Winter General Meeting
January 19-23, 1953

Headquarters
Hotel Statler
7th Avenue and 33rd Street, New York, N. Y.

TECHNICAL PROGRAM

Monday, January 19

10:00 a.m.—Land Transportation
CP.** Trends in Rapid Transit Car Design. S. H. Bingham, N.Y.C. Board of Transportation.
CP.** Extension of Rapid Transit Facilities in Boston. S. B. Lent, Metropolitan Transit Authority.
CP.** Development of Rapid Transit and Super-highways in Chicago. S. D. Forsythe, Chicago Transit Authority.
CP.** An Interurban Becomes A Railroad. C. H. Jones, Chicago, South Shore & South Bend R.R.

10:00 a.m.—Insulated Conductors

10:00 a.m.—Electric Circuit Theory
CP.84. Phase Plane Characterization of a Non-Linear Inductance. H. E. Ellithorn, Kenneth Kempf, University of Notre Dame; William Shewan, Valparaiso University;

10:00 a.m.—Industrial Power Systems
CP.** Equipment Grounding for Industrial Plants. L. J. Carpenter, General Electric Co.
CP.** Short-Circuit Protection for Small and Medium Size Industrial Plant Generators. F. L. Brightman, General Electric Co.
CP.** The Effect of Iron Conduit on Single Phase Circuit Impedance. E. A. Rockau, Consolidated Edison Co. of N.Y.
CP.** Problems Associated with the Installation and Operation of a 6900 Volt Grounded Neutral Industrial Power System. C. L. Eichenberg, Bethlehem Steel Co.

10:00 a.m.—Electronic Power Converters and Substations

10:00 a.m.—Conference on Education
Panel Discussion: Should Curriculum Options Continue? by G. S. Brown, Massachusetts Institute of Technology; K. B. McEachron, Jr., General Electric Co.; and J. R. North, Commonwealth Services, Inc.

10:00 a.m.—Conference on Applied Mathematics
CP.** Induced Potentials. Garrett Birkhoff, Harvard University.
CP.** The Optimum Characteristic of a Non-linear Device for Producing Combination Frequencies. W. H. J. Fuchs, Cornell University.

10:00 a.m.—Conference on AIEE Standard Number One
CP.** Proposed Revision in AIEE Standard Number One. G. L. Moses, Westinghouse Electric Corp.
CP.** IEC Proposals on Classification on Insulation. M. S. Hancock and P. C. Smith, Westinghouse Electric Corp.

10:00 a.m.—Carrier Current

ADVANCE COPIES OF PAPERS
Members may obtain preprints of numbered papers at the uniform price of 30c each (60c each to nonmembers), by sending encased order form and remittance to the AIEE Order Department, 35 West 39th Street, New York 18, N. Y. Mail orders (particularly from out-of-town members) are advisable, inasmuch as an adequate supply of each paper at the meeting cannot be assured. Coupon books in $9 denominations are available for those who wish to avoid remittance by check or otherwise. Most of the papers ultimately will be published as AIEE Proceedings and in the Transactions. Conference Papers denoted by CP.** are intended for presentation only, and are not available.
Tuesday, January 20

9:30 a.m.—Land Transportation
Introduction: L. S. Bissell, Baltimore & Ohio R.R.
CP** The Diesel Locomotive of the Railroads: Charles Kerr, Jr., Westinghouse Electric Corp.
9:30 a.m.—Industrial Power Systems
CP** Electrical Innovations in the Molten Metal: L. W. Griner, General Electric Co.
9:30 a.m.—Electric Space Heating and Heat Pumps
CP** Experience with Controlled Electric Space Heating: R. C. Gill, Florida Power Corp.
CP** Electric Space Heating and Resulting System Load Factors: D. M. Anderson, H. B. Allen, Memphias, Project Committee on Flat Wells.
9:30 a.m.—Refrigeration
9:30 a.m.—Air-Conditioning
9:30 a.m.—Maintenance of Rotating Machinery
CP** Commutation Problems: Carl E. Brauning, Dept. of Water & Power, City of Los Angeles.
CP** Standards for Electric Repair Shops: Sun Hellet, Consolidated Electric Motor Corp.
CP** Maintenance of Large Rotating Electric Equipment on Ships: W. V. Gruber, Bureau of Ships.
9:30 a.m.—Magnetic Materials
CP** Properties of Barium Permanent Magnets: Edward Adams, Naval Ordnance Lab.
CP** Magnetic Materials for High-Speed Pulse Circuits: D. R. Brown, Massachusetts Institute of Technology.
CP** Stress Strains with Rectangular Hysteresis Loops: H. J. Williams, Bell Telephone Labs.
9:30 a.m.—Non-Metals
CP** 70 M.E.V. Medical Synchrotron: R. N. Edwards, General Electric Co.
CP** Nuclear Power Reactor: John Munkar, N. A. A.
CP** Design Parameters of Beta Thickness Gages, Harkins-Pindar Co.
CP** New Focus Scheme of the Brookhaven Cyclotron: J. P. Brielwalt, Brookhaven.
CP** A Scintillation Detector with Extended Plater: Earl Farmer, Presentation of Institute of Physics.
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9:30 a.m.—Complexity of Electronic Systems

CP.** This Problem in the Signal Corps. E. L. Nelson, Signal Corps Engineering Lab.


CP.** Some Viewpoints of the Air Forces. Presented by representatives from the Wright Air Development Center.


CP.** A Manufacturer's Viewpoint. H. T. Bundenbom, Bell Telephone Labs.

9:30 a.m.—Special Communication Applications

CP.** Audio Frequency Filters on Negative Feed-Back Principle. Tadeusz Janisz, University of Detroit.


9:30 a.m.—General Industry Applications


9:30 a.m.—Production and Application of Light


CP.** Photochemical Sources and Applications of Ultraviolet. L. J. Battolph, General Electric Co.

CP.** Industrial Applications of Infrared. I. J. Barber, Fostoria Pressed Steel Corp.

9:30 a.m.—Cathode Protection

2:00 p.m.—Power Generation and System Engineering

53-49. Principles of Load Allocation Among Generating Units. E. E. George, Ebasco Services, Inc.


2:00 p.m.—Switchgear

CP.** New Line of Low Voltage Air Circuit Breakers. B. S. Beall, ACO.* Ill. and V. N. Stewart, General Electric Co.


2:00 p.m.—Permanent Magnet Generators and Motors


2:00 p.m.—Basic Sciences

CP.** Equations for Determining Current Distribution Among the Conductors of Busses Comprised of Double-Channel Conductors. C. M. Siegel, 11-R Copley Hill Project, and T. J. Higgins, University of Wisconsin.


53-155. Experimental Investigation of Superregenerative Circuits. Abd El-Samie Mostafa, Farouk I University, and M. El-Shishini Bey, member of Egyptian Senate. Presentation by title only for discussion.

53-156. Oscillatory Circuits Containing Iron-Cored Inductances with a Generalised Analysis of Performance and Design of Static Stabilisers Using Such Circuits. Abd El-Samie Mostafa, Farouk I University, and M. El-Shishini Bey, member of Egyptian Senate. Presentation by title only for discussion.

53-157. Superregenerative Circuits under Signal Condition. Abd El-Samie Mostafa, Farouk I University, and M. El-Shishini Bey, member of Egyptian Senate. Presentation by title only for discussion.

53-158. Superregenerative Circuits Under No Signal Condition. Abd El-Samie Mostafa, Farouk I University, and M. El-Shishini Bey, member of Egyptian Senate. Presentation by title only for discussion.

53-159. Effects of Harmonics on the Frequency of Oscillation As Well as on the Asymmetry of the Resonance Curves. Abd El-Samie Mostafa, Farouk I University. Presentation by title only for discussion.

2:00 p.m.—Analog Computer Developments


CP.** Microsyn Electromagnetic Components. R. K. Mueller, Massachusetts Institute of Technology.

CP.** Precision High Current Computer Power Supplies. Allen Rosenstein, University of California.

2:00 p.m.—Telegraph Systems

53-163. A Nonarmored Submarine Telegraph Cable. C. S. Lawton, Western Union Telegraph Co. and L. H. Hutchins, Jr., Simplex Wire & Cable Co.


CP.** A Switching System for Dispatcher Test Wires. P. R. Easterlin, Western Union Telegraph Co.

2:00 p.m.—Light Sources and Control Devices

CP.** Filament Sources. Kirk Reid, General Electric Co.

CP.** Mercury and Vapor Sources. Eugene Beggs, Westinghouse Electric Corp.

CP.** Fluorescent Sources. Theodore Sargent, Sylvania Electric Products, Inc.


2:00 p.m.—Electrochemical Processes

CP.** History and Development of the Magnesium Industry. T. M. Baxandall, Dow Chemical Co.


CP.** Economics of Insurance of Generating and Converting Equipment for Chemical Process. J. N. Fogg, Ethyl Corp.

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

ACO.* Advance copies only available; not intended for publication in Transactions.

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