical communities by serving in a wide variety of capacities.

Concurrently, VEST's 27 offices, the National Registry, and locally, the Professional Career and Information Center makes available to him the services of the Illinois State Job Bank, appropriate reference material, and access to State, Federal, and Municipal employment opportunities not readily available elsewhere.

BUSINESS DIRECTORY

YOUR CARD HERE

REACHES 5,000

CHICAGOLAND ENGINEERS

J. J. MIKOS, P. E.
Consultant

Studies of Safety, Applications, Transients,
Instrumentation for Commercial, Industrial,
and Utility Electrical Power Systems.
P.O. Box 32, Highland Park, Illinois 60035
312-432-7158