AMERICAN INSTITUTE OF ELEECTRICAL ENGINEERS

# NORTH EASTERN DISTRICT TECHNICAL MEETING 

Headquarters: Wendell Hotel

(Meetings also as noted at the Berkshire Museum and WBRK Auditoriums)

PITTSFIELD, MASS.<br>April 8, 9, 1943



The Berkshire Museum, Pittsfield, Mass.

## WARTIME MEETING

This Meeting brings to A.I.E.E. members and others interested in electrical engineering an opportunity to learn of the latest developments in a number of fields of importance in furthering the war effort. In preparing the program of five conference sessions, a general session, and three technical sessions emphasis has been placed on the selection of subjects of importance to electrical engineers in fulfilling their professional duties in wartime. By eliminating all non-essential elements a full technical program is presented in two days instead of the usual three days, permitting the most efficient utilization of members' time.
The Five Conference Sessions are a special feature to facilitate the free exchange of ideas of timely importance to engineers. These conferences consist of short prepared talks by authoritative speakers, followed by informal
general discusssions in which individual problems may be considered.
Pittsfield and Berkshire County, situated in the scenic and historic Berkshire Hills, have made many notable contributions in the fields of literature and the arts. Members of the New England literary group associated with the earlier history of Pittsfield include Hawthorne, Longfellow, Holmes, and Melville. The city and nearby towns are noted for the manufacture of textiles and paper of high quality. In more recent times, with the advent of electrical engineering, Pittsfield has become of national importance to the industry.

## SPECIAL FEATURES

A Tri-Sectional Competition Meeting is an advance feature which will be held in the Berkshire Museum Audi-
(Continued on page 4)

# NORTH EASTERN DISTRICT TECHNICAL MEETING 

## ADVANCE COPIES OF PAPERS

Preprints of technical papers may be obtained by mail by remitting price indicated to the A.I.E.E. Order Department, 33 West 39th Street, New York, N. Y.; if purchased at A.I.E.E. headquarters or at the meeting 5 c 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. Coupon books in $\$ 5.00$ denominations are available for those who wish to avoid remittance by check or otherwise. Most of the papers ultimately will be published in ELECTRICAL ENGINEERING or the TRANSACTIONS.

## Wednesday, April 7

8.00 p.m.-Technical Paper Competition for Younger Engineers

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- Berkshire Museum -
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J. C. Russ, Presiding

Tri-Sectional Competition Meeting. Sponsored by the Schenectady, Lynn, and Pittsfield Sections.

## Thursday, April 8

9:00 a.m.-Power Transmission and Distribution - Wendell Hotel -
W. W. Lewis, Presiding

43-64. A New Control System for Automatic Parallel Operation of Load Ratio Control Transformers. S. Minneci and S. B. Farnham, General Electric Co. 20 cents by mail.
43-65. Use of Equivalent Annual Ambient Temperature in Overloading Transformers and Voltage Regulators. M. S. Oldacre, Commonwealth Edison Co. 15 cents by mail.
43-73. Electric Rating of Overhead Line Wire. Myron Zucker, The Jam Handy Organization (on leave from the Detroit Edison Co.). 25 cents by mail.
43-66. The Frequencies of Natural Power Oscillations in Interconnected Generating and Distribution Systems. Reinhold Rudenberg, Harvard University. 30 cents by mail.
43-67. The Sorocabana Railway Electrification. Durval Muylaert, Sorocabana Railway (Presentation by title). 30 cents by mail.
9:00 a.m.-Measurements and Instrument Transformers

> Berkshire Museum -
> Everett S. Lee, Presiding
43.71. New Developments in Potential Transformer Design. G. Cạ̣illi, General Electric Co. 15 cents by mail.
D.P.f A Capacitance Bridge for Determining the Ratio and Phase Angle of Potential Transformers. H. W. Buusman and R. L. TenBroeck, General Electric Company.
43.70. Overvoltage Protection of Current Transformer Secondaries and Associated Circuits. R. H. Kaufmann and G. Camilli, General Electric Co. 20 cents by mail.

43-69. Interim Report on Application and Operation of Circuit Breakers and Switchgear. Subcommittee on Circuit Breakers. Switches, and Fuses.
15 cents by mail.
1:30 p.m.-General Session 220

- Berkshire Museum -
L. Wetherill, Presiding

Sleet Damage on Overhead Lines. (Movies and slides) J. F. Burt, Western Massachusetts Electric Company.
Address: "The Engineer's Interest in City Planning." H. S. Osborne, President, A.I.E.E.
2:30 p.m.-Conference on City and Regional Planning

- Berkshire Museum


## President H. S. Osborne, Presiding

This conference immediately following the address by President Osborne in the general session will bring together a number of civic authorities and experts who are engaged in planning work. It is the fourth of a series of Institute conferences at national and District meetings dealing with civic responsibilities of local engineering councils. (For example, see ELECTRICAL ENGINEERING, March 1942, page 148.)
Welcoming address. The Honorable James Fallon, Mayor of Pittsfield, Massachusetts.
Address: "Regional Development through Industrial Research." L. W. Bass, Director of the New England Industrial Research Foundation.
The addresses of President Osborne and Mr. Bass will be discussed by the following:
Miss Elizabeth M. Herihy, Chairman and Executive Secretary, Massachusetts State Planning Board.
The Honorable Roger Lowell Putnam, Mayor of Springfield, Massachusetts, and Director of the New England Council.
William Stanley Parker, Member and Former Chairman, Boston City Planning Board.
C, A. Harrell, City Manager, Schenectady, N. Y.
E. J. Adams, Chairman, Housing Committee on Joint Projects; M. 1. T.


Electric Arc Welding on a Transformer Tank

| 2:30 p.m.-Conference for Industrial | Operators |  |
| :---: | :---: | :---: |
| of Electrical Equipment |  |  |
|  | WBRK Auditorium - | 80 |
| J. J. Orr, Presiding |  |  |

C.P.* Methods of Organizing and Holding Clinics for Industrial Operators. T. M. Linville, General Electric Co.
C.P.* Protective Lighting in Industrial Plants. H. E. Mahan, General Electric Co.
C.P. The Economics of a Maintenance Program for Electrical Equipment. A. W. Dust, Western Massachusetts Electric Company.
C.P.* A Prepared Discussion of Static Electricity as a Hazard in Industrial Plants.

> A Panel Discussion of Specific Electrical Problems Encountered ly Industrial Operators in the Pitsfield ares. H. W. Roger. Geseral Electrio-Company; A. W. Dust. Western Massechusets. Electric Company; C. E. Eismann, General Electric Company.

## 6:00 p.m.-Vice-Presidental Reception <br> - Wendell Hotel -

6:30 p.m.-Get-Together Dinner 2 ano 2y:chot - Wendell Hotel J. O. Roser, Presiding Presentation of District Prizes for Papers. Address: "Railroad Transportation in the Present Emergency." C. E. Smith, Vice-President, New York, New Haven and Hartford Railroad.

## Friday, April 9

9:00 a.m.-Plastics

- Wendell Hotel -
H. M. Richardson, Presiding
D.P. $\uparrow$ Thermoplastics in the Electronic World of Tomorrow. H. K. Nason, Monsanto Chemical Co.
D.P. $\ddagger$ Characteristics and Properties of Thermo-setting Plastic Material. C. W. Blount, Bakelite Corp.
D.P. $+\quad$ Plastic Parts Design. W. S. Larson, General Electric
D.P. $\dagger$ The Application of Laminated Plastic Products in the Electrical Industry. P. B. Leverette, General Electric Co.
9:00 a.m.-Conference on Electric Welding and Brazing

> Berkshire Museum -
> J. H. Lampe, Presiding
C.P.* Alternating.Current Arc Welding. (Demonstration and Movies) E. F. Potter, General Electric Co.
C.P.* Application Problems in A-C Arc Welding. R. F. Wyer, General Electric Company.
C.P.* Contribution of Resistance Welding Control to the War Effort. H. L. Palmer, General Electric Co.
CP.* Control Requirements for Spot Welding of Hardenable Alloy Steels in Light and Heavy Gages. W. F. Hess, Rensselaer Polytechnic Institute.
CP.* Electric Brazing. W. C. Reed, General Electric Co.

9:00 a.m.-Conference on Electronics and Communications
$\underset{\text { Donald G. Fink, Presiding }}{\text { - WBRK Auditorium - }} 130$
C.P.* Electron Microscope. C. H. Bachman, General Electric Co.
C.P.- Radio Transmission Systems for Vehicles.
F. A. Gifford, N. E. Tel. \& Tel. Co.

Sgt. W. T. Armstrong, Bureau of Communications, Massachusetts Dept. of Public Safety. John J. Murphy, Boston Consolidated Gas Co. Harold C. Hamilton, Boston Edison Co.
C.P.* Radio Noise in Aircraft.

Fred Foulon, Douglas Aircraft Co.
D. K. Kinsey, Chance Vought Aircraft Co.
C. W. Frick, General Electric Co. Con,
S. W. Zimmerman, General Electric Co.
43.72. Train Communication. L. O. Grondahl and P. N. Bossart, Union Switch and Signal Co. (Presentation by title). 25 cents by mail.
2:00 p.m.-Conference on Wartime Problems of Technical Personnel I.

- Wendell Hotel

Vice-President K. B. McEachron, Presiding

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\begin{aligned}
& \text { Three authoritative speakers will discuss } \\
& \text { different aspects of the wartime technical } \\
& \text { manpower problem. This will be followed by } \\
& \text { panel discussions of technical manpower } \\
& \text { problems in industry and the colleges at } \\
& \text { present and in the post-war period. }
\end{aligned}
$$

Address: "Securing and Training of Technical Personnel Needed by The Army." Col. Herman Beukema, Director, Army Specialized Training Division.
Address: "Securing and Training of Technical Personnel Needed by the Navy." Joseph W. Barker, Special Assistant to the Secretary of the Navy.
Address: "The War Manpower Commission's Technical Training Program for War Industries," William C. White, Regional Adviser for the War Training Program; Dean of Engineering, Northeastern University.
C.P.* Wartime Technical Manpower Problems in Manufacturing and Operating Companies.
M. M. Boring, General Electric Co.
T. O. Armstrong, Westinghouse Elec. \& Mfg. Co.
C.P.* Wartime Manpower Problems in Tech. Colleges. F. J. Adams, Worcester Polytechnic Institute;
S. B. Wiltse, Rensselaer Polytechnic Institute;
C. L. Dawes, Harvard University.
C.P.- Technical Manpower Problems After the War.
A. G. Conrad, Yale University
I. A. Terry, General Electric Co.
T. O. Armstrong, Westinghouse Elec. \& Mfg. Co.
D.P. + -District Paper: no advance copies available; not intended for publication in TRANSACTIONS.
C.P. ${ }^{\text {- }}$ Conference Paper; no advance copies available; not intended tended for publication in TRANSACTIONS.


Fast Dependable Freight Service Plays an Important Part in the Present Emergency

## (Continued jrom page 1)

torium, on April 7 at 8:00 p.m. Younger engineers of the Schenectady, Lynn, and Pittsfield Sections who have had no previous experience in presenting papers of a technical nature to a national society will speak in the competition. Each competitor's oral presentation will be judged by a set of three judges and an audience ballot.

## Thursday, April 8

The General Session at $1: 30 \mathrm{p} . \mathrm{m}$. in the Berkshire Museum Auditorium will be addressed by Mr. J. F. Burt of the Western Massachusetts Electric Company who will show still and motion pictures of sleet-storm damage to overhead lines. President H. S. Osborne's address "The Engineer's Interest in City Planning" will conclude the general session and introduce an important Conference on City and Regional Planning to follow.
A Vice-Presidential Reception will be held at 6:00 p.m. in the Wendell Hotel followed by a dinner.

Get-Together Dinner at 6:30 p.m. at the Wendell Hotel. The address of the evening will be made by Mr. C. E. Smith, Vice-President of the New York, New Haven and Hartford Railroad, speaking on, "Railroad Transportation in the Present Emergency." From a long and colorful career in railroading, as well as having served during 1918 as a Major in the Construction Division, U. S. Army, Mr. Smith is particularly well qualified to present this subject.

## EXHIBITS

In lieu of inspection trips, which are impractical under wartime conditions, it is planned to have at the Berkshire Museum interesting exhibits of products of the various industries in the Pittsfield district. These exhibits will be on display during April $8-9$, so that those attending the meeting may see them at their convenience.

Anyone desiring space for an exhibit of engineering interest should write to W. J. Rudge, 100 Woodlawn Ave., Pittsfield, Mass.

## RESERVATIONS AND REGISTRATION

Hotel Reservations should be made as early as possible by filling in and mailing the enclosed hotel reservation card addressed to S. Terpak, 100 Woodlawn Avenue, Pittsfield, Mass. Under war conditions facilities are limited. Although no difficulty in providing accommodations is expected, it will be necessary for most of those in attendance to share a suite of two rooms, with three people assigned to the suite. The two connecting rooms are provided with three single beds and an adjoining bath.
Please Register in Advance by filling in and mailing promptly the advance registration card and complete your registration at the Wendell Hotel 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.

## COMMITTEES

General Committee: L. Wetherill, Chairman; E. V. DeBlieux, C. W. Germeck, J. H. Hagenguth, E, K. Kane, R. G. Lorraine, D. D. MacCarthy, K. B. McEachron, R. F. Morrier, C. A. Read, J. O. Roser, W. J. Rudge, J. C. Rust, S. Terpak.

Technical Program: E. V. DeBlicux, Chairman; A. Boyajian. C. Camilli, R. E. Coates, J. C. Howes, F. H. Judkins, P. B. Leverette, S. Minneci. H. M. Richardson, P. B. Sowell, J. L. Thomason.
Tri-Sectional Competition: J. C. Russ, Chairman; H. W. Allison, P. N. Bosworth. J. H. Hagenguth, B. M. Harris, 1. W. Marks, H. Schubert, C. W. Werta, S. W. Zimmerman.

Exhibits: W. J. Rudge, Chairman; G. F. Lincks, L. L. Lincoln.
Publicity: D. D. MacCarthy, Chairman: E. J. Allen, C. A. Beers, R. A. Browne, E. A. Elge, T. D. Gordy, J. W. Kalb, C. W. Kellogg, E. W. Manning.
Dinner: E. K. Kane, Chairman; J. R. Barr, C. A. Beers.
Finance: J. H. Hagenguth, Chairman.
Registration: R. F. Morrier, Chairman.
Information: C. A. Read, Chairman.
Hotels: S. Terpak, Chairman; L. W. Marks, C. W. Wertz

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