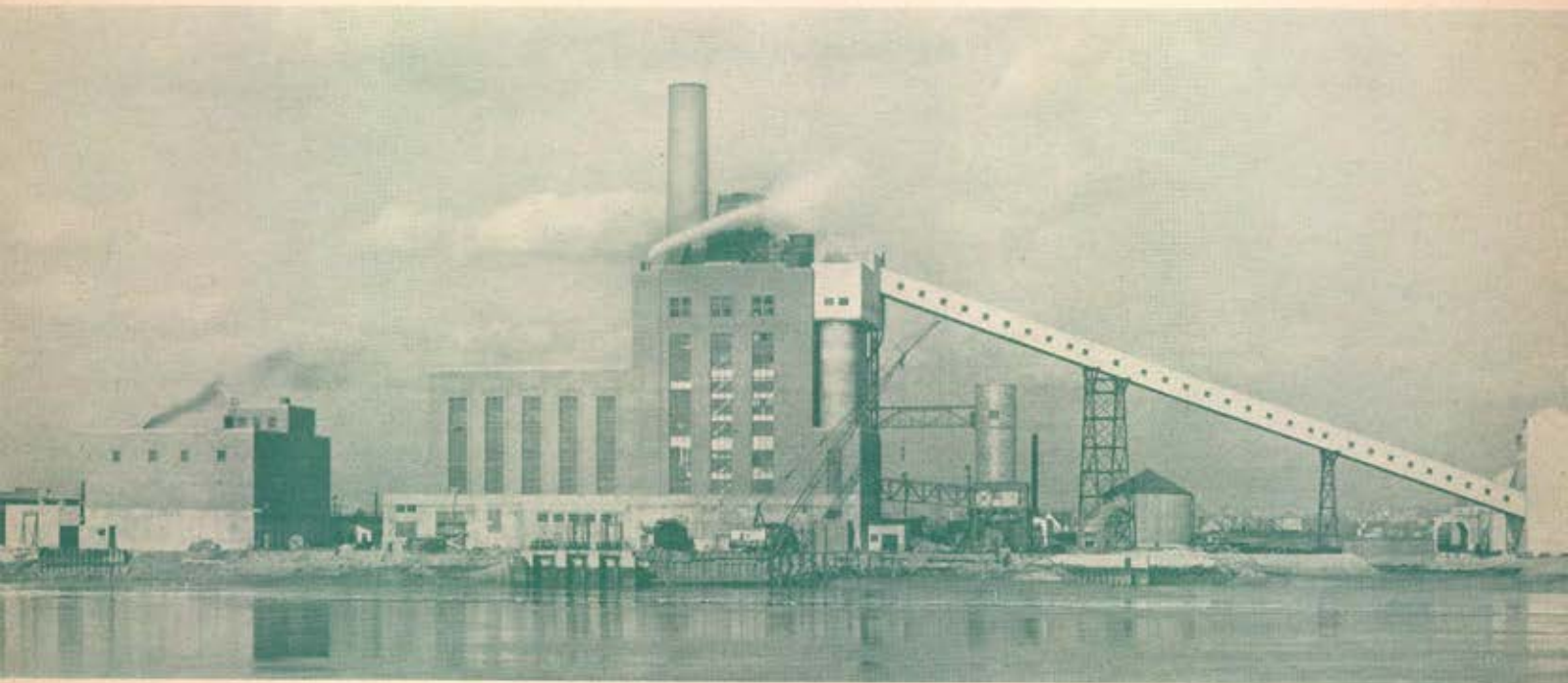


NORTH EASTERN DISTRICT TECHNICAL MEETING

Headquarters: HOTEL STATLER

Boston, Mass.

April 19-20, 1944



New 50,000-Kw Mystic Station of the Boston Edison Company

Technical Paper Competition for Younger Engineers

Seven Technical Sessions

One Student Session

Observance of AIEE 60th Anniversary

NORTH EASTERN DISTRICT TECHNICAL MEETINGS

Tuesday, April 18

Afternoon—Registration

8:00 p.m.—Technical Paper Competition for Younger Engineers

Hotel Statler—Salle Moderne

R. W. ADAMS, Presiding

Tri-Sectional Prize Competition,
Sponsored by Schenectady, Lynn, and
Pittsfield Sections

Wednesday, April 19

9:00 a.m.—Registration

10:00 a.m.—Cables

E. W. DAVIS, Presiding

- D.P.* High-Frequency Cable Design and Testing. N. D. Kennedy, P. W. Ware, Simplex Wire & Cable Co.
- 44-53. Current Rating of Cables As Affected by Mutual Heating in Air or Conduit. IPCEA Committee on Research. Presentation by R. J. Wiseman, Chairman. 30 cents by mail.
- D.P.* Gas-Filled Cable Research and Experience. G. B. Shanklin, General Elec. Co.
- D.P.* Synthetic Insulation for Cables. C. A. Finkel, The Okonite Co.
- D.P.* Field Testing and Fault Location in Cables. W. D. Fenn, L. A. Gray, Simplex Wire & Cable Co.

10:00 a.m.—Transformers and Selected Subjects

C. T. BURKE, Presiding

- D.P.* Impulse Testing of Transformers. J. H. Hagenguth, General Elec. Co.
- 44-87. Design of Variac Transformers. Eduard Karplus, General Radio Co. 15 cents by mail.
- 44-73. Reliability of Compressed-Gas Insulation. J. D. Cobine, E. C. Easton, Harvard Univ. 15 cents by mail.
- D.P.* Air-Cooled Dry-Type Regulators. L. G. Tubbs, Westinghouse Elec. & Mfg. Co.
- D.P.* Application and Description of Automatic Control and Switching Equipment for Capacitor Banks. T. W. Schroeder, W. C. Bloomquist, General Elec. Co.
- D.P.* Smaller-Tank Oil Circuit Breakers. W. M. Leeds, Westinghouse Elec. & Mfg. Co.

10:00 a.m.—Student Session

G. MINALGA, Presiding

Method of Magnetic Recording. C. J. Hooker, Jr., Mass. Inst. of Technology

Vacuum-Tube Voltmeter with Cathode Follower. J. B. Angell, A. B. VanRennes, Mass. Inst. of Technology.

Variable-Frequency 25-Centimeter Oscillator. H. G. Ryan, Northeastern Univ.

Electronically Regulated Bias Supply. R. W. Bordewick, D. R. King, Northeastern Univ.

Methods of Conducting Student Branch Activities with Army, Navy, and Civilian Student Bodies. Robert P. Burr, AS, U.S.N.R., Cornell Univ.

2:00 p.m.—AIEE 60th Anniversary Observance

1. History of the Institute. Dr. Nevin E. Funk, President, AIEE
2. Future of Electrical Engineering and the Institute. David C. Prince, Vice-President, General Elec. Co., Chairman, Post-War Committee
3. The Future of Aeronautics. Edward J. Foley, American Air Lines, Post-War Committee

6:00 p.m.—Presidential Reception

6:30 p.m.—Get-Together Dinner

Statler Hotel, Imperial Ballroom

WILLIAM H. TIMBIE, Toastmaster

Presentation of District Prizes for Papers
"Some Thoughts on the Future." William S. Newell, President, Bath Iron Works

Thursday, April 20

9:30 a.m.—Electronics

T. S. GRAY, Presiding

- 44-78. Development of Excitron-Type Rectifier. H. Winograd, Allis-Chalmers Mfg. Co. 30 cents by mail.
- D.P.* Ignitrons, Their Development and Uses. J. H. Cox, Westinghouse Elec. & Mfg. Co.
- D.P.* Operation of Rectifiers under Unbalanced Conditions. M. M. Morack, General Elec. Co.
- 44-75. A Graphical Analysis of the Voltage and Current Wave Forms of Controlled Rectifier Circuits. P. T. Chin, E. E. Moyer, General Elec. Co. 30 cents by mail.
- D.P.* Electronic Control for D-C Motors. B. J. Dalton, General Elec. Co.



Official Photograph, U.S. Army Air Forces
Aerial View of the B-17 Flying Fortress

Abstracts of most numbers

44-79. The Application of Broad-Band Carrier Systems to A.C.O.† Telephone Cables. J. P. Thurber, New England Tel. & Tel. Co. 20 cents by mail.

9:30 a.m.—Power Transmission

C. A. CORNEY, Presiding

44-74. 110-Kv Tie-Line Uses Progressive Design. E. A. A.C.O.† Church, E. G. Stebbins, Boston Edison Co. 15 cents by mail.

44-77. Improving the Performance of 110-Kv Lines. D. H. A.C.O.† Hatheway, A. B. Jones, Boston Edison Co. 15 cents by mail.

44-76. Conversion of Montaup Electric System from 66 Kv to 110 Kv. W. B. Carnie, Montaup Elec. Co. 15 cents by mail.

44-80. Measured Electrical Constants of 270-Mile, 154-Kv Transmission Line. C. A. Streifus, Ebasco Services, Inc.; C. S. Roadhouse, Nebraska Pr. Co.; R. B. Gow, Kansas Gas & Elec. Co. 25 cents by mail.

2:00 p.m.—Air Transportation

R. W. ADAMS, Presiding

44-81. A-C and D-C Short-Circuit Tests on Aircraft Cable. J. C. Cunningham, W. M. Davidson, Westinghouse Elec. & Mfg. Co. 25 cents by mail.

44-70. Electrically Driven Gyroscopes for Aircraft. H. M. Witherow, Albert Hansen, Jr., General Electric Co. 15 cents by mail.

44-82. Damping Cylinders for Aircraft Gyroscopes. F. R. Sias, J. H. Wright, General Elec. Co. 20 cents by mail.

44-72. A Unit for Balancing the Voltages of Three-Phase Aircraft Inverters Supplying Large Single-Phase Loads. Sydney Wimpie, The Holtzer-Cabot Elec. Co. 15 cents by mail.

44-84. Blast-Tube Cooling for Aircraft Generators. C. G. Veinott, Westinghouse Elec. & Mfg. Co. 20 cents by mail.

44-83. Aids to Quality Control in the Manufacture of Aircraft Generators. F. M. Potter, General Elec. Co. 15 cents by mail.

D.P.* Differential Generator Control Relays for D-C Aircraft Electrical Systems. F. E. Crever, General Elec. Co.

2:00 p.m.—Electrical Machinery

H. B. ASHENDEN, Presiding

44-85. Prevention of Rotor Winding Deformation on Turbo-Generators. J. G. Noest, Consolidated Edison Co. of N. Y., Inc. 25 cents by mail.

44-71. Vibration Protection for Rotating Machinery. R. L. Webb, C. S. Murray, Consolidated Edison Co. of N. Y., Inc. 15 cents by mail.



Albert Hansen, Jr., and H. M. Witherow with Their Gyroscopic Flight Instruments

D.P.* Exciters for 3600-RPM Generators. Clarence Lynn, Westinghouse Elec. & Mfg. Co.

44-86. Behavior Factors of Rectifier-Driven D-C Motors. Victor Siegfried, Worcester Poly. Inst. 15 cents by mail.

D.P.* Interpretations of Current-Time Curves As Applied to Insulation Testing. R. F. Field, General Radio Co.

2:00 p.m.—Industrial Power Applications

F. S. BACON, JR., Presiding

D.P.* Voltage Regulation in Industrial Plants. Hugh McCrea, General Elec. Co.

D.P.* Capacitors in Industrial Plants. J. E. Barkle, Westinghouse Elec. & Mfg. Co.

D.P.* Power Supply for Resistance Welders. R. L. Briggs, Thomson-Gibb Elec. Co.

D.P.* Electronic Control for Variable-Speed Motors. W. I. Bendz, Westinghouse Elec. & Mfg. Co.

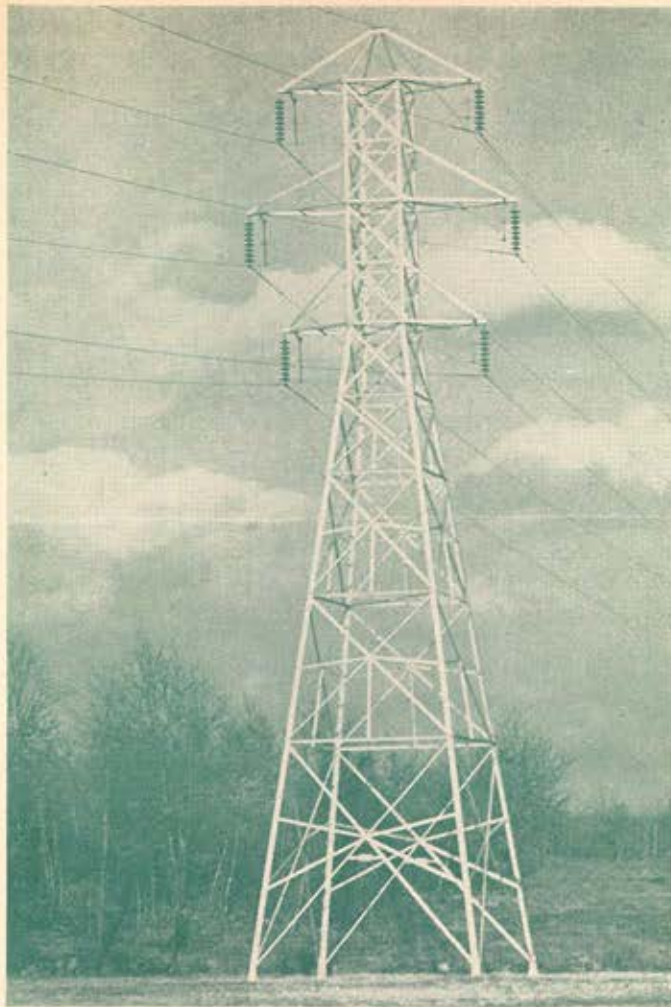
D.P.* Variable-Speed Drives. F. B. Haeussler, General Elec. Co.

D.P.* Maintenance of Industrial Motors and Control. H. E. Thomas, Westinghouse Elec. & Mfg. Co.

D.P.* Electronic Heating. H. M. Chatto, General Elec. Co.

*D.P. —District Paper; no advance copies available; not intended for publication in TRANSACTIONS.

†A.C.O.—Advance Copies Only available; papers not intended for publication in TRANSACTIONS.



*Typical Suspension Tower of a 110-Kv Line to be discussed
in the Power Transmission Session*

HOTEL RESERVATIONS

Members should make their own hotel reservations by writing directly to the hotel preferred as early as possible. In the following table the rates of the Statler, as well as some of the other nearby hotels, are given.

BOSTON HOTEL RATES

Hotels	Single Rooms	Double Rooms	Suits
Statler (Headquarters).....	\$3.85-8.80	\$5.50-11.00	\$ 9.95-20.00*
		6.60-12.00	12.70-22.00**
The Ritz-Carlton	5.00-8.00	9.00-11.00	14.00-30.00
Copley Plaza†	4.40-6.60	7.70-11.00	
Touraine		6.50- 8.25	14.00
Bradford	3.30-4.40	5.00- 7.70	9.00-12.00

*For one person

**For two persons

†Reservations must be made 10 days in advance.

ADVANCE REGISTRATION

Please register in advance by filling in and mailing promptly the enclosed advance registration card and complete your registration upon arrival at the meeting. A registration fee of \$2.00 will be charged all nonmembers except Enrolled Students and the immediate families of members.

COMMITTEE

T. Cooper, Jr., *Chairman*
R. G. Porter, *Vice-Chairman*
J. M. Murray, *Secretary-Treasurer*

Subcommittee Chairmen

F. S. Bacon, *Dinner*
F. W. Bliss, *Publicity*
C. L. Dawes, *Technical Program*
J. G. Patterson (*Secretary*)
D. C. Jackson, *Sixtieth Anniversary*
A. L. O'Banion, *Hotel and Registration*
R. G. Porter, *Student Activities*

Issued by

AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS

33 West 39th Street, New York 18, N. Y.