



Scanfax

CHICAGO SECTION · IEEE · INSTITUTE OF ELECTRICAL & ELECTRONICS ENGINEERS

DECEMBER 1973

Section Meeting The Energy Situation



Rene H. Males, Commonwealth Edison Company, will speak on "The Energy Situation" at a general meeting of the Chicago Section on Tuesday, December 18, 1973. Meeting will be held at Nielsen's Village, 7330 W. North Avenue, Elmwood Park. Social hour, 5:30 p.m.; dinner, 6:30 p.m.; meeting, 7:30 p.m. All-you-can-eat buffet, \$6.00. Make reservations by calling the IEEE office, 263-5954.

Rene H. Males is manager, general service, of Commonwealth Edison Company. He has been with the company since 1956, serving principally in financial, administrative, and customer service

areas. He served as north shore area manager and as the director of economic research. He became assistant to the vice president of division operations in 1970 and assumed his present position in 1973.

Males has also served as a member of the Federal Power Commission committee to update the National Power Survey, as a member of the National Academy of Engineering committee on power plant siting, and is the vice president of the Chicago chapter of the National Association of Business Economists. A graduate of Ripon College, he received a MS in business administration from Northwestern University.

CALENDAR OF EVENTS

IEEE OFFICE: 263-5954

- Dec. 3-4 Chicago Fall Conference; O'Hare Inn, Rosemont (Page 4)
- Dec. 5 Electronic Surveillance; Fox Valley Subsection; Terrace Restaurant, Lombard (Page 3)
- Dec. 11 The Electromagnetic Pulse; Group on Electromagnetic Compatibility; Menard's Black Steer Restaurant, 6446 W. North Ave., Chicago (Page 3)
- Dec. 11 IEEE Executive Committee; Menard's Black Steer Restaurant, 6446 W. North Ave., Chicago
- Dec. 12 IEEE Day at WSE; Luncheon at Chicago Engineers Club, 314 S. Federal Street, Chicago (Page 3)
- Dec. 12 Aluminum Conductors and Terminations; IAS/IECI; Nielsen's Village 7330 W. North Avenue; Elmwood Park
- Dec. 18 The Energy Situation; Chicago Section Meeting; Nielsen's Village, 7330 W. North Ave.; Elmwood Park
- Dec. 24 IEEE Office Closed
- Dec. 25 Merry Christmas
- Dec. 31 IEEE Office Closed
- Jan. 1, 1974 Happy New Year
- Jan. 8 IEEE Executive Committee Meeting; Menard's Black Steer Restaurant
- Jan. 9 Factors in the Selection of Automatic Transfer Switches; IAS/IECE; Nielsen's Village, 7330 W. North Ave., Elmwood Park
- Jan. 16 Thyristors Today and Tomorrow; Chicago Section Meeting; Nielsen's Village, 7330 W. North Ave., Elmwood Park
- Jan. 16 E — The Environment and the Engineer; Power Engineering Society/Northwest Subsection; Maitre d' Restaurant; Elk Grove Village

Deadline for copy: First week of month preceding publication.

Five Section Meetings Planned

The Chicago Section, IEEE, is planning five section meetings. At the first of these, Rene H. Males of Commonwealth Edison Company, will discuss "The Energy Situation."

All meetings will be held on the second Tuesday of the month, at Nielsen's Village, 7330 West North Avenue, Elmwood Park.

The other four meetings are listed below:

January 16, 1974 — "Thyristors Today and Tomorrow," Brian Bixby, director of engineering, International Rectifier Co.

February 20, 1974 — "The Proposed 1974 National Electrical Code," Ralph Lee, DuPont. Meeting joint with IAS/IECI.

March 19, 1974 — "Microwave Transmission of Power," William Brown, Raytheon Corp.

April 16, 1974 — "Noise," H. M. Schlicke, chief electrical scientist, Allen-Bradley Co.

Holiday Schedule

The IEEE office will be closed for the Christmas Holidays on December 24 and 25, 1973. It will also be closed for the New Year's Holidays on December 31, 1973, and January 1, 1974. But the office will open again, bright and early on January 2, 1974, to serve all IEEE members.

Hoffman Serving in Executive Interchange Program

Dr. S. David Hoffman, Underwriters Laboratories' vice president and chairman of the Consumer Advisory Council is serving for one year as a Presidential Interchange Executive, Washington, D.C. Dr. Hoffman is in the Programmatic Center for Consumer Product Safety, National Bureau of Standards.

Hoffman is acting as technical consultant to the new Consumer Product Safety Commission. His duties include consulting services in the areas of preparation and review of consumer product safety and performance standards; review of proposed safety rules; review of the establishment and development of criteria,

IEEE Fellow Nominations

All members and group and society chapters are asked to submit their recommendations for 1974 IEEE fellow awards to John Bell, chairman of the Chicago Section Awards Committee. Send your suggestions to him at Zenith Radio Corporation, 6001 W. Dickens Avenue, Chicago, Ill. 60639; 745-2551.

A great deal of back-up material must be submitted with the nomination, and the Awards Committee needs time to work before they submit the recommendations to IEEE in New York. Please send any suggestions in early — and be sure to send them to John Bell and not directly to New York.

Nominating Committee Appointed

Chairman Dick Bulley has appointed the nominating committee to select a slate of officers and the executive committee for the Chicago Section for 1974-75. The committee consists of Henry A. Setton, University of Illinois, chairman; Robert Nunamaker, Motorola, Inc.; and George J. Mack, Illinois Bell Telephone Company.

If you have any suggestions you would like to see for the people you would like to see running the section during 1974-75, call Hank Setton at 996-2202, or the IEEE office, 263-5954.

the performance of laboratory testing procedures and methods for safety and performance; consulting in laboratory accreditation and certification; and technical advice and services in the area of labeling of appliances for efficiency characteristics. His duties also include the establishment and use of safety and performance labels and the procedures for effectively obtaining interaction between consumers, consumer products industries, and government and professional standards organizations.

Dr. Hoffman is a member of the Chicago Section, IEEE.

Scanfax Board of Directors
George J. Mack, President
Illinois Bell Telephone Company
Ruth L. Oldfield, Secretary
and Executive Editor
R. L. Oldfield & Associates
Ed. Osterberg, Treasurer
Illinois Bell Telephone Company
Don Haines
Advertising Manager
(312) 832-4611
Scanfax Office
Room 532
55 E. Washington Street
Chicago, Ill. 60602
(312) 263-5954

Chicago Section Officers
Richard A. Bulley, Chairman
Commonwealth Edison Company
James F. Ralston, Vice Chairman
Allen-Bradley Company
Joseph Feitler, Secretary
Programming Methods, Inc.
Daniel J. Vieth, Treasurer
Argonne National Laboratory

SCANFAX, December 1973 - Volume 26, 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.

Meeting Reservations

Remember that the IEEE office, (312) 263-5954, will take your meeting reservations. The best time to call is between 9:30 a.m. and 12:30 p.m. or between 2:30 p.m. and 5:00 p.m.

The meeting coordinator for any group should call and leave his number with Judy at the office, so she can refer questions on matters other than reservations.

Change of Address

If you have moved — or are about to move — please notify the IEEE office in NEW YORK. Our SCANFAX mailing labels come from there, and we cannot update your mailing address locally in Chicago.

A change of address form is included in each issue of SPECTRUM. Your local post office will also supply you with cards; mail to Emily Sirjane, Membership Services, IEEE, 345 E. 47th Street, New York, NY 10017. Include your SPECTRUM mailing label if possible. We cannot forward this information for you, so please do not send it to the local office.

Call for Papers!

The Second Annual Milwaukee Symposium on Automatic Control will be held at the University of Wisconsin-Milwaukee, Milwaukee, Wisconsin on Friday and Saturday, March 29-30, 1974. Papers in any of the following areas will be considered: programmable controllers, biomedical systems, image processing, pattern recognition, hybrid computation, industrial control systems, mini-computers in education, artificial intelligence and robotic systems, speech processing, software reliability, program verification, and urban systems engineering. Prospective authors should submit extended abstracts or summaries in enough detail to permit refereeing to Dr. Richard A. Northouse, Program Chairman, MSAC-74, Electrical Department, University of Wisconsin-Milwaukee, Milwaukee, Wisconsin 53201. Closing date for abstracts is January 1, 1974. Authors will be notified prior to January 21, 1974, and provided with special forms for full text of papers. A proceedings will be published. Authors who wish to have their papers reviewed for publication in the IEEE Automatic Control Transactions of the IEEE Systems, Man and Cybernetics Transactions, should submit four extra copies of the complete paper.

Spacecraft photographs furnish data for detailed photomosaic globe of Mars

A unique photomosaic globe of Mars — the first detailed map of any planet fashioned from spacecraft photographs — has been completed at the California Institute of Technology's Jet Propulsion Laboratory. It is the first of three large photospheres of Mars that JPL is assembling for the National Aeronautics and Space Administration.

The photos returned by Mariner spacecraft were mostly angle shots, which had to be rectified by computer processing to show the Martian surface as it would appear from directly above any given point. They were corrected to an identical scale to prevent errors in the size of features and were developed with exactly the same degree of contrast to assure accurate shading variations of the surface. Each section had to be oriented precisely

IAS/IECI Meetings

The Chicago joint chapter of the Industrial Applications Society and the group on Industrial Electronics and Control Instrumentation meets on the second Wednesday of each month. All meetings are at Nielsen's Village, 7330 W. North Avenue, Elmwood Park, Ill. The calendar for the remainder of the 1973-74 season includes:

December 12, 1973 — "Aluminum Conductors and Terminations," Kaiser Aluminum Co.

January 9, 1974 — "Factors in the Selection of Automatic Transfer Switches," R. Castenschiold

February 13, 1974 — "Proposed 1974 NEC Code Changes, R. Lee, DuPont (Joint with Chicago Section)

March 13, 1974 — "Process Piping Heat Tracing," Thermonics

April 10, 1974 — "Coordination of Protective Devices," General Electric Co.

May 8, 1974 — "Solid State Contactors and Relays," Loyola Industries

June 12, 1974 — "Variable Speed Drives," Eaton Corporation

in longitude and latitude and matched perfectly to adjacent segments.

In fashioning the map, each photo is located on the globe and temporarily taped. Final positioning is made by matching the images of overlapping photos. A scalpel-like blade is used to trim sections to fit perfectly into the global jigsaw puzzle before gluing.

The globes present the full span of Mars photo research, revealing volcanic peaks, fantastic canyons and eroded channels, craters, dust storms, and dry-covered polar regions. They even show the shadows of the two tiny Martian moons — Phobos and Deimos.

The photographs used were taken in 1972 by Mariner 9, which returned more than 7300 pictures while orbiting Mars.

IEEE Day at WSE

Western Society of Engineers will honor IEEE at its December 12 luncheon. The program is sponsored by the WSE Communications Division. Richard A. Bulley, chairman of the Chicago Section, IEEE will be special guest of WSE on IEEE Day.

All IEEE members are invited to this luncheon. Program will be "AT&T Domestic Satellite System," featuring Vern Hatch, engineer-manager, transmission, American Telegraph & Telephone Company.

Social hour begins at 11:30 a.m.; luncheon, 12:15 p.m.; adjournment, 1:15 p.m. Luncheon will be held at the Chicago Engineers Club, 314 S. Federal Street, Chicago (in the south end of the Loop). Cost of luncheon \$3.50. For reservations, call the IEEE office, 263-5954, or Western Society of Engineers, 663-0220. If you call WSE, be sure to identify yourself as an IEEE member.

The Electromagnetic Pulse

At the Tuesday, December 11, 1973, meeting of the Group on Electromagnetic Compatibility, Irv Mendel, IIT Research Institute will describe "The Electromagnetic Pulse."

This is an increasingly important subject to electronics engineers and manufacturers because of new government requirements and the devastating effects that an electromagnetic pulse can cause. A single pulse can completely disable, if not destroy, systems 3,000 miles away.

Meeting will be held at Menard's Black Steer Restaurant, 6446 W. North Avenue, Chicago. Social hour, 6:00 p.m.; dinner, 6:30 p.m.; meeting, 7:30 p.m. For reservations, call Colin Willmott, 539-7171, or the IEEE office, 263-5954.

Electronic Surveillance

F. W. Romig, Westinghouse Electric Corp., will speak on "Electronic Surveillance, at the December 5 meeting of the Fox Valley subsection.

Meeting will be held at the Terrace Restaurant, Lombard, Ill. Social hour, 6:00 p.m.; dinner, 7:00 p.m.; meeting, 8:00 p.m. For reservations, call IEEE office, 263-5954.

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: Nov. 21, 1973.
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 Mack, 55 E. Washington St., Room 532, Chicago, Ill. 60602; editor, Ruth Oldfield, 1200 E. Madison Park, Chicago, Ill. 60615; managing editor, Ruth Oldfield, 1200 E. 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.) Scanfax, Inc., 55 E. Washington St., Room 532, Chicago, Ill. 60602.

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 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)	5,300	5,300
B.	Paid circulation		
1.	Sales through dealers and carriers, street vendors and counter sales	—	—
2.	Mail subscriptions	5,205	5,205
C.	Total paid circulation	5,205	5,205
D.	Free distribution by mail, carrier or other means		
1.	Samples, complimentary, and other free copies	200	200
2.	Copies distributed to news agents, but not sold	—	—
E.	Total distribution (sum of C and D)	5,205	5,205
F.	Office use, left-over, unaccounted, spoiled after printing	95	95
G.	Total (Sum of E & F—should equal net press run shown in A)	5,300	5,300

Chicago Fall Conference

The Chicago Fall Conference on Broadcast and Television Receivers will be held on Monday and Tuesday, December 3 and 4, at O'Hare Inn, Rosemont, Ill. Morning technical sessions start at 9:30 a.m. each day; afternoon technical sessions start at 2:30 p.m. The Consumer Awards Luncheon will be held at 12:15 p.m. on Monday, December 3. The Industry Cocktail Hour, sponsored by M. Gottlieb Associates, Inc., will be held at 6:00 p.m. on Monday.

Topics to be covered in the technical sessions cover all aspects of broadcast and television receivers. Session I includes: An Approach to a Unified Chroma System, A New TV Video Sound Detector IC, A Receiver with Low Cost Frame Grabber for Still Picture Television System, An Integrated Circuit System for Channel Selection of Varactor Tuned Television Receivers, and A Two IC Pal Chroma/Luma System.

Session II includes: Integrated Quadrasonic DC Volume Control, A Candidate for the Final Solution of the Sound Channel in a TV Receiver, Autodyne AM/FM Tuner using a Dual Gate MOSFET, Active Multi-Channel Tone and Volume Controls, and a Monolithic Stereo Decoder for the General Electric 4-Channel FM Stereo System.

Session III will cover: Monolithic IC for Vertical Deflection in TV Receivers, Self Regulating Horizontal Deflection Systems Using Transistors, Color Television Brightness, Plastic Encapsulated Signal and Power Transistor Reliability, and The ITR for Horizontal Deflection.

Session IV includes papers on: An IC Dual Timer, Systems Approach to Automated Assembly, Camera, and Statistical Tolerancing of Electronic Components and Devices.

BUSINESS DIRECTORY

YOUR CARD HERE
 REACHES 5,000
 CHICAGOLAND ENGINEERS