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CHICAGO SECTION • IEEE • INSTITUTE OF ELECTRICAL & ELECTRONICS ENGINEERS

OCTOBER 1976

CALENDAR OF EVENTS

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

- Oct. 6 "The Body Scanner," Fox V. Sub., Loyola University.
- 11-14 IAS/IECI Annual Meeting, Hyatt Regency O'Hare, Chicago, Ill. For information call Glenn R. Griffith, General Chairman, 468-9300, ext. 595.
- 12 IEEE Executive Committee Meeting; Brown & Root Offices, 2001 Spring Rd., Oak Brook, Ill., 7:30 PM — ALL WELCOME.
- 13 "Interference Considerations in Mobile Radio Systems," VT Group, Two Knights, Irving Park RD. (Hwy. 19 & Old Hwy. 53).
- 16 Tour — Andrew Corp., MTT/APS., 10500 W. 153rd St., Orland Park, Ill. Luncheon at Petey's 11, 159th St. & LaGrange Rd., Orland Park, 12 noon.
- 19 General IEEE Topic of Interest, PES (joint with Chicago Section), Joseph Dillard, President of IEEE, Midland Hotel, 172 W. Adams St., Chicago, Ill. Luncheon
- 21 "GTD Family of Digital PABX's," Comms. Soc., GTE Automatic Electric, 400 N. Wolf Rd., Northlake, Ill. Social & Dinner 6:30 PM; Meeting 7:30 PM.
- Nov. 3 "Electronic Gains," Fox V. Sub. (joint with Computer Society), Aylwards, 27W103 North Ave., West Chicago, Ill.
- 9 IEEE Executive Committee Meeting; Brown & Root Offices, 2001 Spring Rd., Oak Brook, Ill., 7:30 PM — ALL WELCOME.
- 10 "Surge Protection for Electronic and Power Equipment," IAS/IECI, Nielsen's, 7330 W. North Ave., Elmwood Park, Ill. Social Hour 5:30 PM; Dinner 6:15 PM; Meeting 7:15 PM.
- 10 "Area Load Control," PES, Midland Hotel, 172 W. Adams St., Chicago, Ill. Luncheon.
- 10 "Citizens Band Radio," VT Group. No further information by deadline.
- 16 "Pulsed Antenna," MTT/APS, Black Steer, 6446 W. North Ave., Chicago, Ill. Social Hour 6:00 PM; Dinner 7:00 PM; Meeting 8:00 PM.
- 17 NW Sub. No information by deadline.
- 18 "A 24 Channel Digital Echo Suppressor," Comms. Soc., Willowbrook Holiday Inn, 7800 S. Kingery Hwy. Social Hour 5:30 PM; Dinner 6:30 ; Meeting 7:45 PM, followed by plant tour of Wescom, Inc., 8245 Lemont Rd., Downers Grove, Ill.

Deadline for copy: One month before date of issue

RELIABILITY GROUP ELECTS NEW OFFICERS

At a meeting held on August 13, 1976 the following officers of the Reliability Group were elected for the 1976-77 season: *Chairman*, Rod J.

Garcia of General Time Corporation; *Vice Chairman*, Raymond L. Schirmer of ITT Telecommunications; *Secretary*, Henry A. Malec of GTE Automatic

Electric Company; *Treasurer*, Shaw H. Matthews, III of Zenith Radio Corporation.

J. K. DILLARD HERE



At the October 19 joint Power Society and Section meeting, Joseph K. Dillard, IEEE President will present a very interesting view of the IEEE: "A Glance Back and a Look Ahead."

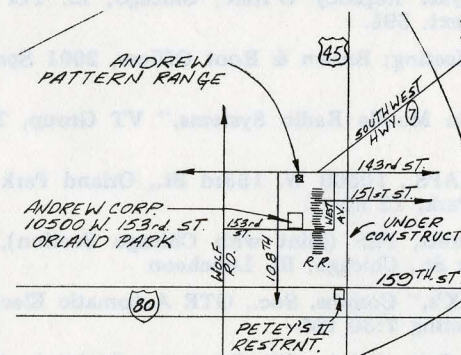
Mr. Dillard is a native of South Carolina. He earned his BSEE Degree in Electrical Engineering at Georgia Institute of Technology and his MS De-

gree at Massachusetts Institute of Technology. He remained for a few years as a member of the staff in the Electrical Engineering Department at MIT before he came to Westinghouse in 1950. He is also a graduate of the Advanced Management Program of the Harvard Business School, Class of 1960.

His first assignment at Westinghouse was in the Electric Utility Engineering Department, where he dealt with system studies of surge protection, transient phenomena, circuit analysis, economic dispatch, and similar problems.

Mr. Dillard is a member of the National Academy of Engineering and a Fellow of the IEEE, the world's largest professional engineering society, and presently serving as its President. In 1973 he was awarded his company's highest recognition, the Westinghouse Order of Merit.

MTT/APS TO TOUR ANDREW CORP.



A tour of the Andrew Corporation pattern range facility will originate from Petey's 11 Restaurant at approximately 2:00 PM on Saturday, October 16 following lunch and a brief talk by Larry Hansen, Manager of the Microwave Antenna Design Department and the pattern range facility of Andrew Corporation.

Mr. Hansen will describe the different pattern ranges available and the techniques used for measuring radiation pattern envelopes for the UHF through microwave frequencies with gains of 0 - 50 dB. The tour will include viewing earth satellite TV reception via a 10 metre antenna plus the radiation pattern measurement of a 10 metre antenna on Test Tower No. 1.

Luncheon will be 12 noon at Petey's 11 Restaurant located at 159th Street (Route 6) and LaGrange Road (Route 45) in Orland Park.

For reservations call the IEEE office at 236-4609.

Scanfax Officers

Ed Osterberg, Publisher
Illinois Bell Telephone Company
(312) 727-5405

George Mack, Finance Manager
Illinois Bell Telephone Company
(312) 727-3339

John Johnson, Contributing Editor
Illinois Bell Telephone Company
(312) 727-7867

Scanfax Office
125 South Clark St., Room 1545
Chicago, Illinois 60603
(312) 236-4609

Chicago Section Officers

Paul E. Jahn, Chairman
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Meeting Reservations

Remember that the IEEE office, (312) 236-4609 will take your meeting reservations. Call anytime between 8:00 AM and 5:00 PM, Monday through Friday.

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

Change of Address

If you have moved - or are about to move - please notify the IEEE Service Center in New Jersey. 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 Roseann Schulz, Member Services, IEEE Service Center, 445 Hoes Lane, Piscataway, N.J. 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.

FOCUS ON FAX

IEEE SCENE

There are a great many engineers out looking for jobs today. I wonder if that's a contributing factor in the IEEE election for a president this year. Robert Saunders, Irwin Feerst, and Robert A. Rivers all want the job. That is really incredible when you think about it! IEEE membership declines more with each dues increase. Section activities are lightly attended. Squabbles about the quality and quantity of staff support at IEEE Headquarters consume everyone's attention. Structural unemployment has hit electrical engineers. Amid all the chaos, we have three individuals that want to lead this mess!!!!

Not only are there three individuals, but each has supportive credentials, two candidates went through the effort of the petition process, and each candidate has very definite opinions about where they would like to see the IEEE headed. This type of choice is the very

DIGITAL PABX'S

At the October 21 meeting of the Communications Society, Gerald F. Fetterer of GTE Automatic Electric Laboratories will give a presentation on "The GTD Family of Digital PABX's".

The GTD Family of systems is a series of stored program controlled, digital switching (via Pulse Code Modulation) PABX's being developed at GTE Automatic Electric. The presentation will cover Time Division Switching, Transmission Considerations and Software/Hardware Interfacing in the GTD Family, as well as a description of each system within the series.

Mr. Fetterer will discuss how a major goal of the development program, commonality of design, was approached. The advantages of commonality, both to the manufacturer and the user, will be explored.

Gerald F. Fetterer presently is Manager, Specialized System Design section, in the Switching Laboratory at GTE Automatic Electric Laboratories. He received his BSEE degree from Marquette University in 1966, and an MBA degree from the University of Chicago in 1970. He has been with GTE Automatic Electric since 1966, and has been design manager for the GTD-120 and GTD-1000 developments, two of the three main GTD Family members.

strength of the IEEE today. Who would believe it? It's often difficult enough to get one good candidate for a board membership, let alone three to choose from. But back to the issues, ah, the issues!

Candidate's statements were mailed out with the ballots. In addition, the August issue of Spectrum contained an identical statement. Saunders will pretty much continue the policies and direction initiated by the Board. Rivers offers inspired "leadership that has a vision of the future". Feerst is the ever "outspoken and forceful champion". The choice is a crucial one for the IEEE activities and direction may dramatically change with the election results. The key is in the interest of the membership in identifying those priorities which they feel are important for the coming year. It's easy to do - elect the candidate you feel is qualified to lead the IEEE off into the sunset, whether it sets in the north, south, or east (the west is reserved for perfection).

I may not agree with your choice, but I heartily support your right and preference to choose. It's most important to express your opinion this year, for the result could have a significant impact on where the IEEE is headed and whether it will have the financial strength to continue. It would truly be a tragedy if we did not have a higher percentage of the membership voting than the national turnout of eligible voters in the November election.

-JFJ-

WE NEED COPY!

Attention *all* Groups and Societies - mail copy covering your meetings into the IEEE office *no later than the first of every month* for inclusion in Scanfax. Give us the subject of your meeting, speaker's name, date, time and location plus information on the meeting itself.

Remember, it pays to advertise. They can't go if they don't know.

The address of the IEEE office is 125 South Clark Street - Room 1545 - Chicago, Illinois 60603.

OCT. 15 OR ELSE

Yes, folks, that's the deadline for your group, society or subsection budget for 1976-1977. Run - don't walk - and get it to John Waters, our noble Treasurer, at Bussmann, 50 W. Lake St., Northlake, Ill. 60164.

FOCUS ON FAX

NATIONAL SCENE

A glorious Bicentennial Year brimming with events, memorabilia, trivia, a landing on Mars, and to top it off, it's an election year. Not just any election year but a national Presidential race and in Illinois, an interesting gubernatorial choice, both offer contrast in candidates and issues. Depending upon where you live, a Congressional seat or state legislative office might add to the excitement. But in all the guffaws and ballyhoos, where does the engineer or scientist plug into it all?

At the very least, any technical constituent should be conversant with the candidates' attitudes and stands in the areas of defense expenditures, the priority of the Office of Science and Technology, the funding for public projects in the areas of pollution and other environmental concerns, emphasis on a National Energy Policy, and posture towards the continuing introduction of nuclear technology. One position you might take is to elect those people who will maximize the emphasis and growth on all technical areas so the job market for engineers and scientists will swell like the heydays off the early sixties. Another stance is to narrow your interest to your particular specialty - the old PYA syndrome (more of that in a later column)! After all, if you have a job, we can only pass through a Recession; if you don't have a job it's a damned Depression.

There are quite a few other alternatives to be considered. Clearly, one is to bitch, moan, groan, and holler about the state of the State and the Union. What the heck, you can't really do anything anyway! You really don't have a choice about who gets elected! Although technical types are often not the most ardent political supporters, you could also get out and help the candidate whom you most respect. It doesn't hurt to hand out leaflets to neighbors and friends or take voter opinion preferences in a pre-election poll. However, the risk is that you get involved in the American political process right at the grassroots level.

If you do nothing else this fall, make sure that you vote. It does matter and it does count. I don't care which platform or which party you like. I don't care if you like Carter or Ford, Howlett or Thompson, or Betty or Amy! This column is not for giving my preference, but I can assure you that if you ask, I'll offer an opinion. See you at the POLLS!!!

-JFJ-

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CONTINUING EDUCATION SERVICES

It takes "guts" to keep pace with the rapid technological advances we are experiencing today. Each and every one of us knows of technologies that were merely hinted at a few years ago, which today have burgeoned into significant industries.

We're living in a mobile society that has an insatiable appetite which constantly makes demands of its members. And yet, a very real problem exists. Most of us feel that employment limits us in responding to this increasing emphasis of continuously updating our knowledge just to maintain that competitive edge.

It may interest you to know that the Educational Activities Board of the Institute mandated a positive education expansion program in 1974 that proposed a ten-fold growth in ten years. Ever since that announcement, establishment of a viable expansion program for educational activities has become our principal objective. We have developed some two dozen courses in many fields to satisfy the needs of our Sections. We ask that you scan the list below to see if any are applicable to your specific need.

COMPUTER AND INFORMATION SCIENCES

The CAMAC Modular Interface Standard — (one day)

Minicomputer Realtime Operating Systems — (one day)

Computer Aided Filter Design — (one day)

Minicomputers — (two days)

Electronic Information Processing — (two days)

Microprocessors — (one day)

Microprocessors Seminar — (two days)

Microprocessors Seminar — (five days)

Computer Networks — A Tutorial — (one day)

BUSINESS AND MANAGEMENT

How To Start and Finance a New Business — (one day)

John C. Crystal's Life/Work Planning Process — (one day)

The Management Imperative — Effective Communication — (one day)

How to Convert Your Ideas Into Dollars — (one day)

Law, Legislation, the Engineer and Society — (one day)

Planning: Professional and Personal — (one day)

POWER SYSTEMS

Power Systems — Interconnections — (two days)

Power Systems — Planning — (two days)

Power Systems — Relaying — (two days)

Introduction to Solid State Power Electronics — (two days)

ELECTRICAL AND ELECTRONICS ENGINEERING

Infrared Testing — (two days)

COMMUNICATIONS

Engineering Consideration for Microwave Communications Systems — (five days)

DEAR READER

Many times you have read or heard what the IEEE can do for you. Now we would like to turn to the question of what you can do for the IEEE.

As with all institutions, the IEEE exists to serve the needs of its members. When an institution changes so that it no longer serves its members or if the needs of its members change and the institution does not change with it, then that institution will surely die or be replaced by another that better serves the present need.

Overall then, the IEEE, averaged over all members and all time, must give its members more than it receives from them or it will cease to exist. Not all receive the same amount for as with other institutions, what one gets out is somewhat proportional to what one puts into it. However, not all of us can be receivers at all times. There must be a few who at times put in more than they take out.

There are at least three levels of support which you as members can supply. On the first level, the members support the IEEE with their dues, they read the journals and use this information to improve their technical knowledge.

BARGAIN MONTHS

Now through December are bargain months in the IEEE. Any new members recruited during this period will pay one year's dues and receive membership coverage from the date of enlistment until December 31, 1977. Thus, new members can receive from one to three months of additional membership at no extra charge. (Use this extra incentive when approaching any potential new members.)

This increases the quality of the engineering profession so that the image of technology is improved.

On the second level are those of you who will join us at meetings and speak up with your opinions or write us your thoughts so that the planners, the organizers, and the motivators set the right course for future actions. This group is very influential and very effective in making the institute responsive to the needs of its members. True, they put more in, but they get more out, and I think on balance they still receive more than they put in.

Then there is the level three group who are the planners, the organizers of service, the motivators of change, the committee chairmen, the committee members, the program planners, the ones who keep in touch with new members, who spread the word about meetings; the ones who for a time in their career are putting more into the institution than they are taking out.

The Chicago Section welcomes all three levels of support, for all are useful and needed.

However, the rate of improvement in services depends on the dedication of the leaders and the numbers of members who are for a time willing to put in more than they take out.

Recently the large sections have noted a decrease in activity of the members at meetings. Either we are not doing something right or we are not doing enough. Perhaps the needs have changed, and we have not changed with it.

We need new blood among the planners, the organizers of service, the motivators of change. We need more who will speak out or write us with their view on what direction we should be going.

What can you do for the IEEE? If you are a level one supporter, why not consider level two or level three. If a number two, then number three. Executive committee meetings are the second Tuesday of every month at Oakbrook at 7:30 P.M., or write and tell us what you would like to do to help.

BUSINESS OPPORTUNITY

Electronic equipment distributorship established over twenty years in Chicagoland is offered for sale. Other business interests prevents present owner from devoting time required. Seller wants the business continued to serve present customers and to support product in the field. A very low sale price of \$50,000 has been established for a buyer who can demonstrate ability to continue and expand the business. Prospective purchaser should have radar and/or communications systems background. Principals only may write giving name and phone number for appointment. Confidential. Reply to ELECTRONICS, P.O. Box 696, Hillside, IL 60162