

Summer General Meeting

Cornell University

June 18-23, 1961

ITHACA, N. Y.

Headquarters
Willard Straight Hall



SCHEDULE OF EVENTS

June 18—SUNDAY

Registration Begins—2:30 P.M.
Informal Tea—4:00 to 6 P.M.

June 19—MONDAY

Ladies' Coffee Hour—
9:00 to 10:30 A.M.
Technical Sessions—10:00 A.M.
High Voltage Cable Project Trip—
10:00 A.M. to 12:00 Noon
Annual Meeting—2:00 P.M.
Ladies' Tea, Art and Craft Exhibit—
3:00 to 5:00 P.M.
Ornithology Lecture—8:00 P.M.
Informal Cabaret—8:00 to 12:00 P.M.

June 20—TUESDAY

National Homes Trip—
8:30 A.M. to 12:30 P.M.
Technical Sessions—9:00 A.M.
Ladies' Coffee Hour—
9:00 to 10:30 A.M.
Ladies' Enfield Trip—
9:45 A.M. to 3:00 P.M.
Ladies' Auxiliary Meeting—10:30 A.M.
Corning Glass Center Trip—
1:00 to 6:00 P.M.
Ornithology Lab Trip—1:30 P.M.
Cornell Computing Center—2:00 P.M.
Technical Sessions—2:00 P.M.
High Voltage Cable Project—
4:00 to 5:00 P.M.
Informal Cabaret—8:00 to 12:00 P.M.

June 21—WEDNESDAY

Technical Sessions—9:00 A.M.
Ladies' Coffee Hour—
9:00 to 10:30 A.M.
Ithaca Gun Trip—9:30 to 11:00 A.M.
Creative Flower Arrangements—
10:30 A.M.
Ladies' Card Luncheon—
12:30 to 4:00 P.M.
Great Western Wineries Trip—
1:00 to 6:00 P.M.
G. E. Trip—1:30 P.M. and 3:00 P.M.
Ornithology Lab Trip—
1:30 P.M. and 2:30 P.M.
Technical Sessions—2:00 P.M.
High Voltage Cable Project Trip—
4:00 P.M. to 5:00 P.M.
Chicken Barbecue—6:00 to 8:00 P.M.
Informal Cabaret—8:00 to 12:00 P.M.

June 22—THURSDAY

Ladies' Coffee Hour—
8:00 to 10:30 A.M.
IBM Trip—8:30 A.M. to 1:00 P.M.
Ladies' Corning Glass Center Trip—
8:30 A.M. to 6:00 P.M.
Technical Sessions—9:00 A.M.
Westinghouse Trip—
1:30 P.M. to 5:30 P.M.
Ornithology Lab Trip—
1:30 P.M. and 2:30 P.M.
Technical Sessions—2:00 P.M.
Cornell Computing Center—2:00 P.M.
High Voltage Cable Project Trip—
4:00 to 5:00 P.M.
Informal Cabaret—8:00 to 12:00 P.M.

June 23—FRIDAY

Technical Sessions—9:00 A.M.
Ladies' Coffee Hour—
9:00 to 10:30 A.M.

The American Institute of Electrical Engineers **Summer General Meeting** will be held at Cornell University in Ithaca, New York, June 18-23, 1961. The Ithaca Session extends a hearty welcome to the members of the Institute and their guests.

The program for the week will open on Sunday afternoon with an **informal tea** to be held in the Terrace Room of Willard Straight Hall between 4 and 6 P.M. for the members of A.I.E.E. and their families.

The **Annual Meeting** will be held on Monday afternoon where the presentation of the Lamme Medal will be made to Dr. John G. Trump of Cambridge, Massachusetts. Dr. Allen B. DuMont will be awarded Honorary Membership in the American Institute of Electrical Engineers. At this meeting President C. H. Linder will present the Annual Report of the Board of Directors and the election of officers will be announced.

Thirty-seven **technical sessions** have been organized by the technical committees in the six divisions of the Technical Operations Department.

In the Power and Science and Electronics Divisions, the Power Generation and Nucleonics Committees are pooling their efforts in sponsoring two joint sessions. Other Power Division sessions are scheduled on the subjects of Rotating Machinery, System Engineering, Transmission and Distribution, Insulated Conductors, Power System Communications, Substations and Transformers.

In the Communication Division, it is noted that a session on Radio Astronomy is scheduled by the Radio Communication Systems Committee. This is one of the major projects at Cornell University. Other sessions in the Communication Division are sponsored by the Communication Switching Systems and Wire Communication Systems Committees.

The Feedback Control Systems Committee, in the Industry Division, has organized four sessions. In addition to this we find in this Division sessions on Industrial and Commercial Power Systems and a joint session with this latter Committee and the Relays Committee from the Power Division.

In the Science and Electronics Division, one of the most important sessions has been organized by the Solid State Devices Committee. Other important sessions in this Division are sponsored by the Electrical Insulation, Basic Sciences, Computing Devices and Semiconductor Rectifiers Committees.

The Instrumentation Division is well represented in that the following Committees are sponsoring sessions for this meeting: Indicating and Integrating Instruments, Telemetry and Recording and Controlling Instrumentation.

Among those Committees that do not fall within the six technical Divisions of the Institute, we find sessions sponsored by the Research, Management and Education Committees. The latter Committee has secured seven papers in the technical field of rotating machines which has evolved into the broader field of electromechanical energy conversion.

HOUSING ARRANGEMENTS

Note: Confirmation of housing reservations can only be assured if the Advance Registration Card is received by June 7, 1961

Dormitories: Principal housing facilities for the convention are Cornell University Dormitories. Please note that *private bath facilities are not available in the dormitories.* Elevator service exists for 650 rooms.

Dormitory rates: Single \$4.00/room/day
Double (twin beds) 5.00/room/day

Since University housing and dining facilities cannot be as flexible as those of professional hotels, the Housing and Dining Committees urgently request all members who plan to attend the convention to cooperate in supplying advance registration information. Please fill in all pertinent blanks on the enclosed registration card and RETURN IT PROMPTLY. State your order of preference for Dormitory—Motel—Hotel accommodations by number. Indicate willingness to share a double room, if you have checked Single. For family groups, state requirements under "Details." Please note that the University Housing Office discourages attendance of very young children since suitable facilities for their proper care are not available in the dormitories.

Motels: There are approximately 200 rooms available in Motels in the area. Motels will be assigned on a first-come-first-served basis. Approximate rates follow:

Single \$ 7.00/room/day and up
Double 8.00/room/day and up
Twin bedded 9.50/room/day and up
Family units 15.00/unit/day and up

(All facilities include bath)

Hotels: A very limited number of hotel rooms are available in downtown Ithaca.

Rates: Single (with bath) \$ 7.00/room/day and up
Double (with bath) 10.00/room/day and up

Ample parking will be provided on the campus grounds. The "Kite Hill" parking lot alone will accommodate 1000 cars, and will be convenient for those "commuting" by car daily from the more distant of the motels and hotels.

INSPECTION TRIPS

Monday, June 19, 10:00 A.M. to 12:00 Noon and 4:00 P.M. Tuesday, Wednesday and Thursday — High-Voltage Cable Project. The Association of Edison Illuminating Companies and the Edison Electric Institute are sponsors of a research and test program at Cornell for the study and evaluation of specially-designed, extra-high voltage underground power cables. Cable specimens, each of unique design, have been built by four cable manufacturers and installed at the recently dedicated test station at Cornell. The cables, designed to operate underground with an excitation in excess of 345,000 volts between phases, provide a three-phase, load-transmission capability in excess of 500,000,000 volt-amperes and represent the first such installation in America. The voltage will be gradually increased over a two year period to a maximum of 500,000 volts.

No cost for trip.

Tuesday, June 20, 8:30 A.M. to 12:30 P.M.—National Homes. The tour of the National Homes Plant at Horseheads, New York will encompass the major portion of the manufacturing operation so that all may see what goes into making a National Home. After completion of this portion of the guided tour, an inspection of five of their leading design homes will be made available. Homes manufactured at this facility are distributed to 12 eastern states of the Company's national sales market. The plant, in operation since 1950, completed the 200,000th home for the corporation last November.

Approximate cost of trip—\$2.00.

Tuesday, June 20, 1:00 to 6:00 P.M.—Corning Glass Center Trip. At the Center, built in 1951 to celebrate the 100th anniversary of Corning Glass Works, you will be introduced to the fascinating world of glass. In the lobby is a major achievement of modern glassmaking, the giant 20-ton predecessor of the disk cast for the Hale telescope on Palomar Mountain in California. In contrast, one of the earliest known examples of glassmaking, a tiny Egyptian amphoriskos made in 1500 B.C., is exhibited at the entrance of the Museum, where hundreds of pieces of glass from earliest times to the present are on display. The Hall of Science and Industry contains dramatic displays and push button exhibits which show how glass is used to make living more comfortable and productive.

From a spacious gallery you will see master craftsmen fashion and engrave world-famous Steuben crystal. Films and lectures on glass-making are presented in the Lecture Hall. You will be able to purchase souvenirs at the Gift Counter, or beautiful Steuben crystal in the Retail Shop.

Approximate cost of trip—\$2.00.

Monday, June 19 to Thursday, June 22, 1:30 P.M.—Cornell Ornithology Laboratory. The Cornell Ornithology Laboratory at Sapsucker Woods is located two miles Northeast of the Cornell Campus. This 150-acre woodland, with a 10-acre pond, is a refuge for many kinds of birds, ducks, geese and herons. Both woodland trails and a comfortable glassed-in area within the laboratory building are available for observation and study of these many species.

The laboratory is well known for the phonograph records it has produced over the last 25 years. The Cornell Library of Natural Sounds now includes the voices of over 1000 species of birds and other animals.

No cost for trip.

Tuesday, June 20 and Thursday, June 22, 2:00 P.M.—Cornell Computing Center. The Center recently installed a new data processing system in expanded quarters that provide 17 offices for staff and departmental use and three air-conditioned, humidity-controlled rooms to house the computer and associated equipment. The new system, known as the Burroughs 220, is comprised of card, paper tape and magnetic tape handling equipment, and a data processor with a magnetic core memory. This extremely versatile equipment provides facilities for increasing the scope of investigations in both data processing and scientific areas. Students thus have access to a representative and powerful data processor such as they might encounter after graduation.

No cost for trip.

Wednesday, June 21, 9:30 to 11:00 A.M.—Ithaca Gun Company. Although the Ithaca Chamber of Commerce refers to the Ithaca Gun Company as the oldest industry in Ithaca (1880), the Company shies from the word "industry" and prefers instead the designation "craft." The difference reflects the pride Ithaca Gun Company employees take in their work. Whether it be a 2500 FEATHERLIGHT Shotgun inlaid with 24 karat gold and platinum, or a boy's .22 caliber LIGHTNING Rifle, it is fabricated with loving skill by Ithaca craftsmen. At the same time, the company must remain strictly competitive, parts must be interchangeable and modern production methods de-



EHV Cable Testing Facility, Cornell University

veloped to stay ahead of the field. Any engineer will marvel at Ithaca Gun's ability to merge these two divergent philosophies in its plant nestled on a hillside "far above Cayuga's waters." From the master engraver who may take as much as eight weeks to engrave and inlay a gun, to the 17-ton Rotary Forge, only one in the American gun industry, which hot forges a gun barrel in a matter of seconds, visitors gain a wealth of understanding and appreciation for the skills handed down from generation to generation in this unique plant.

No cost for trip.

Wednesday, June 21, 1:00 to 6:00 P.M.—Great Western Wineries. Founded near Hammondsport in the Finger Lakes section of New York in 1860 as the Pleasant Valley Wine Company, Great Western is starting its second century of wine making in this country. Today's champagne is still made in the traditional fashion, aging it in the bottles for three years before placing it on the market. During these years, each bottle is handled 167 times, following the process used by the discoverer of champagne, Dom Perignon, in 1695.

The entire process of wine-making may be viewed in the cellars of Great Western. The wines are made with the same meticulous care and slow aging methods employed for centuries in Europe. The highlight of the trip is generally considered to be the samples offered at the end of the tour.

Approximate cost of trip—\$2.50.

Wednesday, June 21, 1:30 and 3:00 P.M.—General Electric Advanced Electronics Center. The General Electric Advanced Electronics Center, first permanent tenant in the Cornell University Industry Research Park, is the applied research and advanced engineering arm of GE's Light Military Electronics Department. The Center is engaged in research and development work in electronic countermeasures, navigation techniques, air-launched missiles and missile guidance, airborne tracking and search radar, sonar, undersea warfare, infrared and ultraviolet surveillance and detection, communications, data processing and display, bionics, magnetics and in the development of other light military equipment necessary to support the tactical and strategic missions of the U.S. Department of Defense. Tours of the Center's facilities and presentations and demonstrations of some of the latest developments in military electronics will be given.

No cost for trip.

Continued on page 7

ADVANCE COPIES OF PAPERS

Members may obtain preprints of numbered papers at the uniform price of 50¢ each (\$1.00 each to nonmembers), by sending enclosed order form and remittance to the AIEE Order Department, 33 West 39th Street, New York 18, N. Y. 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 \$10 denominations are available to those who wish to avoid remittance, by check or otherwise. The Transaction Papers will also be published in the bimonthly publications.

Note: Unnumbered Conference Papers (CP.*) may be available at or after the meeting, if copies are provided by the author. They are not intended for publication in the Transactions and are not presently scheduled for reproduction in any form by the Institute.

Note: The TRANSACTIONS papers will be printed in the bimonthly publications as follows:

- I COMMUNICATION AND ELECTRONICS.
- II APPLICATIONS AND INDUSTRY.
- III POWER APPARATUS AND SYSTEMS.

Monday, June 19th

10:00 a.m.—Indicating and Integrating Instruments & Telemetering

- 61-719. The Design of a Repulsion Magnetic Bearing for Watthour Meters. D. F. Wright, Westinghouse Electric Corp. (Re-presented for Discussion only)
- 61-720. Photoelectric Impulse Generation Devices for Demand Metering. R. E. Whipple, General Electric Co.
- CP.* A New Kind of Tachometer. W. H. Middendorf, University of Cincinnati; F. C. Weimer, Ohio State University
- 61-721. A General Description of D-C Digital Voltmeters. C. Stansbury, National Bureau of Standards. (Re-presented for Discussion only)
- CP.* A Differential Thermocouple Voltmeter. J. E. Griffin, F. L. Hermach; National Bureau of Standards
- S-111-A. A Bibliography on Telemetering—An Addendum. C. A. Mabey, The Bristol Co. Price \$1.50.

10:00 a.m.—Computer Technology

- CP.* Considerations in the Development of an Optical Character Recognition System. J. J. Leimer, IBM Development Lab.
- 61-725. A Comparison of Computers. F. G. Curl, California Inst. of Technology
- 61-724. Results of Simulation Comparison of Control Computers. I G. T. Sendzuk, General Electric Co.
- CP61-726. Automation of Logic Page Printing. C. R. Warburton, IBM Corp.
- CP.* A Technique for Implementing Synchronous Sequential Relay Circuitry. R. L. Gamblin, M. P. Marcus, C. J. Tunis; IBM Development Lab.
- 61-732. Large-Scale On-Line Data Processing Systems. S. Levine, I Teleregister Corp. (Re-presented for Discussion only)
- 60-1007. A Computer Program for Preparing Wiring Diagrams. Mrs. I D. B. Kirby, C. W. Rosenthal; Bell Telephone Labs., Inc. (Re-presented for Discussion only)
- 61-814. Forcing Circuitry—Sequential Building Blocks for Logical I Design. R. M. Meade, IBM Corp. (Re-presented for Discussion only)
- 60-1283. Boolean Prime Implicants by the Binary Sieve Method. I F. B. Hall, Argonne National Laboratory. (Re-presented for Discussion only)

10:00 a.m.—Micro System Electronics

- CP.* An Approach to Circuit Integration. H. Kihn, RCA Labs.
- CP.* Molecular Electronics. H. C. Lin, J. P. Stelmak, G. Strull; Westinghouse Electric Corp.; W. Lukac, American Bosch Arma Corp.
- CP.* The Hall Effect Mapper. J. A. Dickerson, IBM Corp.

2:00 p.m.—Annual Meeting

- 1. Report of the Treasurer, W. R. Clark.
- 2. Report of the President and the Board of Directors, C. H. Linder.

- 3. Report of the Committee of Tellors on the vote for the Constitutional Amendments and the nominees for AIEE Officers.
- 4. a) Introduction of and presentation of President's Badge to W. H. Chase.
- b) Response by Mr. Chase.
- 5. Presentation of the Lamme Medal to John G. Trump.
- 6. Presentation of an Honorary Membership Certificate to Allen B. DuMont.
- 7. Other Business.

Tuesday, June 20th

9:00 a.m.—Section Delegates Conference

9:00 a.m.—Hydro Power Generation

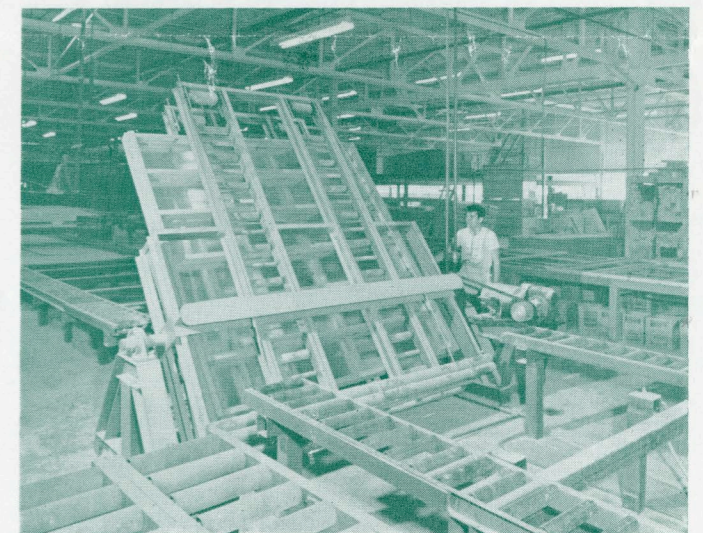
- 61-772. The Cowans Ford Project. J. Q. Wray, Duke Power Co. III
- CP61-818. An Electric-Hydraulic Governor for Hydraulic Turbines, N. G. Dennis, Woodward Governor Co.
- CP.* Electrical Features of the Niagara Power Project. T. E. Thorgerson, Charles T. Main, Inc.
- CP.* Electrical Controls and Protective Relaying-Niagara Power Project. T. E. Thorgerson, J. Basileco; Charles T. Main Inc.

9:00 a.m.—Direct Current Machinery

- 61-766. DC Motor Flashover Torque. H. J. McLean, O.C. Coho; General Electric Co.
- 61-760. Design of Self Compensated High Current Comparatively III Higher Voltage Homopolar Generators. A. K. Das Gupta, Illinois Inst. of Technology
- CP61-820. A New D-C Motor Concept with Motor Designs. G. A. Oberbeck, Massachusetts Inst. of Technology
- 61-763. Ribbon Generators With MHD Generator and Other Impli- III cations. A. D. Moore, University of Michigan.

9:00 a.m.—System Planning and Economics

- 61-780. Hydro-Thermal Economic Scheduling—Part II: Extension of III the Basic Theory. B. Bernholtz, L. J. Graham; The Hydro-Electric Power Commission of Ontario (Re-presented for Discussion only)
- 61-824. Hydro-Thermal Economic Scheduling—Part III: Scheduling III the Thermal Sub-System Using Constrained Steepest Descent. B. Bernholtz, L. J. Graham; The Hydro-Electric Power Commission of Ontario (Re-presented for Discussion only)
- CP61-798. Improving Transient Stability by Use of Dynamic Braking. W. H. Croft, R. H. Hartley, Arizona Public Service Co.
- 61-727. Limiting Curves for Transient Stability—A Digital Program III for Evaluating Operating Guides for Synchronous Generators Connected to Large Systems. A. Johannesen, J. A. Harle; University of Alberta



National Homes Assembly, Horseheads, New York

61-797. Calculation of Short Circuits Using A High-Speed Digital III Computer. A. H. El-Abiad, Purdue University and American Electric Power Service Corp.; Miss R. Guidone, G. W. Stagg, American Electric Power Service Corp.

9:00 a.m.—Semiconductor Rectifying Devices and Power Supplies

CP.* Characteristics and Applications for the 100-Ampere Tristor. W. F. Munzer, Westinghouse Electric Corp.
 CP61-716. Simplified Method for Measuring Nanosecond Reverse Recovery Time of Diodes. B. Szabo, IBM Corp.
 CP.* Transient Voltage Suppression in Silicon, Germanium and Controlled Rectifier Circuitry. C. E. Arnold, General Electric Co.
 61-717. 30V 10A Regulated Power Supply Using the Variable Output I Transistor Oscillator With Current Transformer. S. P. Jackson, Continental Electronics Corp.
 CP.* Silicon Controlled Rectifier High Voltage Power Supply. G. E. Snyder, General Electric Co.
 61-718. A Silicon Controlled Rectifier Inverter With Improved Comutation. W. McMurray, D. P. Shattuck; General Electric Co. (Re-presented for Discussion only)

9:00 a.m.—Communications Switching I

61-722. A New Design for Customer Group Telephone Service in the I Modern Business Community. P. D. Shea, New York Telephone Co.
 CP61-815. A New Technique for Establishing a Connection Through Crosspoint Networks, Permitting Simplification of Solid-State Space-Division Switching Systems. M. S. Macrander, Automatic Electric Labs., Inc.
 CP61-723. An Electrically Controlled PAX—Its Design and Performance. S. Yamato, K. Watanabe, K. Muroga, J. Okuda; Nippon Electric Co., Ltd.
 CP61-817. The Relative Merits of Time Division Multiplex Versus Space Division as a Mode of Operation for Electronic Telephone Exchanges. J. G. Pearce, General Dynamics Electronics.
 61-825. Transmission Network of an Electronic Crosspoint P-A-B-X. I R. F. Kowalik, Automatic Electric Labs., Inc. (Re-presented for Discussion only)
 61-826. Logical Control of an Electronic Crosspoint P-A-B-X. R. P. Sanders, Automatic Electric Labs., Inc. (Re-presented for Discussion only)
 61-827. Features of an Electronic Crosspoint P-A-B-X. J. G. Van Bosse, I J. De Cicco; Automatic Electric Labs., Inc. (Re-presented for Discussion only)

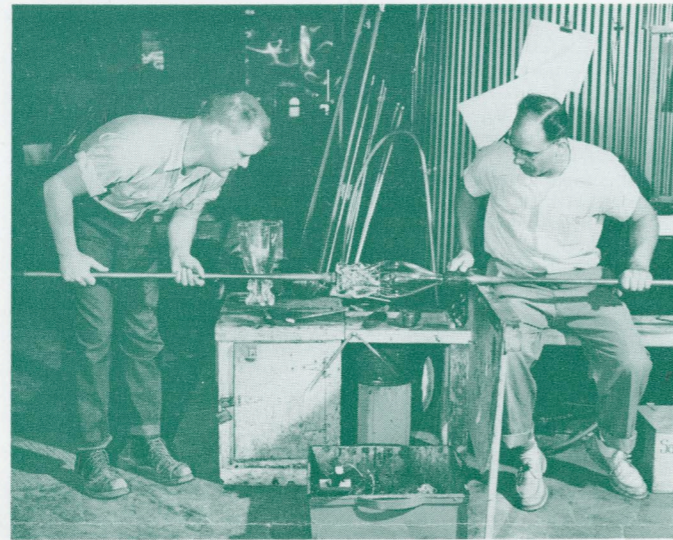
2:00 p.m.—Section Delegates Conference

2:00 p.m.—Induction Machinery

61-761. Saturation Harmonics of Polyphase Induction Machines. C. H. III Lee, Westinghouse Electric Corp.
 61-762. Derivation of the Basic Constants of the General Induction III Machine in Terms of Winding Parameters. T. D. Graybeal, The Siegel Co.
 CP.* Advanced Design of Printed Motor Employing Barium Ferrite Field Structure. F. A. Higgins, Photocircuits Corp.
 CP61-764. A Magnetic Amplifier Voltage Regulator for a Brushless A-C Generator Using the New "FCE" Frequency Converter Excitation System. A. F. Szippel, K. M. Sparrow; The Lima Electric Motor Co., Inc.
 CP61-765. The Induction Frequency Converter Saturable Reactor (FCE-SR) As An Exciter-Regulator For A Brushless A-C Generator. K. M. Sparrow, The Lima Electric Motor Co., Inc.

2:00 p.m.—System Engineering & Transmission and Distribution

61-805. Voltage Nomenclature—Secondary and Utilization Systems. III A. S. Anderson, Ebasco Services Inc.
 CP61-790. Improvement of Electric Service Performance—Part I: Service and Facility Performance Records. J. J. Malone, R. K. Moore, Pennsylvania Power & Light Co.; N. N. Smeloff, Allentown, Pa.
 CP61-750. Improvement of Electric Service Performance—Part II: Selective Modernization of Distribution. J. E. Weed, R. K. Moore, Pennsylvania Power and Light Co.; N. N. Smeloff, Allentown, Pa.
 CP61-751. Improvement of Electric Service Performance—Part III: Greater Protection and Automation of Distribution. J. E. Treweek, R. K. Moore, Pennsylvania Power & Light Co.; N. N. Smeloff, Allentown, Pa.



Steuben Glass Fabrication, Corning Glass Center

2:00 p.m.—Research and Management

CP61-800. Costs of Supporting Functions of Research and Development Laboratories. H. T. Thompson, General Electric Co.
 61-801. Controller's Function as it Applies to Research and Development III in Industry. C. S. Van Wormer, General Electric Co.

Wednesday, June 21st

9:00 a.m.—Industrial & Commercial Power Systems, Relays

CP61-821. Testing Protective Devices on Industrial Plant Power Systems. R. J. Dikeman, Jr., R. M. Shoop; Multi-Amp Electronic Corp.
 CP.* A Survey of Current Industrial Relay Protection. J. J. O'Connor, N. Peach; Power Magazine
 CP61-799. Team Work—The Key to Electrical Service Continuity for Continuous Process Plants. M. M. Gilbert, E. I. du Pont de Nemours & Co., Inc.
 CP61-829. What the Industrialist Should Know and Do When Arranging to Obtain Utility Power. W. E. Marter, Duquesne Light Co.; A. Hauspurg, American Electric Power Service Corp.

9:00 a.m.—Operating Experience Nuclear Power Plants

CP.* Selected Operating Experience of Commission Power Reactors. J. O. Roberts, U. S. Atomic Energy Commission
 CP.* Operating Experience at the Dresden Nuclear Power Station. J. A. Haaga, General Electric Co.; K. F. Hempstead, Commonwealth Edison Co.
 CP.* Control & Transient Performance of the Dresden Nuclear Power Station. E. R. Owen, W. I. Collett; General Electric Co.

9:00 a.m.—Transmission & Distribution

CP.* Bibliography on Bundled Conductors. AIEE Working Group of Towers, Poles & Conductors Subcommittee, H. B. White, Chairman
 CP61-823. Thermal Limits of Overhead Conductors at Various Meteorological Conditions. J. A. McElyea, Illinois Power Co.
 CP61-813. The Electrical Properties of Single Layer Aluminum Conductors, Steel-Reinforced (ACSR) Having Single Steel Core Wires With Heavy Aluminum Coating. C. H. Jensen, Retired (formerly with Copperweld Steel Co.); R. E. DeMuth, R. W. Mowery, Battelle Memorial Inst.
 CP61-791. Transmission Characteristics of the Near Signal. L. Runge, Midwest Research Inst.

9:00 a.m.—Electrical Insulation

61-757. Simplified Methods of Calculating Insulation Life Characteristics. III L. C. Whitman, General Electric Co.
 61-758. Thermal Endurance of Enamelled Wires Using Twisted Wire III Specimens, Statistical Analysis of Test Results. H. Goldenberg, The Electrical Research Association Laboratory

9:00 a.m.—Management

CP.* Responsibilities of an Engineering Manager as Seen by the Engineer. W. J. Dowis, D. W. McLenegan; General Electric Co.
 CP.* The Young Engineer Looks at Management. N. J. Bowmaker, Baltimore Gas and Electric Co.
 CP.* The Use of Psychological Service in Manager Selection and Development. L. D. Edmonson, William, Lynd and Williams

9:00 a.m.—Wire Communications & Data Communications

61-774. The 81-A Exchange Trunk Carrier System. M. E. Ferguson, I M. C. Harp; Lenkurt Electric Co.
 61-775. The 81-A Exchange Trunk Carrier System-Repeater and I Regulation. E. A. Gilmore, C. G. Griffith; Lenkurt Electric Co., Inc.
 CP61-776. The 81-A Exchange Trunk Carrier System-Signaling. E. F. Tuck, D. K. Melvin; Lenkurt Electric Co., Inc.
 61-777. The 81-A Exchange Trunk Carrier System-Applications. L. R. I Cool, R. G. Walker; Lenkurt Electric Co., Inc.
 CP.* Economical Short-Haul Four-Wire Circuits. J. A. Lee, E. L. Fletcher, New York Telephone Co.
 61-822. Reliable Data Transmission Through Noisy Media—A Systems I Approach. C. M. Melas, IBM Corp. (Re-presented for Discussion only)

9:00 a.m.—Insulated Conductors

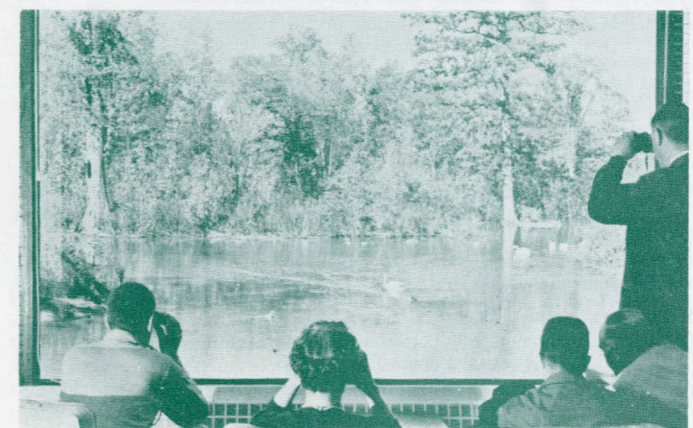
CP.* A 69 KV High-Pressure Gas-Filled Aluminum Sheath Aerial Cable. F. W. Mahley, Long Island Lighting Co.; E. J. Merrell, Phelps Dodge Copper Prod. Corp.
 61-736. Cable Sheath Insulation Requirements to Withstand Abnormal III Voltage Stresses. F. O. Wollaston, K. H. Kidd; International Power and Engineering Consultants, Ltd.
 61-737. The Role of Grounding Cells and Similar Devices in the III Effective Cathodic Protection of Lead Sheathed Power Cables of Substation Exit Systems. S. E. Trouard, M. J. Maier; New Orleans Public Service Inc.

2:00 p.m.—Industrial & Commercial Power Systems

CP.* Expansion of the Electrical Distribution System in a Chemical Plant. A. H. Barth, Monsanto Chemical Co.
 CP61-768. Selective Relaying for the Synchronizing Bus Industrial Power Distribution Systems. D. C. Burke, General Electric Co.
 CP.* Rectifier Applications in a Steel Plant. K. Forster, Algoma Steel Corp.
 CP61-767. Line to Enclosure Impedances—Use of Ground Fault Trip Devices to Limit Arcing Damage. L. E. Fisher, General Electric Co.
 CP.* Design of a Single Screw Industrial Terminal Connector. T. C. Price, Burndy Corp.

2:00 p.m.—Design Features of Nuclear Power Plants

CP61-771. Electrical Features of the Elk River Reactor Plant. D. C. McClintock, Sargent and Lundy
 CP.* A Nuclear Unit at the Humboldt Bay Power Plant. J. O. Schuyler, J. W. Colwell; Pacific Gas and Electric Co.
 CP.* Power Distribution at Boiling Nuclear Superheat Power Station, Puerto Rico. E. L. Bottum, Jackson and Moreland; F. Bevilacqua, General Nuclear Engineering Corp.



Cornell University Ornithology Laboratory

CP.* Simultaneous Operation of a Nuclear and Coal Fired Power Plant—HNPF. C. L. Dunsmore, Atomics International

2:00 p.m.—Power Generation & Transmission and Distribution

61-784. Digital Traveling-Wave Solutions — Part I: Single-Phase III Equivalents. L. O. Barthold, G. K. Carter; General Electric Co.
 CP61-785. Experience With Line Dropping Up to 500 KV at Hydro-Quebec. L. Cahill, Quebec Hydro Electric Commission; P. A. Baltensperger, Brown Boveri & Co., Ltd.
 61-786. Investigations Concerning the Possibility of Dangerous Resonance III Conditions at the Breed Plant During Unit Maintenance and Unit Startup. S. G. Vassiliev, V. P. Rader; American Electric Power Service Corp.
 61-787. The Breed Plant Transmission System: Conceptual, Feasibility, III and Design Studies. C. F. De Sieno, A. Hauspurg; American Electric Power Service Corp.

2:00 p.m.—Education in Electrical Insulation

CP.* Opportunities for Electrical Engineers in the Field of Electrical Insulation. K. Mathes, General Electric Co.
 CP.* What the Colleges Are Teaching About Dielectrics and Insulation Fundamentals
 CP.* The Need for Research in Insulating Materials. J. Swiss, Westinghouse Electric Corp.
 CP.* Industry's Outlook on Education in Dielectrics. J. R. Perkins, Jr., E. I. du Pont de Nemours & Co., Inc.
 CP.* Outline for a Proposed Course in Insulation Fundamentals. M. L. Manning, South Dakota State College.

2:00 p.m.—Wire Communications

CP61-778. Speech Volume on Bell System Message Circuits. K. L. McAdoo, Bell Telephone Labs., Inc.
 61-653. Loop Around Transmission Test Circuit for Step by Step I CDO's Having Verification Train. F. O. Richardson, J. J. Clark; New England Tel. & Tel. Co.

CP61-816. Comparative Transmission Characteristics of Polyethylene Insulated and Paper Insulated Communication Cables. T. C. Henneberger, M. D. Fagen; Bell Telephone Labs., Inc.

61-779. Electrical Uniformity and Deviations Control in Polyethylene Insulated Multipaired Telephone Cables. W. L. Roberts, Superior Cable Corp.

2:00 p.m.—Insulated Conductors

61-738. Some Considerations Concerning Extra-High Voltage A.C. III Cable Power Transmission. J. M. Oudin, Cables de Lyon; R. A. Tellier, Electricite de France.
 61-739. Effect of Temperature Gradient on Moisture Migration in III Granular Media. C. M. Wong, United Technology Corp.; F. K. Hoh, IBM Corp.; W. A. Hadley, Linotype and Machinery Ltd.; H. D. Baker, Columbia University.

61-242. Nondestructive Inspection of Cable Terminations and Splices III by X-Ray Analysis. T. L. Bourbonnais, II, E. I. du Pont de Nemours & Co., Inc. (Re-Presented for Discussion only)

61-730. Objectives for Overcoming Temperatures and Electrical Stress III Barriers of E.H.V. Cable Insulation Through Molecular Design. R. C. Mildner, J. J. Grebe, The Dow Chemical Co. (Re-presented for Discussion only)

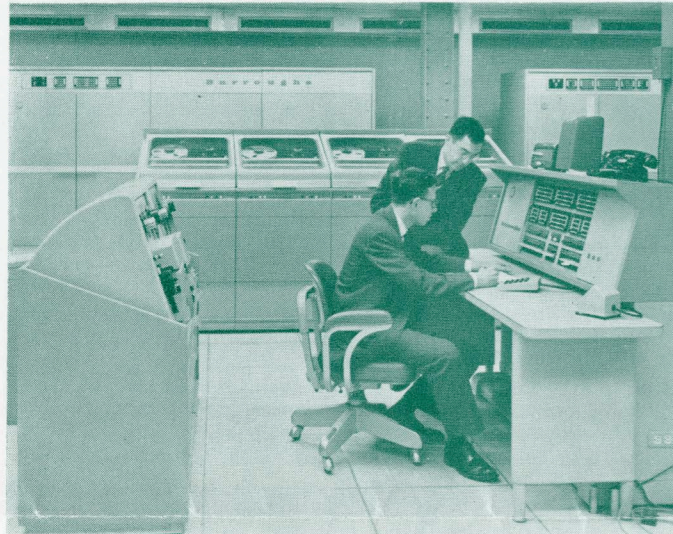
2:00 p.m.—Linear Control Systems

61-753. Realization of Transfer Functions. M. Smith, Massachusetts II Inst. of Technology.
 CP61-741. A Stability Investigation of Time-Varying Linear Systems. G. P. Szego, Purdue University.
 61-728. On Linear Control Theory. P. D. Joseph, J. T. Tou; Purdue II University.
 61-752. Feedback Compensation: A Design Technique. G. J. Thaler, II J. D. Bronzino, D. E. Kirk; U. S. Naval Postgraduate School.

Thursday, June 22nd

9:00 a.m.—Control System Analysis

61-828. Phase Space Analysis and Design of Linear Discontinuously II Damped Feedback Control Systems. K. W. Han, G. J. Thaler; U. S. Naval Postgraduate School. (Re-presented for Discussion only)
 61-754. An Introduction to Lyapunov's Second Method. W. J. Cunnigham, II Yale University. (Re-presented for Discussion only)
 CP61-830. Use of an Incremental Computer in a Feedback Control System. C. E. Baker, McDonnell Aircraft Corp.



Cornell University Computing Center

- CP61-748. Limit Cycles of a Sampled-Data Relay Servo Using the z-Transform and Describing Function. J. S. Demetry, U. S. Naval Postgraduate School.
- 61-819. Mathematical Models for Time-Domain Design of Electro-Hydraulic Servomechanisms. P. K. C. Wang, IBM Corp.
- 9:00 a.m.—Power System Communications**
- 61-806. Digital Computer Solution of a Microwave Reflector Problem. III C. McCord, J. W. Vinyard; Tennessee Valley Authority.
- 61-807. A Repeater Receiver for the Near System. D. R. Cleary, Midwest Research Inst.
- 61-808. Receivers for the National Emergency Alarm Repeater System. F. H. Inderwiesen, Midwest Research Inst.
- 9:00 a.m.—Transmission & Distribution**
- CP61-792. Field Tests on an Interrupter Switch for Capacitor Service. J. J. Mikos, S&C Electric Co.; V. P. Rader, American Electric Power Service Corp.
- 61-740. Field Patterns of Bundle Conductors and Their Electrostatic Properties. A. S. Timascheff, Aluminum Company of Canada, Ltd.
- 61-793. Extra-Long-Distance Transmission. E. W. DuBois, J. F. Fairman, Jr., C. M. Murphy, Westinghouse Electric Corp.; D. E. Martin, J. B. Ward, Pacific Power and Light Co.
- 9:00 a.m.—Electromechanical Energy Conversion-System Analysis**
- CP61-734. Support of Endowed Colleges By Industry. M. G. Malti, Cornell University.
- Note: The following three papers are being preprinted under one cover and will have the same number. Price \$1.25.*
- S-128. A Decade of Experience in Teaching Kron's Approach to Generalized Systems Theory. T. J. Higgins, University of Wisconsin.
- An Abstract Mathematical Basis for Network Analogies and Its Significance in Physics and Engineering. F. H. Branin, Jr., IBM Corp.
- Kirchoff's Versus Lagrange's Postulates as a Basis of System Analysis. H. E. Koenig, Michigan State University.
- 61-733. Educating Electrical Engineers for Professional Careers. S. Linke, Cornell University. (Re-presented for Discussion only)
- 61-735. Some Thoughts on Motivation Through Challenge. W. C. Johnson, P. R. Clement; Princeton University. (Re-presented for Discussion only)
- 9:00 a.m.—Radio Astronomy**
- CP.* Observations of Extraterrestrial Radio Noise. P. F. Weaver, Cornell University.
- CP.* Auroral Radar Phenomena. W. Flood, Cornell University.
- CP.* Radio Investigations of the Moon. T. Gold, Cornell University.
- CP.* A New Method of Space Exploration by Radar. T. Laaspere, Cornell University.

- 2:00 p.m.—Sample Data Control Systems**
- CP.* An Input Self-Adaptive Pulse-Data System. C. K. Taft, Cleveland, Ohio.
- 61-743. Sampled-Data Control Systems with Transport Lag by Mitrovic's Algebraic Method. D. Siljak, Beograd, Yugoslavia.
- 61-749. Optimum Synthesis of Multiport Systems Containing Modulators with Periodic Carriers. J. F. Egan, G. J. Murphy; Northwestern University.
- CP61-742. An Analog Simulation of a Discrete Compensator for a Sampled Data System. R. C. Dorf, U. S. Naval Postgraduate School; R. L. Enos, U. S. N. Guided Missiles School.
- 2:00 p.m.—Radio Noise**
- 61-795. The Spectrum of Corona Noise Near A Power Transmission Line. C. W. Helstrom, Westinghouse Electric Corp.
- 61-729. Radio Interference From High Voltage Lines: Part I—Statistical Approach. R. J. Mather, B. M. Bailey, Bonneville Power Administration.
- CP.* The Problem of Radio Noise Instrumentation. W. E. Pakala, Westinghouse Electric Corp.
- 61-794. Digital Calculation of Radio Noise Levels. A. K. Abboushi, L. O. Barthold, General Electric Co.

2:00 p.m.—Electromechanical Energy Conversion—Undergraduate Courses

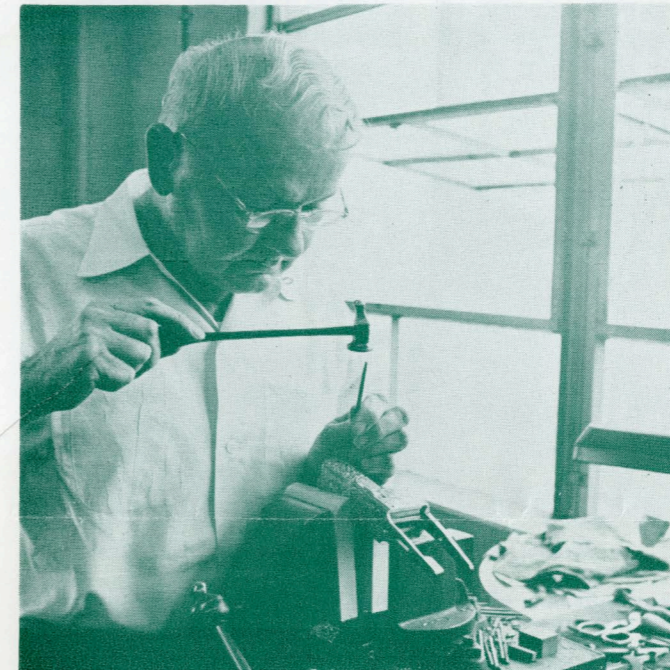
Note: The following four papers are being preprinted under one cover and will have the same number. PRICE \$1.25.

- S-128. Evaluation of a Program in Energy Conversion and Control. K. A. Fegley, University of Pennsylvania.
- Electromechanical Energy Conversion in the Undergraduate Curriculum at the University of Delaware. E. Erdelyi, University of Delaware.
- Electric Machinery in an Undergraduate Electrical Engineering Curriculum. H. Majmudar, Syracuse University.
- Electric Machinery and System Engineering Courses. P. L. Alger, Rensselaer Polytechnic Inst., O. I. Franksen, University of Denmark.
- CP.* Progress Report by the ASEE Committee to Survey the Teaching of Electromechanical Energy Conversion Courses. A. D. Bailey, University of Illinois.

7:30 p.m.—Forum of Technical Committee Chairmen

Friday, June 23rd

- 9:00 a.m.—Control System Techniques**
- 61-745. Experimental Determination of the Frequency Response of a Linear Transfer Function for Arbitrary Transient Inputs of Finite Duration. W. W. Wierwille, Cornell University.
- CP61-746. A Digital Technique for Obtaining Sinusoidal Frequency Responses of any Block Diagram Configuration. R. G. Abraham, Westinghouse Electric Corp.
- CP61-811. Extremum Adaptation in Transient Drift of Multivariable Situations. R. I. Van Nice, (formerly with Carnegie Institute of Technology), Westinghouse Electric Corp., R. A. Mathias, Carnegie Institute of Technology.
- 9:00 a.m.—Substations and Power Generation**
- CP.* Middle of the Road Monitor or Solid State Bearing Protection. D. B. Seymour, Westinghouse Electric Corp.; F. Carney, N. Y. State Electric and Gas Co.
- 61-781. Earth Resistivity Measurements for Grounding Grids. A. Kinyon, Vancouver, Washington.
- 61-782. G.P.U.—Penelec's 460 KV Substations. A. M. Baker, Pennsylvania Electric Co.; G. E. Hertig, I-T-E Circuit Breaker Co.
- CP61-810. Work Simplification Methods Applied to The Construction of Standardized Substations. R. S. Melville, Southern California Edison Co.
- 61-783. Current Asymmetry in Resistance-Reactance Circuits—II. III E. T. B. Gross, B. Thapar; Illinois Inst. of Technology.
- 9:00 a.m.—Transformers**
- CP61-788. Reactance of Toroidal Transformer Devices. A. A. Halacsy, Federal Pacific Electric Co.
- 61-789. Optimization of Transformer Geometry by "Method of Finite Increments." S. P. Jackson, Continental Electronics Corp.
- 61-773. Distribution Transformer Magnetizing Inrush Current. J. E. Holcomb, General Electric Co.



Bill McGraw at Ithaca Gun Company

- CP61-809. The Feasibility of Superconducting Power Transformers. R. McFee, Syracuse University.
- 9:00 a.m.—Electric Circuit Theory**
- 61-802. On the Optimum Synthesis of Random Sampling Multipole Filters with Stationary Inputs. H. C. Hsich, University of California.
- 61-803. Maximization and Minimization of Complicated Multivariable Functions. N. S. Bromberg, Massachusetts Inst. of Technology.
- 61-804. A Note on the Approximate Representation of a Curve With Linear Segments. S. G. S. Shiva, Bangalore, India.
- CP.* Solution of Initial-Valve Circuit Problems by Multiple Mellin Transforms. T. J. Higgins, University of Wisconsin; E. S. Ibrahim, Purdue University.

CONTINUED FROM PAGE TWO

Thursday, June 22, 8:30 A.M. to 1:00 P.M.—IBM, Endicott, New York. The Endicott plant of the International Business Machines, Corp. is the oldest, and at the same time, one of the principal modern plants exclusively manufacturing business machines and electronic computers. The manufacturing plant and engineering facilities now cover 2½ million square feet with approximately 9000 employees.

The results of modern research have created a new product line composed of electronics, transistors, printed circuits and modular concepts that were not in existence a decade ago. Of particular interest and a high point of the tour is the component assembly and test line of the modular system of printed circuit cards. A unique feature is that their manufacturing, assembly and test is almost completely automatic. In addition, much of the entire wiring in the machine is done by tape programmed machines.

Later in the tour the final data processing machines become a reality as the visitor sees the component units flow into the final assembly and test stations. Also to be seen is the manufacturing and assembly of the high speed electro-magnetic printers used as output devices of data processing systems.

Approximate cost of trip—\$2.00.

Thursday, June 22, 1:30 to 5:30 P.M.—Westinghouse Tube Plant. The Elmira Plant, one of two in the Electron Tube Division, started operations in 1953. This plant manufactures television picture tubes and many special purpose types such as ignitrons, thyratrons, large high vacuum power tubes for radio and induction heating, neutron counters, magnetrons for radar, etc.

The plant area is one-half million square feet, single story in the manufacturing and warehousing areas, and two story for office and laboratories.

The visit will consist of a tour of the non-classified manufacturing areas. Operations involving glass blowing, metal sealing to glass, parts making, assembly, exhaust and test of electron tubes may be observed. Exhibits of completed tubes will be stationed along the tour path.

Citizenship not required—no cameras—adults only.

Approximate cost of trip—\$2.00.

LADIES' ENTERTAINMENT

The Ladies' Committee has prepared a schedule of events geared to any degree of energy or curiosity. Watching the changing view of the hills and Cayuga Lake is restful and refreshing. Bird watching at the Ornithology Laboratory or in the glens or bird sanctuary is brisker. Swimming in Teagle Hall or outdoors in Beebe Lake or at the State Parks, is more invigorating. And for the sturdy, hikes through the gorges, bowling and tennis are available.

Small fees will be charged for most of the sports. Bring your own swimming suit and tennis equipment!

For the curious, there is much to see on the campus; more still, of local topography and commercial production on some of the trips arranged by the men; and especially: a unique combination of flowers, music and the dance, and presentation of glass, past, present and future.

For fun and relaxation the Card Luncheon.

Ladies' Headquarters: The Elmhirst Room in Willard Straight Hall will be open Monday through Thursday, 9 A.M. to 4:30 P.M., Friday until noon. Use it to meet your friends, plan your days, or for an informal game of cards. Coffee Hour from 9-10:30 A.M. each morning, except on Thursday when service will begin at 8 A.M.

No special program has been planned for teen-agers, but there are ample facilities for outdoor sports, and for family picnicking in any degree of simplicity.

For parents of young children a list of recommended "sitters" will be available at Headquarters, for making individual arrangements.

Adequate medical care for all is available.

Ladies' Special Events:

Sunday, June 18—Informal Tea, Terrace Room, Willard Straight Hall, 4-6 p.m.

Monday, June 19—Coffee Hour, 9-10:30 a.m., Elmhirst Room. Tea and Exhibit of Art and Craft by wives of area engineers. 3-5 p.m. in the Big Red Barn.

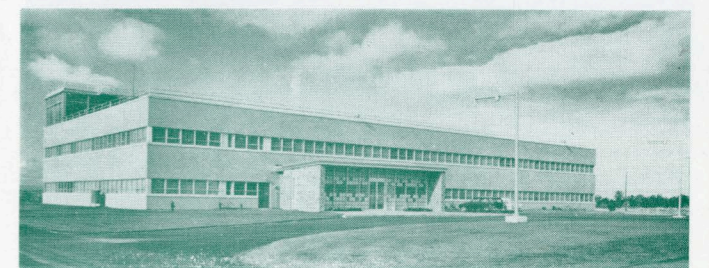
Tuesday, June 20—Coffee Hour, 9-10:30 a.m., Elmhirst Room; Picnic Trip 9:30-3 p.m. by bus to Enfield Glen and Robert E. Treman State Park. Box lunch (\$1.50) in historic Old Mill, short walks, or three mile hike to lower falls and swimming pool. The Finger Lakes country at its best! **LADIES AUXILIARY MEETING** in Elmhirst Room, 10:30 to noon.

Wednesday, June 21—Coffee Hour, Elmhirst Room, 9-10:30 a.m. Flower creations inspired by music and the dance—demonstrated by a past and a future director of the Garden Clubs of New York State, 10:30 to noon, in the Big Red Barn. Luncheon and Cards 12:30-4 p.m. (\$3.00).

Thursday, June 22—Coffee Hour, 8-10:30 a.m., Elmhirst Room. Special trip to Corning Glass Center, 8 a.m. to 6 p.m. by bus (\$2.00), will include: lecture on the history of glass, tours of the museum, films, "Glass and You," Luncheon (\$2.50), tour of the Science Hall, and the Steuben Factory. Souvenirs, favors, and door prizes at the luncheon. (Limited to 150 guests).

Friday, June 23—Coffee hour, Elmhirst Room 9-10:30 a.m.

Note: Tickets for the Card Luncheon and for the Corning Glass Trip, must be purchased in advance. Box luncheons will be available for private outings as well as for the Enfield Trip. They must be ordered 24 hours in advance.



G. E. Advanced Electronics Center, Ithaca, New York

AIEE SUMMER GENERAL MEETING

SPECIAL EVENTS FOR ALL

Monday Evening, June 19—A talk by Dr. Arthur A. Allen, Ornithologist of international reputation will be given at 8:00 p.m. in the Alice Statler Auditorium. Dr. Allen, a Professor Emeritus at Cornell University, will have a movie film to illustrate the photographic and sound recording techniques he has used to unravel some of the mysteries of bird behavior. No charge for tickets.

Monday, Tuesday, Wednesday, Thursday Evenings—An informal cabaret will be operated from 8:00 p.m. to 12:00 Midnight in the Statler Ballroom. Refreshments, buffet, dancing. No admission charge, no cover charge, no minimum charge—pay as you go.

Wednesday Evening, June 21—A chicken barbecue will be held on Schoellkopf Field on the campus. In case of rain, the barbecue will be held in Lynah Hall, nearby. Tickets will be priced at approximately \$2.25.

SPORTS

Cornell University has numerous athletic facilities that will be opened for convention guests and their families. A listing of the sports programs is presented as follows:

Golf—A special tournament has been arranged for both men and women guests on the Cornell University 18-hole championship course. This course is open to all convention guests. Green fees are \$1.50 on weekdays and \$2.00 on Saturday and Sunday.

Tennis—Numerous tennis courts of both clay and hard-surface construction are located throughout the Cornell campus. Many courts are within a short distance of the convention housing facilities. The courts are available at no charge on a first-come, first-served basis.

Swimming—Indoor swimming is available at Teagle Hall. A fee of 50¢ will be charged for use of lockers and towels. Outdoor swimming is available at Beebe Lake. Admission is 20¢.

Miscellaneous—A game room is located in Willard Straight Hall. Billiard and table tennis facilities are available at no cost. Many other facilities such as fishing, golfing, bowling, swimming, and water sports are available in the Ithaca area for convention guests and their families.

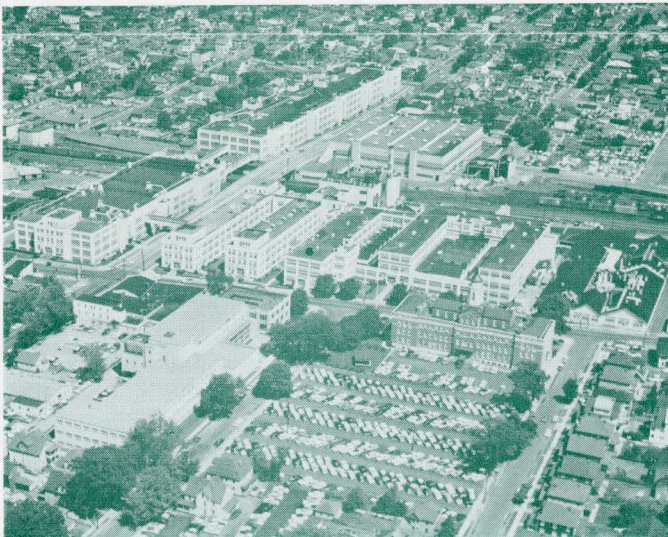
TRANSPORTATION TO ITHACA

Via Air—Mohawk Airlines provides transportation to Ithaca from the cities of New York, Boston, Rochester, Cleveland, Detroit, and Pittsburgh (Pittsburgh service begins approximately April 15).

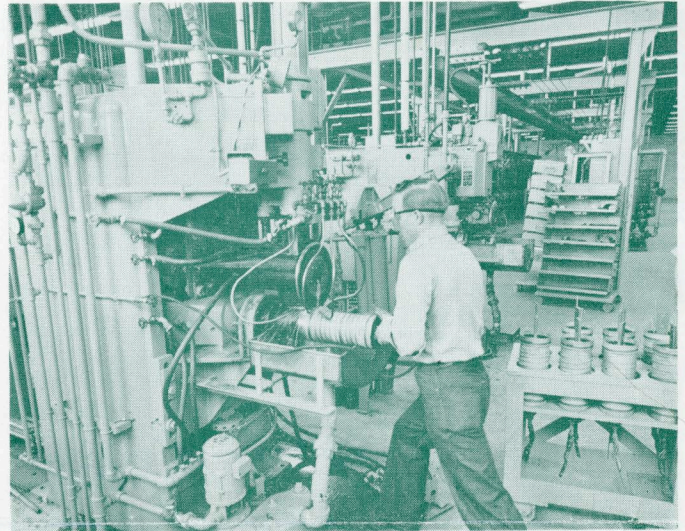
Via Railroad—Since Ithaca has no railroad service, those traveling by rail may make bus connections to Ithaca in Syracuse, Binghamton, or Owego. Syracuse is served by the New York Central Railroad, with Greyhound Bus connections to Ithaca, and both the Erie Railroad and the Delaware, Lackawanna, and Western Railroad serve Binghamton and Owego with connections to Ithaca by way of the Trailways Bus Line.

Via Bus—The Greyhound Bus Lines provide transportation to Ithaca from the cities of New York, Buffalo and Boston.

Travel reservations well in advance are recommended to allow the Greyhound Bus and Mohawk Airline people an opportunity to provide sufficient units to handle the size of the crowd at any time.



IBM Plant, Endicott, New York



Westinghouse Tube Plant, Horseheads, New York

Via Automobile—Travel to Ithaca by private automobile is recommended, because of the scenic beauty of the surrounding countryside. Recommended routes are as follows:

From the West: New York State Thruway to Geneva Interchange (No. 42) and N. Y. State 96 to Ithaca.

From the East: New York State Thruway to the Canastota Interchange (No. 34) and N.Y. State 5 to Chittenango, N.Y. State 13 to Cazenovia, U.S. 20 to U.S. 11, U.S. 11 to Cortland, N.Y. State 13 to Ithaca.

From the South: U.S. 220 north to Waverly, N.Y. and N.Y. State 34 to Ithaca or N.Y. State 17 northwest to Owego and N.Y. State 96 to Ithaca.

Of special interest along the way, or accessible by short side-trips, are Taughannock Falls State Park, Letchworth State Park, Niagara Falls, the Catskill Mountains, the Finger Lakes, the Newark Rose Festival (June 17th to 25th), Watkins Glen, and the Glen Classic sports car races (June 23rd and 24th).

REGISTRATION

Upon arrival, members should register at the registration desk located in the Memorial Room of Willard Straight Hall. The desk will be open from 2:30 P.M. to 4:30 P.M. on Sunday and from 8:30 A.M. to 4:30 P.M. on Monday through Friday. (A housing desk, also in the Memorial Room, will remain open until 10 P.M. every day.)

Your registration will be much simpler and quicker if you return your advance registration card. In addition, the information on this card can be of assistance to the local committee in planning the various inspection trips and social activities.

The registration fees, which are payable on arrival, are \$6.00 for members, \$10.00 for nonmembers, and \$2.00 for ladies. Student members are not charged a registration fee.

MAIL ADDRESS DURING MEETING

The mail address for the Summer Meeting will be: AIEE Headquarters, Willard Straight Hall, Cornell University, Ithaca, New York.

The members of the **1961 SUMMER GENERAL MEETING COMMITTEE** are:

W. H. Erickson, General Chairman; C. J. Fitch, Vice-Chairman; R. E. Osborn, Treasurer; J. P. Peterson, Finance Committee Chairman; M. G. Malti, Program Committee Chairman; S. Linke, Housing Committee Chairman; N. M. Vrana, Special Events Committee Chairman; C. L. Cottrell, Properties Committee Chairman; H. G. Smith, Dining Committee Chairman; D. Purdy, Publicity Committee Chairman; N. H. Bryant, Registration Committee Chairman; J. L. Rosson, Sports Committee Chairman; P. D. Ankrum, Transportation Committee Chairman; Mrs. M. G. Malti and Mrs. C. L. Cottrell, Ladies Committee Co-Chairmen.

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