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CHICAGO SECTION • IEEE • INSTITUTE OF ELECTRICAL & ELECTRONICS ENGINEERS

SEPTEMBER 1975

CALENDAR OF EVENTS

IEEE OFFICE 236-4609

- Sept. 2 IEEE Executive Committee Meeting; Brown & Root Offices, Spring Road, Oak Brook, Ill. 7:30 PM — ALL WELCOME
- Sept. 3 "How Switching Evolved to be Electronic" Fox Valley Subsection, Bell Tele. Labs. Naperville & Warrenville Roads, Naperville, Ill., Dinner 7:00 PM — \$6.00, Meeting — 8:00 PM (Re-scheduled from Apr. 2.)
- Sept. 10 "Energy Management Through Demand Control" IAS/IECI, Nielsen's Village Restaurant, 7330 W. North Ave., Elmwood Pk., Ill. Social Hour 5:30 PM, Dinner 6:15 PM, Meeting 7:15 PM
- Sept. 17 "Tour of Johnson Outboards", Northwest Subsection; bus departure from Mt. Prospect, Randhurst Shopping Center water tower to Waukegan plant — 6:30 PM. Including Chicken Box Lunch and Refreshments, \$4.50.
- Sept. 27 "Tour of Antenna Laboratory and Meeting" A & P/M T & E; Motorola Corp., 1301 E. Algonquin, Schaumburg, Ill. Talk: "Microwave Antenna Measurements". Lunch — 12:30 PM, Lancers Steak House, Schaumburg; Tour and talk — 1:30 PM
- Oct. 1 "Electrification of U.S. Railroads", Information Chap., Aylwards, West Chgo, Ill., Dinner 7:00; Meeting 8:00.
- Oct. 6 "Telephone Switching System Reliability — Past, Present and Future" Reliability Chapter; Huer's Restaurant, 5591 River Road, Rosemont, Ill. Social Hour 5:30 PM; Dinner 6:30 PM, \$7.50 Meeting 7:30 PM
- Oct. 6-8 National Electronics Conference/National Communications Forum; Hyatt-Regency — O'Hare
- Oct. 7 IEEE Executive Committee Meeting
- Oct. 8 IAS/IECI Society Meeting, (No information by deadline)
- Oct. 14 Antennas & Propagation Meeting (No information by deadline)
- Oct. 23 "High Voltage Direct Current In A Metropolitan Area" Power Engineering Society, Commonwealth Edison Bldg — Room 650, 125 S. Clark St., Chicago — Luncheon.

Deadline for copy: First week of month preceding publication

NEW FELLOW NOMINATION DEADLINE

Fellow Grade Nominations for 1976 will be accepted until February 27, 1976 by the Chicago Section. Although the deadline at New York Headquarters is

April 30, 1976, the committee here needs adequate time to conduct the necessary interviews, write the report for each nominee and have the report delivered to

Headquarters before the deadline.

Now is the time to consider possible nominees.

IMPORTANT NOTICE

Effective June 23, 1975 the Chicago Section IEEE office has moved. Office services and phone will be provided by the Electrical Institute of Chicago.

The NEW address and phone number are:

The Institute of Electrical and Electronics Engineers, Inc., Chicago Section
125 South Clark Street - Room 1545
Chicago, Illinois 60603
Phone: 312-236-4609

The phone is answered "Electrical Institute." Office hours are 8 AM to 5 PM, Monday through Friday.

NCF/75 - NEC/75

The combined 31st Annual National Electronics Conference and Exhibition (NEC) and 3rd Annual National Communications Forum (NCF) will be held October 6-8 at the Hyatt Regency O'Hare, Chicago.

Emphasizing "Telephone" orientation, over 100 original papers will be presented. The two major technical meetings will include 18 Technical Paper Sessions, reflecting the current state of communications technology and 12 Technical Seminars providing more detailed treatment of selected topics.

In addition to the papers program and seminars, NCF/NEC 75 will feature panel discussions concerned with the general topics of programing productivity and the future of digital switching. A series of lectures dealing with technical motivation and management strategies in a technological environment is also scheduled.

On the lighter side, the Communications Industry Dinner, set for October 7 at 6:30 P.M. will provide an opportunity for socializing after the day's technical activities. John Wallace Spencer will speak on "The Bermuda Triangle."

Included among the subjects to be presented are New Device Developments,

recent advances in Communications Theory, Software Maintenance and Mass Storage Systems. Seminar topics will include Speech Processing, Synchronization and Timing in Large Time-Division Networks, Software Performance Evaluation and latest developments in Optical Communication.

For further information on the meeting, which includes a large exhibit of electronic and communication equipment, contact the NEC Office, Suite 103, 1310 West 22nd Street, Oak Brook, Illinois 60521 (312) 325-5700.

ELECTION OF OFFICERS

We regret that this issue does not permit space for a complete listing of Section officers. If you can find your June issue, you will see the list of major officers and others in the Executive Committee. A complete list including Society and Chapter officers will appear in the October issue.

Remember that Chairmen of the thirteen active Societies and Chapters are now voting members.

TELEPHONE SWITCHING RELIABILITY

On October 6, Henry Malec of Automatic Electric Company will cover the reliability of past, present and future switching systems for telephone calls. His talk will cover future considerations of new maintenance philosophy and the operating environment as against older forms of service measuring. For reservations call the IEEE office, 236-4609.

CALL FOR PAPERS

Original papers are invited on all aspects of solid state electronics for presentation at the 1976 IEEE International Solid-State Circuits Conference, February 18-20, 1976, Sheraton Hotel, Philadelphia, Pa. Prospective authors should submit a 35 word program abstract and 15 copies of a 300-500 word summary no later than October 1, 1975 to D. Koehler, Bell Laboratories, Room 2A131, 600 Mountain Ave., Murray Hill, N.J. 07974.

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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 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 SPEC-TRUM. 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.

MICROWAVE ANTENNA MEASUREMENTS

Motorola has established an antenna range in Schaumburg for use in the measurement of land mobile antennas. All performance capabilities of the range will be discussed by Allen L. Davidson, Research Section Manager, including measurements of far field patterns on the

200 foot pattern range equipped with a vehicle rotator capable of rotating cars and trucks weighing up to 5 tons. Measurements of impedance and VSWR plus the quarter-wave technique of correcting impedance measurements will be shown. The probing of the near field of

an antenna will be discussed as well as the loop probe for measuring H and dipole probe for measuring E. The tour of the facility will be conducted immediately after the meeting, September 27.

DEMAND CONTROL FOR POWER

On September 10, Don Hall, Pacific Technology Company (on the West Coast - State of Washington) will discuss "Energy Management Through Demand Control" at a meeting of the Chicago joint chapter of the Industrial Applications Society and the Industrial Electronics and Control Instrumentation Group. Mr. Hall is vice President of Marketing and has authored a number of papers on demand control.

The meeting will be at Nielsen's Village Restaurant, 7330 W. North Avenue, Elmwood Park, Illinois. Social hour, 5:30 PM; Dinner, 6:15 PM; Meeting, 7:15 PM. Dinner (& two drinks) \$7.00 for IEEE members and \$8.00 for non-members. For information and reservations, call the IEEE office, 236-4609.

HOW ELECTRONIC SWITCHING EVOLVED

At the September 3 meeting of the Fox Valley Subsection, Amos E. Joel, Bell Telephone Laboratories, will discuss "How Switching Evolved to be Electronic." He will trace the development of telephone switching systems and emphasize the need for the development of electronic systems, which were initiated more than 20 years ago. Joel will also review current types of electronic switch systems and will point out some of the possibilities for future developments.

Amos E. Joel joined Bell Laboratories in 1940 with a BS from Massachusetts Institute of Technology, and later received an MS. He is currently a switching consultant at the Holmdel location of Bell Laboratories.

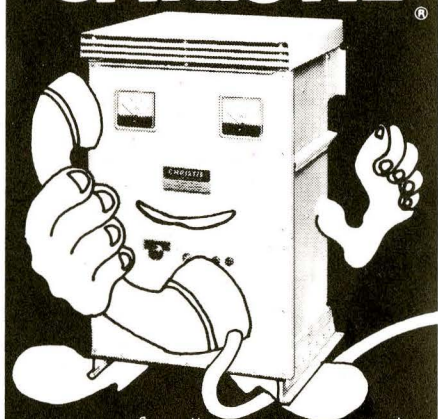
Dinner and meeting will be at Bell Laboratories, Naperville, Ill., Naperville and Warrenville Roads (immediately

north of the East-West Tollway). Dinner, 7:00 p.m.; meeting, 8:00 p.m. For reservations, call 236-4609.

TOUR OF JOHNSON OUTBOARDS

On September 17, a guided tour of Johnson Outboard Motors in Waukegan will cover the induction furnaces, die casting, computer control of parts and transfer lines, quality control, and pollution control. For the convenience of the Northwest Section members, a bus will be available at the Randhurst Shopping Center at 6:30 PM. IEEE Members only. For reservations, call the IEEE office, 236-4609, no later than September 11.

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MOBILE COMMUNICATIONS

COMPREHENSIVE ACCELERATED TRAINING COURSES TAUGHT IN DIFFERENT CITIES

MOBILE COMMUNICATIONS - December 2-4, 1975, Washington, D.C.

This 3-day seminar emphasizes performance prediction and design of land-mobile services. System factors covered include performance, cost, propagation modes, terrain conditions, ambient electromagnetic and man-made noise, antenna types and tower heights, transmitter and receiver characteristics, and required quality and range of service. The impact of FCC, DOC, EIA, military and other rules and regulations and licensing are covered. \$375 *

FCC & CISPR EMC REGULATIONS AND TEST PROCEDURES - Dec. 10-12, 1975, Washington, D.C.

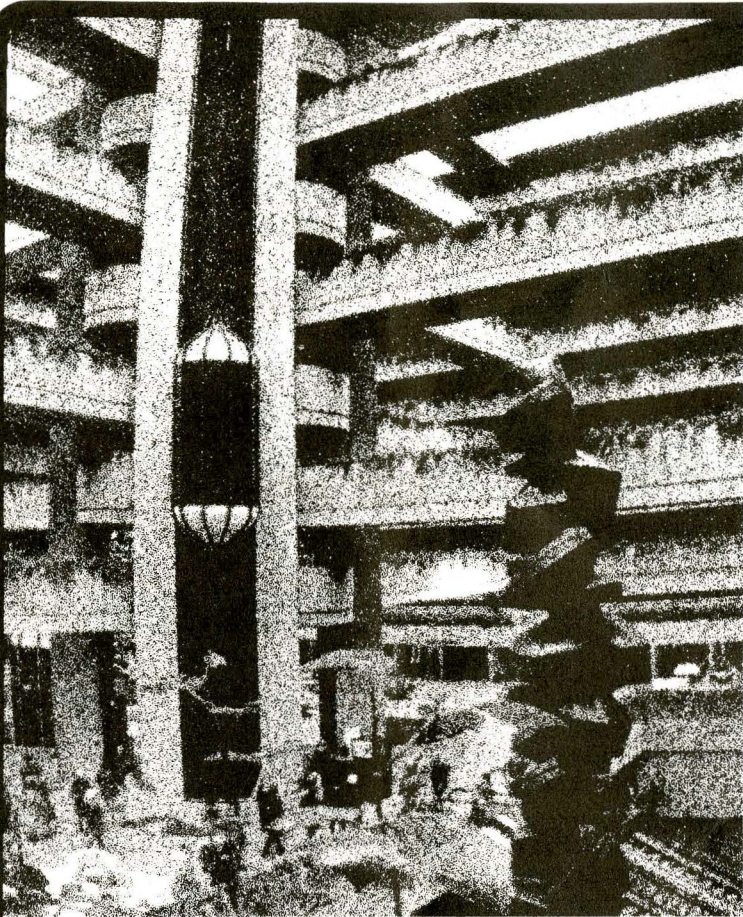
This 3-day seminar covers FCC Rules and Regulations, Part 15 on RF-Devices, and Part 18 on industrial, scientific, and medical devices. It also covers the CISPR and member nation EMC specifications, terms and definitions, test limits and conditions, test instrumentation, test methods and procedures, and how to get a test item type approved or certificated. Trends and futures are also forecast. \$375 *

OTHER EMC RELATED COURSES TAUGHT DURING FALL 1975 IN OTHER CITIES INCLUDE:

TITLE of Course	LOCATION of Seminars	Washington, D.C.	Las Vegas, Nevada	London, England	San Francisco, California	San Antonio, Texas*	Toronto, Canada	Duration & Price
EMC - DESIGN & MEASUREMENT FOR CONTROL OF EMI		SEPT 15-19		OCT 13-17	NOV 17-21			5 DAYS - \$595
EMI CONTROL IN MEDICAL ELECTRONICS & HOSPITALS		SEPT 23-24						2 DAYS - \$285
EMI CONTROL IN DESIGN & INSTALLATION OF COMPUTERS			SEPT 30-Oct 2					3 DAYS - \$375
SHIELDING						OCT 6-7		2 DAYS - \$285
GROUNDING						OCT 9-10		2 DAYS - \$285
FIBER OPTICS AND OPTICAL ISOLATORS		OCT 14-16						3 DAYS - \$375
FCC & CISPR EMC SPECIFICATIONS & MEASUREMENTS		DEC 10-12						3 DAYS - \$375
MICROWAVE SOLID-STATE CIRCUITS		OCT 28-30						3 DAYS - \$375
MIL-STD-462/462B EMI TESTING & CLINIC		NOV 3-7						5 DAYS - \$550
HP-65 EMC/EMI PROGRAMS & APPLICATIONS		DEC 8-9			NOV 12-13			2 DAYS - \$285
VIBRATION & SHOCK - VEHICULAR & SEISMIC		NOV 17-21					NOV 10-14	5 DAYS - \$495
MOBILE COMMUNICATIONS		DEC 2-4						3 DAYS - \$375

*Registration fee, in addition to the lecture series, includes one to two handbooks and texts, lecture notes, and break refreshments. For further information or registration, contact:

MRS. MURIEL M. MOELLER, Don White Consultants, Inc., 14800 Springfield Road, Germantown, Maryland 20767
Phone: 301-948-0028 Telex: 89-2766 DWCI GTWN



Hyatt Regency O'Hare

plan to attend **NEC/75**

**3rd annual
national
communications forum**

**31st annual
national
electronics conference**

**OCTOBER
MON. 6 — TUES. 7 — WED. 8**

**a complete engineering education program
for engineers, scientists and engineering management.**

In recent years communications research and manufacturing resources in the Chicago Metropolitan Area have expanded dramatically and the area is now recognized as the Communications Center of the World. NEC, aware of this development, has expanded its services to the communications engineer working in this and related fields.

An outstanding engineering program has been prepared by the NCF/75 Technical Program Committee, under the direction of Chairman, Dr. John S. Mayo, Vice President, Bell Laboratories, Murray Hill, New Jersey. The highlight of the NCF/75 education program will be the presentation of 11 New Technology Seminars. These six hour, two day seminars present the latest significant research and application results in the field of communications. The unique scheduling permits registrants to attend two complete seminars as well as the Technical Session Program, Executive Lectures and Panel Discussions.

The \$50.00 registration fee for each seminar includes a luncheon ticket, registration for all Technical Sessions, seminar notes and

exhibits. PLEASE NOTE!! Seminar time schedules permit attendance at two seminars during the Conference.

technical session program

The Annual NEC TECHNICAL SESSIONS Program of invited papers has been specifically developed to enhance and embellish the NEW TECHNOLOGY SEMINAR Program. State of the art developments and applications are presented on a wide spectrum of topics in parallel with numerous innovative engineering applications of well-established concepts and practices.

A broad interesting program includes communications, education, medical electronics and management subjects. Registration fee for the TECHNICAL SESSIONS is \$10.00.

executive lecture series

Conference Registrants will have an opportunity to attend two top level Engineering Management Lectures. Lecturers include recognized business authorities and consultants. (No Charge)

31st National Electronics Conference and Exhibition

conference hours:

Monday, Tuesday, Wednesday
October 6, 7, 8

Registration opens 7:30 a.m.

Exhibition 11:00 a.m.-5:00 p.m.

New Technology Seminars
8:30 a.m. & 11:00 a.m.

Technical Paper Sessions —
1:30 p.m. - 3:20 p.m.

Panel Discussions
3:30 p.m. - 5:00 p.m.

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