Fall General Meeting
October 11-16, 1959

CHICAGO, ILLINOIS

HEADQUARTERS
Morrison Hotel

SCHEDULE OF LOCALLY SPONSORED EVENTS

Sunday—October 11
4:00 PM—Welcome Tea—Cotillion Room
4:00 PM—Registration begins

Monday—October 12
9:00 AM—Ladies Coffee Hour—Suite 7
1:00 PM—Ladies Dessert Card Party
2:00 PM—General Session

Tuesday—October 13
8:30 AM—Trip to Fisk Station
11:00 AM—Ladies Tour and Luncheon
2:00 PM—Trip to Commonwealth Edison Dispatching Office
2:45 PM—Trip to Hubbard Electrical Research Laboratory
6:30 PM—Trip to Hubbard Electrical Research Laboratory

Wednesday—October 14
8:30 AM—Trip to GM Electro-Motive Division
9:30 AM—Ladies brunch and Fashion Show
1:30 PM—Trip to Panellit Products Plant
2:15 PM—Trip to Chicago and North Western Railroad
6:30 PM—Fall Frolics

Thursday—October 15
8:30 AM—Trip through Chicago Regional Port District
9:00 AM—Trip to Underwriters' Labs., Inc.
12:15 PM—Ladies Art Institute Luncheon
12:15 PM—ETA KAPPA NU Luncheon
1:00 PM—Trip to Argonne Laboratories
1:30 PM—Trip to Automatic Electric Co.

Friday—October 16
No Functions Scheduled

Chicago Regional Port District facilities for the St. Lawrence Seaway.

The Fall General Meeting of the AIEE will be held in Chicago this year from October 11 to 16, 1959, with headquarters at the Morrison Hotel. The Technical Program, Inspection Trips and Social Activities will occupy the entire facilities of the Morrison during the meeting. The meeting will be held concurrently with the National Electronics Conference with provision for joint registration. The Headquarters for the NEC will be in the Sherman Hotel.

The Chicago section extends a hearty welcome to all members, their families and guests. Chicago, being the center of one of the greatest industrial centers of the world, is easily accessible by automobile, rail or air from all parts of the continent. In addition, Lake Michigan affords pleasant temperatures as well as many recreational facilities.

At the General Session, to be held on Monday afternoon, October 12, 1959, the Institute's Medal for outstanding service in Electrical Engineering Education will be awarded to Gordon S. Brown, Dean of Engineering, Massachusetts Institute of Technology. In addition the initial presentation of the William H. Habirshaw award to William A. Del Mar, Consulting Engineer, Phelps-Dodge Copper Products Corp. and the Maurice E. Leeds award to Herbert B. Brooks, Retired, Chief Electrical Instruments Section, National Bureau of Standards, will be made.

On Thursday, October 15, 1959, there will be an Eta Kappa Nu Luncheon for all AIEE and Eta Kappa Nu Members. This luncheon will be held in Parlors B, C and D in the Morrison Hotel at 12:15 p.m. There will be a speaker of general interest following the luncheon.

TECHNICAL SESSIONS: A large and varied technical program has been planned with special attention given to rotating machinery and nucleonics. The Nucleonic Sessions will include papers covering the Evaluation Studies of Reactor Concepts recently completed by leading consultant firms for the AEC.

SOCIAL ACTIVITIES: A Reception Tea and Hospitality Hour will open the social activities on Sunday afternoon, October 11, 1959 from 4:00 to 6:00 PM in the Cotillion Room. The Hospitality Hour is sponsored by the Chicago section of the AIEE for members and their families. Members of the Ladies Activities Committee will be present to welcome the wives.

The Fall Frolics will be held on Wednesday, October 14, 1959 in the Terrace Casino and, as in previous years, top entertainment will be provided in addition to a good dinner. Dancing will follow the entertainment, so be sure to bring your wife. Tickets are $12.50 per person and may be purchased from Mr. J. R. Warren, Royal Electric Manufacturing Company, 1122 East 87th Street, Chicago 19, Illinois. These shows have been sellouts in previous years, so be sure to get your reservations in early.

LADIES PROGRAM: The Ladies Activity Committee extends a cordial welcome to the wives of members attending the AIEE Fall General Meeting. The Ladies Hospitality Headquarters will be in Suite 7 (Room 705) at the Morrison Hotel. Starting Monday morning, it will be open from 9:00 AM each day except during special Ladies Functions. Coffee and rolls will be served each morning until 10:30 AM. In addition, a variety of special activities has been planned.
AIEE FALL GENERAL MEETING

Wednesday, October 14

9:00 a.m. — Nuclear Power Reactors — A Status Report* — C. H. Bosworth, Bechtel Corp., and W. E. Perkins, Argonne National Laboratory

9:15 a.m. — Power System Communications — S. N. Bartlett, General Electric Co.

9:30 a.m. — Industrial Control — S. L. Plotkin, Interpoint Corp.

9:45 a.m. — Dynamic Positioning System — R. L. Cooder, The Boston Consulting Group

10:00 a.m. — Nuclear In-core Instrumentation — D. H. Taylor, Brookhaven National Laboratory

10:15 a.m. — Nuclear Reactor Safety and Control — L. R. Boyd, General Electric Co.

10:30 a.m. — NUCLEAR ELECTRICITY — Conference Adjourned


4:00 p.m. — Technological Seminar — "The Application of Computer-Controlled Power Systems to the Transmission and Distribution of Electric Power." Session VIII: Power System Planning and Operation.


Thursday, October 15

9:00 a.m. — Nuclear In-core Instrumentation — J. F. Hough, Westinghouse Electric Corp.


9:30 a.m. — NUCLEAR ELECTRICITY — Conference Adjourned


4:00 p.m. — Technological Seminar — "The Application of Computer-Controlled Power Systems to the Transmission and Distribution of Electric Power." Session VIII: Power System Planning and Operation.


Friday, October 16

9:00 a.m.—Digital Logic of Computer Design
CP-11.20, 11.21, 11.22. Automatic Synthesis of Multi-Function Networks, T. C. Martin, Massachusetts Institute of Technology. (Robert F. Sproull, IBM Corp.)
CP-11.23. Use of Logic Design A. E. Vandevender, J. P. R. Boyce, J. D. Smith, Lincoln Laboratory, Massachusetts Institute of Technology.
CP-11.25. A Uniform Logic Leveling System for Large Scale Design, N. L. Smith, University of Illinois at Urbana-Champaign.

9:00 a.m.—Feedback Control Systems
CP-11.37. A Systematic Analysis of the Feedback Control System, L. P. Darrow, Chrysler Corp. (Formerly with Vickers, Inc.);
CP-11.39. Control By Stochastic Adjustment, J. E. Bertram, IBM Corp. (Re-presented for discussion only).
CP-11.40. Use of a Mathematical Error Criterion in the Design of Feedback Control Systems: C. Mertin, III, Massachusetts Institute of Technology. (Re-presented for discussion only).
CP-11.41. Executive Control of Adaptive Systems, R. Santa, Polytechnic Inst. of Brooklyn. (Re-presented for discussion only.)

2:00 p.m.—Applications of Theory of Computers and Computer Circuits
CP-11.42. Synthesis of Symmetric Logic Functions Containing a Large Number of Variables, C. E. Blakely, MIT Computation Center.
CP-11.47. A Digital Section Transmission Planning System, C. J. Baldwin, Northern Electric, Inc.

2:00 a.m.—Safety
CP-11.53. Safety
CP-11.55. Control By Stochastic Adjustment, J. E. Bertram, IBM Corp. (Re-presented for discussion only).
CP-11.56. Use of a Mathematical Error Criterion in the Design of Feedback Control Systems: C. Mertin, III, Massachusetts Institute of Technology. (Re-presented for discussion only).
CP-11.57. Executive Control of Adaptive Systems, R. Santa, Polytechnic Inst. of Brooklyn. (Re-presented for discussion only.)

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2:00 a.m.—Safety
AIEE FALL GENERAL MEETING

such as the industrial multiple alarm system (PANALARMS), Graphic Process Control Panel, industrial digital logger-scanner (PANASCAN), and others. With an engineering staff specialized in centralized control rooms, Panellit is composed of several sections, namely:

Control Systems and Panels: In this division, one will see boards under construction for Boiler, Turbine, and Generator controls.

Panalarm Annunciators: In a shop uniquely designed for this application, one will see Panalarm Annunciators being assembled, wired, and individually tested, before going through the final functional test.

Information Systems (ISI): The visitor will then tour a recently completed section where a functional test will be made on the newly installed — 609 Information and Computer System. This is the ultimate in combining data reduction with an internally programmed general purpose computer for static scanning, computing, and controlling of the process.

Tickets are $2.00 each. This is a bus trip with a maximum of 40 persons.

New Equipment of the Chicago & North Western Railroad—Wednesday Afternoon—October 15, 1959 (2:15 PM-3:15 PM): An inspection of America’s push-pull suburban train and of a unique “bi-level” streamlined is planned during this tour. The inspection will be staged at the Chicago & North Western Railway Company’s new terminal, Canal and Madison Streets, with L. E. Legg, Electrical Engineer of the railway as host and sponsor. Both are “electric trains” in every sense of the word, with energy provided by electric engines and locomotive auxiliary generators. The locomotives of both trains provide power for lighting, air-conditioning and even electric heating in the coaches. Undercar generators and troublesome steam pipes have been eliminated in the new trains. In operation, the “push-pull” train moves toward Chicago with the locomotive at the rear end. As the train proceeds, the engineer controls the train from a cab located at the head end of the leading car. Outbound from Chicago, the engineer transfers to the locomotive and the train is pulled in the conventional manner. Tickets—no charge.

This is a walking trip with a maximum of 40 persons.

The Chicago Harbor Authority—Thursday Morning—October 15, 1959 (8:30 AM-12:30 PM): The Chicago Regional Port District facilities at Lake Calumet which unites the St. Lawrence Seaway with Chicago, the gateway to America’s farm, business and industrial heart. The Calumet Harbor also links the nation’s two main arteries of waterborne commerce—the Great Lakes—St. Lawrence Seaway system with the Illinois Waterway—Mississippi River System. The harbor expects to handle 500 foreign ships this year. It has about 6,000 ft. of ship dockage and 500,000 sq. ft. of warehouse. Products from steel and autos to beer and olives are unloaded to be replaced by innumerable products including machinery, hides and rubber. The Calumet Harbor at present has two grain elevators with capacity for 13 million bushels of grain. New workers will inspect the fully automated dumping, conveying, storage temperature measurement, and ship loading control rooms. Tickets are $2.00 each.

This is a bus trip with a maximum of 40 persons.

Underwriters’ Laboratories, Incorporated—Thursday Morning—October 15, 1959 (9:00 AM-10:00 AM): Underwriters’ Laboratories, Incorporated is chartered as a nonprofit organization without capital stock to establish, maintain, and operate Laboratories for the inspection and testing of devices, systems, and materials to help reduce and prevent loss of life and property from fire, crime and casualty. During the inspection of the various laboratories, the AIEE members will see the testing of clothes driers and automatic washing machines; stalled rotor tests on inherent overload protection of motors; arc-repuit tests on motor controllers, enclosed switches, service equipment; endurance tests on thermostats; impact and implosion tests on TV tubes; temperature tests on fluorescent lamp fixtures; normal and abnormal temperature tests on various types of cooking appliances and heaters; short circuit tests on fuses; temperature tests on signalling appliances and battery chargers. In other laboratories, the members will see tests on air conditioners, refrigerators, explosion-proof electrical equipment, fire retardant paints, fire doors and many other types of materials and equipment. Tickets are $5.00 each. This is a walking trip, with a maximum of 20 persons.

Automatic Electric Company—North Lake, Illinois—Thursday Afternoon—October 15, 1959 (1:30 PM-5:30 PM): This plant is located on a 161-acre site, 15 miles west of Chicago’s Loop, in North Lake with a main building which covers 35 acres. The company manufactures and installs automatic telephone and other communication systems for independent telephone companies, for business and industry, and also designs and manufactures a wide variety of electrical control components and systems for use in the products and processes of industries in every field. The company is part of General Telephone and Electronics which operates one of the largest telephone systems serving more than 4 million telephones. The proposed trip will include a visit to the General Telephone Laboratories which occupy a large area of the plant where products are being designed and developed, and a trip through the main plant where these products are manufactured for telephone and industrial use. Tickets are $2.00 each.

This is a bus trip with a maximum of 80 persons.

Argonne National Laboratories—Thursday Afternoon—October 15, 1959 (1:00 PM-6:00 PM): The Argonne National Laboratory, the nation’s senior atomic energy research and development center, is located approximately 25 miles southwest of downtown Chicago. Argonne’s research laboratories and other facilities are spread over a 3700-acre tract and are valued at more than $100,000,000. The scheduled trip to Argonne will give you an opportunity to become acquainted with the Experimental Boiling Water Reactor (EBWR), a “prototype” for the electric-power-producing reactors. Originally designed for 20 MW thermal output, the EBWR has been operated at more than 60 MW (thermal) and with modifications now in progress is expected to produce 100 MW (thermal). You will also become acquainted with the Zero Gradient Synchrotron (ZGS), a proton synchrotron accelerator now under construction. The ZGS will be capable of producing ultra-high energy particles in the 10 to 15 Bev range and will be used as a laboratory tool in the field of high-energy physics research. Visits to some of the experimental facilities and research reactors will be included as time permits. Tickets are $2.00 each. This is a bus trip with a maximum of 80 persons.

REGISTRATION: Registration will be joint with the National Electronics Conference this year. Those registering for the AIEE may also register for the NEC, if requested at the time of registration, without payment of additional fee. Those registering for the NEC may also register for AIEE by payment of difference in registration fee. Registration Fee will be $6.00 for members and $10.00 for nonmembers. Wives and women guests of members and nonmember registrants will pay a registration fee of $2.00. Students, children and invited nonmember authors register without fee.

There will be no advance registration.

COMMITTEE: The members of the 1959 Fall General Meeting Committee are: General Chairman, E. H. Finch; Vice-Chairman, D. H. Beal; Secretary, L. E. Randall; Treasurer, D. E. Skyeingstad; Fell Frolics, J. R. Warren; Hospitality, G. H. Robertson; Hotel Arrangements, R. J. Durkin; Finance and Budget, F. A. Larson; Sale of Papers, L. E. Ackman; Technical Program, R. J. Krelkel; Ladies Activities, Mrs. P. R. Cassidy; Ticket Sales, D. J. Somers; Registration, F. D. Law; Trips and Transportation, H. Fossom; General Session, C. L. Welch; Publicity, S. Clat.