# N. J. IEEE Meeting: WOR - TV/WXLO - FM Transmitter Tour

The North Jersey Chapter of Antennas & Propagation/Microwave & Techniques will sponsor a tour of New York City TV Channel 9 and WXLO-FM transmitters on Wednesday evening, December 10, 1975 at 7:30 pm. The stations are located high-a-top the Empire State Building and are only accessible to the public on a guided tour basis.

The tour will take approximately one hour and include a description of the transmitter line up (including UHF TV Translator, Channel 71), RF transmission-line facility and RF, Video and Audio processing/monitoring equipments. Technical questions will be fielded by a broadcast engineer tour guide.

A pre-tour dinner will be held at 6 pm at the Park One Restaurant, One Park Ave., Lyndhurst, N. J. (just south of Rt. 3).

Reservations for this tour are limited. Please mail your reservations to E. W. Niemiec, 66 Skytop Rd., Cedar Grove, N. J. 07009, or call E. W. Niemiec (ITT, Nutley, N. J.) at (201) 284-2323.

Time: 7:30 pm, Wednesday, December 10, 1975

Place: Empire State Bldg., N. Y. C. Pre-Tour Dinner: 6 pm at the Park One Restaurant, 1 Park Ave., Lyndhurst, N. J.

#### Faith On Unemployment

The IEEE Electron Devices — Parts Hybrids Packaging Groups of N. Y. Metropolitan area sections are sponsoring a talk by Ms. Faith Lee, RCA, Somerville. The talk will commence at 4 pm on Thursday, Dec. 18, 1975.

A graduate of Arizona State University in EE, Ms. Lee earned her bachelors degree in 1963 and her masters in 1969. She worked for Motorola for six years, and SGS (Italy) for one and a half years before coming to RCA Somerville, where she has worked for the last five years on R & D associated with LSI. Presently she is involved in yield improvement for COS/MAC, RCA's microprocesser.

Ms. Lee serves the IEEE as a committee chairman for the National Electron Devices Group and also as the Political Action Chairman for the New York Section. This latter post has given her access to the returns of the recent IEEE employment (?unemployment?) questionnaire. She will discuss the results of that survey.

Time: 4 pm, Thursday, December 18, 1975.

Place: RCA Somerville, Advanced Technology Center.

#### **Computer Networks**

A one-day tutorial short course on Computer Networks will be presented by the IEEE Educational Activities Board in cooperation with the IEEE N. Y. Computer Society, on Friday, December 5, 1975, in New York City.

This tutorial is intended to provide a user-oriented introduction to resourcesharing computer networks. The tutorial will cover the areas of network topology and communications media, network technology and its impact on network performance, resource-sharing requirements and capabilities, and new techniques in performance measurement, network access and network management. The general approach will be to present terminology and concepts followed by specific example. The intent is not to be comprehensive, but to impart a basic understanding of the state-of-the-art.

The fee is \$55 for IEEE members; \$25 for student members; and \$70 for non-members.

For further information, contact: IEEE Continuing Education Dept., IEEE Service Center, 445 Hoes Lane, Piscataway, N. J. 08854; (201) 981-0060, Ext. 174 or 175.

Time: 9 a m to 4:30 p m, Friday, December 5, 1975.

Place: United Engineering Center, 345 E. 47th St., N. Y. C.

#### **Ultrasound Mammography**

The Metropolitan N. Y. Chapter of the IEEE Group on Electronics in Medicine and Biology (GEMB) has announced that Gilbert Baum, M. D., of the Albert Einstein Medical Center, will address the topic "Ultrasound In Mammography" at the December 10 GEMB Meeting.

For further information, call: W. H. Buchsbaum, Sc.D., at (212) 240-5594 (Brookdale Hospital Medical Center).

Time: 7:30 pm, Wednesday, December 10, 1975.

Place: Rockefeller University, South Lab., Rm. 204, 66th St. and York Ave., N. Y. C.

**Pre-Meeting Dinner**: 6 pm, Tower Cafeteria, 64th St. and York Ave.

#### **Pattern Recognition**

The N. Y. Chapter of the IEEE Computer Society is sponsoring a talk on "Pattern Recognition: Theories and Applications," given by Prof. Y. T. Chien of the University of Connecticut.

This talk will focus on the significant advances of pattern recognition work in the past decade, The fundamentals of pattern recognition theories will be reviewed in the context of mathematics and computer technology. Particular attention will be given to those theories that have been put into practice in various application areas. The talk will conclude with a look at the current directions of pattern recognition research.

For further information, call Tom Gerson at (212) 631-6207.

Time: 10:00 am to 12:00 noon, Saturday, December 13, 1975.

Place: Queensboro Community College, Science Bldg., Lecture Hall S-111, Springfield Blvd. and 56th Ave., Bayside, N Y

Directions: Take Long Island Expressway to Springfield Blvd. exit, follow Springfield Blvd. north two blocks to 56th Ave. Follow 56th Ave. east one block to entrance of college grounds and parking lot.

#### **Computerized Tomography**

The N. Y. Chapter of the IEEE Computer Society will present a talk on one of the most important new applications of computer technology to clinical medicine: computerized axial tomography, i. e. the computerized reconstruction of a cross-sectional "slice" of a three-dimensional object, on January 20, 1976.

Dr. W. Gordon Monahan, a medical physicist at Mt. Sinai Medical Center, will describe the implementation and clinical applications of computerized tomography with special reference to Mt. Sinai's new Ohio-Nuclear scanner, as well as present slides of clinical scans recorded by the equipment. (Prospective attendees might read the cover story of the October 1975 issue of "Scientific American" for preparation.)

For further information: Dr. Monahan, (212) 650-7775.

Time: 6:00 to 7:30 P. M., Tuesday, January 20, 1976.

Place: Andre Meyer Department of Physics (Nuclear Medicine), 2nd Floor, Annenberg Bldg., Mt. Sinai Medical Center, (Enter on Madison Ave. entrance near 100th Street, N. Y. C.)

# Operating Systems: Concepts & Technology

The IEEE Computer Society, New York Chapter, will present on December 17, 1975 Harold Lorin, IBM Research, Insitute, speaking on "Operating Systems Concepts and Changing Technology."

An analysis of new operating system design concepts brought about by changing hardware technology, with emphasis on the delivery of computer

power, will be given. Mr. Lorin is the author of two books on computer science: one on parallelism in hardware and software, and the other on computer sorting.

Time: 6:30 pm to 8:00 pm, Wednesday, December 17, 1975.

Place: IBM-SRI, 4th Floor, 219 E. 42nd St., N. Y. C.

#### CP - 1600 Microprocessor

The N. Y. Chapter of the IEEE Computer Society will present a talk and demonstration of the General Instrument CP-1600 microprocessor and development system, by Frank Gruppuso, the MOS design engineer of the microprocessor, on Saturday, January 24, 1976, from 10 am to 12:30 pm

For further information, call F. Gruppuso at (516) 733-3000.

Time: 10 am to 12:30 pm, Saturday, January 24, 1976.

Place: General Instrument Corp., 600 West John St., Hicksville, N. Y.

Directions: Take LIE to Rt. 106 - 107 south. Continue along Rt. 106 until West John St. Turn right on West John St. and continue until the GI plant.

## Address Changed?

North Jersey Section Members should report address changes to the following address:

> IEEE Service Center 445 Hoes Lane Piscataway, N. J. 08854 (201) 981-0060.

#### Career Workshop

Do you have a career plan, or just a job? Are your talents being wasted in your current position? Are you looking for work?

You may be interested in a new process of life/work planning developed by the John Crystal Management Service in conjunction with the Washington Section of the IEEE. The New Jersey Sections of the IEEE are considering sponsoring a one-day Workshop to introduce you to this thorough and systematic process. If interest warrants, the Workshop will be held on a Saturday this fall. The cost will be on the order of \$30 to \$40. If you are interested, please read on and return the coupon at the end of this column.

The Crystal process includes the development of a detailed work case history, a self-evaluation, and an introduction to the business world. It can help you locate, create, and price a position you want. It is applicable to students, mid-career people, and retirees. There is a book on it: "Where Do I Go From Here With My Life?" by John Crystal and Richard Bolles (Seabury Press paperback — \$7.95). Useful background is Bolles' book "What Color is Your Parachute?" (\$4.95). The methodology and thoroughness of the Crystal career planning process should appeal to engineers.

This workshop will be a joint project of the Princeton, North Jersey and Jersey Coast Sections of the IEEE. It is being coordinated by Anthony D. Robbi of the Princeton Section. If you are interested in taking advantage of such a workshop, please fill out the form below.

То:	A. D. Robbi PS-PAC Career Workshop RD # 1 Hopewell, N. J. 08525	
	_ I have a strong interest in the Workshop.	
	_ I have some interest in the Workshop.	
Name		(North Jersey)
ddress		
Phone		

# APL Language And Applications

The N. Y. Chapter of the IEEE Computer Society will sponsor a talk on December 10, 1975 by Allen J. Rose of Scientific Time Sharing Corp. on APL, the powerful high level computer language implemented by IBM's System /370, 5100, and by Scientific Time Sharing. Mr. Rose is co-author of a leading book on APL ("APL: An Interactive Approach," published by John Wiley), and lectures widely on APL. The talk is directed to engineers with no previous knowledge of APL, who wish to learn the language's capabilities for scientific, engineering, or business use.

For further information, call A. J. Rose at (914) 728-6910.

Time: 6:30 - 8:00 P. M., Wednesday, December 10, 1975.

Place: Scientific Time Sharing Corp., 14th Floor, 747 Third Ave., (between 46 and 47th Streets) N. Y. C.

# Pratt Offers Microprocessor Course

The basic understanding of the microprocessor and its applications will be reviewed in a special course for engineers in industry being offered this winter by Pratt Institute's School of Engineering. The course, which is limited to 50 students, will cover both the hardware and software aspects of microprocessors.

"The microprocessor, 'a computer on a chip' as it has been called, has been hailed as the most important development in electronics since the invention of the transistor," Arthur Seidman, the acting dean of the school, explains. "Applications for the device span virtually the entire field of engineering," he adds. A brief sampling of applications includes instrumentation, manufacturing, word processing, and traffic control.

The course will be taught by Morton Herman, a logic design engineer at Redactron Corp., who has extensive experience in microprocessors. Formerly of IBM, he is engaged in the application of microprocessors for an electric editing typewriter.

Pratt's 1976 Winterim session, which begins on January 5, 1976, includes this course. Classes will meet on Mondays, Tuesdays and Thursdays from 6:30 to 9:30 pm for four consecutive weeks. Registration is December 1 through 12 from 9 am to 4 pm on Pratt's Brooklyn campus, DeKalb Ave. and Hall St. The course also may be taken for undergraduate or graduate credit (3 each), or for no credit.

For additional information, call: Professor Hall Graves, director of the Pratt Winterim, at (212) 636-3403.

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NY&LI Sections, IEEE



## **EDUCATION PROGRAM—SPRING 1976**

Metropolitan Section

Power and Industrial Div.

#### REVIEW STUDY GROUPS — FOR PROFESSIONAL ENGINEER EXAMINATIONS

This program is designed to prepare candidates for Professional Engineering License examinations in New York and New Jersey. The material is consistent with the national type of exam used for the New York license examinations. Candidates for Part I and Part II should enroll in Study Group No. 1, No. 2 and No. 3. The New York State Board permits graduates of approved schools to take Parts I and II and qualify for "Engineering in Training." New York exams will be held in April, 1976 and November, 1976. Please note that the fall course will be completed prior to the November exam.

#### BASIC ENGINEERING SCIENCES I (IEEE)

STUDY GROUP NO. 1

Review for Part I & Part II, N.Y. Exam. Review will cover practical applications of Statics, Mechanics of Materials. TUESDAYS, Starting January 6, 1976, 6:30–9:00 P.M., 12 sessions—Room 341-S, Con Edison Co., 4 Irving Place *Instructor:* B. Koplik, Ph.D., P.E., Professor of Mechanical Engineering, Polytechnic Institute of New York

#### BASIC ENGINEERING SCIENCES II (ASME)

Instructor: M. Kurtz, P.E., Consulting Engineer

STUDY GROUP NO. 2

Review for Part I & Part II, N.Y. Exam. Review will cover practical applications of Dynamics, Fluid Mechanics, Thermodynamics and Electrical Principles.

MONDAYS, Starting January 5, 1976, 6:30—9:00 P.M., 12 sessions—Room 3W3-3W4 (3rd FI West), New Building,

#### ENGINEERING ECONOMICS & PRACTICE (IEEE)

STUDY GROUP NO. 3

Bellevue Hospital Center, 27th St. & 1st Ave.

Review for Engineering Economics for all three sections of the exam. Review will cover economic comparisons, annual cost, present worth and rate of return. Fixed and operating costs, accounting and cost analysis, depreciation, taxes and valuations will also be reviewed.

THURSDAYS, Starting January 8, 1976, 6:30—9:00 P.M., 12 sessions—Room 341-S, Con Edison Co., 4 Irving Place Instructor: R. E. Mendoza, P.E., Public Service Electric & Gas of New Jersey

#### MECHANICAL ENGINEERING (ASME)

STUDY GROUP NO. 4

Review for Mechanical Engineering Section of Part III, N.Y. Exam. Application of mechanical engineering principles to combustion, gas dynamics, compression shock, nozzle design, steam power plant cycles, psychrometrics, air conditioning heat transfer, nuclear reactors, Mach cone, Kinetics, gyroscope motion, vibratory motion, balancing of machines, compound shafts, design of gears, hydraulics, pumps and fans, stress and deformation of machine elements, etc.

WEDNESDAYS, Starting January 7, 1976, 6:30–9:00 P.M., 14 sessions–Room 3W3-3W4 (3rd FI West), New Building, Instructor: M.Kurtz, P.E., Consulting Engineer Bellevue Hospital Center, 27th St. & 1st Ave.

#### ELECTRICAL ENGINEERING AND APPLICATIONS (IEEE)

STUDY GROUP NO. 5

Review for Electrical Engineering Section of Part III, N.Y. Exam. Electrical Engineering Principles and Applications of: transformers a-c and d-c machines, transmission lines, filters, wave guides, networks, impedance matching, bridges, coupled circuits, resonance, harmonics, transients, three-phase power, amplifiers, electronic circuits, Root locus and Routh Criteria.

WEDNESDAYS, Starting January 7, 1976, 6:30–9:00 P.M.,12 sessions—Room 341-S, Con Edison Co., 4 Irving Place Instructors: L. E. Burnett, P.E., P.A.S.N.Y.

S. Sonsky, P.E., Queensborough Community College

SEE REGISTRATION FORMS ON PAGE FOUR.

# Volume 22 December 1975 No. 5 Published monthly except June and July by the North Jersey Section of the Institute of Electrical & Electronics Engineers, Inc. Office of Publications: 399 Howard Boulevard, Mount Arlington, N. J. 07856.

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Deadline for receipt of material is the 1st of the month preceding the month of publication. All communications concerning editorial matter should be addressed to: Ray Vaccari, Editor, 236 Summit Road, Mountainside, N. J. 07092. All communications concerning business matters, including advertising, should be addressed to: The Newsletter, c/o Girard Associates, Inc., 399 Howard Boulevard, Mt. Arlington, N. J. 07856.

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#### REPORT ALL ADDRESS CHANGES TO:

IEEE Service Center 445 Hoes Lane Piscataway, N. J. 08854 (201) 981-0060

It is not necessary to inform the North Jersey Section when you change your mailing address. The NEWSLETTER and other section mailings use a list provided by IEEE's national headquarters in New York. This means the Section has no need to maintain a mailing list or addressing plates. Section membership records are changed when Headquarters notifies us.

#### SECTION OFFICERS 1975-1976

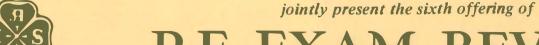
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## The North Jersey, Mid-Jersey, and Trenton Sections of the AMERICAN SOCIETY OF MECHANICAL ENGINEERS

and

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# P.E. EXAM REVIE ORRESPONDENCE COUR

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- GOOD NATION-WIDE: Developed for the two-part P.E. exams used in many states (like Pennsylvania and N.Y.), the three-part New Jersey exams, and virtually all other state exams for Electrical, Industrial, and Mechanical Engineers.
- NOTE: These courses are offered by sections of ASME and IEEE to aid engineers in their preparation for taking Professional Engineer (P.E.) exams. Neither ASME nor IEEE is connected with nor acting in any way for any State Board of Professional Engineers. Applicants are advised to contact their State Board of Professional Engineers to obtain applications for the P.E. examinations, to discuss eligibility for a P.E. license, etc. (Do not contact ASME or IEEE on such matters.) (e.g., in New Jersey, eligibility for a P.E. license is solely determined by:

New Jersey State Board of Professional Engineers and Land Surveyors, 1100 Raymond Boulevard, Newark, N.J. 07102.)

- Course "A", Engineering Fundamentals: For all engineers (EE, ME, IE, etc.) studying for E.I.T.'s (N.J. exam Parts I & II, and equivalent parts of other State exams. Math, physics, chemistry, electricity, moment of inertia, radius of gyration, sheer and bending moment, beam deflection, rivets and bolts, etc.; 490 pp.).
- Course "B", Mechanical Engineering: For ME's (and IE's) studying for the last part ("specialty") of P.E. exams (N.J. exam Part III, and equivalent parts of other State exams. Heat transfer, HVAC, engines, compressors, stress analysis, vibrations, mechanical design, economics, IE problems; etc.; 248 pp.).
- Course "C", Electrical Engineering: For EE's studying for the last part ("specialty") of P.E. exams (N.J. exam Part III, and equivalent parts of other State exams. Circuits, motors, generators, bridges, electronics, polyphase circuits, transients, safety; etc.; 360 pp.)
- FEES: \$95 per course. (Your cancelled check is your initial receipt. Completion certificate mailed at end of course.)
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**COURSE APPLICATION DEADLINE:** 

To conform to the normal 12-week mailing sequence and finish in time for the May exams, your review course application should be received by January 12, 1976. (If you are not preparing for the May exams, or if you specify a special mailing schedule, your application should state this and can be received any time.)

#### FOR MORE INFORMATION ABOUT THESE COURSES, CALL:

NORTH JERSEY ASME	Mr. K.R. Floyd	201/622-7000, ext. 3935
MID-JERSEY ASME	Mr. K.R. Floyd	201/622-7000, ext. 3935
TRENTON ASME	Dr. E. Bulanowski	609/587-5000 ext. 3526
NORTH JERSEY IEEE	Mr. E. McIntyre	201/866-6833

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. . . And Send Before Deadline (see above) To:

> MR. EDWARD M. McINTYRE 1039 Bloomfield St. Hoboken, N.J. 07030

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For further information contact: R. Samuelson or F. Riley-Phone (212) 566-6940

Fill out one registration form for each group and mail with payment Registrations will be accepted at first and second sessions to the limit of room capacity.

REGISTRATION FORM		REGISTRATION FORM	
Name (printed)  Firm Position  Business Address  Phone No.		Business Address Phone No.	
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No.

Note: See Registration Information for Checks

Note: See Registration Information for Checks

#### Third Generation Microprocessors

The IEEE Computer Society is presenting on December 4, 1975, Frank Gruppuso of General Instrument Corp., speaking on "Third Generation Microprocessors." An introduction to the hardware and software design of the third generation microprocessors, as typified by the GE CP-1600, will be given.

Time: 6:30 pm, Thursday, December 4, 1975.

Place: IBM Thomas J. Watson Research Center, Yorktown Heights, N. Y. Directions (from N. Y. C): Taconic Parkway north to Rt. 134. Right on Rt. 134 until IBM Research Center sign. (Phone 914-945-3000.)

#### LATE NOTICE Communications & Energy

The N.Y. IEEE Communications Society will sponsor a one-day seminar on Communications & Energy on December 4, 1975. For further information, write: J. Donnelly, Box 52, RCA Global Communications, 60 Broad St., N.Y.C. 10004.

#### **IEEE Prints Guide To Technical Presentations**

The publication of "A Guide for Better Technical Presentations, a Book of Selected Reprints," has been announced by the IEEE Press. This collection was edited by Robert M. Woelfle of E-Systems Greenville Division.

Virtually every engineer, scientist, or manager is occasionally required to give a technical presentation, and many do so as a routine part of their jobs. However, few such professionals, when faced with the requirement to present a technical briefing, explain a proposal, outline a management plan, or provide other similiar face-to-face communications before a group, can draw upon formal training for the needed background and techniques. Yet technical presentations are a vital part of almost every phase of the governmental, industrial, and academic worlds.

This 240-page book, sponsored by the IEEE Professional Communication Group, is priced at \$7.45 for the paperbound member edition. A clothbound edition is available for \$14.95 (discounted to \$11.20 for IEEE members).

It can be ordered postpaid from the IEEE Service Center, 445 Hoes Lane, Piscataway, N. J. 08854. Payment should accompany the order.

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If you have a job opening for an IEEE member, please send details of it to the Employment Assistance Program. This should be typewritten and suitable for reproduction. It should include a brief description of the duties and responsibilities, the minimum educational and experience requirements, and the name, address and telephone number of the person(s) to be contacted by applicants. Job openings submitted in this manner will be included in a brochure to be distributed to unemployed members periodically. Please mail all job openings to: Quayne Golden Gennaro, P. E., 1B-536, Bell Laboratories, Room Holmdel, N. J. 07733.

March 6
NJ IEEE Section

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I. TITLE OF PUBLICATION: The IEEE Newsletter; 2. DATE OF FILING: October I, 1975; 3. FREQUENCY OF ISSUE: Monthly except June & July; 3A. ANNUAL SUBSCRIPTION PRICE: \$0.75 Members, \$1.50 Others; 4. LOCATION OF KNOWN OFFICE OF PUBLICATION: 399 Howard Blvd., Mt. Arlington, N.J. 07856; 5. LOCATION OF THE HEADQUARTERS OR GENERAL BUSINESS OFFICES OF THE PUBLISHERS: 399 Howard Blvd., Mt. Arlington, N.J. 07856; 6. NAMES AND ADDRESS OF PUBLISHER, EDITOR AND MANAGING EDITOR: Publisher, North Jersey Section IEEE, 399 Howard Blvd., Mt. Arlington, N.J. 07856; Editor, Ray Vaccari, 236 Summit Rd., Mountainside, N.J. 07092; Managing Editor, B. Blair, 399 Howard Blvd., Mt. Arlington, N.J. 07856; 7. OWNER: North Jersey Section IEEE, 399 Howard Blvd., Mt. Arlington, N.J. 07856; 8. KNOWN BONDHOLDERS, MORTGAGEES AND OTHER SECURITY HOLDERS OWNING OR HOLDING I PERCENT OR MORE OF TOTAL AMOUNT OF BONDS, MORTGAGES OR OTHER SECURITIES: None

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Paid Circulation		
Other Than Mail Subscriptions	0	0
Mail Subscriptions	4,919	4,894
Total Paid Circulation	4,919	4,894
Free Distribution	44	36
Total Distribution	4,963	4,930
Office Use, Left-Over, Unaccounted, Spoiled	227	170
TOTAL	5,190	5,100

I certify that the statements made by me are correct and complete.

M.M. Perugini



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