

MIDDLE EASTERN DISTRICT MEETING

Baltimore, Md., October 3-5, 1950



Headquarters:
Lord Baltimore Hotel



Baltimore Skyline

MEETING FEATURES

BALTIMORE: The 1950 Middle Eastern District Meeting will be held in Baltimore, Md., October 3-5, with headquarters in the Lord Baltimore Hotel. In addition to the Technical Program, a delightful series of events, consisting of a stag smoker, cabaret dance, inspection trips and a special women's program have been arranged by the committee.

GENERAL SESSION: On Tuesday, October 3 at 10 A.M. the General Session will open in the Calvert Ball Room of the Lord Baltimore. The subject "Developing Engineers for Industry" will be presented by Dr. W. B. Kouwenhoven, Dean, School of Engineering, The Johns Hopkins University, Everett S. Lee, General Electric Company and Titus G. LeClair, President, American Institute of Electrical Engineers.

AIR TRANSPORTATION COMMITTEE: This District meeting has been selected by the Air Transportation Committee, AIEE, for their annual Institute meeting. Members from all of the country will attend. This selection is felt to be appropriate because of the Glenn L. Martin Plant here and the recent dedication of the new Friendship International Airport at which special inspection trips have been arranged. All other members and guests may attend.

THE SMOKER: There will be a stag smoker in the Calvert Room of the Lord Baltimore Hotel, Tuesday evening, October 3, 6:00 P.M. It will consist of an old time Maryland Oyster Roast with all of its elaborate trimmings. For those not wishing to partake of oysters there will be plenty of other kinds of food. Rivers Chambers and his Orchestra will furnish music. Boxing Matches will be staged during the evening. Tickets are priced at \$6.00 per person (with a special \$3.00 rate for student members); these prices include tax and gratuity. Get your reservations early by filling out and sending in the enclosed card.

A CABARET DANCE will be held on Wednesday evening, 9:00 P.M. in the Ball Room of the Lord Baltimore Hotel. Informal dress, door prizes. Music by Jack Lederer's Famous Ball Room Orchestra. No admission charge.

LADIES ENTERTAINMENT: The ladies committee wishes to extend a cordial invitation to the wives of members. A suite of rooms will be open to the ladies at all times to provide for their comfort and to serve as a meeting place for old and new acquaintances. The following program has been arranged. Monday, October 2, Two to

Continued on page 5

AIEE MIDDLE EASTERN DISTRICT MEETING — PROGRAM — Baltimore, Md.

ADVANCE COPIES OF PAPERS

Members may obtain preprints of technical papers at the uniform price of **30¢ each (60¢ each to nonmembers)** by sending remittance to the AIEE Order Department, 33 West 39th Street, New York 18, N. Y. District papers denoted by DP** 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. Coupon books in \$9.00 denominations are available for those who wish to avoid remittance by check or otherwise. Most of the papers ultimately will be published as AIEE PROCEEDINGS and in the TRANSACTIONS.

Tuesday, October 3

10:00 a.m.—General Session

Calvert Ball Room
THOMAS W. TRICE, Presiding

Opening Remarks. J. W. Gore, Chairman, Maryland Section, AIEE Developing Engineers for Industry

Mutual Obligations—The University, The Engineer, Industry, The Engineering Society. Dr. W. B. Kouwenhoven, The Johns Hopkins University.

Industry Appraises and Develops the Engineer. Everett S. Lee, General Electric Co.

Is the College Graduate Educated? Titus G. LeClair, President, American Institute of Electrical Engineers.

Awards Presentation. District No. 2 Papers. C. G. Veinott, Vice President, District No. 2.

2:00 p.m.—Computing Devices

Federal Hill Room
J. G. BRAINERD, Presiding

DP.** The EDVAC—Basic Principles. S. E. Gluck, University of Pennsylvania.

DP.** The Installation and Modification of the EDVAC. R. L. Snyder, Jr., Aberdeen Proving Grounds.

DP.** Adders and Counters. H. J. Gray, University of Pennsylvania.

DP.** Systematization of Tube Surveillance in Large Scale Computers. Homer Spence, Aberdeen Proving Grounds.

DP.** Stability Diagrams for Feedback Systems. J. F. Koenig, University of Illinois.

2:00 p.m.—Relays

Founders Room
W. G. WITHINGTON, Presiding

50-189. Theory and Application of Transformer Differential Protection. G. W. McKenna, Philadelphia Electric Co.

50-190. Differential Relay Sensitivity Adjuster. C. L. Headley, Consolidated Gas Electric Light and Power Co. of Baltimore.

DP.** Improved Bus Protection. L. E. Goff, General Electric Co.

DP.** Symmetrical Components as Applied to Protective Relaying. W. K. Sonnemann, Westinghouse Electric Corp.

2:00 p.m.—Rotating Machinery I—D.C.

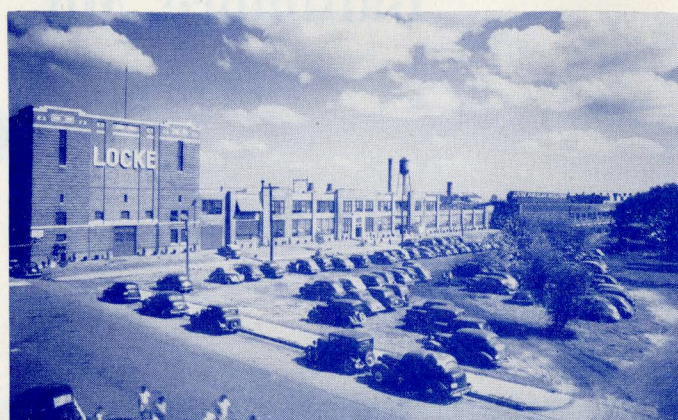
Phoenix Room
B. H. CALDWELL, Presiding

50-191. Resistance Commutation. F. D. Olney, General Electric Co.

50-192. Current in Equalizer Connections of D.C. Machine Armature Windings. T. M. Linville, D. P. Strang, General Electric Co.

50-193. Measurement and Calculation of D.C. Machine Armature Circuit Inductance. H. D. Snively, Paul B. Robinson, General Electric Co.

50-194. Measurement of Insulation Resistance on Energized Systems. E. L. Brancato, A. T. McClinton, Naval Research Lab.



Locke, Inc., Baltimore, Md.

2:00 p.m.—Air Transportation I

Mount Vernon Room
W. V. BOUGHTON, Presiding

50-195. 5-KVA, 400-Cycle Aircraft Inverter with Amplistat Regulator. R. E. Morgan, J. A. Walley, General Electric Co.

50-277. Aircraft Electric Motors Need Test Equipment. I. E. Ross, General Electric Co.

DP.** An Electronic Speed Control for Aircraft Inverters. A. W. Forsberg, Herbert Gumaer, Gaveco Labs., Inc.

DP.** Stopping Devices for 400 Cycle Motors. L. A. Zahorsky, Lear, Inc.

50-196. Tracking Radio Noise on Aircraft. T. B. Owen, Hughes Aircraft Co.

DP.** Comparison of Electric, Hydraulic and Pneumatic Actuators for Aircraft. H. M. Geyer, R. C. Treseder, General Motors Corp.

Wednesday, October 4

9:30 a.m. Electronic Devices I

Founders Room
C. V. O. TERWILLIGER, Presiding

DP.** Instrumentation on Transistors. C. B. Brown, Naval Ordnance Lab.

DP.** A Submicrosecond Timer. R. H. F. Stresau, Naval Ordnance Lab.

DP.** Underwater Telemetry. J. M. Norton, Naval Ordnance Lab.

DP.** X-Ray Gauge for Steel Mill Service. Z. L. Collins, Westinghouse Electric Corp.

9:30 a.m.—Electric Phenomena and the Human Body

Federal Hill Room
W. B. KOUWENHOVEN, Presiding

DP.** Significance of the Electric Resistance of the Skin in Medicine. C. P. Richter, The Johns Hopkins Hospital.

DP.** Electric Observations on the Conscious Brain. Curtis Marshall, The Johns Hopkins Hospital.

DP.** The Use of Stable Isotopes in Medical Research. Theodore Enns, The Johns Hopkins Hospital.

DP.** Use of Counter Shock in Recovery of the Fibrillating Heart. W. B. Kouwenhoven, The Johns Hopkins University; Alfred Blalock, The Johns Hopkins Hospital.

9:30 a.m.—Industrial Control

Fairmount Room
F. O. SCHNURE, Presiding

DP.** A New Shoe Brake with Two Magnets. T. W. Driesch, General Electric Co.

50-197. The Operating Speed of D-C Magnet Brakes. J. E. Ryan, T. M. Spitzer, General Electric Co.

DP.** Modernization of Sheet and Strip Copper Facilities at Revere Copper and Brass, Incorporated., Baltimore Division. W. T. Bertier, Revere Copper and Brass, Inc.; E. E. Vonada, The Reliance Electric and Engineering Co.

DP.** Primary Power Requirements for X-Ray Apparatus. W. S. Lusby, Westinghouse Electric Corp.

9:30 a.m.—Rotating Machinery II—A.C.

Phoenix Room
W. G. WITHINGTON, Presiding

50-198. AC Series Motors—A Design Method. S. S. L. Chang, J. H. Karr, Robbins and Myers, Inc.

50-199. Investigation and Elimination of Unusual Vibration in the Field on a Large Single Phase Frequency Changer. W. M. H. Ballantyne (Deceased), J. E. Allen (Deceased), Safe Harbor Water Power Corp.; R. A. Baudry, Westinghouse Electric Corp.

50-200. An Analysis of Rotating Machines. R. L. Cosgriff, E. H. ACO.* Gamble, Curtiss-Wright Corp.

DP.** Thermalistic Insulation for Turbine Generators. C. M. Laffoon, G. L. Moses, Westinghouse Electric Corp.

50-201. Design Calculations for A-C Generators. David Ginsberg, U. S. Army Engineer Research and Development Labs. Presentation by title only.

9:30 a.m.—Air Transportation—II

Mount Vernon Room
D. E. FRITZ, Presiding

DP.** Circuit Interrupting Phenomena at Altitude. J. P. Dallas, Hughes Aircraft Co.

50-202. Aircraft Circuit Breakers for 28 and 120 Volts D-C. B. S. Beall, III, P. J. Reifschneider, General Electric Co. Presentation by title only.

DP.** Aircraft Cutouts and Contactors for Interrupting High DC Voltages. R. L. Harrison, Hartman Electrical Manufacturing Co.

50-203. An Environment-Free 120 Volt DC High Performance Limit Switch. T. R. Stuelpnagel, Los Angeles, Calif.

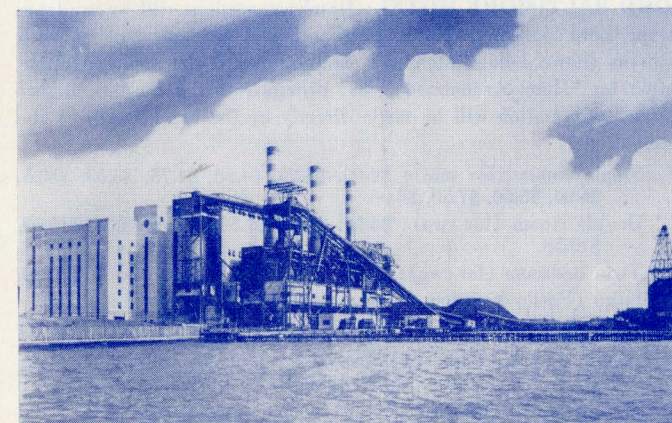
50-204. The Design of Reactors for Radio Interference Filters. L. I. Knudson, General Laboratory Associates, Inc.

2:00 p.m.—Electronic Devices II

Founders Room
C. V. O. TERWILLIGER, Presiding

DP.** Wind Tunnel Instrumentation at the Naval Ordnance Laboratory. L. P. Gieseler, Naval Ordnance Lab.

DP.** Electrical Equipment and Control System of the White Oak Supersonic Wind Tunnels. B. D. Gilbert, Naval Ordnance Lab.



Riverside Generating Station of the Consolidated Gas Electric Light and Power Company of Baltimore

DP.** Instrumentation Techniques Used with Naval Ordnance Laboratory Air Guns. G. Stathopoulos, Naval Ordnance Lab.

DP.** Precision Magnetic Tape Recordings of Low Frequency Signals. S. J. Raff, Naval Ordnance Lab.

2:00 p.m.—Electric Welding

Mount Vernon Room
T. B. JONES, Presiding

DP.** Radio Interference Aspects of High Frequency Stabilized Welding Transformers. R. G. Klause, U. S. Naval Engineering Experiment Station.

DP.** Instrumentation for Investigating the Quality of Electric Welds. Fritz Albrecht, Glenn L. Martin Co.

DP.** Effect of Cover Characteristics on Electrical Behavior of Electrodes. E. B. Lutes, Arcrods Corp.

DP.** Automatic All Position Welding Head for Electrode Testing. Bella Ronay, U. S. Naval Engineering Experiment Station.

DP.** DC Arcs with High Speed Electrodes. W. B. Kouwenhoven, T. B. Jones, The Johns Hopkins University.

2:00 p.m.—Magnetics

Phoenix Room
C. H. ROTHAUZE, Presiding

50-205. Series-Connected Saturable Reactor with Comparatively High Control Source Impedance. H. F. Storm, General Electric Co.

50-206. Determination of Steady-State Performance of Self-Saturating Magnetic Amplifiers. Edward J. Smith Polytechnic Institute of Brooklyn.

50-207. Magnetic Amplifier Application Problems. F. S. Malick, ACO.* Westinghouse Electric Corp.

DP.** The Mechanical Rectifier. Otto Jensen, I.T.E. Circuit Breaker Co.

2:00 p.m.—Land Transportation

Fairmount Room
C. W. MILLER, Presiding

DP.** Motors and Control for Diesel Electric Locomotives. T. L. Weybrew, Westinghouse Electric Corp.

DP.** Electric Drives for Baltimore's New Ore Handling Facilities. C. B. Risler, Westinghouse Electric Corp.

DP.** Radio Communications in the Railroad Industry. L. J. Prendergast, Baltimore and Ohio Railroad.

DP.** Sealed Ignitron Rectifiers for Urban Transit Power Supply. D. W. Borst, General Electric Co.

2:00 p.m.—Electric Substations

Federal Hill Room
S. A. RITTENHOUSE, Presiding

DP.** Switching High Voltage Shunt Capacitor Banks. A. W. Funkhouser, Indianapolis Power and Light Company; R. C. Van Sickle, D. F. Shankle, Westinghouse Electric Corp.

DP.** Group Regulation of Urban 4 Kv. Feeders. H. B. Peck, C. L. Grim, Consolidated Gas Electric Light and Power Co. of Baltimore.

DP.** Bus and Individual Feeder Regulation. F. M. Hunter, D. R. Samson, General Electric Co.

DP.** Power for the Small Factory. L. W. Moxey, III, Keller-Pike Company.

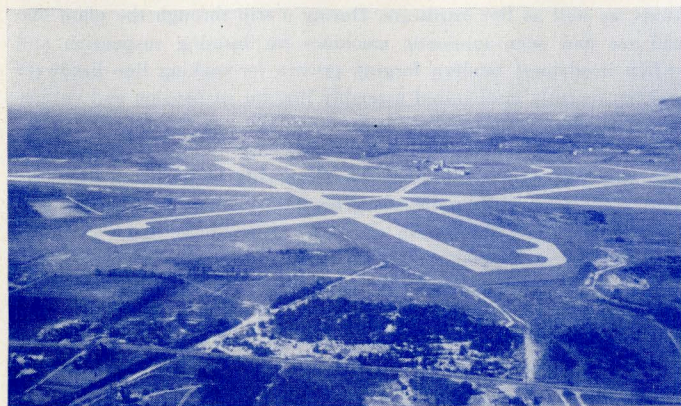
DP.** High Voltage Circuit Interruption. S. C. Killian, Delta Star Electric Co.

Thursday, October 5

9:30 a.m.—Transmission and Distribution I

Federal Hill Room
W. J. WITTE, Presiding

50-163. A Method of Estimating Lightning Performance of Transmission Lines. Lightning and Insulator Subcommittee.



Friendship International Airport

DP.** Operating and Economic Benefits Realized from Application of Three Phase Grounded-Neutral System in Baltimore. H. C. Louis, Consolidated Gas Electric Light and Power Co. of Baltimore.

DP.** 60 Kv Medium Pressure Gas Filled Cable and Conduit Installation. G. C. McCabe, Potomac Electric Power Co.

DP.** Increasing the Load Rating of a 110 Kv Overhead Transmission Line. J. E. Hipp, E. F. Wolf, Consolidated Gas Electric Light and Power Co. of Baltimore.

9:30 a.m.—Insulation

Phoenix Room
R. L. McCOY, Presiding

DP.** Silicone Fluid Surface Treatment for Insulators Operating in Contaminated Atmospheres. A. L. Baldock, General Electric Co.; R. H. Lee, E. I. du Pont de Nemours and Co.; H. A. Frey, Locke, Inc.

DP.** Live-Line Insulator Washing with a Low Pressure Water Stream. I. F. Freed, Consolidated Gas Electric Light and Power Co. of Baltimore.

DP.** Basic Impulse Insulation Levels and Their Relation to Outdoor Switch and Bus Insulators. R. L. McCoy, Locke, Inc.

9:30 a.m.—Air Transportation—III

Mount Vernon Room
S. D. SUMMERS, Presiding

DP.** Effect of Short Circuits on Distribution System Design for 28 Volt, DC Aircraft Power Systems. E. S. Sherrad, K. E. Carlson, General Electric Co.

50-213. Dynamic Characteristics of Carbon Pile Voltage Regulators. R. L. Mills, Magnolia Oil Corp. (Formerly with Naval Research Lab.)

50-208. Transient Analysis of a Voltage-Regulated Aircraft D-C System. D. G. Scorgie, Naval Research Lab.

DP.** Aircraft Electrical System Integrity Increased by an Insulated Isolated Bus. H. O. Davis, L. D. McDonald, Lockheed Aircraft Corp.

50-276. Wide-Speed-Range AC Electric Systems for Aircraft Use. H. B. James, R. P. Judkins, C. L. Mershon, Westinghouse Electric Corp.

9:30 a.m.—Television—I

Founders Room
S. C. MILLER, Presiding

DP.** U. H. F. Television Design. F. R. Norton, Bendix Aviation Corp.

DP.** Blocking Tube Oscillator Design Considerations in the Television Receiver. A. Giordano, Allen B. DuMont Labs., Inc.

DP.** Synchronous Circuit Design for Good Noise Immunity. N. S. Kornetz, Westinghouse Electric Corp.

DP.** Influence of Power System Voltage on TV Receivers. H. E. Campbell, General Electric Co.

2:00 p.m.—Transmission and Distribution II

Federal Hill Room
W. J. WITTE, Presiding

DP.** Line Noise and Attenuation as Factors in Power Line Carrier Applications. J. A. Becker, J. C. G. Carter, Westinghouse Electric Corp.

DP.** Should Residential Service Drops be Three Wire? R. D. Bader, B. C. H. Meyers, Consolidated Gas Electric Light and Power Co. of Baltimore.

DP.** Chemical Brush Control on Rural Power Systems. C. J. Waldron, Rural Electrification Administration.

DP.** Low-Voltage Capacitor Applications on Secondary Networks. V. A. Rydbeck, General Electric Co.

2:00 p.m.—Instruments and Measurements

Phoenix Room
W. R. HEDEMAN, JR., Presiding

DP.** Instrumentation for Aircraft Navigation. W. L. Webb, Bendix Aviation Corp.

DP.** Meteorology and Electronics. Howard Orville, Bendix Aviation Corp.

50-214. An Ultrasonic Method for Measuring Water Velocity, W. B. ACO.* Hess, Safe Harbor Water Power Corp.; R. C. Swengel, Consultant; S. K. Waldorf, Pennsylvania Water and Power Co.

50-209. Electrical Instrumentation in Medical Research. J. M. Benjamin, Jr., Franklin X-Ray Company; John Hale, E. L. Carstensen, H. E. Tompkins, University of Pennsylvania.

2:00 p.m.—Air Transportation—IV

Mount Vernon Room
J. D. MINER, Presiding

DP.** Electric Drives for Large Wind Tunnels. H. B. Bunce, R. J. Lusk, Westinghouse Electric Corp.

50-210. Automatic Feathering—To Reduce the Hazard of Aircraft Engine Failure at Take-off. W. L. Kershaw, The Glenn L. Martin Co.

50-211. Aluminum Conductors from the Aircraft Manufacturer's Viewpoint. W. W. Schumacher, The Glenn L. Martin Co.

DP.** Controlled Power for Starting Jet Engines. E. A. Fuchs, General Electric Co.

50-212. Analog Techniques for Turbo-jet Thrust Instrumentation. E. S. Van Valkenburg, N. W. Matthews, Naval Research Lab.

2:00 p.m.—Television—II

Founders Room
S. C. MILLER, Presiding

DP.** A Building Block Type Television Transmitter. Paul Breen, Allen B. DuMont Labs., Inc.

DP.** Network Television Transmission. J. A. Parrott, American Telephone and Telegraph Co.

DP.** Leased Short Haul Television Channels in Maryland. W. W. Holloway, The Chesapeake and Potomac Telephone Co. of Baltimore City.

ACO.* Advance copies only available; not intended for publication in TRANSACTIONS.

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

Five P.M. hostesses will be in Hostess Rooms to entertain and offer a welcome throughout the entire meeting. Tuesday, October 3—Nine A.M. to One P.M., Hostess Rooms open, shopping tours or visits to points of interest may be arranged. At 2 P.M. the ladies will make a tour through McCormick and Company, House of Spices, the world's largest spice processor; tea will be served in the Tea House. At 6 P.M. pre-dinner refreshments will be served in the Hostess Rooms at the Lord Baltimore Hotel. At 7 P.M. dinner will be served in the Caswell Room of the Hotel, including a Fashion Show by Hutzler Bros., cards, games and music; dress optional, \$4.00 (all inclusive). Wednesday, October 4 at 9:00 A.M. a trip will be made to Annapolis by bus, consisting of visits to various historical houses, luncheon at Carvel Hall, tour of the Naval Academy and a reception at the Governor's Mansion; \$4.00 (all inclusive). At 8:30 P.M. the gentlemen will escort the ladies to the Cabaret Dance.

SPORTS: For members of AIEE wishing to play golf, arrangements have been made at the Rolling Road Golf Club, Wilkens Avenue and Hilltop Road, in Catonsville. Any members who wish to bowl may do so at the Recreation Bowling Alleys at 602 North Howard Street. Other sport events of importance will be posted on the Bulletin Board. All reservations will be made for any of the events at the registration desk and should be made as far in advance as possible.

INSPECTION TRIPS: Highlighting the District meeting will be inspection trips to several of Baltimore's large nationally known industrial plants and to other equally interesting locations. It will assist the Committee materially if those expecting to take the trips will indicate their choice on the advance registration card. Others unable to do this are requested to make arrangements for the trips they wish to take immediately upon registration at the Meeting Headquarters. (It will be necessary for those visiting Aberdeen Proving Ground and Glenn L. Martin Plant to have proof of citizenship with them. This is important. Birth certificates, passports, company identification cards, etc., will constitute such proof. Automobile drivers licenses and similar identification will not.) Following is a schedule of the trips:

Tuesday Afternoon, October 3—Bendix Radio Division of Bendix Aviation Corp.: This is a thoroughly modern plant and is engaged largely in the manufacture of radio and television sets for residences, radio and electronic control for the Armed Services, ground-approach landing equipment for air fields, and other electronic equipment. The mass production methods and well-planned factory layout make this a very interesting plant to visit.

Tuesday Afternoon, October 3—Locke, Inc.: This is the world's largest manufacturer of wet process insulators used in electrical trans-

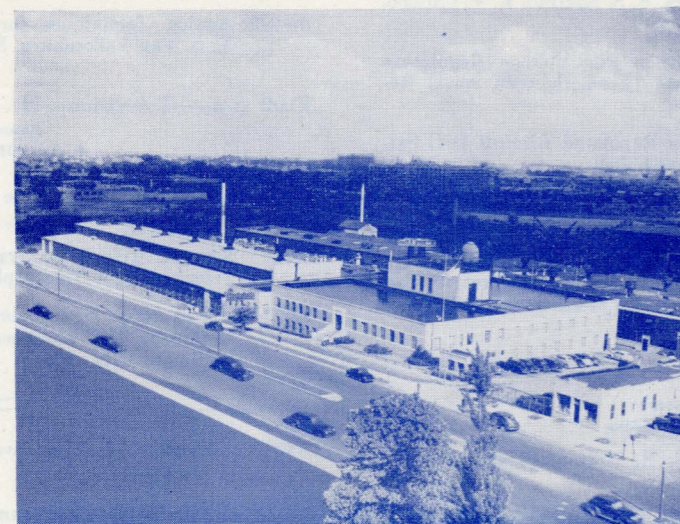
mission. The Company was founded in 1893 by Mr. Fred M. Locke, who invented the wet process insulator. Now an affiliate of General Electric Company, Locke has complete facilities for the development, manufacture and testing of standard and special insulators of all kinds, as well as line hardware. During a trip through the plant one will see new semi-automatic machines for forming suspension and switch insulators; modern forging presses for making line hardware and the recently mechanized assembly line for suspension and switch-type insulators.

Tuesday Afternoon, October 3—Riverside Generating Station: This is the most modern electric generating plant of the Consolidated Gas Electric Light and Power Company of Baltimore and was placed in operation in December 1942. Its present capacity is 180,000 KW consisting of three 60,000 KW hydrogen-cooled turbine generators, which operate at 3600 RPM, with throttle conditions of 850 psig. and 900°F. Each unit is supplied by its own boiler and each of the three boilers has a rated capacity of 550,000 lbs. of steam per hour.

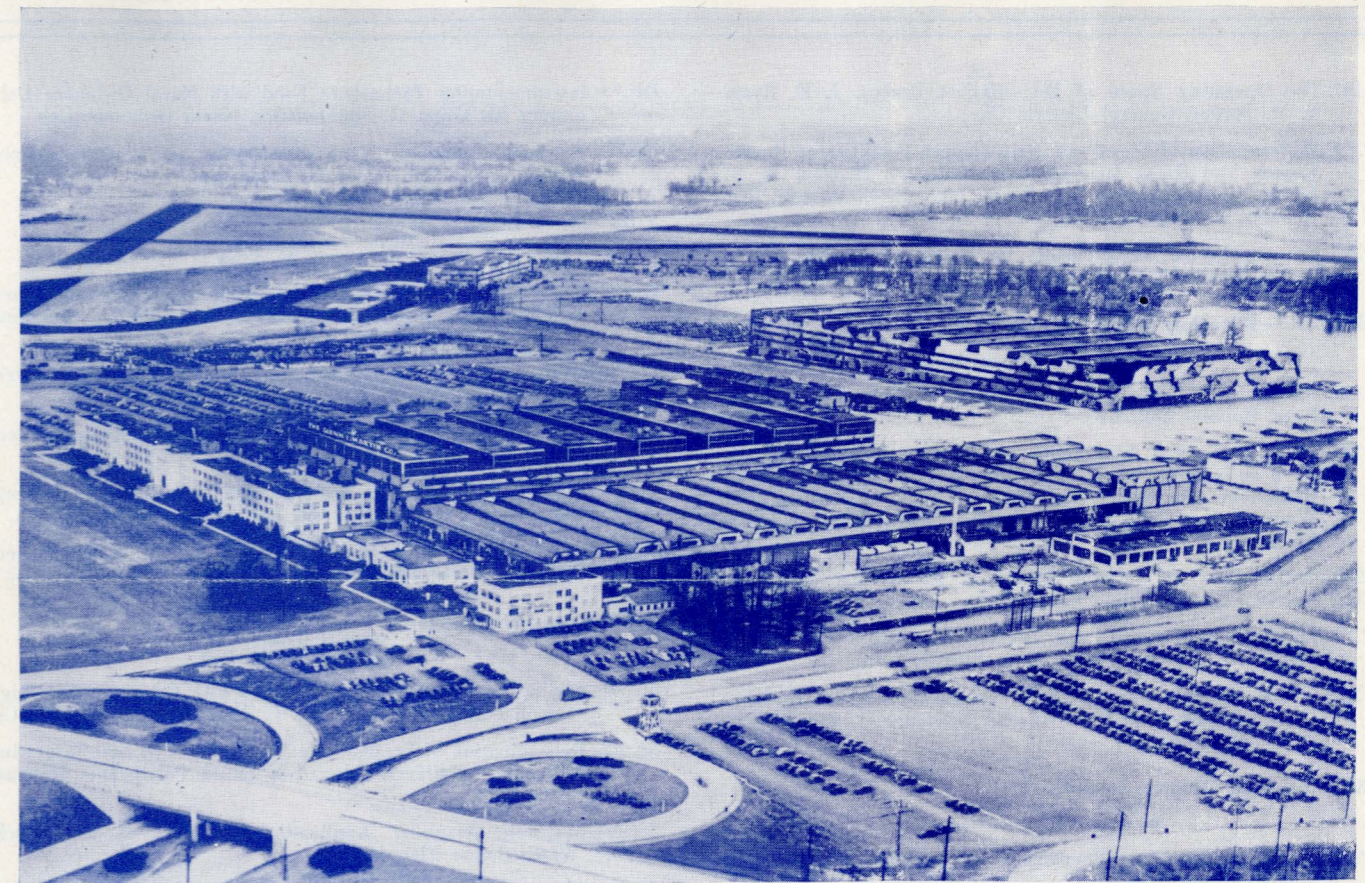
At present a fourth unit is being installed, scheduled for operation in August 1951. It will have a rating of 75,000 KW with steam conditions at the throttle of 1,450 psig. and 1050°F. Its boiler will have a rated capacity of 625,000 lbs. of steam per hour. A luncheon will be held at the plant prior to the inspection.

Wednesday Afternoon, October 4—Aberdeen Proving Ground—Ballistic Research Laboratories and Wind Tunnel—Aberdeen Proving Ground, located on the Chesapeake Bay about 30 miles from Baltimore is the hub of Ordnance activities for the research, development and testing of arms, ammunition, combat vehicles, etc. for the Armed Forces. Of particular interest to members of the AIEE are the Ballistic Research Laboratories and the Wind Tunnel. The Laboratories contain several computing machines—I.B.M. Relay Calculators, a Bell Relay Computer, ENIAC, EDVAC, and ORDVAC. These devices are used to solve computational problems arising in Ordnance and other Government agencies, with particular reference to the theory of projectile motion, trajectories, and many other problems. The Wind Tunnel, or "Bomb Tunnel" as it is called, is equipped with five centrifugal compressors with a combined horsepower of 13,000 and is used for testing models of guided missiles and supersonic aircraft, models of bombs and projectiles, air flow around and forces acting upon aerodynamic objects, etc. (*It will be necessary for those taking this trip to have proof of citizenship with them.*)

Wednesday Afternoon, October 4—Glenn L. Martin Company: This aircraft manufacturing plant is located at Middle River, about 10 miles east of Baltimore. The plant has a floor area of 2,700,000 sq. ft., covers 958 acres and includes four huge production buildings



Wilkens Avenue plant of the Westinghouse Electric Corporation, headquarters for the Westinghouse Electronics and X-Ray Division.



Aerial view of the Glenn L. Martin Company, Baltimore, Md., looking southwest. White buildings in the foreground are Personnel, Administration and Engineering Buildings. Main factory buildings are behind them and toward upper right, is "D" Building where most of final assembly work is done. Airport is in the background and body of water in the distance is the Chesapeake Bay.

with the latest machinery and equipment, buildings for engineering, personnel, and administrative employees, as well as a modern completely equipped airport. Present employment is approximately 9,000. The plant is engaged in the development, design, manufacture and testing of many types of aircraft, including jet-propelled planes and rockets for the Government and commercial transport planes for private airlines. (*It will be necessary for those taking the trip to have proof of citizenship with them.*) Attendance on this trip will be limited to 100 and first choice will be given to those who sign up for it on the advance registration card.)

Wednesday Afternoon, October 4—Westinghouse Electric Corporation, Electronics Division: This plant was built during the war when Westinghouse was engaged in the manufacture of radar and other electronic equipment for the Armed Forces. At the present time manufacturing operations at the plant include micro-wave equipment, high frequency heating equipment, radar, broadcast transmitters, power line carrier equipment and industrial radios.

Thursday Morning, October 5—Friendship International Airport: This airport, dedicated by President Truman on June 24, 1950, is Baltimore's bid for aerial supremacy. It is one of the world's greatest and was built at a cost of \$15,000,000. It is five times the size of the National Airport in Washington and four times larger than LaGuardia Field in New York.

The site covers 3,200 acres on a man-built plateau 140 feet above sea level, the highest airport elevation on the Atlantic Seaboard. It is the only field on the Atlantic Seaboard to earn the "Class 8" designation of CAA. The instrument landing runway, one of the longest in the country, stretches 9,450 feet and is 200 feet wide. It will accommodate any type of aircraft now flying, on the drawing boards or now in contemplation. Luncheon will be provided at the airport.

ADVANCE REGISTRATION: Advance Registration cards should be filled out as soon as possible and forwarded to Mr. Eduard Fritz, Chairman, Registration Committee, Middle Eastern District Meeting,

AIEE c/o Pennsylvania Water & Power Co., Post Office Box 2076, Baltimore 3, Maryland. Prompt action will greatly assist the Committees making arrangements for the meeting and save you time upon arrival. Member registration fee \$2.00; nonmembers \$3.00; enrolled students and members of families, no fee.

DISTRICT MEETING COMMITTEE: Members of the District Meeting Committee are as follows: Thomas E. Marburger, General Chairman; G. Russell Page, Arrangements; L. G. Smith, Students; Paul L. Betz, Technical Meetings; Thomas W. Trice, Special Meetings; M. C. Albright, Finance; T. H. Marshall, Jr., Publicity; Donald Gunn, Smoker; W. C. Wilkinson, Sports; Charles Wallace, Entertainment; C. R. Durling, Cabaret Dance; Eduard Fritz, Registration; C. S. Fiske, Inspection Trips; Mrs. J. Lawrence Hildebrandt, Ladies.

LORD BALTIMORE HOTEL: Hotel reservations will be available at the Lord Baltimore Hotel, Baltimore and Hanover Streets, with rates as shown below. Members should forward the enclosed application for "Hotel Accommodations" promptly to the Lord Baltimore Hotel. Confirmation will be made directly by the hotel accepting the reservations.

Single Room (for one): \$4.00, \$4.25, \$4.50, \$4.75, \$5.00, \$5.25, \$6.00, \$6.50, \$7.50, \$8.00.

Double Room (for two): \$6.50, \$7.00, \$7.50, \$8.50, \$9.00, \$10.00, \$10.50.

Twin Bedroom (for two): \$7.50, \$8.00, \$8.50, \$9.00, \$10.00, \$10.50.

Suite (Parlor bedroom and two baths for one or two): \$18.00.

Three in a room, \$2.00 additional charge for third occupant.

YOUR HOST: Maryland Section AIEE—John W. Gore, Chairman; John McGee, Vice Chairman; Ferdinand Hamburger, Secretary.

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