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SCANFAX, 125 S. CLARK ST., CHICAGO, IL 60603

CHICAGO SECTION • IEEE • INSTITUTE OF ELECTRICAL & ELECTRONICS ENGINEERS

MAY 1977

CALENDAR OF EVENTS

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

- | | | |
|------|-------|---|
| May | 4 | "Air Traffic Safety," Fox V. Sub., Elmhurst Inn, 933 S Rt. 83, Elmhurst, Ill. Dinner 7:00 PM; Meeting 8:00 PM. |
| | 5 | "ERPI - where it came from; where it's been; where it's going," PES, Midland Hotel, 172 W. Adams St., Chicago, Ill. Social Hour 11:00 AM; Luncheon 11:45 AM; Talk follows luncheon. |
| | 7 | IEEE Recognition Dinner. O'Hare-Ramada Inn, Mannheim & Higgins Rds., Rosemont, Ill. Cocktails 6:00 PM. |
| | 10 | IEEE Executive Committee Meeting; Brown & Root Offices, 2001 Spring Rd., Oak Brook, Ill., 7:30 PM - ALL WELCOME. |
| | 11 | "Annunciator & Data Recording Systems," IAS/IECI, Nielsen's, 7330 W. North Ave., Elmwood Park, Ill. Social Hour 5:30 PM; Dinner 6:15 PM; Meeting 7:15 PM. |
| | 11 | "911 - The Emergency Telephone Number," VT Grp., The Hungry Lion, 17W650-22nd, Oak Brook, Ill. Social Hour 6:30; Dinner 7:00 PM; Meeting 8:00 PM. |
| | 14 | Ladies Night Theatre-Dinner Party. MTT/APS, Drury Lane East, McCormick Pl., Chicago, Ill. Cocktail Hour 6:30 PM; Dinner 7:30 PM; Meeting 8:30 PM; Show 9:30 PM. |
| | 17 | "Computer Games," NW Sub., Maitre D' Rest., 111 E. Higgins Rd., Elk Grove Village, Ill. Social Hour 6:00 PM; Dinner 7:00 PM; Meeting 8:00 PM. |
| | 21 | Tour of Commonwealth Edison Company's LaSalle County Nuclear Generating Sta., LaSalle, Ill., PES (j w/Fox V. Sub.). Morning tour 9:30 AM; Afternoon tour 1:30 PM. |
| June | — | VT Grp. No information by deadline. Call Dan Clark on 576-6567. |
| | 8 | "The Engineer & The Law," IAS/IECI, Nielsen's, 7330 W. North Ave., Elmwood Park, Ill. Social Hour 5:30 PM; Dinner 6:15 PM; Meeting 7:15 PM. |
| | 12 | Boat Trip-Cruise on Lake Michigan. MTT/APS. Departure from Navy Pier. 3:00 PM to 6:30 PM. |
| | 12-15 | ICC '77. Comms. Soc. Conf. Bd & Chicago Section IEEE. O'Hare-Ramada Inn, Mannheim & Higgins Rds., Rosemont, Ill. |
| | 14 | IEEE Executive Committee Meeting; Brown & Root Offices, 2001 Spring Rd., Oak Brook, Ill., 7:30 PM - ALL WELCOME. |

*PLEASE: Mark your two month Scanfax calendar for a desired meeting.
We cannot accelerate Postal Service or sending of meeting information.
Deadline for copy: One month before date of issue.*

MTT/APS CRUISE

Ahoy there! The Microwave Theory and Techniques Group and Antennas and Propagation Society invite you to a cruise aboard the luxury liner S.S. Clipper Ship. The Clipper is a 900 passenger vessel which smoothly sails the high seas of Lake Michigan. Departure will be on Sunday, June 12, 1977 from Navy Pier. Cruise time will be from 3:00 PM to 6:30 PM. Dr. Michael L. Burrows, a Britisher from M.I.T. Lincoln Laboratory, will astound everyone with his talk "Ocean Communications" which will take place in the ship's theatre. After his

talk, enjoy the many facilities below deck or take in the sea air on the "poop." Reserve by sending your check, made payable to the Great Lakes Transit Company, to purser George Bowman, Motorola PTP Products, 1301 East Algonquin Road, Room 3113, Schaumburg, Illinois 60196 before May 15. Include your name, address and phone number with the reservation. Adults \$11.33 per person and \$7.58 for children under 12. Reserve now! Our trusty vessel requires 50 crewmates before sailing at 3 bells!

NUCLEAR TOUR

SATURDAY, MAY 21, 1977

First tour: 9:30 AM - 11:30 AM

Second tour: 1:30 PM - 3:30 PM

Tours start promptly at 9:30 AM and 1:30 PM.

Both tours limited to IEEE members plus one guest (18 years minimum age). Hard hats will be available at La Salle Station and must be worn at all times

(Continued on page 3)

CHICAGO SECTION of IEEE CO-SPONSORS ICC '77

In the 13 years since its inception, the annual International Conference on Communications has become a most prestigious technical event, and ICC '77 is expected to continue the tradition. The 1977 International Conference on Communications, hosted by the Chicago Section, is scheduled for June 12-15 at the Ramada O'Hare Inn, 6600 North Mannheim Road, Des Plaines, Illinois. The Conference will get underway with an "Old Chicago" Welcome Party on Sunday evening, followed by a three-day Technical program that features 48 technical sessions and two tutorial sessions.

A total of 243 Technical papers will be presented, of which 192 were invited papers and 51 were submitted in response to the open call. Highlighting the excellent technical program are sessions on the Bell System's LSE Coaxial System, GTE's No. 3 EAX Tandem Switching System, and a panel discussion concerned with Interface Standards for Accessing the Public Data Network. In keeping with recent trends, several sessions are devoted to digital switching and transmission systems, and computers used in communication systems will be explored in no fewer than five sessions. There is, in addition, a strong "Satellite" flavor to ICC '77.

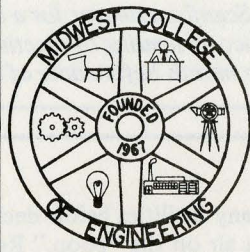
In addition to the technical program, ICC '77 will feature a Conference Banquet on Monday evening, with Mr. William Ellinghaus, Vice-Chairman and Director of the American Telephone and Telegraph Company as the guest speaker. The Conference Luncheon on Tuesday will feature Mr. Robert Gressens, President of GTE Communication Products Business, as luncheon speaker. A full social program is planned, including several tours and events for the ladies.

Advance registration for ICC '77 is strongly advised. Registration material is included with the Advance Program, which was mailed in early April. Registration material may be obtained by contacting George Mack, Illinois Bell Telephone Co., 225 W. Randolph St., Chicago, Illinois 60606. Conference Chairman Ed Glenner extends a special invitation to Chicago area IEEE members to participate in ICC '77 and help make it a truly memorable conference.

EPRI - "WHERE IT'S BEEN, WHERE IT'S AT, WHERE IT'S GOING!"

The purpose of the Electric Power Research Institute (EPRI) is to promote and coordinate R&D in the electric utility industry. Since its inception in 1973, EPRI has grown to a full fledged organization. Its staff consists of 267 engineers representing 58 utilities. Currently it is managing 900 R&D projects and has completed 150 projects. 500 utilities support EPRI's program, 400 utility personnel serve as advisors and 28 utilities are acting as hosts for demonstration of new technology. The projects sponsored by EPRI encompass almost all aspects of utility power generation, transmission and operation. The R&D budget for the next five years is \$1.087 billion.

What EPRI is, what it has accomplished so far and its plans for the future will be the subject of Ed Steeve's talk at the Power Engineering Society's meeting at the Midland Hotel on Thursday, May 5. Mr. Steeve is Director of Research for the Commonwealth Edison Company. His previous experience has been mainly in the transmission and distribution field with particular emphasis on underground cable. He has 5 IEEE transaction papers on fault locating, line design and sodium conductor cable. He is a member of IEEE (Power Group), Western Society of Engineers, Sigma XI and is a registered professional engineer. The Midland Hotel is located at 172 West Adams Street in downtown Chicago. The social period starts at 11:00 AM (cash bar) — luncheon at 11:45 AM — followed by Ed Steeve's talk. Luncheon cost is \$6.50.



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SCANFAX, May 1977 — Volume 29 Number 9. SCANFAX is published monthly, except July and August by the Chicago Section, Institute of Electrical and Electronics Engineers for the information of its members. Business office is at 125 S. Clark St., Chicago, Illinois 60603, telephone number (312) 236-4609. Subscription rate for IEEE members collected in dues, \$1.50; for others, \$3.00 per year. Second-class postage paid at Chicago, Illinois.

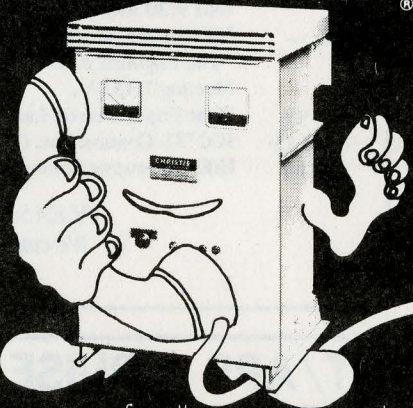
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A change of address form is included in each issue of SPECTRUM. Your local post office will also supply you with cards; mail to Roseann Schulz, Member Services, IEEE Service Center, 445 Hoes Lane, Piscataway, N.J. 08854. Include your SPECTRUM mailing label if possible. We cannot forward this information for you, so please do not send it to the local office.



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CHICAGO SECTION ELECTS OFFICERS AND EXECUTIVE COMMITTEE

The Chicago Section IEEE has elected the officers and members of the Executive Committee for the 1977-78 season. Voting was by ballot printed in the April issue of Scanfax; Officers elected were:

Chairman:

Robert A. Waghorne
Teletype Corp.

Vice Chairman:

John E. Waters
Bussman Mfg. Div.

Treasurer:

Charles Hatstat
Sargent & Lundy

Secretary:

Paul Geiger
Allen-Bradley Co.

Members of the executive committee, also elected by mail ballot, include:

George W. Austin
Commonwealth Edison Co.

Mike Barnes

Motorola Inc.
Chuck Borchert
Bell Telephone Labs.
Walter Ciciora
Zenith Radio Corp.
Dennis Lamont
Weldy-Lamont Assoc.
Edward Osterberg
Illinois Bell Telephone
Howard L. Wolfman
Teletype Corp.

The Executive Committee also includes the chairman of both the Fox Valley and Northwest Subsections and the chairman of each of the active group or society chapters. According to the Chicago Section bylaws, these people are automatically members of the executive committee and do not have to be voted upon by the membership.

ELECTION of OFFICERS COMMUNICATIONS SOCIETY

CHICAGO CHAPTER

Election of officers for S-19 Communications Society Chicago Chapter for 1977-78 Season is being held. Please mark your choices on the ballot below and return the ballot to: J. G. Hemmady, GTE Automatic Electric Labs, P. O. Box 2317, Northlake, IL. 60164.

If you wish to vote for another member, please write in the name in the space provided and check box.

Chairman: ☐ George Wendt
Teletype Corporation

☐ _____
(write-in)

Vice Chairman: ☐ Bernard Pepping
Wescom, Inc.

☐ _____
(write-in)

Secretary: ☐ Robert Pershing
Tellabs, Inc.

☐ _____
(write-in)

NEC - NCF

The Annual NATIONAL ELECTRONICS CONFERENCE and NATIONAL COMMUNICATIONS FORUM are scheduled to be held concurrently October 10, 11, 12, 1977 at Chicago's Hyatt Regency O'Hare announced Dr. Arthur C. Moeller, Chairman of the Board of National Engineering Consortium, Inc. Dr. Moeller stated that the 1977 Conference activities will be directed by Warren E. Danielson, Executive Director. Local Electronic Switching Division of Bell Telephone Laboratories, Naperville, Illinois. Mr. Danielson, President of the 1977 Conference has indicated that the 1977 NEC Management Team will be guided by a select group of communication industry executives. The meetings will focus on the presentation of a broad range of tutorial seminars covering the latest electronics and communications developments. In addition, the continuing education in engineering program will be enhanced by complementary sessions featuring — demonstrations, lectures and seminars with guest speakers discussing a variety of subjects including management techniques, finances, executive growth and topics of interest to the professional engineer.

Dr. Moeller also announced an expansion of 1977 National Engineering Consortium activities which will include a forum of major interest engineering educators and development engineers. The new forum will accent the current state of electronic research. Dr. James Melsa, Chairman of Electrical Engineering and Prof. Michael Sain, University of Notre Dame will co-chair a 1977 forum which will focus on the latest research in linear multi/variable systems. The Conference will explore both state variable methods and newly developed frequency domain methods. The research meeting will be held concurrently with the 1977 NEC.



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Eighteenth Annual Chicago Spring Conference

On Consumer Electronics



TENTATIVE PROGRAM

Conference Chairman - 1977
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MONDAY, JUNE 6, 1977 BALLROOM

DIGITAL TECHNIQUES IN C.B.
Session Chairman: Steve Hilliker
Motorola Semiconductor Products, Inc.

9:00 *Channel Selection Methods for Digital Tuning*
A. Tickle
Nitron

9:25 *A PLL LSI for 40-Channel Citizen Band Radio Requires Single Crystal for AM and Two Crystals for SSB*
A. Fujie, H. Miyagi, H. Aoyama
Nippon Electric Co., Ltd.

9:50 *A Linear CB Synthesizer*
L. Sample
National Semiconductor

10:15 *A Bulk CMOS 40 Channel CB Frequency Synthesizer*
B. Kirschner, I. Daroff
RCA Solid State Division

10:50 *A New Design Technique for CB Digital PLL Synthesizers*
E. Breeze
Fairchild Camera & Instrument Corporation

11:15 *Transmitter Identifier Systems for CB Radio*
S. Lipoff
Arthur D. Little, Inc.

11:40 Author Interviews

TOUR THE HOSPITALITY SUITES!

12:30 LUNCHEON
Guest Speaker: Mr. John Nevin
President & Chairman
Zenith Radio Corporation

TELEVISION AS A SYSTEM
Session Chairman: Carl G. Eilers
Zenith Radio Corporation

2:00 *The Application of Circular Polarization to Television Broadcasting and Reception*
J. J. Gibson
RCA Laboratories

2:25 *Adaptive Multipath Equalization for Television Broadcasting*
H. Thedick
Public Broadcasting Services

2:50 *Television Standard Demodulator . . .*
T. M. Gluyas
RCA Broadcast Systems

3:25 *Television System Transient Response and An Interrelationship with Differential Phase Distortion*
C. B. Neal, S. K. Goyal
GTE Sylvania Incorporated

3:50 *Some Thoughts on Using Comb Filters in the Broadcast Television Transmitter and Receiver*
R. Turner
Zenith Radio Corporation

4:15 Author Interviews

6:00 Industry Cocktail Party
Admission By Registration Badge Only
Sponsored By: M. Gottlieb Associates, Inc.
Rauland Division of Zenith Radio Corp.
Motorola Data Products

MONDAY, JUNE 6, 1977 STATE SUITE

VIDEO GAMES
Session Chairman: Richard Chamberlain
Admiral Corporation

9:00 *Consumer Electronics—No Longer a Passive Role*
E. Leonard
Systems Resources Corporation

9:25 *Television Games: Their Past, Present and Future*
R. Baer
Sanders Associates, Inc.

9:50 *TV Games and the FCC: A Look at the Rules*
D. Norton
Sanders Associates, Inc.

10:15 *A Second Generation Ball & Paddle Game Circuit*
D. Butler
General Instrument Corporation

10:50 *A Miniature, Low Cost Magnetic Tape System for Programmable Games*
C. Johnson, Jr.
Micro Communications Corporation

11:15 Author Interviews

TOUR THE HOSPITALITY SUITES!

12:30 LUNCHEON

SEMICONDUCTOR TUTORIAL
Extended Length Sessions
Session Chairman: M. Berwyn Knight
RCA Semiconductor Div.

2:00 *MOS Integrated Circuits: Theory and Applications*
R. Knapp, J. Paul
American Micro-Systems, Inc.

3:00 *Charge Coupled Device Technology and Its Application to Consumer Electronics*
G. Amelio, J. Rothstein
Fairchild Semiconductor

4:00 *Bipolar Technology*

5:00 Author Interviews



18TH ANNUAL

CHICAGO SPRING CONFERENCE ON CONSUMER ELECTRONICS

JUNE 6 & 7, 1977

At the Marriott Hotel
8535 W. Higgins Rd.
Chicago, Illinois

10 minutes from
O'Hare International Airport

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TENTATIVE PROGRAM

18TH ANNUAL

CHICAGO SPRING CONFERENCE ON CONSUMER ELECTRONICS

TUESDAY, JUNE 7, 1977 BALLROOM

DISPLAY SYSTEMS
Session Chairman: Iva Wilson
Zenith Radio Corporation

9:00 *Achievement of High Picture Quality in Color CRT's with the Beam-Scan Velocity Modulation Method*
S. Yoshida, A. Ohkoshi, K. Shinkai
Sony Corporation

9:25 *An Improved Shadow Mask for In-Line Color Picture Tube Screens*
A. M. Morrell
RCA Electronic Components

9:50 *New Self-Convergence Yoke and Picture Tube System with 110° In-Line Feature*
K. Ando, R. Hirota, M. Akatsu, K. Maruyama
Hitachi, Ltd.

STORED VIDEO

10:15 *Semiconductor Laser Pickup for Optical Video Disc Player*
Y. Tsunoda, S. Sawano, H. Nakamura, K. Saitoh, T. Tsukada, Y. Takeda
Hitachi, Ltd.

10:40 *Long Life Video Head Using Variable Penetration Headpiece*
N. Kihara, E. Saito, K. Takahashi
Sony Corporation

11:05 Author Interviews

11:30 LUNCHEON
Guest Speaker: Mr. John Rennick
Consultant to
Zenith Radio Corporation

1:00 *CSC77 Special Event*
Computer Image Processing—The Viking Experience
William B. Green
Jet Propulsion Laboratory

VIDEO SIGNAL PROCESSING
Session Chairman: Charles Barrow
Tektronix

2:00 *An Integrated One Chip Chrominance Processor for Color TV Receivers*
L. A. Harwood
RCA Solid State Division

2:25 *Digital Vertical Sync. System*
R. Merrell
Zenith Radio Corp.

2:50 *Ghost Reduction System for Television Receivers*
K. Yamamoto, N. Yamaguchi, M. Miyata
Matsushita Electric Industrial Co., Ltd.

3:25 *Non-Linear Chrominance Signal Decoding*
R. Sasaki, Y. Nagaoka, T. Tomimoto
Matsushita Electric Industrial Co., Ltd.

3:50 *A Practical Charge-Coupled Device Filter for the Separation of Luminance and Chroma Signals in a Television Receiver*
S. Barton
Fairchild Camera & Instrument Corp.

4:15 *Frequency and Phase Lock Loop*
R. Citta
Zenith Radio Corporation

4:40 Author Interviews

TUESDAY, JUNE 7, 1977 STATE SUITE

AUDIO
Session Chairman: Sid Bagwe
Fairchild Semiconductor Div.

9:00 *Loudspeaker Measurement and Evaluation*
Phillip White
Bruehl & Kjaer

9:25 *Impulse Testing of Speakers*
R. E. Cooke
KEF Electronics Ltd.

9:50 *The Pulse Train Method and Its Application to the Measurement of Phonograph Cartridges*
T. Muraoka, H. Onoye
Victor Co. of Japan, Ltd.

10:15 *Wow and Flutter: Much Talked About, Little Understood*
Henry M. Morris
Zenith Radio Corp.

10:40 *Compatible AM Stereo System Analysis*
F. Hilbert, N. Parker, Y. Sakaie
Motorola, Inc.

11:05 Author Interviews

11:30 LUNCHEON

1:00 *CSC77 Special Event*
(in Ballroom)

2:00 *100 Watt Super Audio Amplifier Using New MOS Devices*
T. Sampei, S. Ohashi
Hitachi, Ltd.

2:25 *Fault Protection of Monolithic Audio Power Amplifiers in Severe Environments*
E. Buehler, B. Schertz
Delco Electronics Division, GMC

2:50 *A Single Chip AM/FM Integrated Circuit Radio*
W. Peil, R. J. McFadyen
General Electric Company

NEW DIRECTIONS FOR CONSUMER ELECTRONICS
Session Chairman: Leander H. Hoke Jr.
Magnavox

3:25 *Market Growth on the Consumer Electronics Frontier*
J. Montgomery, J. Hutchison
Gnostic Concepts, Inc.

3:50 *The Role of Non-Volatile Memories in Consumer Electronics*
L. Penner
General Instrument Corporation

4:15 *Bipolar Integrated Circuits—Building Blocks for Smoke Detector Applications*
G. Granieri
RCA Solid State Division

4:40 Author Interviews

TUTORIAL SHORT COURSE ON Transient Response of Video Systems

Wednesday, Thursday, Friday, June 8, 9, and 10, 1977
following the 1977 Chicago Spring Conference on Consumer Electronics

Purpose

Advances in modern display devices can be fully utilized only by understanding and applying the theory of transient response of video systems. This course, which is specifically intended for designers of video systems and subsystems, will present, from a practical point of view, the basic principles of this theory.

Prerequisite

A bachelor's degree in electrical engineering, or equivalent, is desirable.

Course Content

Wednesday: Review of Fourier, Laplace, and Hilbert theory with examples; spectra, convolution, impulse response, linear systems, basic modulation theory.

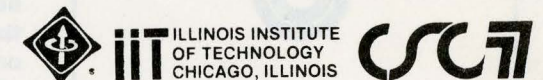
Thursday and Friday: Theoretical framework, spectra of NTSC format and test signals, in-phase and quadrature components, detection principles; synchronous detection, quasi-synchronous detection, envelope detection, the phase locked loop, analytical results with common test signals, VSBR, IF and baseband circuit characteristics, bandpass to low pass transformation, practical measurement techniques, color channel transient response, computational methods in video system analysis, subjective impairments as perceived by viewers, computer programs; DFT & FFT, typical program for video system analysis, kinescope characteristics, studio practices.

Lecturers

Dr. J. P. Bingham, RCA Consumer Electronics
Dr. L. I. Bluestein, GTE Laboratories
Dr. D. Costello, Illinois Institute of Technology
Mr. P. D. Griffiths, RCA Consumer Electronics
Mr. T. Lind, RCA Broadcast Systems
Dr. J. L. LoCicero, Illinois Institute of Technology
Dr. C. B. Patel, RCA Consumer Electronics
Mr. D. H. Prichard, RCA Laboratories
Mr. T. Wagner, RCA Laboratories

Text

Participants will receive copies of tutorial material.



Sponsorship

This course is sponsored by the Broadcast, Cable, and Consumer Electronics Society of the IEEE; Illinois Institute of Technology; and the Chicago Spring Conference on Consumer Electronics. It is organized and directed by:

Dr. Walter S. Ciciora
Zenith Radio Corporation
1000 Milwaukee Avenue
Glenview, Illinois 60025
(312) 391-7000

Dr. Andre Vacroux
Department of Electrical Engineering
Illinois Institute of Technology
Chicago, Illinois 60616
(312) 567-3401

Fee and Registration

The fee is \$170 for IEEE members and \$195 for non-members. The membership number must be included for the member rate.

To reserve space in the course, send a check for the full amount, made payable to ILLINOIS INSTITUTE OF TECHNOLOGY, to: Department of Electrical Engineering, Illinois Institute of Technology, IIT Center, Chicago, Illinois 60616. Please be sure to include your name, address, title, and company. ENROLLMENT WILL BE STRICTLY LIMITED. Refunds will not be made after May 16, 1977. If it becomes necessary to cancel the course, enrollment fees will be returned.

Location

Marriott Hotel, 8535 West Higgins Road, Chicago, Illinois 60631.

Housing

Reservations can be made with the Marriott Hotel by writing to the above address, or calling (312) 693-4444. Accommodations are limited.

Sponsored by IEEE-BCCES
and the Chicago Section of the IEEE

PLEASE CAREFULLY NOTE TIMES—
MANY ARE DIFFERENT THIS YEAR!

☐ IEEE Member @ \$7.00

☐ Non-Member @ \$10.00

NOTE: IEEE MEMBERSHIP NUMBER
WILL BE REQUIRED FOR
"MEMBER RATE"

COMPUTER GAMES

Are you interested in or do you already have one of the widely advertised electronic games such as PONG or ODYSSEY? Then you will want to attend the May 17 meeting of the Northwest Subsection when a demonstration of the next generation of games will be presented by Ward Christensen. Mr. Christensen is an IBM Systems Engineer in IBM's Calumet City Data Processing Division. His hobby is the development of action oriented computer games on his MITS Altair 8800 expandable 8080 based microprocessor.

Don't miss this most entertaining and exciting evening on Tuesday May 17, 1977 at the Maitre D' Restaurant, 111 E. Higgins Road, Elk Grove Village, Illinois. It will begin with a social hour - 6:00 PM, followed by dinner - 7:00 PM. The meeting will begin at 8:00 PM with the annual election of officers for the 1977-1978 year. All IEEE members and guests are invited.

Please make reservations for dinner and/or the meeting by calling the IEEE office at 236-4609.

Commonwealth Edison
Working for you.



RECOGNITION DINNER

Saturday, May 7 is the date for the 1977 Recognition Dinner at the O'Hare-Ramada Inn. An evening of entertainment, including hors d'oeuvres, dinner, dancing, and a floor show, is yours at the low price of \$15.00 per person. Send your check, made payable to Chicago Section IEEE; for reservations call John Bowler, Zenith Radio, 1000 Milwaukee Rd., Glenview, IL.

Be sure to state number of tickets you desire. If you want to charge the tickets to a major credit card (American Express, Mastercharge, etc.) be sure to include credit card name and number.

The reasonable cost of the IEEE Recognition Dinner is made possible only through the cooperation of the Industry Sponsors.

Recognition Dinner Sponsors — OUR THANKS THIS YEAR TO

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GTE Sylvania, Inc.	Switchcraft
Harza Engineering Co.	TRW/Consumer Int'l.
Thomas B Hunter & Assoc.	The John G. Twist Co.
Jensen Sound Laboratories	Vapor Corp.
Magnaflux Corp.	Wescom, Inc.
Memac Sales Company, Inc.	Westinghouse Electric Corp.
Methode Electronics, Inc.	Zenith Radio Corp.

IEEE AND CONGRESSMEN MAP PAY STRATEGY FOR PROFESSIONALS

"Recently we introduced legislation designed to extend wage protection to professional employees under the Service Contract Act of 1965. This legislation is necessary to correct serious and continuing problems of "wage busting" occurring all over the country; particularly affecting engineers and artists.

"In hearings held by the House Education and Labor Subcommittee on Labor-Management Relations it was recently revealed that wage busting bidding practices on government contracts are driving down the standard of living of professionals. This situation has arisen because professionals, such as engineers, have been subjected to depressed local standards of pay instead of a standardized national average. In Cape Canaveral, Florida, for example, which experienced a technical boom for engineers during peak activity in the 1960's and early 1970's, many engineers find their wages cut to the minimum wage due to the tremendous competition for jobs.

"Our bill, H.R.15228, seeks to remedy this situation.

"First, it would define a professional employee to include any professional covered by the most recent U.S. Department of Labor National Survey of Professional, Administrative, Technical and Clerical Pay (PATC), employed in a civil-

ian job at a rate not less than that received by Federal Government employees in Grade 15 of the General Schedule. Second, the bill provides that professionals whose services are comparable to those described in the Survey receive not less than that prevailing rate. Third, the measure would establish a successorship standard, so that a bidder succeeding to a previous contractor's agreement with the government could not pay professional employees less than they earned under the predecessor's contract."

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