

GREAT LAKES DISTRICT MEETING

Des Moines, Iowa



April 1-3, 1948

Headquarters: Hotel Fort Des Moines



View of Central Section of Des Moines with Court House in the Foreground

FEATURING

Six Technical Sessions

A Student Paper Session

**Student Branch Counselors and
Branch Representatives Meeting**

Inspection Trips

Ladies' Entertainment

Informal Banquet

Smoker and Buffet Supper

INSPECTION TRIPS

Thursday afternoon inspection trips will be taken to the Firestone Tire and Rubber Company or the Iowa Power and Light Company. The Firestone Tire and Rubber Company plant is one of the most modern and streamlined of its type for the manufacture of large size tires and tubes for tractors, trucks, and earth moving machinery. Its machines incorporate the latest practical controls and designs developed for the tire industry. The Iowa Power and Light Company main plant has a new 161-KV substation used to connect to the transmission line interconnecting Davenport, Des Moines, St. Joseph, and Kansas City. Modern transformers, switch-

gear, and carrier current equipment can be seen at this nearly completed project.

On Friday afternoon a trip has been arranged to the Lake Shore Tire and Rubber Company or the Solar Aircraft Company. The Lake Shore Tire and Rubber Company is one of the largest industrial plants in Iowa. This modern new plant is devoted exclusively to the manufacture of passenger, truck, and tractor tires. The Solar Aircraft Company is one of the few plants in the country working exclusively with stainless steel and process sheet steel to engine tolerances. The manufacture of high temperature parts for the new aircraft jet engine may be seen.

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AIEE GREAT LAKES DISTRICT MEETING—PROGRAM—Des Moines, Iowa—April 1-3, 1948

ADVANCE COPIES OF PAPERS

Members may obtain preprints of technical papers at the uniform price of **30¢ each (60¢ each to non-members)** by sending enclosed order form and remittance to the AIEE Order Department, 33 West 39th Street, New York 18, N. Y. Conference papers denoted by CP* are intended for presentation only, and are not available. 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.

Thursday, April 1

8:30 a.m.—Registration

Mezzanine

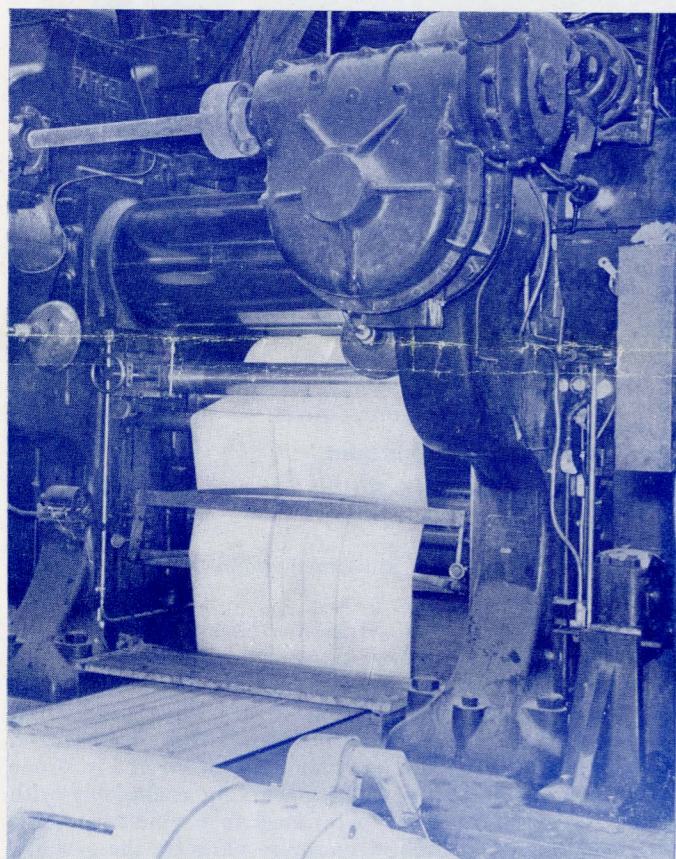
10:00 a.m.—Opening General Meeting

R. F. Castner, Presiding

Address of Welcome: A. W. Brayton, Secretary, Des Moines Chamber of Commerce.

Remarks: T. G. LeClair, Vice-President, Great Lakes District, AIEE

Address: "Ceiling Unlimited." B. D. Hull, President, AIEE.



Rubber Calender at Lake Shore Tire and Rubber Company, to be visited on Friday afternoon

1:30 p.m.—Movies on Mexico

2:00 p.m.—Inspection Trips

- (a) Firestone Tire and Rubber Company.
- (b) Iowa Power and Light Company Plant and 161-Kv substation.

2:00 p.m.—Technical Session

South Ball Room
H. E. Hartig, Presiding

- 48-101. A Practical Approach to Calculating Optimum Performance of Semi-conductor Rectifiers. E. D. Wilson, Westinghouse Elec. Corp.
- 48-102. Amalgam-Cathode Materials for Power Tubes. J. A. M. Lyon, C. E. William, Northwestern Univ.
- CP.* Induction Heating as a Practical Tool. C. J. Rath-sack, Allis-Chalmers Mfg. Co.
- CP.* Utility Experience with High-Frequency Heating. H. R. Winemiller, H. Bunte, Commonwealth Edison Co.

2:00 p.m.—Technical Session

Palm Room
E. B. Kurtz, Presiding

- 48-103. The General Solution Method of Power Network Analysis. L. A. Dunstan, Federal Power Commission.
- 48-104. Primary Detectors for Measurements. E. E. Lynch, A. J. Corson, General Elec. Co.
- CP.* Use of Intermediate Voltage in Conversion from D-C to A-C in Buildings. J. D. Fitzgerald, General Elec. Co.

3:00 p.m.—Ladies' Tea at the Wakonda Club

(Transportation furnished.)

5:30 p.m.—Open House

(Courtesy of General Electric Co. and Westinghouse Elec. Corp.)

6:30 p.m.—Informal Banquet—Ladies Welcome

Grand Ball Room

Entertainment. Collins Radio Players.
Speaker. (To be announced).
Tickets \$4.50.

Friday, April 2

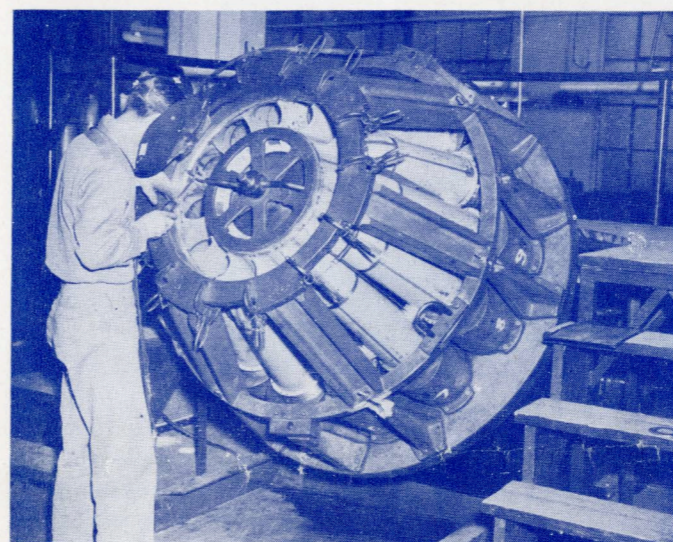
9:30 a.m.—Student Technical Papers

South Ball Room

9:30 a.m.—Technical Session

Palm Room
R. B. Miller, Presiding

- 48-106. A New Relayed Automatic Oil Circuit Recloser. ACO† E. J. Casey, E. T. McCurry, General Elec. Co.



Hand Atomic Welding for Assembling Jet Engine Combustion Chambers at the Solar Aircraft Company plant, to be visited Friday afternoon

- 48-108. Power Air Circuit Breakers in Metal Clad Switch-gear. R. C. Dickinson, B. I. Hayford, Westinghouse Elec. Corp.

- 48-107. Modern Design Conceptions Are Used to Make Improved High-Voltage Switches. A. H. Powell, H. R. Harrison, General Elec. Co.

12:15 p.m.—Luncheon

Grand Ball Room.

Address: "Industrial Research and Development." Dr. J. F. D. Smith, Dean of Engineering, Iowa State College.

Tickets \$1.75; Students \$1.00.

1:30 p.m.—Ladies' Sightseeing Tour

(Transportation furnished.)

2:00 p.m.—Movies on Mexico

2:30 p.m.—Inspection Trips

- (a) Lake Shore Tire and Rubber Company.
- (b) Solar Aircraft Company.

2:30 p.m.—Symposium on Nucleonics

Grand Ball Room
J. J. Smith, Presiding

- CP.* Cyclotrons. J. B. Livingood, Collins Radio Co.
- CP.* Synchrotrons. H. C. Pollock, General Elec. Co.
- CP.* Nuclear Reactors. A. Wattenberg, Argonne National Labs.
- CP.* Radiation Measurements. D. S. Martin, Inst. for Atomic Research.

6:30 p.m.—Smoker and Entertainment—Buffet Supper

Ball Room, Hotel Savery, 4th and Locust Sts.
Tickets \$6.50.

6:30 p.m.—Informal Ladies' Dinner

Des Moines Club.
By courtesy of the Iowa Pr. and Lt. Co.

Saturday, April 3

9:30 a.m.—Student Branch Counselors and Branch Representatives

Green Room

9:30 a.m.—Technical Session

Palm Room
J. F. Calvert, Presiding

- CP.* Starting of Hermetically-Sealed Motors. E. D. Fillmore, Univ. of Minn.

- 48-109. Oscillographic Study of Synchronous Motor Hunting. E. B. Kurtz, Univ. of Iowa.

- 48-105. Analysis of Unsymmetrical Machines. K. Burian G-M Laboratories, Inc.

- 48-110. Progress Report on AIEE-ASME Standard Large 3600-RPM Turbine-Generators. S. H. Mortensen, Allis-Chalmers Mfg. Co.; J. B. McClure, General Elec. Co.; C. M. Laffoon, Westinghouse Elec. Corp.

9:30 a.m.—Technical Session

South Ball Room
M. S. Coover, Presiding

- 48-111. Experimental Determination of the Capacitances of Heavy-Current Buses Comprised of Solid or Tubular Rectangular Conductors. R. D. Teasdale, T. J. Higgins, Illinois Inst. of Tech.

- 48-112. A Large Scale General Purpose Electric Analog Computer. E. L. Harder, Westinghouse Elec. Corp.; G. D. McCann, Calif. Inst. of Tech.

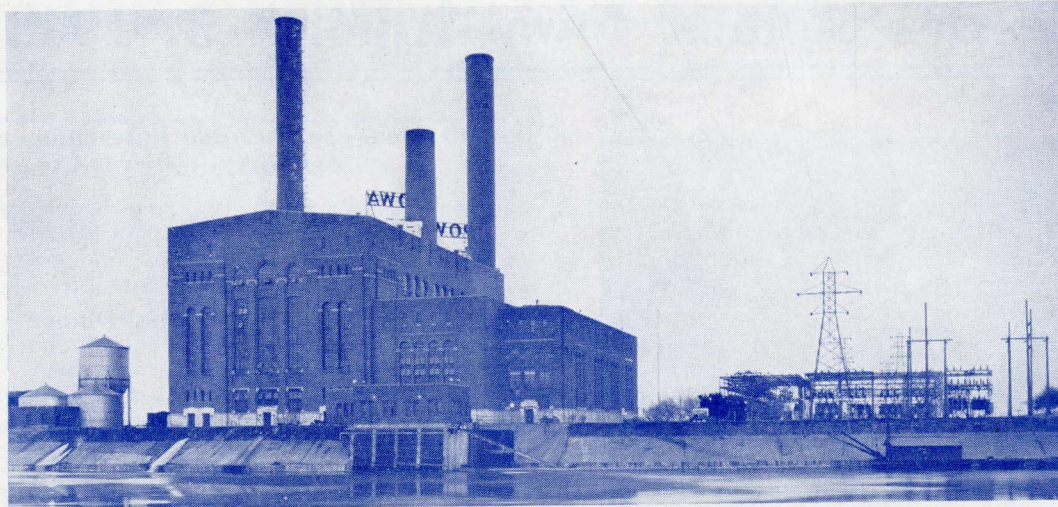
- 48-113. An Optical Radar for Surveying. W. W. Hansen, Armour Research Foundation.

12:30 p.m.—Student Branch Luncheon

Ranch Room

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.



Plant of the Iowa Power and Light Company to be visited on Thursday afternoon

GENERAL INFORMATION

Registration will take place on the mezzanine floor of the Hotel Fort Des Moines. All sessions and meeting activities will take place on this floor, except the Student Branch Luncheon scheduled for Saturday. This will be held in the Ranch Room on the top floor of the Hotel.

Ladies' Headquarters will be maintained in Parlor "D" at the north side of the mezzanine floor.

Buses for the Ladies' Tea and all inspection trips will leave from the 10th Street side of the Hotel.

Transportation for the Ladies' Sightseeing Tour on Friday will also leave from the same point.

The tickets for the banquet will be \$4.50 and ladies are invited, with dress informal.

Tickets for the Friday noon luncheon will be \$1.75 with a special rate to registered students at \$1.00.

The smoker and buffet supper on Friday evening will be held at the Hotel Savery, 4th and Locust Streets, distant six blocks from the Fort Des Moines Hotel.

Arrangements have been made with the Hotel for special student accommodations at \$2.00 per night each with 3 or 4 in a room. It is suggested that the faculty advisor of each school should make arrangements directly with the Hotel for this space.

ADVANCE REGISTRATION

Please register in advance by promptly filling in and mailing the enclosed advance registration card. This will assist the registration committee and save time on arrival. A non-member registration fee of \$2.00 will be charged all non-members except Enrolled Students, the immediate families of members, and local members of the Iowa Section.

HOTEL FORT DES MOINES

All members are requested to mention their attendance at the Great Lakes District Meeting when writing to the Hotel Fort Des Moines, 10th and Walnut Streets, Des Moines, Iowa. For reservations during the period of the meeting, the Hotel will then give priority accordingly. For convenience, a hotel reservation card is enclosed which should be mailed before

March 15. Please indicate type of reservation desired and in the case of twin-bed and double rooms give the name of someone selected to join in occupancy. Room rates are as follows:

Single	Double	Twin Beds
\$3.25	\$4.50	\$7.00
3.50	5.00	8.00
4.00	5.50	8.50
4.50	6.00	
5.00	7.00	
6.00	8.00	
6.50	8.50	

Although arrangements have been made for sufficient rooms for the number expected to attend, they will be held only if specifically reserved by those who will occupy them.

DISTRICT MEETING COMMITTEE

T. G. LeClair, <i>Chairman</i>	R. F. Castner, <i>Vice Chairman</i>
R. E. Beam	J. V. Gebuhr
W. L. Cassell	B. C. Lueders
	N. C. Percy
	A. W. Rauth
	J. D. Ryder

LOCAL COMMITTEES

Program—J. D. Ryder
 Finance—R. F. Castner
 Hotels & Registration—J. H. O'Day
 Trips & Transportation—G. A. Corcoran
 Publicity—J. V. Gebuhr
 Banquet—K. R. Brown
 Ladies' Entertainment—Mrs. D. A. Powell

Issued by

AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS
 33 West 39th Street, New York 18, N. Y.

PRINTED IN U.S.A.