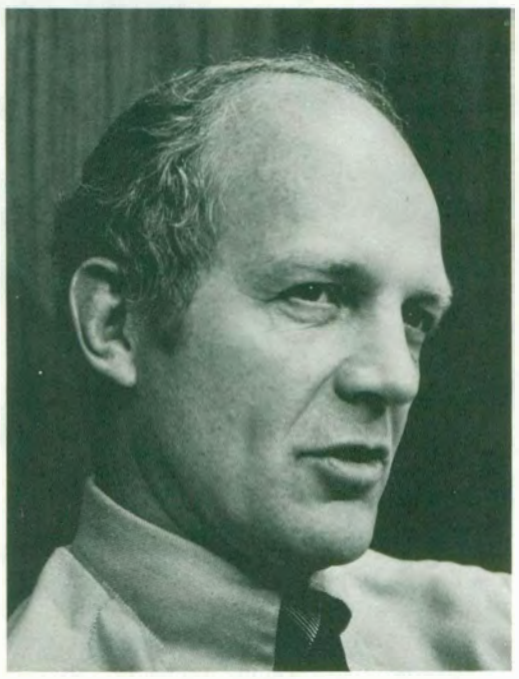
The IEEE
Newsletter

Hittinger Of RCA To Speak At Annual Dinner-Dance & Fellows Night



The North Jersey Section IEEE will hold it's annual Dinner Dance and Fellows Night, Saturday, March 1, 1975 at the Governor Morris Inn in Morristown.

William C. Hittinger, Executive Vice President of RCA, will be the speaker for the evening. All members are encouraged to attend, especially young members and student members. It will be an excellent opportunity to meet technical leaders in your field.

Mr. Hittinger will speak on the "Outlook of the Electronics Industry over the Next Decade." This is an area of importance to all of us and should make attendance beneficial.

ABOUT THE SPEAKER:

William C. Hittinger, an Executive Vice President of RCA since 1972, is responsible for the RCA Consumer Electronics, Solid State Electronics and Electronic Components activities. He was elected to the RCA Board of Directors in September, 1974.

Mr. Hittinger is a Fellow of the IEEE and a Trustee of Lehigh University.

A native of Bethlehem, Pa., he graduated from Lehigh University in 1944 with a B.S. degree in Metallurgical Engineering.

Mr. Hittinger resides with his wife in Summit, N.J. They have four children.

The band will play a variety of tunes including "rock and roll" for the younger members of our group.

Please note that the evening is **not** restricted to IEEE members and their families so you are invited to **Bring A Friend.**

Use the form below for reservations enclosing a stamped, self-addressed envelope. Reservations received after February 20th, or without an enclosed envelope, will be held at the door along with telephoned reservations. Call (201) 645-5467 or (201) 645-5472 (leave a message for R. McMillan) or (201) 744-6794 (evenings).

Time: 7:00 P.M. (Cash Bar 6:00-7:00; Dancing 9:00 P.M. - 1:00 A.M.), Saturday, March 1, 1975.

Place: Governor Morris Inn, Morristown, N.J.

Dr. Robert McMillan, Dinner Chairmen
E.E. Dept., New Jersey Institute of Technology (N.C.E.)
323 High Street
Newark, New Jersey 07102

Please forward tickets at $12.50 each (make checks payable to North Jersey Section IEEE) to:

Name_____

Address_____

City_____

I would like to share a table (seating 10) with the following:

_____

_____

I am a young engineer (under 30) or student. ☐

I would like to have a young engineer or student at my table. ☐

The Engineer In Today's Society

On Tuesday, March 4, 1975, Paul Robbins, Executive Secretary of the National Society of Professional Engineers will speak at a joint meeting of the Northern New Jersey sections of the I.E.E.E., A.S.M.E., local P.E. societies, and the I.S.A.

The topic to be covered is the role of "The Engineer in Today's Society".

ABOUT THE TALK:

Engineers today cannot continue all too prevalent attitudes of past exemplified by "Tell us what you want done and we'll do it."

Engineers in the next decade will need to be "involved".

What does this mean for:

Individual engineers?
Their societies?
Their employers?

How can engineers make an imput to policy makers:

In local affairs?
In state matters?
At the national level?

ABOUT THE SPEAKER:

A registered professional engineer, Mr. Robbins has engineering degrees from Syracuse University, M.I.T., and Rose Polytechnic Institute. His early engineering experience was in highway design and layout and structural steel fabrication, after which he taught at Cooper Union, New York University, and the University of Maine. In 1941 he became a consultant on engineering training in the executive office of Mayor La Guardia of New York City and during World War II was with the Transportation Corps of the U.S. Army at the New York Port of Embarkation and in the Pentagon.

He has been executive director of NSPE since 1946. He has served as advisor and member of task forces on supply and utilization of scientists and engineers under presidents Eisenhower, Kennedy, Johnson and Nixon. He is an officer of JETS, a member of several engineering societies, Tau Beta Pi, Rotary, and a Fellow of the American Association for the Advancement of Science.

Time: 8 P.M., Tuesday, March 4, 1975.

Place: Coachman Inn
Cranford, N.J.
Exit 136 - Garden State Parkway

Optical Fiber Transmission Systems

A joint meeting of the North Jersey Chapter Communications and Microwave Theory & Technique divisions, to be held Wednesday, February 12, 1975 at 8:00 P.M. at Bell Labs, Whippany, will feature Dr. M. DiDomenico, Jr., of Bell Labs, speaking on "Optical Fiber Transmission Systems."

Over the past several years optical fiber transmission systems suitable for use in commercial and military communications systems have begun to evolve. The evolution of these systems has been spurred by the progress in reducing the attenuation in glass fibers. Optical fiber systems are attractive because glass fiber waveguides offer potential low cost, small size, light weight, strength and flexibility, and chemical and electrical stability. In addition, optical fibers provide wide bandwidth capabilities together with immunity to electromagnetic interference. These characteristics, some of which are unique, give optical fiber transmission systems potential economic viability in many sectors of the commercial and military communications network. This talk will review some of the fundamentals of optical transmission systems highlighting optical fiber waveguides, GaAs injection laser sources, silicon avalanche photodiode detectors, and optical carrier system performance.

Mauro DiDomenico, Jr. was born on January 12, 1937 in New York, New York. He received his B.S., M.S., and Ph.D degrees from Stanford University in 1958, 1959 and 1963, respectively. He joined Bell Laboratories in 1962 and has worked on lasers, electro-optic and nonlinear optic devices, high-speed silicon avalanche photodetectors, luminescence in III-V compound semiconductors, and optical communications systems. He has over 50 technical publications in these areas.

Since 1970 he has been Head of the Optical Devices and Optical Subsystems Department with responsibility for developing devices and subsystems for optical fiber transmission applications. Dr. DiDomenico is a member of the Institute of Electrical and Electronic Engineers, the American Physical Society, Tau Beta Pi and Sigma Xi.

For further information, contact J.F. Kampschoer at (201) 386-4135 or (201) 386-1922.

Time: 8:00 P.M., Wednesday, February 12, 1975.

Place: Bell Laboratories, Seminar Room 3A-108, Whippany, N.J., (near intersection of Rt. 10 and Whippany Road.)

Pre-meeting dinner: 6:00 P.M., Hanover Trail, Rt. 10 between Rts. 287 and 202, Morris Plains.

Economics & Control

The North Jersey Chapter of the Control Systems Society will sponsor a talk entitled "Current Developments in Optimal Control for Macroeconomic Policy Analysis". The speaker will be Dr. Gregory Chow, of the Econometrics Research Program at Princeton University.

Recent developments in the application of optimal control techniques to the study and the formulation of macroeconomic policies will be reviewed. Similarities and differences between the approaches of the control engineer and the economist will be discussed. Trends of current and future research will be observed.

Time: Tuesday, February 25, 1975 8:00 P.M.

Place: Bell Telephone Labs
Murray Hill, N.J.

Pre-Meeting Dinner: 6:00 P.M.

Sleepy Hollow Inn
1900 Raritan Rd.
Scotch Plains, N.J.

Multi-Group Meeting At Bell Labs

The Multi-Group is co-sponsoring a meeting at Bell Laboratories, Murray Hill, New Jersey, on Wednesday March 12, 1975 beginning at 3:15 p.m. The program is as follows:

3:15 p.m.	Arrival and Registration at the Auditorium - Refreshments will be served.	
3:45 p.m.	Introduction to Bell Labs	Bill Mines
4:00 p.m.	"Applications of Electron Beam Accelerators to Radiation Effects Studies in Polymers".	M.J. Bowden
4:30 p.m.	"Radioactive Ion Implantation"	E.N. Kaufman
5:00 p.m.	"14 MeV Neutron Activation Analysis for Materials Studies"	J.W. Mitchell
5:30 p.m.	"Radiation Protection Consideration in the design and use of the new Laboratory.	M.M. Weiss
6:00 p.m.	Laboratory tour orientation	Bill Mines
6:15 p.m.	Visits to Exhibit Area and new Laboratory	
7:00 p.m.	Departure - Cocktail hour and dinner at a nearby restaurant - optional	

This meeting is open to interested associates of IEEE members.

If interested in attending, contact M.M. Weiss - Bell Laboratories - 600 Mountain Avenue - Murray Hill, New Jersey, 07974 - Phone 201-582-2792, to make your reservation.

The Potential For Electronic Vehicles

The Potential for Electric Vehicles will be the topic sponsored by the joint chapter of the Industry Application Society and the Power Engineering Society of the New York and Long Island Sections during a General Meeting that will be held on Wednesday, February 19, 1975.

Mr. Victor Wouk, Consultant and Chairman of the Board of Petro-Electric Motors Co. and a speaker from Electric Transportation Projects Division of E.S.B. Inc. will discuss the present status of electric vehicle development and its potential for the future. The presentation will cover the progress made in the production and use of electric vehicles throughout the world and the development of electric vehicle components.

Time: 6:00 P.M. Wednesday, February 19, 1975.
Refreshments: 5:30 to 6:00 P.M.
Place: World Trade Center, Room 62 South
1 World Trade Center
New York, N.Y.

Computer Group Meets

The February meeting of the Computer Chapter of the North Jersey Section will be held on Feb. 18, 1975. The program features A. Metaxides of Bell Laboratories speaking on "The CODASYL Approach to Data Base Management".

In April 1971 an industry-wide group of manufacturers and users (the CODASYL Data Base Task Group or DBTG) published specifications for a data description and manipulation language. Their objective was to promote the development of Data Base Management Systems which would be compatible between manufacturers. However, there are still numerous alternative systems on the market. This makes it important to understand the concepts underlying such systems. While this talk will concentrate on the CODASYL approach it will also provide a sound basis for understanding the others.

For additional information, contact W.D. Roome at (201) 564-7317.
Time: 8:00 P.M. Tuesday, Feb. 18.
Place: Bell Telephone Laboratories, Murray Hill, Room 1D-451 (use main entrance)
Pre-Meeting Dinner:
Wally's-on-the-Hill,
Scotch Plains, Dutch Treat
6:00 P.M. Feb. 18, no RSVP

Call For Papers

A special session on Satellite Communication Systems is to be held during the 1975 Midwest Symposium on Circuits and Systems. The symposium is scheduled for August 11 and 12,1975 at Sir George Williams Campus of Concordia University in Montreal, Canada.

Authors are invited to submit papers on various aspects of simulation, analysis, design and operation of satellite communication systems, a 300 word summary of their contributions headed by the title, names of authors and affiliations is to be sumitted by March 1, 1975 to: Dr. S.N. Verma, Westar Systems Engineering Department, Western Union Telegraph Company, 1 Lake Street, Upper Saddle River, N.J. 07458.

NCE Is Now NJIT

The seal of New Jersey Institute of Technology symbolizes the new comprehensive name adopted to reflect a broadening mission for NCE, while retaining distinctive features identified with its historical past. Incorporated into the seal are the original date of founding - 1881; the acronym NCE; and the distinguishing geometric logo. Separately, each can be taken as representative of a noteworthy phase in the development of the Institute. Together they form a basis for the name chosen as being most expressive of the current visible future mission of the Institute.

Presented in a specially selected type, the Name "New Jersey Institute of Technology" is designed in a circular pattern to create a border for the seal. Within the border, and at the base of the seal, is the date 1881, the year in which the original insitution known as Newark Technical School, was organized. Central to the seal is the logo - a union of the triangle, the square and the circle. As joined here, they are three perfect geometric symbols, representing a balanced system, dynamic and fully extended, but with no sense of instability. Emblazoned upon the logo itself is the acronym NCE, representing Newark College of Engineering, the name by which the Institute has been known during its important formative years as a degree-granting institution.

As the emblem or coat of arms for the Institute, the seal is employed officially in a number of ways. Sometimes, the seal is used in more or less modified form for purposes of decoration or identification. In its complete form it appears on stationery, publications, citations, medals, and certain other official records.

The logo was originally designed to provide the public with an easily recognizable means of identifying the Institute, will continue to be used by itself for this purpose. Its simplicity in reproduction and ease of recognition makes it the most distinctive outward symbol of the Institute.

Electronic & Electrical Word Puzzle

Can You Find 27 Electronic or Electrical Words in This Puzzle? They All Begin With the Letter - C.

C U R V E R E T R E V N O C O U P L E R F
R T C H A R G E S C E R O C O S E K R F A
O E I C S T T I P L O C S I S N C O O R S
T C V U C A S C O D E O C A T E T T C H T
I M L O C I U O E E D O H T A C U R R C C
C O A X S R C I C L A C O R E C U C O O A
A R C S R S U L A E C O U L O M B D P L T
P L A E C I O C U O S Y L A C A L P N C N
A H N O S C S R E C A O C U R R E N C O O
C T L A T S Y R C A C E L L E R T O P A C

Volume 21 February 1975 No. 7

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.

STAFF

Editor ..... Ray Vaccari
Managing Editor ..... Barb Blair
Business Manager ..... M.M. Perugini
Student Activities Editor ..... Les Kovach
Associate Editor ..... Ken Weiland
Member, Editorial Staff ..... Ed Hendela
Member, Editorial Staff ..... Lauren Urso
Chairman, Publications ..... Ray Vaccari

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.

Subscription: $0.75 per year through dues for members; $1.50 per year for non-members.

REPORT ALL ADDRESS CHANGES TO:
Institute of Electrical and Electronics Engineers, Inc., 345 East 47th Street, New York, N.Y. 10017

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.

Second Class Postage Paid at Mount Arlington, N.J.

NEWLY ELECTED FELLOWS FROM THE NORTH JERSEY SECTION

MARK R. BARBER

For contributions and leadership in microwave, medical, and digital electronics.

Mark R. Barber is currently a Member of the Technical Staff of Bell Telephone Laboratories. Since 1968 he has been involved in bipolar semiconductor memory development and the development of computer controlled apparatus for testing silicon integrated circuits. Throughout the period from 1959 to 1974 he also cooperated with workers in several hospitals in developing improved electrocardiographic techniques.

He was born in New Zealand on July 23, 1931. He received the B.Sc. and B.E. (hons) degrees from the University of New Zealand, in 1954 and 1955 respectively, and the Ph.D. degree in electrical engineering from the University of Cambridge, England, in 1959. While in England he studied electron flow in high-power klystrons.

From 1959 to 1961 he worked on underwater acoustic signal processing at the New Zealand Naval Research Laboratory. He joined Bell Telephone Laboratories, Inc., N.J. in 1962 to work on solid-state microwave switches, amplifiers, mixers, and Gunn oscillators.

Among the many projects he has worked on, he has made significant technical contributions in the fields of biomedical electronics and solid state microwave devices. In medical electronics he developed a technique for quantitatively measuring the electrical dipole strength of different areas on the heart's surface. This work has stimulated research in the medical departments of several universities in the United States.

In microwave electronics he led the group that reported the first experimental gain, noise and bandwidth measurements of the amplifying phenomenon in bulk n-type gallium arsenide. This resulted in a widespread international investigation of the phenomenon as a possible replacement for electron beam traveling wave amplifiers.

Associate Editor Journal Solid State Circuits 1968-1971

IEEE Solid State Circuits Council 1971-1974

Sponsors Committee, International Solid State Circuits Conference 1972-1975.

JOHN A. CASAZZA

For contributions to new technical and economic analyses in electric power system planning.

John A. Casazza, currently is Vice President — Planning and Research of Public Service Electric and Gas Company, became a Fellow of the IEEE this past January 1, 1975.

He has been a member of IEEE since 1947 and was elevated to the Senior Member grade in 1956. He is a member of the Power Engineering Society.

He participates in two international activities as a representative of the United States. One of these is CIGRE (International Conference on Large High Tension Electric Systems) of which he is currently a Vice President of the U.S. National Committee and Chairman of the U.S. Technical Committee. He also represents this country in the USA-USSR Joint Commission on Scientific and Technical Cooperation by serving as a member of the Electric Power System Planning and Dispatching Group.

Mr. Casazza is an active member of the Edison Electric Institute in which he has been past chairman of its System Planning Committee and of its System Protection and Control Subcommittee. Another of his memberships is on the National Electric Reliability Council (NERC) Interregional Review Subcommittee. And this past October he was elected to the Board of Trustees of the New Jersey Marine Sciences Consortium.

He holds a B.E.E. degree which he received at Cornell University in 1945. He is well-known for his advocacy of engineering as a cornerstone in solving mankind's problems and has published many articles and papers on technical, economic, social and managerial subjects.

RICHARD T. DENTON

For demonstration of the data transmission capacity of an optical transmission system, and for contributions to ferromagnetic parametric amplifiers.

Richard T. Denton is Head of the Shipborne and Shore Technology Department at Bell Laboratories in Whippany, New Jersey. Since joining Bell Labs in 1954, Mr. Denton has worked on a number of assignments. During the period June 1954 to September 1956, he worked on the development of transistor switching circuits. After completing graduate studies at the University of Michigan in July 1959, he was employed at Bell Labs in the Solid State Device and Materials organization working on the development of microwave ferromagnetic parametric amplifiers. From June 1962 to May 1968 he supervised groups working on microwave ultrasonics and on the development of optical terminals. From 1968 to present he has been involved in directing the development of signal processing systems and circuits.

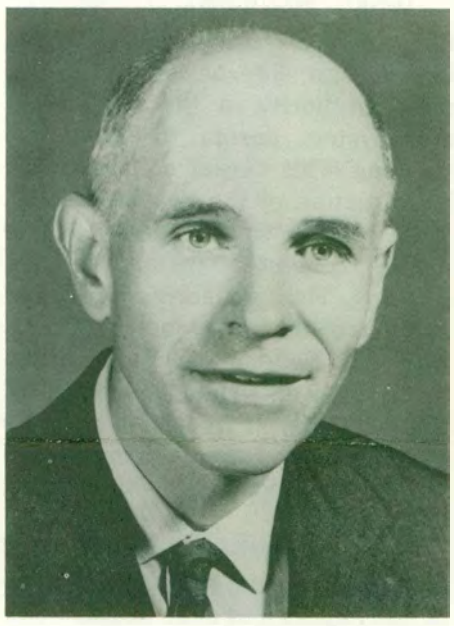
Mr. Denton received the BSEE and MSEE degrees from Pennsylvania State University in 1953 and 1954. Subsequently, he received the PhD degree in Solid State Devices from the University of Michigan in 1961. He is a member of IEEE, American Physical Society, Tau Beta Kappa, Eta Kappa Nu, and Sigma Xi. He holds five patents and has written numerous technical articles.

GEORGE S. EAGER

For development of an industry-accepted method of corona detection in extruded dielectric power cables.

George S. Eager is head of the Electric Utilities Research Department of the General Cable Corporation Research Laboratory. He has been with General Cable since 1948 after having served as a Signal Corps Officer during World War II. He received his BS Degree in Electrical Engineering in 1936 and Dr. Engr. Degree in 1941 from Johns Hopkins University.

Since joining General Cable, Dr. Eager has been associated with or has supervised the Research activity of the company in the design and testing of the 345-kV power cable now in commercial use, the 550 kV power cable now undergoing test at Waltz Mill, cross-linked polyethylene solid dielectric power cable rated up to 69 kV in commercial production, the 138 kV cross-linked polyethylene solid dielectric power cable now undergoing test at Waltz Mill as well as the other high voltage systems devised by the company during the last 15 years. He is the author of many IEEE papers covering properties of high voltage cables and has received numerous patents in the field of high voltage cables. Dr. Eager has served on the Insulated Conductors Committee of IEEE since 1952 and is presently Chairman of that Committee. He is past Chairman and a member of the Conference on Electrical Insulation and Dielectric Phenomena of the National Research Council and is a member of CIGRE.



MAX V. MATHEWS

For advances in the analysis, synthesis, and recognition of speech and the generation of musical sounds by computer and electronic methods.

Max V. Mathews is currently the Director of the Acoustical and Behavioral Research Center at Bell Telephone Laboratories. He has been on the staff at BTL since 1955. This laboratory carries out research in speech communication, visual communication, human memory and learning, programmed instruction, analysis of subjective opinions, and physical acoustics. Mr. Mathews' personal research is concerned with sound and music synthesis with digital computers and with the application of computers to areas in which man-machine interactions are critical. He joined the staff of the Bell Telephone Laboratories in 1955.

He was born in Columbus, Nebraska, on November 13, 1926. He received a B.S. degree in Electrical Engineering from California Institute of Technology in 1950, and M.S. and Sc.D. degrees in Electrical Engineering from Massachusetts Institute of Technology in 1952 and 1954, respectively.

Mr. Mathews is a member of the Institute of Electrical and Electronics Engineers, Sigma Xi, The Audio Engineering Society, The Psychonomic Society, and a Fellow of the Acoustical Society of America. He is the recipient of the 1973 IEEE David Sarnoff Gold Medal Award.

GEORGE D. ROCKEFELLER, JR.
For technical leadership in the application of protective relaying.

George D. Rockefeller is presently responsible for system-protection engineering at Consolidated Edison Co. of N.Y. He started with Metropolitan Edison Co., Reading, Pa., after graduating from Lehigh University with a B.S. in E.E. in 1948.

With Westinghouse Electric Corp., Newark, N.J. for 21 years, he became an internationally recognized authority in the application and system design of protective relaying. This career culminated in his direction of the development in 1970 of the world's first on-line digital computer installation for relaying. This pioneering work was an outgrowth of his Master's Thesis (Newark College of Engineering, 1968); also published in the IEEE Transactions, it received a Prize Paper Award and is now recognized as the basic work in this emerging technology.

He is an author or co-author of four books, eleven IEEE/AIEE Transaction Papers and over twenty other technical articles. He holds nine U.S. patents and is a licensed Professional engineer (N.J.).

He has been a member of the Power-Engineering-Society Power-System Relaying Committee since 1964 and has just completed three years service on the IEEE Admissions and Advancement Committee.

DR. ERHARD K. SITTIG
For contributions to acoustic wave devices.

Erhard K. Sittig is supervisor of activities involving optical information storage, display devices, automatic inspection systems for photolithographic masks and photolithographic exposure systems at Bell Telephone Laboratories.

From 1955 to 1959, he held a position as Instructor at the Physics Department of the Technische Hochschule Stuttgart. From 1959 to 1961, he was Assistant Research Physicist at the Physics Department of the University of California, Los Angeles. During these years he worked on various aspects of sound propagation in solids and fluids. Between 1961 and 1963, he was involved in the development of ultrasonic equipment as Senior Physicist of the Durasonics Division of Durabond Bearing Company, Palo Alto, California. In 1963 he joined Bell Telephone Laboratories at Murray Hill, New Jersey, where he worked on ultrasonic surface wave devices, diffraction delay lines and high-speed delay line memories.

He was born in Konigsberg, Germany on June 3, 1928. He received the Diploma of the Imperial College, London, England in electrical engineering in 1954, the Diploma in physics from the University at Tubingen, Germany in 1955, and the degree of Doktor der Naturwissenschaften from the Technische Hochschule Stuttgart, Germany in 1959.

Dr. Sittig is a member of the Optical Society of America.

GEORGE ELWOOD SMITH
For contributions to the development of charge-coupled devices.

George Elwood Smith is current head of the MOS Device Department of Bell Telephone Laboratories. His primary interests are in the areas of new semiconductor devices for logic and memory applications, the device physics of semiconductor insulator interfaces and charge-coupled devices.

He was born in White Plains, New York in 1930. He received the B.A. in physics from the University of Pennsylvania in 1955, and the M.S. and Ph.D. in physics from the University of Chicago in 1956 and 1959 respectively.

Following graduation, he joined Bell Telephone Laboratories (1959), where he initially studied the electrical properties and band structures of semimetals, mostly bismuth and bismuth-antimony alloys. These studies were largely microwave resonance electric and galvanomagnetic effects. In 1964 he was made head of the Device Concepts Department. In this capacity, he was involved in a variety of investigations including junction lasers, semiconducting ferroelectrics, electroluminescence, transition metal oxides, the silicon diode array camera tube, and Hall effect devices.

Dr. Smith is a member of Pi Mu Epsilon, Phi Beta Kappa and Sigma Xi, he is a Senior Member of the Institute of Electrical and Electronics Engineers and a Fellow of the American Physical Society. In October, 1973, he received the Stuart Ballantine Medal of the Franklin Institute for the invention of the charge-coupled device concept. In February, 1974, he received the IEEE Morris M. Liebmann Memorial Award "For the invention of the charge-coupled device and leadership in the field of MOS device physics". He holds 16 patents, has 10 patents pending and is the author of approximately 40 published articles.

George Smith and his wife, Janet, reside in Murray Hill, New Jersey. He enjoys playing golf and is a sailboat enthusiast, docking at a summer home on Barnegat Bay in New Jersey. The Smith's have three children, Carson, Leslie and Laurie.

RALPH W. WYNDRUM, JR.
For contributions to hybrid integrated circuit development and application.

Ralph W. Wyndrum, Jr. has been head of the Loop Transmission Technology Department at Bell Telephone Laboratories since 1969. He is responsible for the development and installation of several digital and analog carrier systems and Picturephone® systems. He has received the B.S. and M.S. degrees in electrical engineering from Columbia University, New York, N.Y., where he was a Grumman Scholar and a Regent Fellow. During the intervening summers, he gained practical mechanical engineering experience as an aircraft riveter, welder, and antenna designer. An incidental benefit of this experience was the French Ralph learned from an assembly line co-worker from Haiti. Wyndrum earned his doctorate in 1963 from New York University, New York, where his doctoral research provided the first synthesis procedure, in the classical sense, for distributed RC networks. He is a member of Eta Kappa Nu and Sigma Xi.

In 1963 Wyndrum joined Bell Laboratories in device development where he was closely associated with tantalum thin-film circuit development. His work included the development of resistive networks, decoders, UHF integrated circuit amplifiers, and several basic hybrid IC design concepts. For this work he has received six patents. In 1965 he became Supervisor of the Exploratory Circuit Applications Group, responsible for developing new applications of IC technology, including computer-aided design tools. Wyndrum is the author of about 25 technical papers as well as two chapters in recent McGraw-Hill and Wiley texts concerning computer-aided IC design and active networks. He was promoted to Head of the Loop Transmission Technology Department in 1969.

He has augmented his work at Bell Laboratories with teaching assignments at both NYU and Newark College of Engineering, Newark, N.J., Graduate Programs. Wyndrum is a member of the IEEE Long Range Planning Committee, Vice Chairman of the INTERCON Technical Program Committee, Session Chairman of the 1974 IEEE International Symposium on Subscriber Loops and Service, Associate Editor for the Wire Communications Committee, and an editorial reviewer for several IEEE **Transactions**. In 1968 he was awarded Honorable Mention in the Eta Kappa Nu Award for Recognition of the Outstanding Young Electrical Engineer. His outside interests include teaching Sunday School, soliciting funds for Columbia University in his role as Class Chairman (1959, engineering), and taking on his wife and four growing children in tennis.

AARON D. WYNER
For basic contributions to information theory.

Aaron D. Wyner received the B.S. degree in mathematics and physics from Queens College, Flushing, N.Y., in 1960, and the B.S., M.S., and Ph.D. degrees in electrical engineering from Columbia University, New York, N.Y., in 1960, 1961, and 1963, respectively.

He has been a full- and part-time faculty member of the Department of Electrical Engineering at Columbia University and the Polytechnic Institute of Brooklyn. Since 1963 he has been at Bell Laboratories, Murray Hill, N.J., and is presently Head of the Communications Analysis Research Department. For the year 1969-1970 he was on leave from Bell Laboratories at the Weizmann Institute of Science, Rehovot, Israel, and at the Technion-Israel Institute of Technology, Haifa, Israel, on a Guggenheim Foundation Fellowship.

Dr. Wyner is a member of Tau Beta Pi, Eta Kappa Nu, and Sigma Xi. He has been active in the Information Theory Group of the IEEE, and is presently Vice-President. In the past he has served as Chairman of the Group's New York Chapter, as an Associate Editor of this **Transactions**, and as a Co-Chairman of two International Information Theory Symposia.

April Meet On Experiments In ESP

The North Jersey Section of the Power Engineering Society will hold its Third Annual Dinner Meeting honoring past chairmen on April 7, 1975. The evening will feature a roast top sirloin of beef dinner, presentation of awards, and a program by Professor John Mihalasky.

Dr. Mihalasky, a professor of industrial engineering at Newark College of Engineering Division of New Jersey Institute of Technology, will give a presentation on "Modern Experiments in ESP". This is Professor Mihalasky's basic talk on ESP and what it's all about. The presentation covers the areas of mental telepathy and precognition; the application of telepathy in communication; and the use of precognition in decision-making. Professor Mihalasky describes how his research is organized to guarantee the validity of the results and conducts an actual experiment with his audience to prove that ESP does, indeed, exist and that it works. Dr. Mihalasky holds degrees in mechanical, industrial and management engineering; a Masters of Business Administration in economics and management and his doctorate from Columbia University.

This Third Annual Dinner Meeting will be held at the Rock Spring Inn, 481 Northfield Avenue, West Orange, New Jersey on Monday, April 7, 1975. A dutch treat cocktail hour will begin at 6:00 P.M. and dinner will be served at 7:00 P.M. The charge for the dinner, including gratuities, will be $5.50. Wives and guests are most cordially invited to attend. Reservations must be made by April 1, 1975 to John R. Redmon, Public Service Electric and Gas, 90 West Grand Street Elizabeth, New Jersey 07202, phone: 353-7000, ext. 545.

Worth Repeating

Experience is a much greater teacher than any school—a person should learn on his own.

Emil Muench

Whatever happens, do not lose hold on the two main ropesof life, Hope and Faith.

Anonymous

Correcting The Record

In our November, 1974 issue, the affiliation shown for Dr. Gilbert Starr, one of the speakers at a meeting on microprocessors sponsored by the P & I Division was incorrect. Dr. Starr is President of Micro Digital Corp. of Fort Lee, New Jersey.

Cut along this line

Fold along this line

Staple

FIRST CLASS
Permit No. 3
Mt. Arlington
New Jersey

BUSINESS REPLY MAIL
No Postage Stamp Necessary If Mailed in the United States

POSTAGE WILL BE PAID BY—

NORTH JERSEY SECTION IEEE

BOX 455

MT. ARLINGTON, N.J. 07856

2 What type of format appeals to you?
One day seminar
Correspondence
Week Nights

3 Are you interested in assisting the Education Committee in its works?
You might be asked to help plan a seminar or set up a correspondence course.
☐ Yes I am interested. ☐ No I am not.

NOTES TO THE EDITOR:

February 1975

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2	**3**	**4**	**5** N.J. Section Exec. Comm. Meeting, 7:30 P.M., Bell Labs, Whippany	**6**	**7**	**8**
9	**10**	**11**	**12** N.J. Chapter Communication and Microwave Theory & Technique Division Meeting, 8:00 P.M., Bell Labs, Whippany	**13**	**14** St. Valentine's Day	**15**
16	**17** George Washington 1732 (Monday Holiday Bill)	**18** N.J. Computer Society Meeting, 8:00 P.M., Bell Labs, Murray Hill	**19** Industrial Applications Society and Power Engineering Society General Meeting, 6:00 P.M., World Trade Center, N.Y.C.	**20**	**21**	**22** George Washington 1732 (Traditional)
23	**24**	**25** N.J. Control Systems Society Meeting, 8:00 P.M., Bell Labs, Murray Hill	**26** N.Y. and L.I. P&I Division World Trade Center (WTC) Tour, 2:00 P.M., WTC, N.Y.C.	**27**	**28** Copy Deadline For April Issue of The NEWSLETTER	

FUTURE MEETINGS:

Mar. 1, 1975—N.J. Section Fellows Night. 7:00 P.M., Governor Morris Inn, Morristown.
Mar. 4—N.J. I.E.E.E., A.S.M.E., local P.E. societies and I.S.A. Joint Meeting on "The Engineer in Today's Society." 8:00 P.M., Coachman Inn, Cranford.
Mar. 11—N.J. Communications Society and Computer Society Joint Meeting on Data Security & Privacy. 8:00 P.M., Informatics, River Edge, N.J.
Mar. 12—Multi-Group Meeting. 3:15 P.M., Bell Labs, Murray Hill.
Apr. 7—N.J. P.E. Society Third Annual Dinner Meeting. 7:00 P.M., Rock Spring Inn, West Orange.
May 15-16—Metro Area MOS Symposium. City Univ. of New York, N.Y.C.
Aug. 11-12—1975 Midwest Symposium on Circuits and Systems. Sir George Williams Campus of Concordia Univ., Montreal, Canada.

APRIL 16 - PROGRAMMABLE ~~Computers~~ Calculators Past/Present & Future

Data Communication Security & Privacy

On Tuesday, March 11, Mr. Robert H. Courtney Jr. of IBM will address the North Jersey Chapters of the Communications Society and Computer Society on DATA SECURITY & PRIVACY.

The presentation will provide

- a rationale
- a systematic procedure

for the selection of security measures on the basis of cost/effectiveness relationships.

Mr. Courtney is IBM's Manager of Data Security and Privacy. He is responsible for establishing architecture and design criteria, to assure data security in hardware and software.

He joined IBM as Manager, Intelligence Systems Department, in the Federal Systems Division, in 1960. His publications are numerous and he is active in industry and government committees addressing privacy issues.

Time: 8:00 P.M. Tuesday, March 11.
Place: INFORMATICS
65 Route 4, River Edge, N.J.
Pre-Meeting Dinner:
6:30 P.M. Boodle's Restaurant
259 Johnson Av. River Edge.
FURTHER INFORMATION:
Alex. J. McPhee, 201-967-9415

Reserve Saturday, March 1, 1975 for the NJ IEEE Section Banquet

World Trade Center

The Power and Industrial Division, New York and Long Island Sections, is sponsoring a two-hour tour of World Trade Center in New York City, on Wednesday, February 26, 1975 at 2:00 P.M.

For reservation and information send self-addressed envelope to: Mr. George Vickers, ASEA Inc., 4 New King Street, White Plains, N.Y. 10604.

Executive Terms

To negotiate—To seek a meeting of minds without knocking together of heads.
Re-orientation—Getting used to working again.
Reliable source—The guy you just met.
Informed source—The guy who told the guy you just met.
Unimpeachable source—The guy who started the rumor originally.
A clarification—To fill in the background with so many details that the foreground goes underground.
We are making a survey—We need more time to think of an answer.
Note and initial—Let's spread the responsibility for this.
Let's get together on this—I'm assuming you're as confused as I am.
See me, or let's discuss—Come down to my office; I'm lonesome.
Give us the benefit of your present thinking—We'll listen to what you have to say as long as it does not interfere with what we've already decided to do.
With modifications— Will be shipped to you in kit form—put it together (if you can) yourself. Glue optional.

FEEDBACK CARD

1 The Education Committee has asked the **Newsletter** to find out what the members are interested in. On what subject matter would you like a course offered?

Power
Communications
Computers
Control Systems
Reliability
Engineering Management
Antennas & Propagation
Geoscience
Nuclear Science
Engineering in Medicine & Biology
Systems, Man & Cybernetics
Other (please specify)