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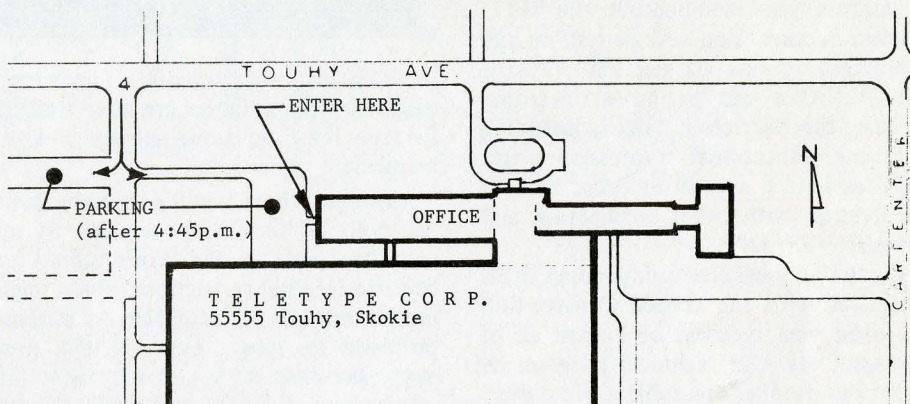
MAY 1973

A New Family of Data Communications Terminals

COMMUNICATIONS SOCIETY JOINT MEETING

Mr. James D. Ulaszek, product planning manager, Teletype Corporation, will discuss a new family of data communications terminals designed to cope with the complex needs of the communications environment of the 1970's. These new devices include significant advances in the areas of data preparation and communication. Of special interest is the total terminal concept, which has been incorporated into the design philosophy of this new product line. The unique approach taken for terminal diagnostics, in addition to the functional capabilities of the apparatus, will be presented. A movie and slide presentation, as well as a plant tour, is scheduled.

The meeting will be at Teletype Corporation, 5555 W. Touhy Ave., Skokie, Ill. Plant tour will start at 5:30 p.m. (please do not arrive before 4:45). Parking will be available in Lot 4 and the visitors lot. Dinner (roast sirloin strip) is at 6:30 p.m.; cost is \$5.75. Reservations for dinner must be made. The meeting will start at 7:30 p.m. Children over 16 welcome.



Tour of Nuclear Power Plant at Zion

On May 16 the Northwest Subsection will tour the Nuclear Power Plant of Commonwealth Edison Company at Zion, Ill., after a short meeting at which the election of incoming officers will be held. The Zion plant is the world's largest nuclear power plant, and will have two reactors with a full-power rating of 1,100 megawatts each, when completed. Controversy has raged over various aspects of

the plant since its earliest days, most recently centering around safety features for the prevention of radioactive contamination and the locality.

The meeting and election will start at 8:00 p.m., followed immediately by the tour. You may use your own transportation if you desire, but we will have bus service which will leave Randhurst Shop-

(Continued on page 2)

CALENDAR OF EVENTS

IEEE OFFICE: 263-5954

- May 6 Fox Valley Subsection Ladies Night — See Page 3
- May 8 - 10 American Power Conference — See Page 4
- May 9 Industry Applications Society (S-34) and Industrial Electronics & Control Instrumentation Group (G-13)
- May 12 Recognition Dinner — See Page 3
- May 15 Joint Antennas & Propagation (G-3) and Microwave Theory & Techniques (G-17) — See Page 2
- May 16 Northwest Subsection Tour of Nuclear Power Plant at Zion — See Page 1
- May 22 Section Meeting — A New Family of Data Terminals - Teletype Corp. — See Page 1
- May 22 Power Engineering Society — See Page 3
- May 23 Engineering in Medicine & Biology — See Page 4

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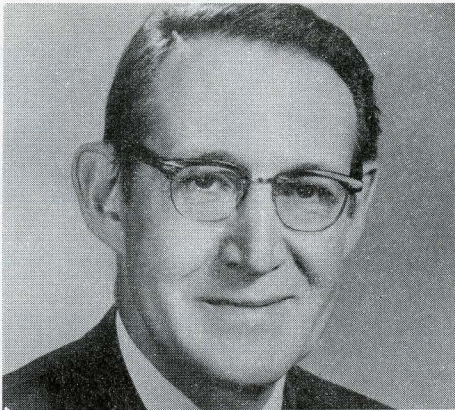
THE PRESIDENT

I am pleased to have this opportunity to address you members of the IEEE Chicago Section. You have certain unique advantages because the Section is a large one. Activities can be more rewarding because the Section is larger, including technical, educational, professional and social activities, as well as those held in cooperation with other engineering and scientific societies.

On the national scene, expanding IEEE objectives with the revised Constitution has been well received by almost all of our members. Our technical program remains our number one subject of interest, and the attendance at several of our conferences continues to run ahead of last year. Educational courses, the IEEE Press offerings, and tape cassettes on special subjects are being prepared in increasing numbers. Special attention is being focused on such subjects as the energy crisis, environmental concerns, and technology assessment.

The professional activities of the IEEE are moving ahead well under the direction of the United States Activities Committee, USAC, made up of the U.S. Regional Directors (1-6) as well as 3 Directors from the 6 Technical Divisions. Our Washington Office under Ralph Clark has had a beneficial influence in bringing important engineering and scientific societies into closer cooperation. Joint legislative activities, several pension efforts, endorsement of Guidelines for Professional Employment Practices, and expanding technology assessment activities are representative of what is taking place at the national levels. The IEEE Congressional Fellow Plan is moving ahead. We are also encouraging increased efforts at getting combined societies' activities on societal problems at the local level. Although our professional activities have a high degree of novelty and member interest, they probably represent less than 4 percent of our efforts in terms of their monetary costs.

Because electrical and electronic engineering can make important contributions, to present-day society, the change in the IEEE Constitution appears to have been timely. Management, as well as



Harold Chestnut
President, IEEE

working engineers, seems in agreement that new opportunities are now available for the IEEE to serve society and our members.

However, there is still a lot to be done. We will be increasing services to our members and to the world about us, because internal restrictions which might inhibit our paying attention to external problems no longer exist. It will, however, take hard work, because the technical, economic, social and political problems that face us today are difficult ones. I believe that most IEEE members are eager and able to meet this challenge.

G-3 & G-17 –
Picturephone
Service

A Picture's Worth 1,000 Words. That's the theme of the Illinois Bell Picturephone presentation we are invited to attend after our May 15th dinner meeting.

Three representatives from Illinois Bell will demonstrate Picturephone Service, explain how it is presently being used and by what types of businesses. Any and all questions will be answered. This promises to be an interesting session. Only one stipulation: audience participation in the demonstrations is required.

The presentation will begin at 8:00 p.m. in the Business Communications Center off the main lobby of the Illinois Bell Headquarters Building, 225 W. Randolph St. A hot buffet dinner (\$5.00) in the Illinois Bell 20th floor dining room is scheduled for 7:00 p.m. For reservations and additional information, call Shared Laxpati at 996-5493 (or 996-3423), or Larry Hansen, 349-3300, Ext. 272.

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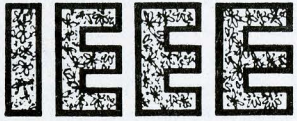
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ZION PLANT TOUR

(Continued from Page 1)

ping Center at 7:00 p.m. Included in the \$4.50 price for the bus trip will be a chicken box supper and refreshments, which we will eat enroute. It is important that reservations be made by calling 263-5954. Relax, leave the driving to us and enjoy the informal comradeship.



RECOGNITION
DINNER

SATURDAY, MAY 12, 1973

Join your associates for a great evening at the Arlington Park Towers' Paramount Ball Room. Past Dinners have been a roaring success, so don't miss this one.

Recognition this year goes to Dr. Oskar Friedrich Doehler "for contributions and technical leadership in the field of high-power microwave tubes and especially crossed field devices," and to Dr. Stephen Yau "for contributions to switching theory, the reliability of computing systems, and engineering education."

Tickets are only \$12.50 per person—and for that you get:

★ HORS D'OEUVRES

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SATURDAY, MAY 12, 1973

ARLINGTON PARK TOWERS –
PARAMOUNT BALL ROOM

(Non-IEEE members are also invited)

Fox Valley
Ladies Night

"How The Other Half Loves", with an all New York cast will be the featured play at the Shady Lane Theatre (3 miles west of Marengo on U.S. 20), when the Fox Valley members and wives or girl friends get together on Sunday, May 6th.

Dinner, with tenderloin tips as the entree, begins at 2:30 p.m. The play begins at 4:30 p.m. This leaves the evening free for meeting with friends afterwards.

Ticket cost for both the dinner and play is only \$7.50 per person. Send your check, payable to "IEEE, Fox Valley Subsection," to Howard Zuvers, c/o National Electronics, P. O. Box 269, Geneva, Ill. 60134.

YOU ALL COME!

Power Plants -
Picking the Sites:
The Engineers Role

The Power Engineering Society (S-31) presents a luncheon meeting on May 22 at the Chicago Engineers Club, 314 S. Federal Street, Chicago.

C.A. Brown, environmental engineer for Sargent & Lundy, will talk on the problems of power plant site selection. Brown is a member of the Thermal and Special Project Section of the Environmental Division of Sargent and Lundy. He has been responsible for the organization, coordination, and report preparation for four alternate cooling technique studies and Sargent & Lundy's first benefit cost analysis. He has also directed the development of S&L's cooling tower plume behavior model and population distribution and projection program.

C.A. Brown is a University of Wisconsin graduate (BS in mechanical engineering). His MS in mechanical engineering is from Rensselaer Polytechnic Institute. Additional advanced work has been done at both Rensselaer and Trinity College.

The meeting is at 12:30 p.m.; lunch (\$3.00) at 12:00 noon (cash bar will be open for refreshments from 11:30.) For reservations call 263-5954 on or before Monday, May 21. Complimentary copies of the program will be available.

Engineering in Medicine & Biology

A meeting, jointly sponsored by the Hawthorne MED (Medical Engineering Development) Club, is scheduled for Wednesday, May 23, at 7:30 p.m. at the Western Electric Company Hawthorne Works, 24th and Cicero Avenue, Chicago. Members of the Club and of the medical profession will talk on the kinds of medically oriented problems laymen can work to solve, and how the problems are solved. A tour of the lab area is also planned.

Dine before coming. Enter at Gate 1. Mr. Riley of the Western Electric Company is coordinating the affair and can be reached at 494-5203. Call 263-5954 for reservations.

American Power Conference

The 35th Annual Meeting of the American Power Conference will be held May 8-10 at the Pick-Congress Hotel, Chicago, Ill. Registration fee of \$40.00 entitles the registrant to receive a copy of the Proceedings and to attend all sessions.

Of particular interest to IEEE members will be the joint American Power Conference/IEEE luncheon on Wednesday, May 9 at 12:15 p.m. J.B. Owens, president of the IEEE Power Engineering Society will preside. The featured speaker will be Richard E. Balzhiser, assistant director, Office of Science and Technology, The White House. Tickets for the luncheon are \$6.00 per person.

WEDNESDAY, MAY 9TH

What You Can Do in Hazardous Areas

The Industry Applications Society (S-34) and the Industrial Electronics & Instrumentation Group are jointly sponsoring a May 9th meeting on instrumentation, control and electrical installations in hazardous areas (usually governed by the rules of Article 500 of the National Electrical Code). Further guidance is found in the Recommended Practices of the American Petroleum Institute and the Instrument Society of America as well as publications of other organizations such as the National Fire Protection Association.

Working Group IV of the IEEE-IAS Petroleum and Chemical Industrial Committee organized a subcommittee to prepare information on methods other than the use of explosion-proof equipment.

It is the intent of this paper to show that there are also other methods available to meet the requirements of the National Electrical Code. These include intrinsic safety, purging and pressurization, physical isolation, et. cetera. An attempt will be made to discuss the advantages and disadvantages of each method. What to do when substances are encountered not presently listed in the National Electrical Code is included.

A discussion of explosion-proof equipment will be included.

The speaker is Bob Loewe, head of the Electrical Specification Division of Sar-

gent & Lundy Engineers. He has also worked at Argonne National Laboratory, Allis-Chalmers and Westinghouse.

He has a BS and MS in electrical engineering from Wisconsin. He is a registered engineer in Illinois, Indiana and Wisconsin. He is a member of NSPA, IES, IEEE, ISA and NSPE. He is currently chairman of the Chicago IAS Chapter of the IEEE, chairman of Working Group IV of the IEEE Petroleum and Chemical Industry Committee, Secretary of the Chicago Section of ISA, editor of ISA's Feedforward and Events and editor of the IEEE-IAS Transactions.

The meeting will be held at Nielsen's Village Restaurant, 7330 W. North Ave., Chicago, Ill. and will start at 7:15 p.m. with dinner at 6:15. (Members \$7.00; non-members \$8.00.) Meet your friends and bring your friends — the social hour starts at 5:30 p.m. Call 263-5954 for reservations.

Northwest Subsection To Elect Officers

The Northwest Subsection will elect officers for the 1973-1974 season at its May 16 meeting, which will be held at the Commonwealth Edison nuclear power plant in Zion, Ill.

The slate nominated by the nominating committee is: Robert Waghorne, Chairman; Henry Pahl, Vice Chairman; Bertram Baumbach, Secretary; Robert Goetz, Treasurer.

Additional nominations from the membership of the Northwest Subsection may be made by written petition submitted to the Secretary prior to the meeting.

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HOSPITALITY SUITES

Salon A—RCA Solid State Div.

Salon B—Motorola Semiconductor Products, Inc.

Salon C—Fairchild Semiconductor



CHICAGO

Spring Conference

ON BROADCAST AND TELEVISION RECEIVERS

TENTATIVE PROGRAM

June 11-12, 1973

MARRIOTT MOTOR HOTEL

The Fourteenth Chicago Spring Conference on Broadcast and Television Receivers will be held June 11 and 12, 1973. Members of the IEEE, and others interested are cordially invited to attend.

The Conference will be held at Marriott Motor Hotel, 8535 W. Higgins Road, Chicago, Illinois 60631, which features complete hotel facilities, and can be reached from downtown Chicago via the John F. Kennedy Expressway in 20 minutes, or from the O'Hare Airport directly by free limousine service. Please reserve your room BEFORE May 25 as our reserved room reservation block will be released on that date.



MONDAY, JUNE 11, MORNING SESSION

Session Chairman: Wayne Luplow
Zenith Radio Corporation

1. *"A New Approach to Determining the Image Response of a Color Picture Tube"*
by R. L. Donofrio
of G.T.E. Sylvania
2. *"Television Receiver White Color: A Comparison of Picture Quality with White References of 9300K and D6500"*
by Daan Zwick
of Eastman Kodak Company
3. *"The Magnavox Chromavue 400 Television Camera"*
by John R. D'Aiuto
of The Magnavox Company
4. *"Television Colorimetry for Receiver Engineers"*
by C. Bailey Neal
of G.T.E. Sylvania
5. *"The Ebers-Moll Effect—Transistor Used as a Low-Value Controlled Resistor in ACC and Other Variable Gain Applications"*
by Roger C. Thielking
of General Electric Company
and
Andrey V. Korolenko
of The Magnavox Company

Luncheon

Guest Speaker: Edward P. Reavey Jr.
Vice President and
General Manager
Consumer Products Division
Motorola Inc.

MONDAY, JUNE 11, AFTERNOON SESSION

Session Chairman: E. M. Tingley
Electronic Industries
Association

PANEL SESSION ON QUADRAPHONIC FM BROADCAST SYSTEMS

Papers by

1. Louis Dorren
of Quadracast Systems, Inc.

MONDAY (Continued)

2. J. J. Gibson
of RCA Corporation
3. Antal Csicsatka
of General Electric
4. Carl Eilers
of Zenith Radio Corporation
5. Norman Parker
of Motorola Inc.
6. Dr. Duane H. Cooper
of University of Illinois
7. Thomas M. Krikorian
of Radio Programming and Management
8. Emil Torick
of CBS Laboratories

6:00 P.M. Industry Cocktail Party

Sponsored by:

RCA
M. Gottlieb Assoc.
Video Craft Mfg. Co.

TUESDAY, JUNE 12, MORNING SESSION

Session Chairman: Bernard Shlachter
Consumer Products Division
Motorola Inc.

1. *"A Simple Touch-Tune System for Television Receivers"*
by Harold J. Benzuly, John G. Konopka,
Kenneth A. Merriweather
of Warwick Electronics, Inc.
2. *"Practical Application of 'On Screen' Channel Display to the TV Receiver"*
by John E. Olson
of Heath Company
and
Jim Brennan
of National Semiconductor Corporation
3. *"An Approach to Ultrasonic Remote Control Systems"*
by Peter Alfke, Norman Doyle,
Moise Hamaoui, Otto Hibbe
of Fairchild Semiconductor

TUESDAY (Continued)

4. *"A Novel TV Add-On Data Communication System"*
by Patrick T. King, Sotirios I. Sideris
of Hazeltine Research, Inc.
5. *"Fully Integrated Selectivity at High Frequency Using Gytrators"*
by K. W. Moulding
of Mullard Research Laboratories

Consumer Awards Luncheon

Guest Speaker: Bernard V. Vonderschmitt
Vice President
Semiconductor Products Division
RCA

TUESDAY, JUNE 12, AFTERNOON SESSION

Session Chairman: Dumonte Voigt
Warwick Mfg.

1. *"Switch Mode Power Supplies—A New Approach for Consumer Audio Systems"*
by Ronald B. Peterson
of Motorola Semiconductor Products, Inc.
2. *A High Stable Television Synchronizing System with a Ceramic Resonator"*
by H. Yamada, H. Izumi, N. Kokado,
T. Abe
of Toshiba Research and Development
Center
3. *"Low Cost SCR Line Connected DC Regulator"*
by James Hicks, Albert Hopengarten
of Philco-Ford Corporation
4. *"A Wide Deflection Angle (114°) TRINITRON Color Picture Tube"*
by Susumu Yoshida, Akio Ohkoshi,
Senri Miyaoka
of Sony Corporation
5. *"Systems Approach to Deflection Drive with Integrated Circuits"*
by Dong W. Rhee
of GTE Sylvania