

MIDDLE EASTERN DISTRICT MEETING

Dayton, Ohio



September 23-25, 1947

Headquarters: Dayton Biltmore Hotel



Aerial View of the City of Dayton

Mayfield Photos, Inc.

FEATURING:

Technical Program:

Air Transportation, 3 sessions
Rotating Machinery, 4 sessions
Industrial Electronics, 1 session

Ladies' Entertainment

Banquet and Smoker

Inspection Trips to Industries
and Wright Field

The second Rotating Machinery session on Tuesday afternoon which deals with leakage reactance should prove of unusual interest. Paper No. 47-213 will give reactance figures as obtained from actual test results. The informal discussion which follows will present pre-determined data on the same motor as calculated by the methods used in four different companies.

AIEE MIDDLE EASTERN DISTRICT MEETING - PROGRAM - Dayton, Ohio - September 23-25, 1947

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 5¢ 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.

On the day preceding the opening of the meeting at 10:00 a.m. the District Executive Committee will hold a meeting. At 4:00 p.m. in the afternoon the registration desk will be open for advance registration.

Tuesday, September 23

8:15 a.m.—Registration

9:00 a.m.—Opening General Session

L. J. Fritz, Presiding

Address of Welcome: Hon. Edward Breen, Mayor of Dayton, Ohio.

Response: George W. Bower, Vice-President, District No. 2 AIEE Announcements.

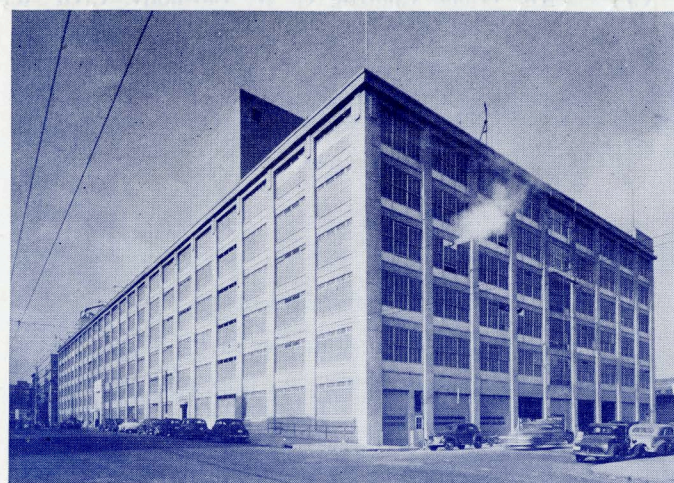
10:00 a.m.—Rotating Machinery—Leakage Reactance

W. R. Hough, Presiding

47-207. Physical Concept of Leakage Reactance. J. H. ACO.† Kuhlmann, Univ. of Minn. 20 cents by mail.

47-208. Calculation of Slot Constants. A. F. Puchstein, The Jeffrey Mfg. Co. 30 cents by mail.

CP.* End Turn Leakage Reactance of a Polyphase Induction Motor Winding. E. C. Barnes, Reliance Elec. & Engg. Co.



Mayfield Photos, Inc.

One of Several Buildings of the Delco Products Division of the General Motors Corp., which may be visited on Wednesday afternoon

47-209. The Air Gap Reactance of Polyphase Machines. P. L. Alger and H. R. West, General Elec. Co. 40 cents by mail.

1:15 p.m.—Ladies' Luncheon, Fashion Show and Card Party—Dining Room, Fifth Floor, Rike-Kumler Company

2:00 p.m.—Rotating Machinery—Leakage Reactance (continued)

J. L. Hamilton, Presiding

47-210. Leakage Reactance of the Squirrel Cage Rotor with Respect to the Stator Harmonics and the Equivalent Circuit of the Induction Motor. M. M. Liwischitz, Polytechnic Inst. of Brooklyn. 20 cents by mail.

47-211. Some Phases of Calculation of Leakage Reactance of Induction Motors. W. H. Formhals, Westinghouse Elec. Corp., and M. M. Liwischitz, Polytechnic Inst. of Brooklyn. 25 cents by mail.

47-212. Reactances of Induction Motors. T. C. Lloyd, V. F. Giusti, and S. S. L. Chang, Robbins & Myers, Inc. 35 cents by mail.

47-213. Test Results of Motor Used for Leakage Reactance Calculations. A. L. Poliquin, Master Elec. Co., and A. S. Bickham, The Whirl-A-Way Motors, Inc. 25 cents by mail.

CP.* Informal discussion of Calculations of Leakage Reactance of sample motor.

E. C. Barnes, Reliance Elec. & Eng. Co.

B. M. Cain, General Elec. Co.

W. H. Formhals, Westinghouse Elec. Corp.

T. C. Lloyd, Robbins & Myers, Inc.

2:00 p.m.—Air Transportation—General Development

W. T. Harding, Presiding

47-214. Electricity Aloft. T. J. Martin, Jack & Heintz Precision Industries, Inc. 35 cents by mail.

CP.* A Constant Speed Drive for Aircraft Alternators. L. H. Schuette and R. Chrzanowski, Sundstrand Mach. Tool Corp.

47-215. Electric Drive for Aircraft. G. C. Crom, Air Materiel Command, Wright Field. 25 cents by mail.

47-216. A Capacitance-Type Fuel-Measurement System for Aircraft. D. B. Pearson, General Elec. Co. 20 cents by mail.

47-217. A Variable-Speed Constant-Frequency Generator. C. S. Roys, Syracuse Univ.; Joseph Nader, Melvin Spotts, Eicor, Inc. 20 cents by mail.

7:30 p.m.—Smoker: Entertainment and Buffet Supper, Engineers' Club of Dayton

Wednesday, September 24

9:30 a.m.—Rotating Machinery—Motor Design

C. G. Voinott, Presiding

47-218. The Hysteresis Motor—Advances which Permit Economical Fractional Horsepower Ratings. H. C. Roters, Fairchild Camera & Inst. Co. 35 cents by mail.



The National Cash Register Company Plant, pioneer manufacturer of cash registers, embraces 27 buildings

47-219. Performance Calculations On Shaded Pole Motors. P. H. Trickey, Diehl Mfg. Co. 25 cents by mail.

CP.* Design of Fractional Horsepower Direct Current Motors. O. M. Swain, Westinghouse Elec. Corp.

47-220. A Design Method for Capacitor Start Motors. S. S. L. Chang, Robbins & Myers, Inc. 25 cents by mail.

47-221. Impedance Relationships of the Adjustable Speed A-C Brush Shifting Motor. F. W. Baumann, General Elec. Co. 20 cents by mail.

9:30 a.m.—Air Transportation—Recent Projects

K. R. Smythe, Presiding

47-222. Aircraft Electric Power Protective Systems. B. O. Austin, Westinghouse Elec. Corp. 25 cents by mail.

47-223. Aircraft Electrical System Testing. P. H. Merriman, ACO.† G. L. Martin Corp. 20 cents by mail.

CP.* Inverters and Inverter Systems for Aircraft. S. Zak, Engg. Div., Wright Field.

CP.* Electrical De-icing of Aircraft Propellers. J. H. Sheets and E. J. Sand, Curtiss-Wright Corp.

47-225. Control and Power Systems for Aircraft Window De-icing. C. L. Mershon, Westinghouse Elec. Corp. 20 cents by mail.

9:30 a.m.—Industrial Electronics

W. C. Osterbrock, Presiding

CP.* New Developments of Electronic Equipment for the Rubber Industry. B. J. Dalton, General Elec. Co.

47-226. Direct Coupled Oscillograph Amplifier. D. R. Christian, The Brush Development Co. 20 cents by mail.

47-227. A Calorimetric Method for Direct Measurement of Plate Dissipation. R. T. Squier, Minn.-Honeywell Reg. Co. 20 cents by mail.

CP.* Current Distribution in Semi-Conductors Heated by High Frequency Currents. F. C. Weimer, The Ohio State Univ.

CP.* A Thyatron Controlled Automatic Welding Head. R. J. LaPlante and G. H. Fett, The Univ. of Ill.

CP.* Timing Circuits in Resistance Welding Controls. B. Sussman, General Elec. Co.

12:00 m.—Luncheon Meeting of Student Branch Counselors

1:30 p.m.—Inspection Trips to National Cash Register Co., McCall Corporation, Delco Products Division of General Motors Corp., or Dayton Rubber Manufacturing Co.

1:30 p.m.—Special Sight-seeing trip for ladies, including inspection trip through the Pattern Department, McCall Corp.

6:30 p.m.—Banquet, Ballroom, Dayton Biltmore Hotel

M. H. Wagner, Sr., Toastmaster

Speaker: Dr. William C. Wickenden, Past President, AIEE

Thursday, September 25

9:00 a.m.—Rotating Machinery—Processing and Testing

W. R. Appleman, Presiding

47-206. The "Copperspun" Squirrel Cage Rotor. G. R. Anderson, Fairbanks, Morse & Co. 20 cents by mail.

47-229. A High Precision Dynamometer for Small Motor Measurements. J. E. Duff, The Hoover Co. 20 cents by mail.

CP.* Expediting and Improving Heat Runs with a Multi-point Temperature Recorder. J. L. Fuller, Reliance Elec. & Engg. Co.

47-230. The Application of Surge Comparison Testing Equipment to Fractional Horsepower A-C Stator Windings. L. W. Buchanan, Westinghouse Elec. Corp. 20 cents by mail.

47-231. The Design and Application of Hermetic Motors. ACO.† F. L. Slade, Century Elec. Co. 20 cents by mail.

9:00 a.m.—Air Traffic Control Equipment

J. D. Miner, Presiding

CP.* Air Traffic Control, C. W. Carmody, Civil Aeronautics Authority.

47-233. Using Airborne Radar to Increase Airline Safety. R. W. Ayer, American Airlines, Inc. 30 cents by mail.

47-234. Landing Through Overcast. W. T. Harding, Equipment Lab., Wright Field. 20 cents by mail.

47-235. Airport Runway and Approach Lighting. G. Kevern, Air Materiel Command, Wright Field. 20 cents by mail.

47-236. High Altitude Flashover and Corona Correction on Small Ceramic Bushings. W. W. Pendleton, Westinghouse Elec. Corp. 20 cents by mail.

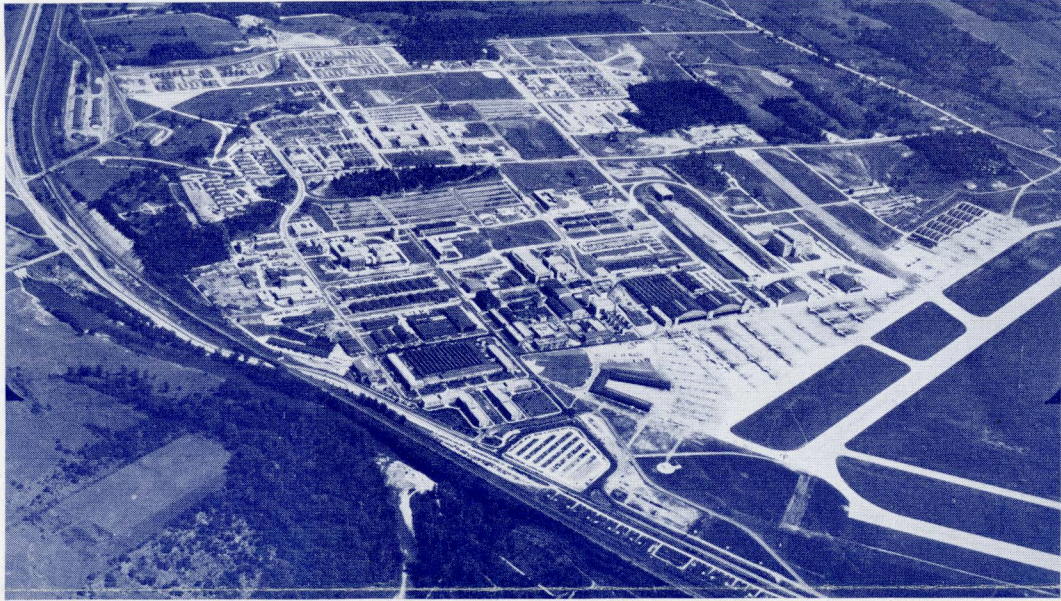
9:30 a.m.—Air Transportation Committee Meeting

9:30 a.m.—First Inspection Trip to Wright Field

1:00 p.m.—Second Inspection Trip to Wright Field

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.



AAF Photo

Aerial View of Wright Field, Area "B," where the Army Air Force does most of the experimental work on aircraft development

ENTERTAINMENT

A Stag Smoker will be held at the Engineers' Club on Tuesday, September 23, at 7:30 p.m. Tickets are \$2.75, which includes entertainment, a light supper, and refreshments served buffet style.

The Banquet is scheduled for Wednesday, September 24, at 6:30 p.m. in the ballroom of the Biltmore Hotel. Special invitation is extended to the ladies. Dress will be informal. Tickets are \$4.50. An entertaining program has been planned.

A Ladies' Luncheon, card party, and fashion show is arranged for Tuesday, September 23, at 1:15 p.m. at Rike-Kumler's dining room. Tickets are \$2.00.

A Ladies' Sightseeing Tour of local points of interest has been arranged specially for the ladies on Wednesday, September 24, at 1:30 p.m., without charge. This will include a tour of McCall's Pattern Department.

Sports Facilities will be available in the city for those wishing to play golf or tennis.

INSPECTION TRIPS

Four inspection trips will be conducted in parallel Wednesday afternoon, September 24. All four trips will start at 1:30 p.m. Busses will be provided, and tickets will be 25 cents to cover cost of transportation.

1. McCall Corporation—Pattern making and publication of many well-known periodicals.
2. Delco Products Division, General Motors Corporation—Electric Motors and Automotive Accessories.
3. National Cash Register Company—Cash Registers and Business Machines.
4. Dayton Rubber & Manufacturing Company—Rubber Products, including Tires, Tubes, Belts, and other Industrial Items.

On Thursday, September 25, there will be two inspection trips to Wright Field, one starting at 9:30 a.m. and the other starting at 1:00 p.m. There is a definite limitation on numbers for each Wright Field trip. Local members (those who have the opportunity of visiting the field at other times) will be requested to defer to out-of-town registrants in case more than 200 desire to take either trip. Tickets will be 50 cents, and admission to the field will be by chartered bus only. No cameras will be permitted.

Note: It will be necessary for those desiring to take either of the Wright Field inspection trips to produce evidence of citizenship (United States or Canada) at time of registration.

ADVANCE REGISTRATION

Please fill in and promptly mail the enclosed Advance Registration Card. This will save time on arrival at the registration desk. A registration fee of \$2.00 will be charged all nonmembers, except Enrolled Students and the immediate families of members.

To avoid inconvenience and to facilitate the work of the committee please enclose a check covering the cost of the functions which you will attend. This will eliminate delays incident to making change, etc. Also, advance payment will assure preference in securing reservations where attendance is limited. Checks should be made payable to G. B. Hamm, Treasurer, AIEE District Meeting.

HOTEL ACCOMMODATIONS

The Hotel Committee has been fortunate in securing block reservations at the following hotels, all of which are within a short distance of the meeting headquarters:

Hotels	Rates-Double	Rates-Single
Dayton Biltmore (Meeting Headquarters)	\$6.00 up	\$4.00 up
Van Cleve	6.00 up	3.50 up
Miami	5.50 up	3.50 up

Members and guests should indicate with whom they desire to share a room in case single rooms are not available.

COMMITTEE

M. H. Wagner, Sr., *Honorary Chairman*

L. J. Fritz, <i>General Chairman</i>	G. B. Hamm, <i>Secretary</i>
R. C. Abbott	W. M. Gallagher
W. R. Appleman	J. W. Gehrke
W. A. Barden	C. Higgins
E. J. Bates	F. S. Himebrook
C. T. Button	R. W. Hommel
H. E. Deardorff	R. S. Hull
W. A. Dynes	J. O. Lang
Mrs. W. A. Dynes	E. C. Merkle
	R. E. Mumma
J. M. Rodgers	C. H. Spittler
H. S. Starbuck	G. I. F. Theriault
Mrs. G. I. F. Theriault	M. H. Wagner, Jr.
Alan Watton	R. Zimmerman

Issued by

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