



# Scanfax

CHICAGO SECTION • IEEE • INSTITUTE OF ELECTRICAL & ELECTRONICS ENGINEERS

SEPTEMBER, 1972

## ATTEND CHICAGO SECTION MEETING THEN TOUR NEC EXHIBITS

Robert H. Tanner, president of IEEE, will speak at the first Chicago Section meeting on Tuesday, October 10 at 1:30 p.m. This meeting will be held at the Regency Hyatt House O'Hare, in conjunction with NEC. President Tanner will speak on "IEEE — It's Plans and Problems."

If you have questions about what the IEEE is doing, and why, in the fields of employment security, pensions, etc., be sure to attend this meeting. You will have a chance to hear the "official" point of view — and you can give Mr. Tanner some idea of the way IEEE members feel about

these issues.

After the meeting, tour the exhibits at the 28th National Electronics Conference. NEC will take place at the Regency Hyatt House-O'Hare from Monday, Oct. 9 through Wednesday, Oct. 11. There is no charge for IEEE members who wish to tour the exhibits.

After the exhibits, and an informal dinner, the Chicago Section IEEE Executive Committee will meet at 6:30 p.m. Meeting room will be posted at the Regency Hyatt House on Tuesday, October 10. All IEEE members are welcome

at the Executive Committee meeting.

Robert H. Tanner received his BSc and MSc in engineering from the University of London. He moved to Canada in 1947, and joined the Northern Electric Company. He was one of the first appointments to the R&D Labs, formed in 1958. Responsible for developments in several communications fields, Mr. Tanner now handles the technical public relations and library services of the Labs. He is a fellow of the Engineering Institute of Canada and the IEEE.

### Chicago IEEE Calendar

- |             |                                                                                                                         |
|-------------|-------------------------------------------------------------------------------------------------------------------------|
| Sept. 6     | Fox Valley Subsection — NAL Tour, Dinner & Meeting at Toll Gate Inn, North Aurora                                       |
| Sept. 6 & 7 | Industrial Seminar on Computer Aided Manufacturing — IIT Research Institute                                             |
| Sept. 19    | Communications Society — Black Steer Restaurant                                                                         |
| Sept. 20    | Northwest Subsection — Tour of Underwriters' Laboratories                                                               |
| Sept. 20    | Power Engineering Society — Commonwealth Edison Wilton Center Tour, Manhattan, Ill.                                     |
| Oct. 4      | Information Theory Group — Allerton Conference, Monticello, Ill.                                                        |
| Oct. 4      | Fox Valley Meeting — Bell Laboratories, Naperville, Ill. (AUTOVON)                                                      |
| Oct. 7      | Treasure Hunt                                                                                                           |
| Oct. 9 - 11 | National Electronics Conference — Regency Hyatt House - O'Hare                                                          |
| Oct. 9      | Antennas and Propagation/Microwave Theory & Techniques - NEC Technical Program<br>No. 5, 9:30 a.m.; Regency Hyatt House |
| Oct. 10     | Chicago Section Meeting, 1:30 p.m.; Robert H. Tanner, President IEEE - Regency<br>Hyatt House                           |
| Oct. 21     | Fox Valley Subsection Tour - Westinghouse Nuclear Training Center, Zion, Ill.                                           |

## MESSAGE FROM THE CHAIRMAN



Henry A. Setton

I greet you from this page for the first time as your Chairman. Our Chicago Section is one of the largest in the United States and is the largest engineering society in Chicago. To be elected to lead a professional group of this magnitude is a distinct honor, as well as a formidable challenge.

How to isolate and recognize the needs and interests of the Section and to evaluate the techniques and methods to satisfy them is no small task. But one good way is through well-staffed, dedicated committees. There are many standing committees within the Chicago Section. Their names, addresses, and telephone numbers appear on page 5 of this issue. I invite the members of the Section who are interested to join a committee. The procedure is simple: just call the Committee Chairman and volunteer. The only requirement is that you be qualified and willing to work. I can offer you long hours of hard work, no pay, and the lasting and regarding satisfaction of serving your profession, your community, and your colleagues.

This is a good time for me to express, on behalf of the Section and the IEEE, our appreciation to Past Chairman William J. Kusner and his Executive Committee for their unselfish and tireless devotion to the Chicago Section.

As your Chairman, I had the pleasure of welcoming, on behalf of the Chicago Section, the attendees of two international conferences which were held in the Chicago area: the 1972 IEEE-GMTT International Microwave Symposium, May 22-24, 1972; and the 1972 IEEE International Symposium on Electromagnetic Compatibility, July 18-20, 1972. The Spring Conference on Broadcast and Television Receivers, June 12-13, 1972, also held a successful conference.

The Program Committee has planned the first regular Section meeting for October 10, 1972. The speaker will be Robert H. Tanner, president of IEEE. This will be a good opportunity for the Chicago

Section members to hear from the Number One man in IEEE. We are fortunate to have Mr. Tanner address the Chicago Section, since there is a general consensus that some changes in the IEEE structure will be made during his term of office. (Additional information about the meeting can be found on page 1.)

Henry A. Setton  
Chairman

### Planning A Meeting, Conference, or Special Event?

Our newly established IEEE office will take your meeting reservations. Telephone number is (312) 263-5954. It is essential that the office have the information — preferably through SCANFAX. The best time to call in reservations is between the hours of 9:30 a.m. and 1:00 p.m. or 2:00 p.m. and 4:30 p.m.

Meeting coordinator should give his number to the office so that the secretary can refer other than routine reservations to him.

### Moved, Lately?

If you have moved—or are about to move—please notify the national office in New York. Our 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: Miss Emily Sirjane, Membership Services, IEEE, 345 E. 47th Street, New York, N.Y. 10017.

Change of address handled in this manner will be taken care of quickly; this is important both to you and to the Chicago Section.

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# NEC/72

## 28TH ANNUAL NATIONAL ELECTRONICS CONFERENCE

Regency Hyatt House-O'Hare

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- COMPUTER MONITORING & CONTROL OF ELECTRIC UTILITY SYSTEMS
- ULTRA-RELIABLE COMPUTERS
- IS ENGINEERING OBSOLETE?
- OSHA: A WHOLE NEW BALL GAME ON SAFETY
- TODAY'S CAPABILITIES OF THE DIRECT DISTANCE IN DIALING NETWORK
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**\$25 REGISTRATION FEE FOR EACH SEMINAR COVERS LUNCHEON, NOTES AND NEC REGISTRATION**

**22 TECHNICAL SESSIONS—100 TECHNICAL PAPERS**

**PROFESSIONAL GROUP MEETINGS**

**INDUSTRY EXHIBITS AND SPECIAL DISPLAYS**



## OCTOBER 9, 10 & 11



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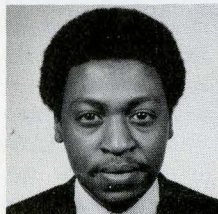


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## FOX VALLEY TO TOUR NAL

The Fox Valley Subsection will meet on Wednesday, September 6, and learn about "High Energy Physics at the National Accelerator Laboratory (Batavia)" from Paul J. Reardon, director of business administration for NAL. Dinner and meeting will be at the Toll Gate Inn, North Aurora, followed by a tour of NAL. Social hour, 6:00 p.m.; dinner, 7:00 p.m.; meeting, 8:00 p.m. For meeting reservations, call 263-3776 by September 2.

The National Accelerator Laboratory was established to serve high energy physics needs of all American universities and to allow for international cooperation in fundamental elementary particle physics research. The basic instrument in this research is the 200/500 BeV accelerator, the largest and most sophisticated in the world. Elementary particle physics with an instrument of this type is a study about the microscopic aspects of our universe and may be contrasted with astrophysics or astronomy, where the studies are about the macroscopic aspects of our universe.

Paul J. Reardon will explain the efforts which lead to the establishment of the National Accelerator Laboratory at Batavia: the selection of the site, the development and construction of the accelerators, the development and construction of the experimental areas and the devices used to do research, and the importance of this facility in furthering our knowledge about the fundamental building blocks of matter.

Paul J. Reardon's professional experience includes being a physicist at the Johns Mansville Research Center; a member of the senior technical staff and head of the operating division at the Princeton-Penn Accelerator; a staff member and accelerator physicist with the U.S. Atomic Energy Commission division of research in Washington; and a research physicist at the Massachusetts Institute of Technology Laboratory for Nuclear Science, where he served as project manager for the 500 MeV linear accelerator.

In his first assignment at the National Accelerator Laboratory in Batavia, Reardon was the leader of the technical group



Paul J. Reardon

responsible for the design, installation, and testing of the 8 GeV rapid cycling booster accelerator now in use. He was subsequently appointed director of business administration.

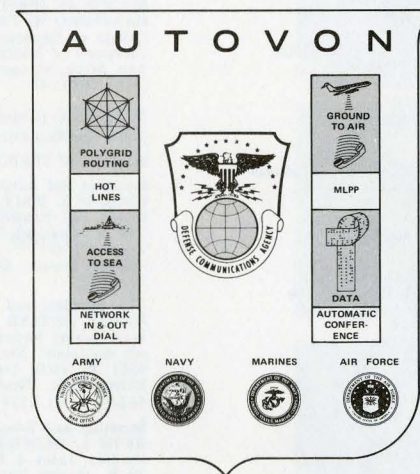
Reardon received a BS from Boston College in 1952 and an MS from Rutgers University in 1961. He is a member of the American Association for Advancement of Science, and the American Physical Society and a member of Subpanel F, High Energy Physics Advisory Panel.

## AUTOVON At Fox Valley Meeting, October 4

The October meeting of the Fox Valley Subsection will be held Wednesday, October 4, at Bell Laboratories, Warrenville and Naperville Road, Naperville, Illinois. The subject of the meeting will be the AUTOVON Military Communications Network and will include both a talk and demonstration of AUTOVON features as well as a tour of the building. The speaker will be Michael



Haverty, who supervised the design of the control programs for the electronic switching system used in the AUTOVON network. Haverty joined Bell Laboratories in 1960 and has been involved in many phases of electronic switching development including circuit and logic de-



sign, program design and system evaluation and testing.

Dinner will be at 7:00 p.m. in the company restaurant. Reservations must be made by October 2, 1972, and may be made by calling 263-3776. The AUTOVON demonstration and tour of the building is limited to the first 125 making

reservations. There is, however, no limit on the number attending the dinner or talk.

OCTOBER 21

### FOX VALLEY TO TOUR ZION

The Fox Valley Subsection plans to tour the Westinghouse Nuclear Training Center at Zion, Ill., on Saturday, October 21 (not Oct. 12, as carried in the Fox Valley program). Tour will be followed by lunch, at noon, at the Rustic Manor Restaurant, Gurnee, Ill. For tour reservations, call 263-3776 by October 17.

### CHANGE OF ADDRESS

Paul E. Jahn, chairman of the Fox Valley Subsection has transferred to the Stickney office of Commonwealth Edison. His current address and telephone number is: Commonwealth Edison Company, 4300 S. Ridgeland, Stickney, Ill. 60402; telephone 242-2550, ext. 213.

## Northwest Subsection to Tour Underwriters' Lab

For its opening meeting on September 20, the Northwest Subsection is featuring a guided tour of the Northbrook facility of Underwriters' Laboratories, Inc. With the growing emphasis on product safety and the implementation of OSHA (the Occupational Safety and Health Act), the role of Underwriters' Laboratories will be more relevant to many engineers, and, perhaps, a new experience for others in the near future. Come and learn the story and see this complex of testing facilities.

Fellowship from 6:00 p.m.; dinner at 7:00 p.m., sharp, at the Sportsman Country Club Restaurant, 3535 Dundee Road (approximately one mile west of Pfingsten Road). Cost of dinner is \$6.00. Call 263-5954 for dinner reservations before September 18.

If you can't make dinner, come directly to Underwriters' Laboratories, on Pfingsten Road just north of Dundee Road, at 8:00 p.m.

## INFORMATION THEORY AT ALLERTON CONFERENCE

The IEEE Information Theory Group will have a meeting on Wednesday, October 4, 1972 at the Allerton Conference, Allerton House, Monticello, Ill. Meeting coordinator is Dan Costello. For reservations, call: 263-5954.

## POWER ENGINEERING TO TOUR WILTON SUBSTATION

The Power Engineering Society, Chicago Chapter, will hold its first meeting for the 1972-73 season with a tour of the Commonwealth Edison Company Wilton Center — 765 kv substation near Manhattan, Ill., on Wednesday, September 20. For meeting details, reservations, and a map of the area, phone IEEE office, 263-5954. Meeting coordinator is F. J. Kloht, Sargent & Lundy Engineers, FI 6-7600, ext. 754.

## Communications Society to Meet September 19

The IEEE Communications Society (S-19) will hold its first meeting of the year on Tuesday, September 19, 1972. "The Communications Society and What it Means to You" will be discussed by Art Leininger, Illinois Bell Telephone Company, a member of the Communications Society Ad Hoc Committee on Papers Policy, and Ran Slayton, Teletype Corp., Communications Society, Department of Administration and Finance.

Meeting will be held at Menard's Black Steer Restaurant, 6446 W. North Avenue, Chicago, Illinois. Social hour, 6:00 p.m.; sirloin of beef dinner, 6:30 p.m.; meeting, 7:30 p.m. Cost of dinner, including tax and tip, \$5.00. For dinner reservations, call the IEEE office, identifying the meeting, at (312) 263-5954. Please call before September 14, 1972.

Meeting coordinator is George Mack, Illinois Bell Telephone Company, (312) 727-3339.

## ANTENNAS AND PROPAGATION/MICROWAVE THEORY AND TECHNIQUES

The joint Antennas and Propagation/Microwave Theory and Techniques Group will hold two meetings in October: the first on October 9 at NEC and the second on October 26.

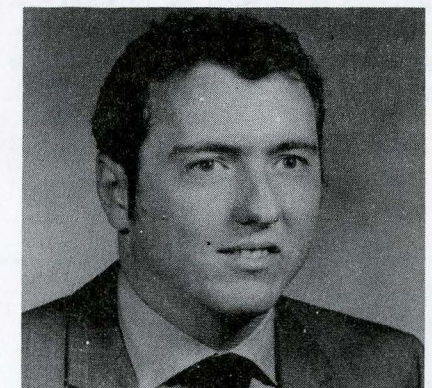
The October 9 meeting is NEC Technical Program No. 5, which will be held at 9:30 a.m., in the Eastern Room of the Regency Hyatt House-O'Hare, River Road and Kennedy Expressway, Chicago, Ill. The session, chaired by R. Mittra, University of Illinois, will be devoted to "Topics in Modern Radar." Papers include: "Modeling of Multipath Induced Monopulse Angle Tracking Errors," by S. O. Dunlap, U.S. Army Missile Command; "Modeling of the Radar Scattering Characteristics of Aircraft," by J. W. Wright, U.S. Army Missile Command; "Geometric Optics Calculation of Radar Cross Sections," by P. L. E. Uslenghi, University of Illinois, Chicago Circle; "A Survey of Random Arrays," by Y. T. Lo, University of Illinois; and, "Air Pollution Detection and Monitoring Using Optical Radar," by H. Sievering, Governors State University.

## Now Hear This . .

Robert F. Pierce has joined Zenith Sales Company, a division of Zenith Radio Corporation, as product manager-audio products.

Prior to joining Zenith, Pierce was general manager-special markets of Broadmoor Industries, Des Plaines, Illinois. From 1967 to 1971, he was with the Admiral Corporation, as marketing manager-audio products until 1969, when he formed and became general manager of the special markets division. Earlier he was associated with Westinghouse Electric Corporation as national sales manager-TV division.

Pierce attended Wright Junior College and DePaul University in Chicago. He is a past member of the National Premium Sales Executives (NPSE).



Patrick T. Griffin

Patrick T. Griffin has joined the engineering staff of Brown & Root, Inc., Chicago Engineering Division, Oak Park, Ill.

Griffin graduated from Purdue University with a BS in electrical engineering and then from the University of Santa Clara with an MBA.

Before joining Brown & Root, Griffin worked as a senior electrical cost engineer for Bechtel Corp.

The October 26 meeting is the Microwave Theory and Techniques National Lecture. Theodore S. Saad, President, Sage Laboratories, Inc., Natick, Mass., will discuss "The Microwave Industry, 1972." The meeting time and location will be announced in the October issue of SCANFAX.

# Computer Aided Manufacturing

An Industrial Seminar on Computer Aided Manufacturing (CAM) will be held at IIT Research Institute, 10 W. 35th Street, Chicago, Sept. 6 and 7, 1972. The seminar is scheduled concurrently with the Machine Tool Show to permit attendees to participate in both functions.

Speakers and discussion leaders will represent both the research and applied areas. Discussions during the seminar will treat questions pertinent to manufacturers' needs such as: What's here and what's missing in CAM software?; What is the impact of CAM on material handling, machine utilization, inventories, profits and costs?; What can be automated?; What should be automated?; Letting design engineers schedule machines and make parts.

Advance registration fee of \$200 covers seminar attendance, luncheons and refreshments. Information and registration forms may be obtained from C. E.

Drayton, IIT Research Institute, 10 W. 35th Street, Chicago, Illinois 60616.

## 16 Months for Price of 12

If you know an engineer who is not an IEEE member, persuade him to join now — he will get 16 months of membership (until Dec. 31, 1973) for one year's dues. He will just pay the \$25 dues assessment prevailing when he joins, and there will be no regional assessment to pay. This is a great bargain, but prospective members should join as soon as possible, since the advantage dwindles month by month. Any new membership applications received by December 31, 1972, will receive the \$25 rate for 1973. This is important for new members, as there may be an increase in dues assessments for 1973.

## Midwest College of Engineering Recognized by NCACSS

Midwest College of Engineering, Lombard, Ill., has been officially recognized by the North Central Association of Colleges and Secondary Schools, it was announced by Dr. Alva C. Todd, president of the college.

According to Dr. Todd, the college received notification that it was granted the status of Recognized Candidate for Accreditation on the recommendation of the association's Executive Board of the Commission on Institutions of Higher Education.

"Because Midwest College of Engineering has been a pioneer in professional engineering education geared to the needs of industry, we are delighted to have received this recognition by the formal academic community in just five years," said Dr. Todd.

Founded in 1967, Midwest College of Engineering is the first professional college of engineering in the country. It offers programs leading to the bachelors' and masters' degrees in all branches of engineering and to the degree of master of engineering administration.

Registration for the Fall Quarter courses at the Midwest College of Engineering will begin September 11, 1972, and class sessions will commence September 25, 1972. Mail registrations will be accepted until September 22, 1972, and registration in person will take place on September 22, from 6:30 to 9:30 p.m. at the college, 440 S. Finley Road, Lombard, Illinois.

### 1972 IEEE TREASURE HUNT

## REMEMBER THE FUN OF '71?

The Chicago Section IEEE Treasure Hunt will be held Saturday, October 7, 1972, starting at 6:30 p.m. Send your reservations in now! This is your "last chance" to participate in this year's fun event.

Tickets for the hunt will be \$19.50 per couple. Only reservations for a full car (3 couples) will be accepted. The cost includes a post-hunt Top Sirloin of Beef dinner. Reservations for the hunt only will not be accepted.

Send your checks or money orders totaling \$58.50 for the dinner and hunt, including the names of the 6 hunters, using the registration form on this page.

Julius Simon  
Registration Chairman  
IEEE 1972 Treasure Hunt  
9248 Oketo  
Morton Grove, Illinois 60053

Enclosed is our check(s) totaling \$58.50 for the 1972 IEEE Treasure Hunt on Saturday, October 7. We understand that the Hunt will take place rain or shine and that full instructions and tickets will be mailed to us a few days prior to the Hunt.

Names of Team-mates:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_

Mail all instructions and tickets to:

Make Checks Payable To:

1972 IEEE TREASURE HUNT

Telephone: \_\_\_\_\_