Winter General Meeting

January 18-22, 1954

The AIEE Winter General Meeting to be held at the Hotels Statler and McAlpin in New York, N. Y., January 18th to 22nd, will feature the largest technical program in the history of the Institute. The social activities, for which this meeting has also been known, will again be one of the outstanding features. A group of varied and interesting inspection trips has also been arranged, closely allied with the technical sessions.

INFORMAL TEA: Inaugurated last year, this social gathering before the formal program begins was enjoyed by many members and guests. It is hoped that more will participate this year—on Sunday afternoon, January 17, from 4 to 6 p.m., in the Georgian Room of the Statler. There will be no charge.

During this same period the registration facilities will be open for those wishing to avoid the Monday morning rush.

HOTEL RESERVATIONS: Blocks of rooms have been set aside at the Hotel Statler (meeting headquarters) and nearby hotels for members and guests attending the meeting. Requests for reservations should be sent prior to January 8 directly to the hotel of choice and to only one hotel. AIEE should be mentioned in the request and a copy sent to the vice-chairman of the Hotel Accommodations Committee, D. V. Buchanan, Room AU16, Consolidated Edison Company of New York, Inc., 4 Irving Place, New York 3, N. Y. A second and third choice should be noted on this copy.

Due to the current accommodations situation in New York hotels, reservations for arrival on Sunday, January 17, are suggested. If the accommodations at the hotel requested are not available, the Hotel Accommodations Committee will transfer the request to one of the other hotels on the list.

Hotel rooms have been reserved at the following:

Hotel Statler (meeting headquarters), 7th Avenue, 32nd to 33rd Sts.
- Single room with bath .................. $ 6.00 to $11.00
- Double room, double bed ................ 8.00 to 14.00
- Double room, twin beds .................. 9.00 to 16.00
- Studio type .............................. 15.00 to 18.00
- Parlor suites ........................... 25.00 to 27.00

Hotel Governor Clinton, 7th Avenue at 31st Street
- Single room with bath .................. $ 6.00 to $ 8.00
- Double room, double bed ................ 8.50 to 10.00
- Double room, twin beds .................. 10.00 to 13.00

Hotel McAlpin, Broadway and 34th Street
- Single room with bath .................. $ 4.50 to $ 9.25
- Double room, double bed ................ 7.00 to 13.50
- Double room, twin beds .................. 6.50 to 13.50

New Yorker Hotel, 34th Street and 8th Avenue
- Single room, tub and shower ............... $ 6.00 to $10.00
- Double room, double bed ................ 9.00 to 14.00
- Double room, twin beds .................. 10.50 to 16.00

Hotel Martinique, Broadway and 32nd Street
- Single room with bath .................. $ 4.50 to $ 7.00
- Double room, double bed ................ 8.00 to 11.00
- Double room, twin beds .................. 9.00 to 12.00

Hotel Commodore, 42nd Street at Lexington Avenue
- Single room, with bath .................. $ 6.00 to $10.00
- Double room, double bed ................ 9.50 to 12.50
- Double room, twin beds .................. 11.00 to 15.00

Hotel Roosevelt, Madison Avenue at 45th Street
- Single room with bath .................. $ 6.50 to $14.00
- Double room, double bed ................ 11.50 to 17.50
- Double room, twin beds .................. 13.50 to 20.00

Rates are subject to 5 per cent New York City hotel room tax.

SMOKER: The Smoker Committee, under the chairmanship of C. F. Bolles, announces that the smoker will be held on Tuesday evening, January 19, at the Hotel Commodore. Tickets are $10 each and include gratuities. Reservations should be sent to: Smoker Committee, AIEE Headquarters, 33 West 39th Street, New York 18, N. Y. Checks should be made payable to "Special Account, Secretary, AIEE." Reservations received after January 5 will not be honored.

THEATER TICKETS: As in the past, tickets to the following shows currently playing in New York will be available to all AIEE members during the week of the meeting.

<table>
<thead>
<tr>
<th>Show</th>
<th>Evenings</th>
<th>Matinee</th>
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<tbody>
<tr>
<td>Cinerama</td>
<td>$4.00</td>
<td>$2.70</td>
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<tr>
<td>Kind Sir (comedy)</td>
<td>6.00</td>
<td>6.00</td>
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<tr>
<td>Mary Martin, Charles Boyer</td>
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<tr>
<td>Wonderful Town (musical)</td>
<td>8.40</td>
<td>5.40</td>
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<td>Rosalind Russell</td>
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<td>The Tea House of the August Moon (comedy)</td>
<td>6.00</td>
<td>4.80</td>
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<td>David Wayne, John Forsythe</td>
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<tr>
<td>Can-Can (musical)</td>
<td>8.40</td>
<td>6.00</td>
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<tr>
<td>Comedy in Music (revue)</td>
<td>6.00*</td>
<td>4.80</td>
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<td>Victor Borge</td>
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<tr>
<td>Dial M for Murder (drama)</td>
<td>6.00*</td>
<td>4.80</td>
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<tr>
<td>Maurice Evans</td>
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<tr>
<td>The Seven Year Itch (comedy)</td>
<td>6.00*</td>
<td>4.80</td>
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<td>Tom Ewell, Vanessa Brown</td>
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<tr>
<td>My Three Angels (comedy)</td>
<td>6.00</td>
<td>4.80</td>
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<tr>
<td>Walter Slezak</td>
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<tr>
<td>Picnic (drama, Pulitzer Prize)</td>
<td>6.00*</td>
<td>4.80**</td>
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<td>William Inge, Ralph Meeker</td>
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<tr>
<td>Rodgers and Hammerstein musicals</td>
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<td>Me and Juliet</td>
<td>8.40</td>
<td>5.40</td>
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<td>Isabel Bigley, Joan McCracken</td>
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<tr>
<td>The King and I</td>
<td>8.40</td>
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<td>Yul Brynner</td>
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<tr>
<td>South Pacific</td>
<td>6.00</td>
<td>4.20</td>
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<tr>
<td>Martha Wright, George Britton</td>
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<td>**$7.20 for Friday or Saturday.</td>
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All prices shown are brokers' prices.

Checks should be made payable to: "Theater Ticket Committee, AIEE." Requests also should include first and second choice of both name and date of show, and should be sent to: Theater Ticket Committee, AIEE c/o S. Friend, Jr., Anaconda Wire and Cable Company, 25 Broadway, New York 6, N. Y.

Preference will be given in order of receipt to requests for seats in blocks of pairs and the committee reserves the right to reduce requests to sell-out shows to two tickets.

All ticket requests will be acknowledged promptly and refund will be made of any money due in excess of the price of tickets purchased.

Please do not include with theater ticket applications payment for any meeting fee or other item for which remittance should be made directly to Institute headquarters.

Tickets to available radio broadcasts and television shows also will be provided at the time of registration for the meeting.

DINNER-DANCE: J. G. Derse, chairman, has announced that the dinner-dance will be held on Thursday evening, January 21, 1954, in the Grand Ballroom of the Hotel Statler. Music and general arrangements will be the same as those which proved so enjoyable last year. Dress will be formal. Plan now and write soon for reservations at tables for ten. Tickets will be $12 each. Address requests to the Dinner-Dance Committee, AIEE headquarters, 33 West 39th Street, New York 18, N. Y. Make checks payable to "Special Account, Secretary, AIEE."

LADIES' ENTERTAINMENT: The Ladies' Entertainment Committee, under the chairmanship of Mrs. E. S. Banghart, is planning a program of social events that should prove both interesting and enjoyable for the ladies. Registration will open Sunday, January 17, from 4 to 6 o'clock in the foyer of the Georgian Room, and from 9 a.m. on Monday, January 18, in Ladies' Headquarters on the mezzanine. The "Get-Acquainted" Tea will be held on Monday afternoon. Among other events, such as a trip to the United Nations, a luncheon and fashion show at the Waldorf-Astoria, and sightseeing trips, there will be a dinner with entertainment on Tuesday evening (the night of the men's smoker) in the Penn Top. Ladies are urged to send...
reservations in advance to Ladies' Entertainment Committee, AIEE, 33 West 39th Street, New York 18, N. Y.

INSCRIPTION TRIPS: A program of inspection trips of both tech- nical and general interest will be offered to members attending the Winter General Meeting. Since the number of people who may be accommodated is limited on all of the trips, reservations are being requested. A list of the trips to be offered will be announced in the February issue of the AIEE Transactions. For trips to which members are particularly invited, a list of those members receiving invitations will be distributed at the breakfast meeting. Members desiring to participate in any of the trips should make reservations in advance. On some of the trips, proof of U. S. citizenship will be required by the operators for reasons of national security.

Bell Telephone Laboratories, Murray Hill, N. J., (Wednesday afternoon, January 20) — Research in all fields of basic science is conducted at this location. Of special interest to visitors are the Microwave Laboratories, the Digital Computer, the Meteorological Laboratories, and the New Telephone Instrument Laboratories. It is also expected that special demonstrations will be arranged for our members, to be determined by the projects under development at the time of the trip.

Electrochemical Corporation, Old Greenwich, Conn. (Wednesday afternoon, January 20) — This plant is an outstanding example of modern industrial methods applied in the production of chemicals and drugs. The plant is equipped with the latest electrical engineering techniques, and the electrical engineer interested in the rapid and efficient automatic transfer of materials in process of manufacture, this trip should prove to be most interesting.

Long Island Lighting Co., Hicksville, L. I. (Thursday all day, January 21) — The Central Operating Headquarters of the Long Island Lighting Company presently consists of five buildings: the Service Building, Operating Warehouse, Transportation Building, Motor and Test Building, and Station and Construction Shops. The Service Building, a circular semi-basement of four stories, is equipped with highly modern office and laboratory facilities which enable systems operators to control major generating stations and substations. The generating station, a 250,000 kilowatt plant, is situated in the Northeast, features an outdoor turbine, a semi-outdoor steam generator equipped to burn coal, oil, or natural gas, interchangably or simultaneously, and a central station which will be enlarged to handle a second 50,000 kw. station in the near future.

New York Stock Exchange, New York, N. Y. (Thursday morning and afternoon, January 21) — This trip will afford visitors an opportunity to see the trading floor of the Exchange. De G. H. T. and IBM will describe the functioning of their Type 701 Data Processing Machines and will discuss the control problems involved. The inspection will be preceded by a twenty-minute film titled "Piercing the Market Tape." AIEE.

Stearns & Sons, Astoria, L. I., N. Y. (Thursday afternoon, January 19) — This famous ice-cream manufacturing corporation will give members the opportunity to see for themselves the processes employed in the production of their famous ice creams. Members will ride in cabs through the plant and will be shown the storage room, where the ice cream is prepared, the freezing room, and the packing and shipping room, where the ice cream is ready for shipment. The members will also be given a tour of the main office and warehouse, with opportunities for personal inspection of all the products of the plant.

United Nations, New York, N. Y. (Thursday morning, January 21) — Talks on the operation of the Exchange will be followed by a tour of the United Nations building. This building contains three additional floors, and members will be allowed to see the activities on the floor of the Exchange from within the building. The tour will be conducted by AIEE Chairman, Dr. T. M. Schalberg.

Western Union Telegraph Co., Bloomfield, N. J. (Thursday afternoon, January 21) — To view the headquarters facilities continued on page 12

ADVANCED COPIES OF PAPERS

Members may obtain preprints of numbered papers at the uniform price of $3 each (plus 50¢ each for member). Orders should be addressed to the AIEE Order Department, 34 West 39th Street, New York 18, N. Y. These members will be billed for the cost of mailing. A small charge will be made for papers requested after acceptance. In some cases a blank form for the order will be provided at the meeting.

Monday, January 18

10:00 a.m. — Power Generation


10:00 a.m. — Distribution Systems and Lightning Protection


10:00 a.m. — Relays


10:00 a.m. — Chemical Industry


Tuesday, January 19

9:30 a.m.—Rotating Machinery and Joint Subcommittee on Carbon Brushes.
54:09. Practical Aspects of Brush Contact Stability. W. B. Bell, Morgan".
CP** Air Humidity and Brush Contact Drop. H. M. Eley, Westinghouse Electric Corp.
9:30 a.m.—Power Generation
CP** Effects of Accelerated Aging on the Dielectric Strength and Power Factor of Magnet Wire Measured at the Aging Temp. and 60 Hz. W. D. Weidman, Anaconda Wire & Cable Co.
9:30 a.m.—Relays
CP** Single Pole Relaying on Shawinigan Water and Power Co. 230 KV Transmission Lines. R. B. Reed and R. C. Hicks, Shawinigan Water and Power Co.
9:30 a.m.—Electronic Power Converters

9:30 a.m.—Transmission Systems
9:30 a.m.—Factors Affecting Permissible Leakage Currents in Directional Electrical Equipment.
CP** The Threshold of Perceptual Currents. C. F. Dalziel, University of California.
CP** The Viewpoint of the Electrical Manufacturer. W. P. Von Haaren, General Electric Co.
CP** The Viewpoint of the Electrical Equipment Merchandiser. O. F. Johnson, Sears, Roebuck & Co.
9:30 a.m.—Thermal Evaluation of Magnet Wire Insulation.
CP** Thermal Life of Magnet Wire Insulation. Ralph Hall, Phelps Dodge Copper Products Corp.
CP** Determination of Thermal Life of Enamelled Wire by Laboratory Test Methods. A. Suter, Westinghouse Electric Corp.
CP** Additive and Varnish Combination. H. J. Morgan and K. N. Mathis, General Electric Corp.
CP** Effects of Accelerated Aging on the Dielectric Strength and Power Factor of Magnet Wire Measured at the Aging Temperature and 60 Hz. W. D. Weidman, Anaconda Wire & Cable Co.
9:30 a.m.—Reels
CP** Single Pole Relaying on Shawinigan Water and Power Co. 230 KV Transmission Lines. R. B. Reed and R. C. Hicks, Shawinigan Water and Power Co.
9:30 a.m.—Electronic Power Converters

9:30 a.m.—Telegraph Systems
CP** A Facsimile Scanner for Facsimile Scanner. J. V. L. Hogan and M. G. Stamps, Hogan Labs., Inc.
CP** Problems in Facsimile Scanning with Cathode-Ray Tubes. W. H. Bliss, RCA Labs.
CP** Instruments and Measurements
54:17. Thermocouple Types Applicable for Use at Very High Frequencies. O. G. McIntosh, General Electric Co.
2:00 p.m.—Sections Committee
2:00 p.m.—Synchronization
54:44. Vibration of Inter-Cooled Generators. R. A. Bubley and Messner, Pennsylvania Electric Corp.
CP** Test Results of an Inlet Cooled Generator. W. C. Brenner and P. R. Heller, Westinghouse Electric Corp.
2:00 p.m.—Power Generation
54:14. Control of Large Towers for Steam Turbine-Generator Units. O. N. Bryant, C. G. Sterrett and D. M. Sauber, Western Electric Co.
2:00 p.m.—Wood and Steel Transmission Lines
CP** Light versus Heavy Transmission Steel Towers. F. B. Di Castello, Milan, Italy.
CP** Effects of Tortoises on Steel and Wood Lines. C. A. Booker, New England Electric Service Co.
2:00 p.m.—Electrical Regulations for Industrial Machines. Characteristics and Economic Fields
CP** Electronic Regulator, E. L. Mannia, Reliance Electric and Engineering Co.
CP** Rotating Regulators, G. E. Shaw, General Electric Co.
CP** Magnetic Amplifier Regulators, R. W. Moreau, Westinghouse Electric Corp.
2:00 p.m.—Thermal Evaluation of Magnet Wire and Magneto Electric Insulation
CP** Aging Tests of Class H Layer Insulations. S. J. Parkinson, Johns-Manville Corp.
CP** Thermal Aging Tests on Silicone Rubber and Class B and H Mica Insulations. D. C. Heron, Westinghouse Electric Corp.
2:00 p.m.—Comparison of Analog Computers
CP** Theory and Application of High-Speed Electronic Models. E. T. Tessar, CAP/B.
CP** An Improved Electronic Function Generator. H. C. Vivian, Boeing Airplane Co.
2:00 p.m.—Marine Transportation
CP** Cross-Parallel Connected Generators for Multiple Engine Applications. N. F. Peck, General Electric Co.
CP** Problems and Examination of New Propulsion Systems, J. L. Weinert, Westinghouse Electric Corp.
2:00 p.m.—Controlling the Elusive Lumen
CP** The Practical, Profitable Maintenance Program at Sperry, James Kimball, Sypress Gnomoco.
CP** Making a Business of Lighting Maintenance. A. Marnor, Broadway Maintenance Co.
TECHNICAL PROGRAM

9:30 a.m.—Conference on Noise
CF** Sources and Properties of Electrical Noise. W. R. Bennett, Bell Telephone Labs.
CF** Sources and Properties of Electrical Noise. G. W. Preston, Philadelphia Corp.

3:00 p.m.—Developments in Analog Computers.
CF** Translator Building Blocks for Analog Computers, H. Henniker, Syracuse University.
CF** A Static Ferromagnetic Memory with Microwave Access, J. R. Ankrum, L. G. Thompson and J. Wylam, Burroughs Adding Machine Co.
CF** Design and Production of an Aid to Electrical Machine Design, R. M. Saunders, University of California.
CF** Bibliography on Data Storage and Recording. G. L. Helson, Bell Telephone Laboratories.
CF** Design Features of Two Large Scale Analog Computers on the United States Naval Ordnance and DoD Aircraft, Consolidated Vultee Aircraft Co.

9:30 a.m.—Land Transportation
CF** All New Phases of the Ignition Refined Locomotives on the Pennsylvania Railroad, F. R. Browne, Western Electric Co.

9:30 a.m.—Wire Communication Systems
CF** Line Amplifiers for Community Television Systems. K. A. Schrader, Durbin, iron Company.
CF** All New Transmission Features of a New Telecommunication System, E. S. Church, Western Electric Co.

9:30 a.m.—Electrothermics

9:30 a.m.—Mining and Metal Industry

CF** Application of Motors and Control to Ball Mills and Rod Mills. W. H. Schneide, General Electric Co.
CF** Factors Affecting Choice of Mine Hoist Drive. R. B. Moore, General Electric Co.

2:00 p.m.—Research
CF** Principles of Operation Research. J. B. Lathrop, Arthur D. Little, Inc.

2:00 p.m.—Rotating Machinery
CF** Induction Motor Theory—Some Elementary Concepts Extending to Supra-Synchronous Speeds, G. T. Button, National Physical Laboratory, N.Y.U.
CF** Physical Concepts of Stray Load Loss in Induction Machines, F. R. Browne, New York University.
CF** Accuracy and Simplicity in Induction Motor Calculations. J. A. Spafford, Marquette University, Represented for discussion.

2:00 p.m.—Sawtchel

2:00 p.m.—Insulated Conductors
CF** Application of Cable Ground in Pipe-Type Cable. E. R. Thomas, Consolidated Edison Co. of N. Y. Inc.
CF** Control of the Thermal Environment of Buried Cable Systems, H. R. Fink, Pittsfield Electric Co. of N. Y., Inc.
CF** Ratings of Pipe Cable Systems During Steady-State and Transient Circuit Loading, M. Morris and W. R. Burwell, Connecticut Electric & Gas Co. of New York.
CF** Corrosion Control of Underground Power Cable in New York. F. E. Kohlan, Consolidated Edison Co. of N. Y. Inc.

2:00 p.m.—Inductive Power Systems
CF** Coaxial Coupling and Damped Coupling. J. A. Silver, Vacuum Tube Corporation.
CF** Coaxial Coupling and Damped Feed-Back Systems for Damped Inductive Power Systems. J. A. Silver, Vacuum Tube Corporation.

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Columbia Broadcasting System
Thursday, January 21

9:30 a.m.—Mining and Metal Industry
2:00 p.m.—Wire Communications
CP** Telephone Lines for Rural Subscribers Service. E. Necheles and H. E. Walling, Bell Telephone Labs., Inc.
CP** Polyethylene Insulated Telephone Cable. A. S. Winder, S. R. Telephone Labs., Inc.
2:00 p.m.—Petroleum Industry
CP** Selection and Application of Large Motors for Petroleum Refineries. J. B. Laddop and E. J. Wiase, Standard Oil Development Co.
2:00 p.m.—Mining and Metal Industry
CP** Resinized Controlled Rolls and its Mining and Electrical Consider- ations. R. R. Corner, Carbate & Carbon Chemical Corp.
CP** Electric Equipment for Rotary Blast Hole Drills. G. F. John- son, Aggregate Co. of America.
9:30 a.m.—Magnetic Materials
CP** Magnetic Developments in Japan. R. M. Boosheh, Bell Tele- phone Labs., Inc.
9:30 a.m.—Electronic Circuit Theory Conference
CP** Results of Certain Basic Circuits to a Symmetrical Wave Packet. T. J. Higgins, University of Wisconsin.
CP** A New Method for Realizing a Driving Point Impedance Function. R. H. Parzynski, Stanford University.
CP** A Supplement to the Brain Synthesis Procedure. F. Bera, Michigan Insitute of Technology.
CP** Synthesis for Structure only of the Ladder Network when the Lattice is known, and is Reactive. G. B. Headley, University of North Carolina.
9:30 a.m.—Color Television Networks and Measurements
CP** Differential Gain and Phase Measurements in Color Television Systems. H. Kelly, Bell Telephone Labs., Inc.
CP** Measuring Codeimeter for Color Television. J. B. Chatter, Philco.
CP** Phase Analyzer for Color Television. J. F. Fisher, Philco Corp.
CP** Transmission of Color Over Inter City Television Networks. J. A. Rax, American Telephone & Telegraph Co.
9:30 a.m.—Communication Switching Systems
54-30. A New Milwaukee in Circuit Breaker Interrupting Capacity 25,000,000 KA at 33 KV. W. M. Levis and C. J. Easley, Westinghouse Electric Corp.
54-34. Dielectric and Other Problems in the Design of a New 33 KV Outdoor Air Switch. A. H. Powell, General Electric Co.
CP** A 33 KV Disconnecting Switch. J. B. Owens, Westinghouse Electric Corp.
9:30 a.m.—System Engineering and Power Generation
54-27. Performance Tests of High-Speed Load and Frequency Con- trol Equipment. C. P. Alons, Jr., and J. Donohue, Jr., Trum- well Valve Authority.
9:30 a.m.—Tubes for Ultra-High Frequency Television
CP** High-Power UHF Klystron Design and Application. A. E. Rankin, General Electric Co.
CP** Design Considerations for Television Tuners Using Pencil Tubes. W. H. Harris and J. J. Thompson, Radio Corp. of America, Baltimore.
CP** UHF Amplifier Design for a Disc Seal Triode. S. C. Perk, Sylvanica Electric Products, Inc.
CP** Tube Evaluation at UHF. R. L. Bailey, General Electric Co.
9:30 a.m.—Aircraft Magnetos
CP** Magnetic Materials in Aircraft. R. M. Boosheh, Bell Tele- phone Labs., Inc.
9:30 a.m.—Rotating Machinery
9:30 a.m.—Rotating Machinery
54-37. Operation of Three Phase Induction Motors on Unbalanced Voltages. J. E. Williams, University of Illinois.
WINTER GENERAL MEETING, NEW YORK, JAN. 18-22, 1954


CP.** Effect of Circuit Reclosing Practice on Winding Temperature Limits During Short Circuit Conditions. J. E. Clem, Test Inspection Service.


2:00 p.m.—Feedback Control Systems

CP.** Impact-Moment Method of Servo Analysis. Ira Ritow.

54-125. Linear Compensation of Saturating Servomechanisms. J. R. Burnett, Purdue University. P. E. Kendall, Cook Research Labs.


54-126. The Transient Performance of Servomechanisms with Derivative and Integral Control. R. C. Lathrop and D. Graham, Wright Air Development Center.

54-127. A Graphical Procedure for Determining the Gain of a Servomechanism for a Specified Maximum Modulus Less Than Unit. T. J. Higgins, University of Wisconsin.

2:00 p.m.—Symposium on High-Frequency Conductors, Cables and Connectors

CP.** Styroflex Semi-Flexible Air-Dielectric Coaxial Cable. E. J. Merrell and A. L. McKeen, Phelps Dodge Copper Products Corp.

CP.** Shielding of Communication Cables. F. H. Gooding and H. B. Slade, Oceanic Co.

CP.** Microstrip—A Printed Microwave Transmission System. H. F. Englemann, Federal Telecommunication Labs., Inc.

CP.** Printed Circuits. O. I. Steigerwald, Eric Resistor Corp.


2:00 p.m.—Conference on Selenium and Tellurium

CP.** Selenium-Tellurium Alloys. P. H. Miller, Jr., University of Pennsylvania.

CP.** Thermoelectric Effect of Intrinsic Semiconductors with Lattice Defects. S. Tanuma, Tohoku University.

CP.** Intrinsic Lattice Defects in Tellurium. H. Fritsche, Purdue University.

CP.** Liquid Tellurium. A. Epstein and H. Fritsche, Purdue University.

CP.** Substitute for Selenium in Rectifiers. J. Cataldo, International Rectifier Corp.

CP.** Capacity-Voltage Studies on Selenium Rectifiers. J. Marinace, General Electric Co.


2:00 p.m.—Magnetic Amplifiers


2:00 p.m.—Broadcast Receivers and Automatic Transmitters

CP.** Very-Small Speaker-Type Personal Broadcast Receiver. K. James, Emerson Radio & Phonograph Corp.


2:00 p.m.—Switchgear

54-139. Flexible High Power Laboratory Capacitor Bank for Variety of Switching Tests to 65,000 KVAr. R. E. Friedrich and D. J. Burns, Westinghouse Electric Corp.


CP.** High Voltage Switching on Unit Substation Transformers. H. S. Gates and H. G. Barnett, Westinghouse Electric Corp.


2:00 p.m.—Basic Sciences


CP.** The Measurement of Electrostatic Potential Due to Net Ion Space Change in Air. J. S. Carroll and S. R. Hammond, Stanford University.

CP.** Conference paper; no advance copies are available; not intended for publication in Transactions.

CONTINUED FROM PAGE 2

of the Westinghouse Lamp Division offers the only opportunity in the United States to see all stages of incandescent lamp manufacture under one roof. The plant, composed of small groups of AIEE members conducted around the plant by engineers, will show the processing of tungsten from raw ore through various metallurgical processes to wire and coils. The manufacture of component parts, final lamp assembly, quality control procedures, and packaging will also be shown.

Allen B. DuMont Laboratories, Clifton, N. J. (Thursday afternoon, January 20)—The Instrument and Cathode-Ray Tube Divisions of DuMont offer an interesting trip for AIEE members. At the Instrument Division visitors will see the assembly of cathode-ray oscilloscopes and demonstrations of the latest models of these indispensable testing devices. At the Tube Division, the methods of manufacturing cathode-ray tubes, including picture tubes for television sets, will be shown and described.

ETA KAPPA NU DINNER: The Annual Recognition Dinner of the Eta Kappa Nu, electrical engineering honor society, will be held Monday evening, January 18, 1954, at 6:45 p.m. in the Keystone Room of the Hotel Statler. Dress is informal. Ladies and guests are cordially invited as it is not necessary to be a member of Eta Kappa Nu to attend. Dinner, including tax and gratuities, will be $5.75 per person. Checks should be made out to "New York Alumni Chapter Eta Kappa Nu." Reservations should be sent to J. W. Steiner, Dept. 2111, Federal Telecommunication Laboratories, 300 Washington Avenue, Nutley, New Jersey.

At the dinner, the Eta Kappa Nu Plaque designating the most outstanding young electrical engineer for 1953 will be awarded to P. A. Abetti, General Electric Company, Pittsfield, Mass. Messrs. A. G. Kegel, Westinghouse Electric Corp., Baltimore, Md., and J. E. Jacobs, General Electric X-Ray Company, Milwaukee, Wis., will be cited for Honorable Mention. The recognition was created to emphasize among electrical engineers that their service to mankind is manifested not only by achievements in purely technical pursuits, but also by contributions to his profession, community, church and by cultural achievements.

COMMITTEE LIST: Members of the 1954 Winter General Meeting Committee are: C. T. Hatcher, chairman; A. J. Cooper, vice-chairman; J. J. Anderson, secretary; C. S. Purnell, budget co-ordinator; M. D. Hooven, Vice-President, District 3; L. F. Hickernell, chairman, Committee on Technical Operations; R. W. Ferris, publicity; L. F. Stone, general session; J. G. Derse, dinner-dance; D. E. Sullivan, inspection trips; C. F. Bolles, speaker; Sidney Friend, Jr., theater-radio-television; W. G. Vieth, hotel accommodations; H. E. Martin, registration; Mrs. E. S. Banghart, ladies' entertainment; R. T. Well, monitors.

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