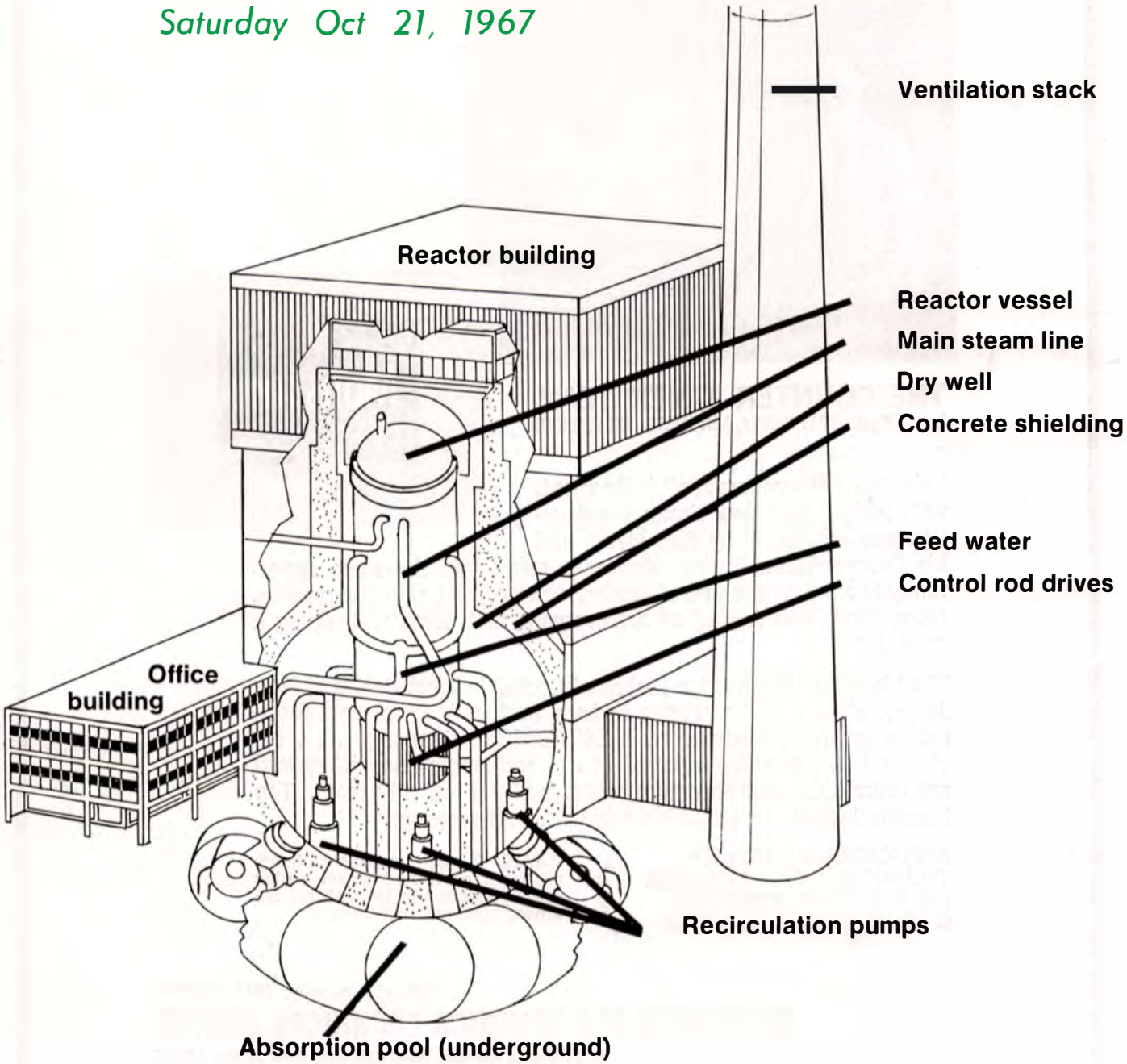
The IEEE
Newsletter
The Magazine of the North Jersey Section

NORTH JERSEY INSPECTION TRIP

Saturday Oct 21, 1967



Oyster Creek Nuclear Generating Station

See Page 11

Volume 14 / Number 2 OCTOBER 1967

The IEEE **Newsletter**

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ABOUT ADDRESS CHANGES

REPORT ALL ADDRESS CHANGES TO:
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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.

NEWSLETTER STAFF

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NORTH JERSEY
SECTION OFFICERS
1967-1968

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Vice Chairman ..... Joseph G. O'Grady
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Executive Committee Meetings
at Verona Public Library
First Wednesday of Month
7:30 P.M.

1967

October 4 — December 6
November 1

1968

January 3 — February 7
March 6 — April 3
May 1 — June 5

All IEEE Members Welcome

CALENDAR

Princeton — Magnetics

The New Semiconducting Ferromagnetic Spinels

The magnetic, electrical and optical properties of this new and unique class of materials will be reviewed by Dr. Peter J. Wojtowicz. An outline of a simple theory which explains the magnetic characteristics of these compounds will be presented.

8:00 P.M. Wednesday, October 18th
Rutgers University
Murray Hall — Room 120

Dinner: Alumni Faculty Club, 6:00 P.M.
Reservations: Mrs. Helen Yefko, E.E. Department, Rutgers University.

Executive Committee Column

Awards Committee

The IEEE creates its image in many ways in the minds of its members and in the views of the rest of the technical fraternity. One important way in which this image is built up is by the care and integrity with which we recognize professional excellence. Our Awards Committee has the responsibility of stimulating such recognition for the North Jersey Section. This committee reviews nominations to the Fellow grade and recommendations for the Institute awards and then forwards these recommendations to the Headquarters Committee. As you may appreciate the size of the section and the depth of study required in reviewing these recommendations make this a very difficult task. In addition, the size of the Institute means that the final processing of these awards places a considerable burden on headquarters.

It is imperative that each and every member of our section recognize that his assistance is vitally needed in selecting these award recipients. Specifically it is the responsibility of the individual members to forward their recommendations for Fellow Grade and the various special awards to the Section Awards Committee. Therefore, if you know of an engineer in the North Jersey Section whose performance deserves special recognition please be certain that it is not overlooked by promptly forwarding his name to the Section Awards Committee.

WELLESLEY J. DODDS
Chairman
Awards Committee

North Jersey MTT
N. Y. Aerospace and Electronics

Microwave Radiometry

Microwave Radiometry may be called Passive Radar. It may be used in all weather because it uses the millimeter wave region of the electromagnetic spectrum and most important it is a passive device. As the state of the art receivers has improved, the applications for Radiometry have grown. Microwave Radiometric Equipment has been developed for a variety of purposes: Astronomy, terminal guidance, military acquisition, target discrimination, navigation, and reconnaissance.

Date:
Thursday, October 19, 1967
Time:
8:00 P.M.
Place:
General Precision Inc.
150 Totowa Road
Wayne, New Jersey
(Turn North from Route 46 at exit between Topps and Two Guys. One mile — then right at Golf Course on Totowa Road, 2/10 miles to 150 Totowa Road)
Speaker:
Myron M. Rosenthal
(Radiometric Section Head)
General Precision Inc.
Kearfott Systems Division
Wayne, New Jersey
Pre-Meeting Dinner:
Pomptonian Restaurant
Cedar Grove, New Jersey
Route 23, 2 miles South of Route 46
Time:
6:30 P.M.


Myron M. Rosenthal

Biographical Note:
Mr. Rosenthal received his BEE from CCNY and a MS in Math from Adelphi College. He is an Engineering Section Head in the Systems Research Department of General Precision Inc. He has taught courses at Polytechnic Institute of Brooklyn for the past 13 years. He is Secretary of the GAES Metropolitan Chapter of the IEEE. He received the 1967 "Best Presentation Award" at the National Aerospace and Electronics Conference.

North Jersey — Computer

Three Talks Planned

The Northern New Jersey Computer Group has planned an interesting program for the winter season. Among the talks will be the following: "Digital Computers to Perform Filtering", "Illiac 4 from the Manufacturer's Viewpoint" and, in cooperation with the Power Group, "Power System Security and Dispatch Computer." Specific details will appear in the next Newsletter.

New York Study Group

Transmission Problems in Computer Controlled Data Systems

There is every indication that data communications will affect the lives of everyone. The subject is not new to some, but the constantly changing associated technologies pose very interesting problems and viewpoints. Join us to hear well known experts on the subject. A series of six lectures on "Transmission Problems in Computer Controlled Data Systems" will be presented by the Communications Technology Group, New York Section, IEEE, on Monday nights beginning October 16. These lectures will be held in the Little Theatre, New York Telephone Building, 140 West Street, New York City starting at 6:30 P.M.

Send check, payable to "Communications Technology Group, New York Section, IEEE," c/o Mr. Paul Lenner, Room 1230, New York Telephone Company, 330 Madison Avenue, New York, New York 10017. Registration fees for the full series are: $5.00 for IEEE members; $8.00 for non-members; and $1.00 for full-time students. Register early as audience size will be restricted to seventy. Tickets for attendees will be distributed at the first lecture.

Non-Members $40.00

Switching Systems and Their Applications

A three part, nineteen lecture series will be rerun to accommodate those unable to attend the previous lectures given last Fall.

Fee:
Students $10.00, Member $35.00
Non-Member $45.00

The two hour lectures for both series will be held in the Little Theater, New York Telephone Company Building, 140 West Street, New York City and will start at 6:30 P.M., October 11.

Registrations must be made in advance and will be limited to 65 persons for each series.

MR. N. J. SYVERTSEN
Treasurer, Education Committee
"Switching Systems and
Their Application" series
New York Telephone Company
Room 2611
140 West Street
New York, New York 10007

I wish to enroll in the following parts of the Communications Technology Group Lecture series on "Switching Systems and Their Application."

Three Part Series Part I Part II Part III

☐ I am an IEEE Member
☐ Non-Member ☐ Full-time Student

My check for $ ..... is enclosed.

Name .....

Affiliation .....

Mailing Address .....

.....

.....

Phone .....

THE INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS INC.

NORTH JERSEY SECTION

Fall 1967 **Lecture Series**

Fortran Programming For Digital Computers

A six session course to teach engineers and others to solve engineering problems on a digital computer.

Basic Reliability Engineering

An eight session study group on probability and statistics to familiarize the engineer with statistical concepts, techniques, and applications.

Electrical Power Distribution for Industrial Plants

A ten session lecture series designed to present a clear understanding of the principles and protective equipment used in the planning, designing and operation of the Electrical Power Distribution System for Industrial Plants.

FORTRAN PROGRAMMING

FOR

DIGITAL COMPUTERS

(JOINT IEEE — ASME COURSE)

A six-session course to teach engineers and others how to use Fortran programming to solve engineering problems on a digital computer.

October 11 — Introduction and Arithmetic Statements
October 18 — Input/Output Statements, Subscripting, Control Statements
October 25 — IF Statements, Looping, DO Statements
November 1 — Use of DO Statements
November 8 — Format, Subprograms, Subroutines
November 15 — Review, Problem Solving, Visit Typical Computer Installation

INSTRUCTOR ..... Mr. H. E. Blaicher, Jr., Distribution Planning Engineer, Jersey Central/ New Jersey Power and Light Company.

TIME ..... 7:00 P.M. to 9:00 P.M. — Wednesday Evenings — October 11 to November 15, 1967.

PLACE ..... Jersey Central/New Jersey Power and Light Company, Room B-09, Madison Avenue at Punch Bowl Road, Morristown.

FEE ..... $30.00 Members (I.E.E.E., ASME, etc.); $40.00 Non-Members. $5.00 discount for early registrations. Text material will be supplied.

Send Registration Forms To: Mr. James C. Gass
Allis Chalmers Mfg. Co.
2222 Morris Avenue
Union, New Jersey
Phone: MU 7-3700

REGISTRATION FORM — FORTRAN PROGRAMMING COURSE

Name ..... Tech. Society .....

Firm ..... Phone .....

Address .....

Check Enclosed Member: $25.00 .....; $30.00 after Oct. 9 .....

Non-Member: $35.00 .....; $40.00 after Oct. 9 .....

Please make checks payable to: North Jersey Section, I.E.E.E.

BASIC RELIABILITY ENGINEERING

An eight session study group will be presented on probability and statistics to familiarize the engineer with statistical concepts, techniques, and applications under the direction of Dr. R. Misra of the Section Reliability Group.

October 19 — Introduction to Reliability Problems in Electronics.
Instructor: R. L. Trent, NASA

October 26 — Probability Theory and Basic Distribution
Instructor: Professor H. Barkan, N.C.E.

November 2 — Distribution
Instructor: Professor H. Barkan, N.C.E.

November 9 — Sampling Theory
Instructor: A. Fennochi

November 16 — Sampling Practices
Instructor: A. Fennochi

November 30 — Basic Failure Mechanisms in Semi-Conductors
Instructor: Professor R. Misra, N.C.E.

December 7 — Failure Mechanisms in Capacitors and Electronic Tubes
Instructor: Professor R. Misra, N.C.E.

December 14 — Management Problems in Reliability Engineering
Instructor:

TIME ..... — 6:30 P.M. - 8:30 P.M. — Thursday Evenings — October 19 to December 14, 1967.

PLACE ..... — NEWARK, NEW JERSEY.

FEE ..... — $30.00 Members; $40.00 Non-Members. $5.00 discount for early registration. Printed notes will be supplied.

Send Registration Forms To: Mr. John Zemkowski
Public Service Electric & Gas Company
80 Park Place, Room 6319
Newark, New Jersey 07101
Phone: 622-7000, Ext. 3008

REGISTRATION FORM — BASIC RELIABILITY ENGINEERING COURSE

Name ..... Tech. Society .....

Firm ..... Phone .....

Check Enclosed Member: $25.00 .....; $30.00 after Oct. 12 .....

Non-Member: $35.00 .....; $40.00 after Oct. 12 .....

Please make checks payable to: North Jersey Section, I.E.E.E.

ELECTRIC POWER DISTRIBUTION FOR INDUSTRIAL PLANTS

A ten session study course to help electrical, consulting, and project engineers, contractors, architects, and others who are concerned with power distribution systems. It will be especially valuable in providing a sound working knowledge of engineering principles necessary to properly select and lay out an economical, adequate, safe, and reliable power system. The presentations will be made by engineers from the General Electric Company who have specialized in designing distribution equipment for industrial plants.

Oct. 9 — Basic Considerations — Preview of material to be covered, factors affecting the planning and selection, load surveys, one line diagrams, use of symmetrical components for short circuit calculation.
Instructor: J. W. Gordon, Application Engineer, East Orange.

Oct. 16 — Short Circuit Calculations — effect of faults, how to make a short-circuit study, per unit and percent systems, problems.
Instructor: A. H. Moore, Application Engineer, New York.

Oct. 23 — Short Circuit Calculations, calculating procedures, examples, use of handbook data.
Instructor: A. H. Moore, Application Engineer, New York.

Oct. 30 — Selection and Application of Protective Devices — need for adequate devices, significance of breaker and fuse rating, use of application tables, equipment available, review of short-circuit tests.
Instructor: Paul Reifschneider, Application Engineer, Philadelphia.

Nov. 6 — Selection and Application of Protective Devices — breaker ratings and fuse ratings, factors to consider in selection of equipment, problem solutions.
Instructor: Frank Shields, Application Engineer, Schenectady.

Nov. 13 — Voltage Regulation and Power Factor Improvement, importance of good voltage, voltage drop, power factor fundamentals, calculation methods, capacitor facts and fallacies, rate studies.
Instructor: W. C. Bloomquist — Manager, Application Engineering, Schenectady.

Nov. 20 — Relay Coordination, factors to be considered in coordination studies, use of time current curves, protective device characteristics, example of coordination, code and standards consideration, differential protection, ground sensors.
Instructor: A. H. Moore, Application Engineer, New York.

Nov. 27 — Selection of Conductors — selection and application of cables for main and branch circuits, overhead versus underground systems, shielding practices, splicing and terminating.
Instructor: D. H. Peterson, Wire & Cable Specialist, New York.

Dec. 4 — Overvoltage Grounding — nature and causes of overvoltage, demonstration of grounded versus ungrounded systems, case studies, selection of grounding methods, selection of lightning arresters and surge capacitors.
Instructor: George Walsh, Application Engineer, Schenectady.

Dec. 11 — Power Systems for Industrial Buildings— voltage and circuit selection for small, medium and large buildings, schools, etc., 460Y/265 volt versus 208/120 volt systems, economic factors affecting selection, 3000 cycle lighting, overcurrent protection, selection of proper and economical equipment for buildings fed from high short-circuit capacity networks.
Instructor: I. C. Cranos, Application Engineer, Schenectady.

TIME ..... 6:30 - 9:00 P.M. Monday nights — Starting October 9, 1967 and ending December 11, 1967.

LOCATION ..... Punchbowl Room, Jersey Central/New Jersey Power and Light Company, Madison Avenue at Punch Bowl Road, Morristown, New Jersey.

FEE ..... $50.00 to members (IEEE, ASME, NJSSPE, etc.) ; $60.00 to non-members. $5.00 discount for early registrations. The following text material will be supplied:

1. Industrial Power Systems Handbook — McGraw Hill ($22.50).
2. IEEE 141 Electrical Power Distribution for Industrial Plants ($3.00).
3. IEEE 241 Electric Systems for Commercial Building ($6.00).

Send Registration Forms To: Mr. B. G. Geertsma
Jersey Central/N. J. Power & Light Co.
Engineering Department — Substation
Madison Avenue at Punch Bowl Road
Morristown, New Jersey 07960
Phone: 539-6111; Ext. 498

REGISTRATION FORM — INDUSTRIAL POWER COURSE

Name ..... Tech. Society .....

Firm ..... Phone .....

Check Enclosed Member: $45.00 .....; $50.00 after Oct. 2 .....
Non-Member: $55.00 .....; $60.00 after Oct. 2 .....

Please make checks payable to: North Jersey Section I.E.E.E.

Student Affairs

Calendar

Fairleigh Dickinson University—Day

Branch meetings will be held on October 5 and October 19 at 10:00 A.M. in Room W-7.

Topics of discussion will include the tour of the Fort Monmouth Communications Facility scheduled for a date in October (date and time to be announced on campus), and increasing sophomore class membership in the student branch.

Newark College of Engineering — Evening

Branch meetings will be held on October 11 and October 25 at 9:20 P.M. in Room 213F.

The main topic of discussion will be the local NCE student paper contest. The scheduled prizes are:

First Prize:	$50.00
Second Prize:	$25.00
Third Prize:	$25.00

New York Section Communication Technology Lecture Series — 1967-1968

Sponsored by the Education Committee

Integrated Circuits

A ten lecture, two part series on Integrated Circuits

Fee:

Students $10.00, Members $30.00

MR. N. A. MACINA
Treasurer, Education Committee
"Integrated Circuits" Series
RCA Communications Systems Division
75 Varick Street
New York, New York 10013

I wish to enroll in the following parts of the Communications Technology Group Lectures series on "Integrated Circuits."

Two Part Series Part I Part II

☐ I am an IEEE Member
☐ Non-Member ☐ Full-time Student

My check for $ ..... is enclosed.

Name .....

Affiliation .....

Mailing Address .....

.....

.....

Phone .....

Joint Metropolitan — Instrumentation and Measurement

A most interesting evening, which includes a dinner, lecture, and tour of the Grumman Lunar Module and its associated instrumentation facilities has been arranged for October 23, 1967. Only United States citizens may attend. Dinner is $5.00 and checks should be mailed not later than October 17, 1967 to Mr. Howard Lustig, General Instrument Corporation, 100 Andrews Road, Hicksville, N. Y. 11802. Telephone contact is (516) 681-4300.

Destiny and New Jersey

by Morris D. Hooven

The following is the text of the address by Morris D. Hooven, past president of the IEEE, at the fourth annual Section dinner-meeting held on June 14 at the Robin Hood Inn, Clifton.

With heat and war clawing at our bodies and minds, the past week has been a poor one in which to sit back and think about ourselves. However, it is not too difficult — even on a hot night — to sit here and be just a little complacent, even a little smug, about ourselves. Tonight is a night of celebration. We are honoring here men of capability and devotion — men who have given of their talent and time to advance our own art. And what sweeter award can there be than that of recognition by one's own working companions?

And I have the feeling — a half buried feeling — but a doubly strong one nevertheless—that we tonight are at a culmination of accomplishment compounded throughout the centuries and at a spot—here at the Robin Hood in Clifton in New Jersey — where we somehow see the technologies of the living past meet the technologies of the future. For the past is still alive and the future stirring: Look at last week.

The two most ancient peoples of which we have record, the Egyptians and the Jews, were at each other's throats — Both peoples have in their pasts the very beginning of engineering accomplishments. True. the Pyramids antedated King Solomon's Temple by centuries and outlived it by centuries; the Temple was ornate, the Pyramids solid; but the point is not their differences but their samenesses. Both peoples are now dependent — not upon their own cultures but upon Western Civilization for their engineering development.

It is not my purpose to explore why these two great civilizations with their marvelous start on the rest of the world in engineering accomplishments did not continue to lead their sister nations. If I were pressed for a reason I could guess that their engineers were never given their place in the sun. True. the Egyptian engineers ate at the king's breakfast table, but somebody else ate the banquets. And King Hiram of Tyre most certainly ran his architects and artisans most efficiently, but it was King Solomon the warrior who reigned in all his glory.

But if I won't try to tell why civilizations decay, I will try to tell you why this one here, now, at this moment, is on the crest of the wave — because I think I know. This technological civilization of ours takes its brightest young men and makes engineers out of them. (The highest AGCT scores generally chose engineering). It takes those who can stand the gaff of constant study while their schoolmates are out socializing, and makes engineers out of them. (The hours in the engineering curricula are much longer than the average college course). It takes men of the highest moral character and makes engineers out of them. (As far as I can determine there is not a single electrical engineer in any New Jersey jail tonight). And it takes the best husbands and puts them in engineering. (The divorce rate for the engineer is far below that of the average male). And, while I must admit that our handsomest men do not gravitate to engineering, I hold it self evident that the engineers marry the prettiest wives.

Engineering in New Jersey had its start in water works and canals — SUM in what is now Paterson was born in 1794. The Morris Canal and the Delaware & Raritan were monumental accomplishments of the early eighteen hundreds — Then came the railroads. ASCE was founded in 1854, just across the river and here, in its meetings, the American genius for engineering development began to assert itself. Papers were read in public; discussion, praise, criticism were the author's reward. When it is considered that, prior to the professional society paper approach, new engineering developments were locked up in secret files, it becomes clear why the explosion in technology hit us.

Within the past few months the papers have described how a Spanish priest uncovered in the archives some of the original notebooks of Leonardo DaVinci. Many of these sketches and notes were so far advanced that they could have been a help to modern thinking. Imagine, if you please, how much further along the world would have been if the DaVinci papers had been presented in open meeting to a group of confreres such as we have here tonight.

To come back to the Civils — Their meetings went on apace. At the end of the Civil War, the whole nation seemed to occupy itself with railroad building. The mechanical engineers who designed the locomotives needed a forum for their papers. The electrical engineers whose telegraph lines extended across the continent needed a place for their papers. There was not room on the Civils' programs (all meetings were held in New York in those days) so that in the early 1880's, the mechanicals and electricals pulled out of the Civil Society, established their own headquarters in the same building. The call for organization of the Electricals was signed by 25 persons, twenty of whom were associated with the telegraph. Thomas Edison signed as an inventor. Many of the new members came from the New York Electrical Society. The first paper read at the first convention in Philadelphia in the fall of 1884, considered the "Edison Effect", the transmission of electric current through space within a vacuum tube. Discussion brought forth no specific explanation and the invention of the electron tube as it is now known was delayed for another score of years.

New Jersey was making rapid electrical engineering progress in the score of years that followed the foundation of the Institute. The predecessors of Public Service, small lighting companies, had a start in those days. Electric traction and electric street lighting filled the programs of the new Institute as well as power, lighting, and communication. Newark, Bloomfield, Paterson were centers of hardware manufacture. The regular Institute meetings were held in New York about once a month. A Marconi Exhibit and wireless discussion was held before 1900, by which time AIEE had 1.000 members mostly centered in New York and New Jersey. Programs again became crowded. The Electro-Chemical Society. later the Chemical Engineers, split off as did the Illuminating Engineering Society and the Association of Iron and Steel Electrical Engineers. It was difficult to program papers over such a wide field. Communication and power supply were of course the larger interests. Important communication papers were DeForest's "Audion" and Fessenden's "Wireless Telephony." New splitoffs, the Society of Wireless Engineers and the Wireless Institute, combined in 1912 to form the Institute of Radio Engineers. The two societies always considered themselves sister organizations (perhaps mother and daughter?) and their pattern of development was much the same. Remember that in the teen's and early 20's both Institutes were New York and New Jersey centered with national meetings largely held in Manhattan.

Our parent or grandparent section, the New York Section of AIEE, was not formed until the 1920's when its first chairman was Farley Osgood, a Jerseyite. Even at that, the New York Section, unlike all the other geographical sections, remained under the direct administration of the Institute's Board of Directors until the 1940's. The Radios, whose 1920 meetings were held in a classroom at Columbia University were beginning to grow in other parts of the country, Rochester, New York, for one and Washington, D. C. for another, so that its own New York Section came into being. The AIEE Power Group, founded in 1929, discovered the popularity of educational courses as did the Radios within a few years. We needed something to sustain us through the Depression. The war brought with it an almost infinite number of electrical problems. WRG Baker, then President of IRE and a prime-mover in AIEE's technical activities, conceived the idea of specialized professional or technical groups which were established in both Institutes. The war seemed to spread industries and laboratories throughout New Jersey; industry representatives wanted some meetings in New Jersey in addition to those traditionally held in New York. I well remember the rather conspiratorial luncheon table in the Robert Treat in 1945 where ten or a dozen of us, knowing that the New York Section was half Jersey people and knowing that our recently circulated questionnaire had resulted in a vote against secession, established the New Jersey Division as a part of the New York Section. Those people are mostly retired now — I can think of only Larry Lunas and me as still active.

It was somewhat different with the Radios. Postwar brought a great increase in the number of IRE members, particularly in Long Island. Our New Jersey interest seemed differently centered somehow so that in 1956 or thereabouts we bade good-bye to our New York parent and started off on our own as a full fledged section of IRE. As I remember the Robert Treat for the first break-off from New York, I seem to remember the Marlborough Inn in Montclair for the other. I recall Frank Polkinghorn, Sam Christaldi, both stalwart members of the Montclair Society of Engineers', as spark plugs. Names like Chipp, LaPorte, Kreer echo in the back of my head. In any event a half dozen years of engineering activity and cooperation with the New Jersey Division of AIEE then preceded the merger. It is convenient to look at the 20 year period between the end of the war and the consolidation of the Institutes as a kind of gestation period for the new born babe whose party we celebrate tonight — the North Jersey Section of the Institute of Electrical and Electronics Engineers. During that 20 year period electrical engineering in New Jersey grew at a

literally astounding pace. The recently celebrated New Jersey Tercentennial threw in our faces the astounding facts concerning the migration to New Jersey of laboratories, research projects, new industries, all of which, seem to have been built around a core of electrical engineering. With its great engineering background, North Jersey easily absorbed into its community the new engineers that the new projects had attracted to New Jersey. Newark College of Engineering, Stevens, Rutgers, Princeton, and more recently Fairleigh Dickinson, have been turning out hundreds of electrical engineers annually. Time does not permit even a listing of the projects in which these engineers are engaged. Those of you who read the Section's programs, and who attend a fraction of the meetings of our section, our groups, our chapters, know the breadth of coverage. Those wives who miss their husband's company at the movies know even better the amount of time consumed in managing and directing the flow of information that is channeled into the intellects of the North Jersey Engineers. The problem is almost twice as great as it was a short 15 years ago — 3,000 North Jersey members then, 5,500 now.

Earlier I mentioned the erection of a living future on the living past. We are living in an Engineering Civilization; we exist in a Culture of Technology. I am provincial enough to assert that this Technology has an Electrical core. I am proud to be provincial enough to say that New Jersey is the Broad and Market of Engineering and Science. I congratulate our new-old Section, and its presently recognized leaders, on its well-done duties at the crossroads. I bow to Steve Mallard at the end of his completely successful administration. I swear fealty to Bernie Meyer, our new chairman — And, most of all, I give, without reservation, my full admiration and respect to the women-folk who have made possible the expenditure of time and energy which has made the Section the admirable organization it is — I thank you.

North Jersey Reliability

Date:
October 19, 1967

Place:
Two Bridges Country Club
Lincoln Park, New Jersey

Time:
Dinner — 6:30 P.M.
Meeting — 8:0 P.M. to 10:00 P.M.

The meeting will consist of a panel discussion. Panel members will represent large and small companies involved in both military and commercial business. The components and systems approaches will be considered.

Questionnaires requesting attendance information and questions for the panel were mailed late in September. If you didn't receive one of these questionnaires please send your questions to: Donald Brown, c/o Union Carbide Corporation/ Kemet, 1341 Hamburg Turnpike, Wayne, New Jersey.

IEEE members as well as non-members are welcome to attend the meeting and discuss their reliability problems. If there are sufficient questions the meeting will continue beyond the formal discussion.

North Jersey Section Inspection Trip

Tour of Oyster Creek Nuclear Generating Station

The North Jersey Section will sponsor an inspection trip to New Jersey's first nuclear station and one of the largest investor-owned nuclear generating plants in the nation. The plant is owned by the Jersey Central Power and Light Company, a subsidiary of General Public Utilities Corporation.

The plant is located near Barnegat Bay on a 800 acre site in Lacey Township. It lies between Route 9 on the east, the Garden State Parkway on the west, the south branch of the Forked River on the north and Oyster Creek on the south.

The cost of the plant is $68,000,000 and will employ approximately 70 persons. The rated capacity is 515,000 Kilowatts with an expected capacity of 640,000 Kilowatts.

Nuclear reactor being lifted into the reactor building at the Oyster Creek nuclear generating station.

Please plan to arrive a little early because the tour will start promptly at 10:00 A.M. and those attending are limited to males only, 16 years and older. The plant can be reached by leaving the Garden State Parkway (southbound) at exit 74, proceed to Lacey Road, turn left back over the parkway to the first traffic light which is Route 9. Turn right about two miles to plant site. Use second entrance opposite "V" sign readable from both directions. Hard hats must be worn and utility will furnish them. It is expected that the tour will take 1½ hours.

If you plan to attend, please send in the reservation slip below.

For late reservations, telephone Carl C. Torell, 201 - 624-7500.

CARL C. TORELL
c/o Federal Pacific Electric Company
50 Paris Street
Newark, New Jersey 07101

I plan to attend the Oyster Creek plant tour Saturday, October 21st.

Besides myself, I will bring ..... guests.

Name .....Telephone Number .....

Address .....
No. Street City State Zip No.

New York — Computer

Computers For Tactical Use

The progress—and lack of progress—in developing computers for tactical use by the U. S. Army will be discussed at the October 17 meeting of the N. Y. Chapter of the IEEE Computer Group.

Far fewer computers — apart from those in weapons systems — are in tactical use in the army today than were forseen when such equipment was first introduced in 1961. Why this is so and what is happening in this important area will be discussed by Milton A. Lipton, Chief, Data Processing Branch, Communications and ADP Laboratory, U. S. Army Electronics Command, Ft. Monmouth, N. J.

The meeting will begin at 7:45 P.M. at National Cash Register, 50 Rockefeller Plaza. A pre-meeting dinner will be held at Schraffts restaurant, 21 W. 51st Street at 6:00 P.M. See you there.

Could you help another engineer use this instrument to solve his measurement problem?

If you understand instrumentation, like to keep up with the state of the art in measurement—and would find satisfaction in helping other engineers solve their measurement problems, we've got a challenging opportunity for you.

Hewlett-Packard sales engineers find satisfaction... and reward...in helping other engineers. They help, in a dynamic way, by offering measurement solutions with the world's broadest and most sophisticated line of test instruments.

To enjoy this work, you have to be interested in your customer's problems, and you have to keep up with the state of the art—the newest Hewlett-Packard instrumentation, what it measures and how to apply it. That's why Hewlett-Packard engineers are among the best trained in the world. The most successful, too.

If you're seeking a chance to use your engineering training and experience in the dynamic field of marketing, we might have just the opportunity you want: the right sales engineer's job in the right place.

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