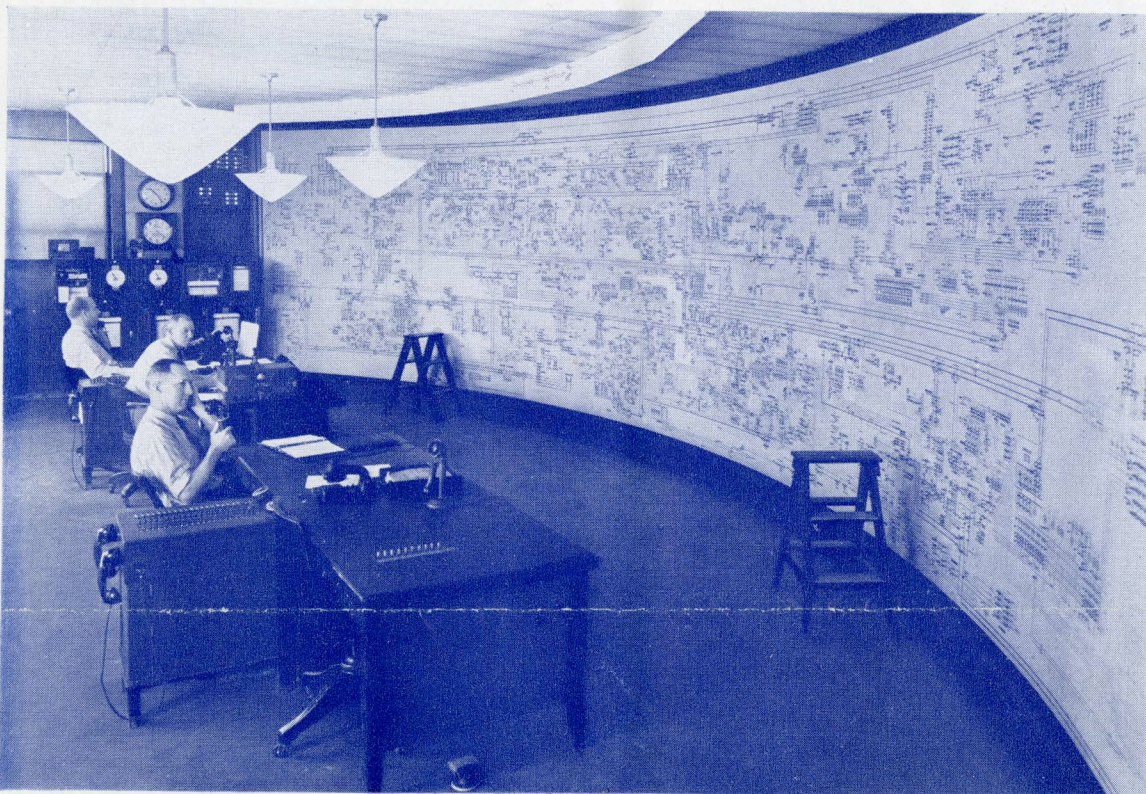


NORTH EASTERN DISTRICT MEETING AND STUDENT BRANCH CONFERENCE

Featuring: "Applications Engineering"

Headquarters: The Sheraton Hotel, Worcester, Mass.

April 23-25, 1947



The Central Dispatching Board of the New England Power System, which may be visited Friday afternoon

SALIENT FEATURES

TECHNICAL SESSIONS—Eight technical sessions plus a student session well filled with papers will serve to build up the general theme of the meeting. Worcester, with its exceptional diversity in industry, seems an excellent setting for papers around the theme of "applications engineering."

INSPECTION TRIPS—Friday afternoon will be devoted to inspection trips to local industries and power systems.

Among the places to be visited are Cable Works of the American Steel and Wire Company, the central dispatcher's office of the New England Power Company, the Norton Company, the Heald Machine Company, the Wyman-Gordon Products Corporation, the Transmitter for Radio Station WTAG and WTAGFM, and Worcester Polytechnic Institute.

(Continued on page 4)

ADVANCE COPIES OF PAPERS

Members may obtain preprints of technical papers by mail by remitting price indicated to the AIEE Order Department, 33 West 39th Street, New York 18, N. Y.; if purchased at AIEE Headquarters or at the meeting 5c less per copy. For convenience an order form is enclosed. Only numbered papers will be available in advance-copy form. Mail orders (particularly from out-of-town members are advisable, inasmuch as an adequate supply of each paper at the meeting cannot be assured. Most of the papers ultimately will be published as AIEE PROCEEDINGS and in the TRANSACTIONS.

Nonmember prices by mail 100% more than listed less 5c on each paper.

Please order by number and enclose remittance.

Wednesday, April 23

8:30 a.m.—Registration

9:30 a.m.—Measurements and Electronics

(Baroque Room)
T. S. Gray, Presiding

- DP.* A Self-Balancing Capacitance Bridge. A. H. Foley, General Elec. Co.
- DP.* A Photoelectric Color Temperature and Exposure Meter. Thomas M. McCaw, Worcester Polytechnic Inst.
- DP.* A New Type of Electronic Frequency Meter. H. J. Reich and R. L. Ungvary, Yale Univ.
- 47-108. Measurement of Acceleration by a Vacuum Tube. W. Ramberg, National Bureau of Standards. 25 cents by mail.



Boynton Hall—Administration Building of Worcester Polytechnic Institute

9:30 a.m.—Transformers and Capacitor Applications

(Crystal Room)
V. M. Montsinger, Presiding

- 47-107. Transient Characteristics of Current Transformers During Faults—Part II. F. S. Rothe and C. Concordia, General Elec. Co. 20 cents by mail.
- 47-105. Short-Circuit Requirements for Transformers. A. N. Garin, General Elec. Co. 20 cents by mail.
- DP.* Application of Capacitors for Power Factor Correction. J. S. Williams, Westinghouse Elec. Corp.
- DP.* Series Capacitors for Welding Circuits. W. C. Bloomquist and R. C. Wilson, General Elec. Co.

10:00 a.m.—Board of Directors Meeting

(Mezzanine Rooms)

2:00 p.m.—Servomechanisms (Closed-Cycle Controls)

(Small Ballroom)
G. S. Brown, Presiding

- DP.* Servomechanisms in Aerial Photography (Demonstration). Roy C. Gunther, Jr., Boston Univ. Optical Research Lab. and Clark Univ.
- DP.* Two-Phase Induction Motors for Instrument Servos. John E. Ward, Mass. Inst. of Tech.
- 47-110. Solution of the General Voltage Regulator Problem by Electrical Analogy. E. L. Harder, Westinghouse Elec. Corp. 35 cents by mail.

2:00 p.m.—Cables and Transmission

(Baroque Room)
R. M. Peirce, Presiding

- DP.* Insulation Resistance Measurements with Particular Reference to Charging Current Errors. E. W. Greenfield, Anaconda Wire and Cable Co.
- DP.* Current-Time Curves in Insulation Resistance Measurements. R. F. Field, General Radio Co.
- DP.* Shielding in Electric Cable Insulation. V. Siegfried, American Steel and Wire Co.
- DP.* Experience with Modernization of Transmission Line on New England Power Association System. Herbert R. Stewart, New England Pr. Serv. Co.

2:00 p.m.—Transportation

(Crystal Room)
H. F. Brown, Presiding

- DP.* Recent Developments in Diesel Electric Locomotives. E. K. Bloss, Boston and Maine Railroad.
- DP.* Radio Communication in Railroad Service. L. J. Prendergast, Baltimore and Ohio Railroad.
- DP.* Electrical Problems in Railway Passenger Cars. H. H. Hanft, Westinghouse Elec. Corp.

3:30 p.m.—Ladies' Program—Sightseeing trip to historic Wayside Inn with entertainment and dinner at the Inn.

6:30 p.m.—Social Hour

(Ballroom Foyer)

7:00 p.m.—Smoker (Ballroom)
Entertainment—Tickets \$2.50.

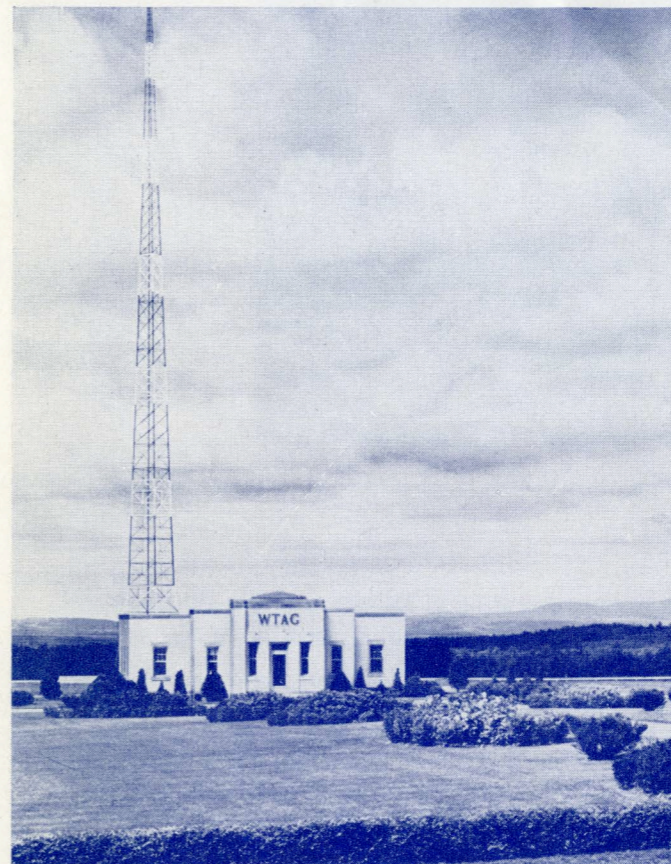
Thursday, April 24

9:30 a.m.—General Session

(Ballroom)

E. W. Davis, Presiding

Address of Welcome. Vice-President E. W. Davis. Remarks on Institute Affairs. President J. Elmer Housley.



Radio Station WTAG, which may be visited on Friday afternoon

Discussion of Organization of the Engineering Profession. J. F. Fairman, Director, AIEE, and Chairman, Committee on Planning and Coordination.

Address: "Atomic Energy—Some of Its Problems and Possibilities." Harry A. Winne, Vice-President in Charge of Engineering Policy, General Elec. Co.

12:00 m. District Executive Committee Luncheon and Meeting

(Mezzanine)

2:00 p.m. Industrial Applications

(Baroque Room)

V. F. P. Sepavich, Presiding

- DP.* Electrical Applications in the Wire Industry. J. G. Roby, General Elec. Co.
- DP.* Electrically Controlled Tension for Reeling Operations. R. M. Scott, New England Butt Co.
- 47-35. Electric Equipment for Two-for-One Twister. E. C. Gwaltney and H. J. Burnham, Saco-Lowell Shops. 20 cents by mail.
- 47-32. Electric Drives for Textile Finishing Ranges. R. B. Moore and H. C. Uhl, General Elec. Co. 35 cents by mail.
- DP.* Oxide Rectifiers as Power Supply for DC Motors. L. F. Reed, Westinghouse Elec. Corp.
- DP.* DC Braking for AC Induction Motors. F. D. Snyder, Westinghouse Elec. Corp.

2:00 p.m.—Communications

(Crystal Room)

C. R. Town, Presiding

47-109. An Improved Cable Carrier System. H. S. Black, F. A. Brooks, A. J. Weir and I. G. Wilson, Bell Tel. Labs., Inc. 25 cents by mail.

47-111. New Test Equipment and Testing Methods for Cable Carrier Systems. W. H. Tidd, S. Rosen, and H. A. Wenk, Bell Tel. Labs., Inc. 20 cents by mail.

DP.* Carrier-Current Telemetry within the New England Power System. L. G. Eaton, New England Pr. Serv. Co.

47-112. Single Side-Band Carrier System for Power Lines. B. E. Lenehan, Westinghouse Elec. Corp. 20 cents by mail.

2:30 p.m.—Ladies' Program—Sightseeing Tour to Worcester Art Museum or Higgins Armor Museum, followed by entertainment and tea.

6:30 p.m.—Social Hour

(Ballroom Foyer)

7:00 p.m.—Banquet (Dress Informal)

(Ballroom)

Address—Tickets \$3.00.

Friday, April 25

9:30 a.m.—Applications to Machine Tools

(Baroque Room)
D. R. Percival, Presiding

- DP.* Machine Tool Electrification as Influenced by the National Machine Tool Builders Electrical Standards. A. L. Krause, Brown and Sharpe Mfg. Co.
- DP.* Application of High Frequency Electrical Equipment to Machine Tools. H. F. Penny, General Elec. Co.
- 47-106. Adjustable Frequency Control of High-Speed Induction Motors. G. W. Heumann, General Elec. Co. 25 cents by mail.
- DP.* Magnetic Vibration in Motors. R. F. Griffith and B. F. Hammarstrom, Heald Machine Company.
- DP.* Electronic Motor Control for Milling Machines. Mark Morgan, Reed-Prentice Corp.

9:30 a.m.—Student Branch Conference

(Ballroom and Crystal Rooms)

- E. R. McKee, Chairman, District Committee on Student Activities
- A New Type of Phase Sequence Indicator. Harold Hull and James Feltner, Univ. of Conn.
- A Simplified Resistance Tuned Oscillator and Multi-Vibrator. Ralph Carlson, Univ. of Conn.
- Theory and Application of Complex Vacuum Tube Volt Meter. F. H. Stansfield, Northeastern Univ.
- Electronic Fractional Horsepower Torque Measuring Indicator. R. O. Williams, Northeastern Univ.
- A Compact 45 Kilovolt Surge Generator. Martin J. Reilly, Graduate Student, Worcester Polytechnic Inst.
- A Circuit Breaker for General Household Use. John Hambor, Worcester Polytechnic Inst.
- An Electric Knockmeter for Internal Combustion Engines. Richard W. Husher, Yale Univ.
- The Application of Circle Loci in the Solution of Electrical Problems. Warren J. Dornhoefer and Gordon C. Bill, Graduate Students, Yale Univ.

(continued on page 4)

DP.*—District paper; no advance copies are available not intended for publication in "Transactions."



Worcester Memorial Auditorium

(Continued from page 3)

12:00 m.—Student Branch Chairmen's and Counselors' Luncheon

(Mezzanine)

1:30 p.m.—Inspection Trips

The American Steel and Wire Company.
 Sub-station and Central Dispatcher's office of the New England Power Company at Millbury.
 The Norton Company.
 The Heald Machine Company.
 The Wyman-Gordon Products Corp., Grafton, Mass. (Operator of the largest press in the United States for the forming of aluminum and magnesium).
 The Transmitter for Radio Station WTAG and WTAGFM at Holden, Mass.
 The Worcester Polytechnic Institute.
 Other trips by special arrangement.

(Continued from page 1)

LADIES' PROGRAM—Outstanding features of the ladies' program will include a trip on Wednesday afternoon to Longfellow's Wayside Inn in Sudbury followed by entertainment and dinner at the Inn. On the Thursday program are trips to the noted John W. Higgins Museum of Armor and to Worcester's Fine Art Museum, followed by entertainment and tea.

ENTERTAINMENT—On Wednesday evening a social hour and smoker will be held in the main ball room. Lively entertainment has been arranged. On Thursday evening, an informal banquet in the main ball room will feature a speaker of prominence.

HOTEL RESERVATIONS—Members should make their own hotel reservations by writing direct to the hotel. For convenience, a room reservation card for The Sheraton is being sent to members within the district. The scale of prices for The Sheraton are as follows:

Single Rooms: \$3.00, \$3.55, \$4.10, \$4.75
 Double Rooms, Double Beds: \$4.65, \$5.20, \$5.75, \$6.85
 Double Rooms, Twin Beds: \$5.10, \$5.75, \$6.85, \$7.95

Make reservations at once! Be sure to state estimated time of arrival, as hotel accommodations are still scarce.

ADVANCE REGISTRATION—Please register in advance. This will assist the registration committee and save time upon arrival. Send registration card to A. L. Duna, Chairman, Registration Committee, American Steel and Wire Company, 767 Millbury Street, Worcester (7), Mass. A registration fee of \$2.00 will be charged all nonmembers with the exception of Enrolled Students and the immediate families of members.

District Meeting Committee

T. H. Morgan, *General Chairman*
 E. W. Davis, *Vice-President*
 Victor Siegfried, *Secretary*
 H. F. Brown
 Truman S. Gray
 E. R. McKee
 D. R. Percival
 W. S. Scheering
 G. R. Town
 B. F. Hammarstrom, *Secretary-Treasurer*
 Worcester Section

Chairmen of Subcommittees

Victor Siegfried, *Technical Program*
 L. S. Leavitt, *Inspection Trips and Transportation*
 F. J. Adams, *Entertainment*
 A. L. Duna, *Hotel and Registration*
 E. R. McKee, *Student Activities*
 Mrs. W. T. Peirce, *Ladies' Program*
 W. W. Locke, *Publicity and Printing*
 S. M. Anson, *Finance*

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