Summer and Pacific General Meeting

June 25-29, 1956

SAN FRANCISCO, CALIF.

Headquarters
Fairmont Hotel

San Francisco and Oakland, California *Redwood Empire Association*

The A.I.E.E. 1956 Summer and Pacific General Meeting to be held in the Fairmont Hotel in San Francisco, June 25-29th will offer a program and activities that will appeal to all interests. A full and interesting technical program is assured. Six inspection trips of both general and technical interest climaxed by a sightseeing boat tour up the bay to the largest fuel-electric power plant west of the Mississippi will complete the program. Sports events will be highlighted by a salmon derby outside the Golden Gate. A diversified entertainment program for the ladies, and special activities for students round out the Convention schedule.

In addition to being host to the Convention, San Francisco is world famous as a vacation center. Places of historic interest and restful resort areas abound within easy driving distance. These features combined with many other outstanding tourist attractions in Northern California offer an unequalled opportunity to combine a business trip to the Convention with a family vacation.

REGISTRATION: The registration desk will be located in the lobby of the Fairmont Hotel. Facilities for registering will be available Sunday afternoon, June 24th, and continued throughout the meeting.

Members and non-members should register in advance by returning the advance registration card sent with the mailed announcement. Registration fees are $5.00 for members and $8.00 for non-members. Families and students will not be charged a registration fee.

Please indicate on the card the events in which you expect to participate. The San Francisco Section must make firm commitments and guarantees for several of the events prior to the start of the Convention. It is hoped that all persons interested in the various events can be accommodated, but to avoid disappointment advance payment of registration fees and ticket purchases is strongly recommended. Tickets will not be held unless prepaid. Remaining tickets will be sold after arrival at the Fairmont on a first-come-first-served basis.

SOCIAL ACTIVITIES: A Welcome Tea will be held at the Fairmont Hotel on Sunday, June 24th, from 4:00 to 5:00 p.m. for early arrivals. On Tuesday, Wednesday and Thursday luncheons will feature outstanding speakers discussing various aspects of the growth of the West in engineering.

On Thursday evening, at the Fairmont Hotel, one of the highlights of the Convention will occur—the dinner dance with outstanding music and unusual entertainment. Dress for this event will be formal for the ladies, optional for the men.

Tickets for the luncheons will be $3.50 each; tickets for the dinner dance will be $10.00 per person.

INSPECTION TRIPS: A program of inspection trips of both technical and general interest has been arranged. Interested persons are urged to make arrangements at the inspection trips desk immediately after registering. People taking the inspection trips will be returned to the hotels in time for evening hospitality hours. Charges for transportation, etc., on the trips will be very moderate.

AIEE SUMMER AND PACIFIC GENERAL MEETING

San Francisco Naval Shipyard—(Tuesday, 26th, morning)—This A.I.E.E. tour of one of the most colorful and capable naval shipyards in the United States will include inspection of the submarine USS Dentuda, a tour of the waterfront with stops to view berthed ships, the drydocks, the world's mightiest crane, with a lift of 630 tons, and other points of interest as time allows.

United Air Lines Maintenance Base and San Francisco International Airport—(Tuesday, June 26th, afternoon)—The San Francisco International Airport is the world's most modern passenger terminal. Located on the shores of San Francisco Bay, just a few miles from downtown San Francisco, it was completed in 1954 at a cost of more than $14,000,000. This 3,685 acre airport is one of the busiest in the world—serving the world's air traffic in the same manner that the world-famed harbor serves waterborne commerce and travel.

The United Air Lines Maintenance Base, located adjacent to the International Airport, is United's main repair center. On this tour you will see complete facilities for renewing giant airliners including extensive electric and instrument sections.

University of California Radiation Laboratory—(Tuesday, June 26th, evening)—This evening inspection trip to the world famous radiation laboratories, at which the cyclotron was first developed, will feature the 120-inch Bevatron which is capable of accelerating protons to 6.2 billion electron volts.

Westinghouse Sunnyvale Plant and Ford Motor Company San Jose Assembly Plant—(Wednesday, June 26th, all day)—The Sunnyvale plant of the Westinghouse Electric Corporation is the most diversified in its output of any of the company's far-flung 51 major manufacturing plants.

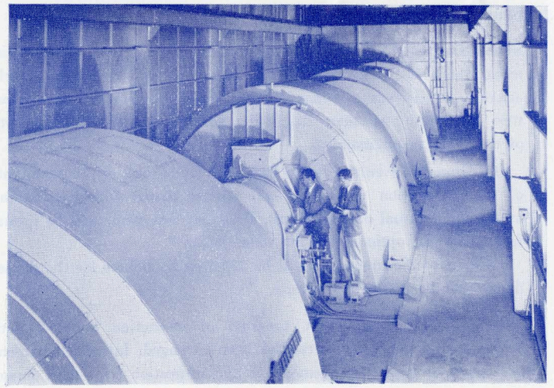
It manufactures everything from a quarter-inch gear, utilized in precision equipment helping astronomers to black out the sun for corona studies, to the world's largest rotating machine, a compressor now under construction which will whip up Goliath gales in a wind tunnel for the U. S. Army Air Force.

Among the other products Westinghouse manufactures in Sunnyvale are electric motors, transformers, panelboards, switchgear, 5,000 kilowatt "packaged" power plants, valves, large air-moving equipment, gears, voltage regulators, and electric home heaters.

The plant, the largest electrical manufacturing operation west of the Mississippi River, employs approximately 3,000 men and women.

The Ford Assembly Plant started production March 1, 1955. It has a potential capacity of 880 passenger cars and trucks daily on a two-shift basis. The plant contains 1,400,000 square feet of manufacturing area, seven miles of conveyor system, and 250 miles of electric wiring. Approximately 3,000 people are employed at this plant.

The group will lunch at the Ford Plant. After the plant tours are complete, the group will return via the East Bay and San Francisco-Oakland Bay Bridge.



Ames Unitary Plan Wind Tunnel,
Moffet Field, California

Ames Aeronautical Laboratory, Moffett Field, and Stanford University—(Thursday, June 28th, all day)—Ames Aeronautical Laboratory, established in 1940 at Moffett Field, is one of the three major research centers operated by the National Advisory Committee for Aeronautics (N.A.C.A.)

The primary role of Ames Laboratory is research in high speed aerodynamics. Research equipment includes 19 major wind tunnels which are among the largest and fastest in the world.

After luncheon at Ames Laboratory, the group will move to Palo Alto for a tour of the Stanford University Campus. Here the electronic facilities include a 200 in. electron linear accelerator, a new electron miscroscope which peers into the nucleus of the atom, and the famous Stanford Microwave Laboratory.

Pacific Gas and Electric Company's Steam-Electric Plant at Pittsburg—(Friday, June 29th, all day)—The men and ladies will join forces for this sightseeing boat trip which should be one of the highlights of the Convention. The trip will offer views of many points of interest in San Francisco Bay, including both big bridges and the near-completed Richmond-San Rafael bridge, four oil refineries, numerous industrial installations and points of historical interest. The trip will terminate at the Pacific Gas and Electric Company's 660,000 kilowatt Pittsburg steam-electric plant, the largest such plant west of the Mississippi. Tickets for this tour will be $4.50. Lunch and other refreshments will be available on the boat at a modest price.

STUDENT ACTIVITIES: In addition to other Convention activities, several events have been planned especially for students. An inspection trip to the University of California Radiation Laboratory is planned for Tuesday morning. In the afternoon the Undergraduate Student Prize Paper Contest will be held. A Counselors and Students Dinner at the International House, University of California, will take place Tuesday evening. Tickets for this dinner will be $2.65 each.

Thursday morning will see the Student Paper Presentations. At the noon luncheon on Thursday, at the Fairmont, the Student Prize Paper Winners from all Districts will be presented.

LADIES ENTERTAINMENT PROGRAM: The ladies attending the Convention are sure to enjoy a full and diversified program. The Ladies Entertainment Committee, headed by Mrs. James S. Moulton, has planned a wide variety of events that will appeal to all interests.

Each day, Monday through Thursday, a hospitality room will be open in the Garden Room of the Fairmont Hotel from 9:00 a.m. to 5:00 p.m. as a meeting place and for cards. Coffee will be served from 9:00 to 10:00 a.m.

On Sunday, June 24th, a Welcome Tea will be held at the Fairmont from 4:00 to 5:00 p.m. Monday will be free for individual shopping and sightseeing. Tuesday will feature a luncheon and

Continued on page 12

TECHNICAL PROGRAM

ADVANCE COPIES OF PAPERS

Members may obtain preprints of numbered papers at the uniform price of 40c each (80c 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 for those who wish to avoid remittance by check or otherwise. The Transactions 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.

Monday, June 25

9:00 a.m.—Relays

CP.* New Relaying Developments. R. E. Cordray, General Electric Co.

CP.* A Transistorized Distance Relay. F. R. Bergseth, University of Washington.

CP56-632. The Protection of Pilot Wire Relay Circuits. Pacific Coast Subcommittee.

CP.* Tests and Operating Experience with Carrier Transfer Trip Relaying for Line Protection. A. W. Adams, Bonneville Power Administration.

CP56-652. Protecting A.C. Motors with Low-Voltage Air Circuit Breaker Series Trips. F. P. Brightman, P. J. Reifschneider and R. R. McGee, General Electric Co.

9:00 a.m.—Substations

56-706. Present Practices in Electrical and Mechanical Design of Buses for Extra High Voltage Substations. Working Group on Project 53.1.

CP56-707. Flexible Copper Braid for Electrical Buses and Connectors. M. Brenner, Penn Union Electric Corp.

56-647. Basic Designs for Large High Voltage Substations. E. G. Norell, Sargent & Lundy.

CP.* Development of Automatic Dry Chemical Fire Protection Systems for Large Outdoor Transformers. E. F. Weaver, Pennsylvania Power and Light Co.

9:00 a.m.—Instruments and Measurements

CP56-794. VIAC: A Variable Interval Automation Controller. J. R. Wood, M. L. Klein and H. C. Morgan, North American Aviation, Inc.

CP56-795. Accurate Measurement of Phase Shift at Low Audio Frequencies. W. M. Meier, Westinghouse Electric Corp.

9:00 a.m.—General Industry Applications

9:00 a.m.—Communication Theory

CP56-653. The Communication Engineer's Needs in Information Theory. W. T. Rea, Bell Telephone Labs., Inc.

CP.* Reliable Circuits Using Less Reliable Relays. E. F. Moore and C. E. Shannon, Bell Telephone Labs., Inc.

CP.* What Use is Delta Modulation to the Transmission Engineer? F. K. Bowers, Bell Telephone Labs., Inc.

CP.* The Cash Value of Information Rate. J. L. Kelly, Jr., Bell Telephone Labs., Inc.

9:00 a.m.—Ethics in Engineering Practice

CP.* The Consulting Engineer's Viewpoint, H. J. Brunnier, Consulting Engineer.

CP.* Professional Ethics and the Government Engineer. E. C. Starr, Oregon State College.

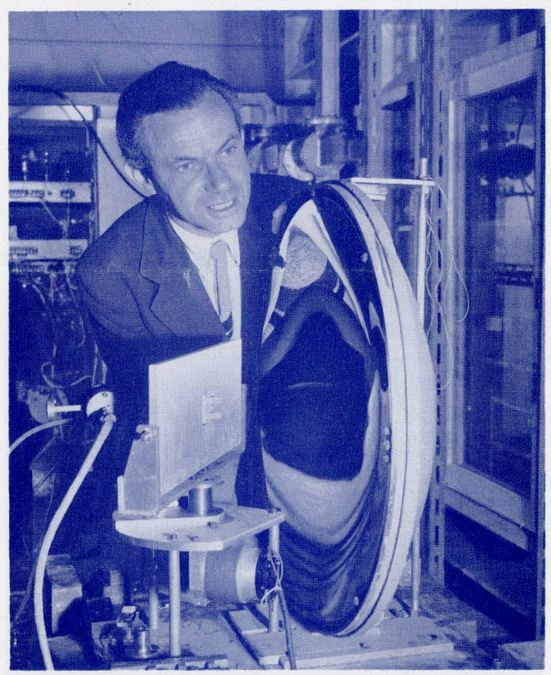
CP.* Ethics for Organizations. C. A. Powel, Past President, San Mateo, Calif.

2:00 p.m.—Opening Ceremony

Address of Welcome. J. S. Moulton, General Chairman.

2:30 p.m.—Annual Meeting

1. Report of the President, M. D. Hooven.
2. Report of the Board of Directors, N. S. Hibshman, Secretary.
3. Report of the Treasurer, W. J. Barrett.
4. Report of the Committee of Tellers on:
   (a) Votes for nominees for AIEE offices.
   (b) Proposed Constitutional amendments.



The Echelette Spectiometer
by Dr. Hans Motz of Stanford University

5. (a) Introduction of, and presentation of President's badge to M. S. Coover.
   (b) Response by Mr. Coover.

6. Presentation of the Lamme Medal to C. R. Hanna, Westinghouse Electric Corp.
   (a) The Establishment of the Medal. J. J. Pilliod, Chairman, Lamme Medal Committee.
   (b) The Career of the Medalist. Dr. J. A. Hutcheson, Vice-President, Engineering Research, Westinghouse Electric Corp.
   (c) Presentation of the Medal and Certificate by President M. D. Hooven.
   (d) Response by Mr. Hanna.

7. Any other business that may be presented.

Address: Dr. Allen B. DuMont.

Tuesday, June 26

9:00 a.m.—Section Delegates Conference

9:00 a.m.—Transmission and Distribution

CP56-708. Big Bend-Granite Falls 230-Kilovolt Transmission Line. T. M. Austin, Bureau of Reclamation.

CP56-709. Transmission Planning for Mountain Sheep-Pleasant Valley Project. W. A. Morgan, G. R. George, R. C. Guse and and M. F. Hatch, The Washington Water Power Co.

CP56-710. Economics of Var Supply in a Large Electric Power System. T. A. Bettersworth, Pacific Gas & Electric Co.

56-711. Short-Circuit Tests with Rapid Reclosing on the 220-KV Line Mettlen-Lavorgo. F. Schaer, Olten, Switzerland and P. Baltensperger, Baden, Switzerland.

9:00 a.m.—Rotating Machinery—Induction

56-712. The Schrage Motor as a Synchronous Tie Transmitter. J. P. Landis, E. I. du Pont de Nemours & Co.

CP.* Recent Trends in Pump Motor Design. W. B. Rice,

CP56-648. Vibratory Systems in Vertical Motor Mountings. J. M. Shulman, Westinghouse Electric Corp.

CP56-713. Vibration in Vertical Pumping Systems. J. H. McKendree and L. A. March, General Electric Co.

Ford Motor Company
San Jose Plant

9:00 a.m.—Magnetic Amplifiers

56-714. Dynamic Behavior of a Three-Phase Magnetic Amplifier. F. J. Ellert, General Electric Co.

56-715. The Triductor. P. P. Biringer, University of Toronto.

CP56-716. Characteristic Properties of a Magnetic Frequency Multiplier. W. Leonhard, Westinghouse Electric Corp.

CP56-649. A Delta-B Indicator. H. W. Lord, General Electric Co.

56-717. Superposed Magnetic Fields in Materials and Rectangular Hysteresis Loops. C. B. Wakeman, Magnetics, Inc. and F. J. Beck, Yale University.

9:00 a.m.—Instruments and Measurements

CP56-796. New DC Hysteresigraph. R. E. Tompkins and J. D. Young, General Electric Co.

CP56-797. An Instrument to Record Voltage Flicker. V. H. Kraybill, Commonwealth Edison Co. and H. M. Jensen, Pennsylvania State University.

9:00 a.m.—Telegraph Systems

CP56-634. Electrical Teletypewriter Transmitter. N. N. Biswas, University of Roorkee, India.

56-654. Transmission of Business Machine Data Over Standard Telegraph Channels. F. B. Bramhall, Western Union Telegraph Co.

CP.* Error Checking with Particular Reference to Telegraph Systems. R. M. Gryb, Bell Telephone Labs., Inc.

56-655. Control System for Integrated Data Processing. P. R. Easterlin, Western Union Telegraph Co.

56-646. Automatic Dispatch System for Half-Duplex Teletypewriter Lines. J. L. Maxwell and H. K. Farrar, The Pacific Tel. & Tel. Co.

9:00 a.m.—Domestic and Commercial Applications

CP.* The Influence of Practical Considerations on the Use of Electric Heating for Homes. S. L. Forsyth, Westinghouse Electric Corp.

CP.* Favorable Economics of Resistance Heating. J. C. Beckett, Wesix Electric Heater Co.

CP56-690. A Study of the Electrical Characteristics of a 20-Suite Electrically-Heated Apartment. J. C. McAdam, British Columbia Electric Co., Ltd.

CP56-691. The Design and Operation of an Air-to-Air Heat Pump Air Conditioning. H. E. Burrier, Southern California Edison Co.

CP.* The Effect of Space Heating on Utility Systems on the Pacific Coast. C. E. Baugh, Pacific Gas & Electric Co.

9:00 a.m.—Land Transportation

CP56-762. Rapid Transit Progress in Toronto. J. G. Inglis, Toronto Transit Commission.

CP.* Rapid Transit Expands in Chicago. S. D. Forsythe, Chicago Transit Authority.

CP56-763. Adapting a Trolley Coach System to a Changing Traffic Pattern. S. M. Shockey, Seattle Transit System.

2:00 p.m.—Section Delegates Conference

2:00 p.m.—Industrial Power Systems

CP56-718. Economics of Distribution Systems. P. F. Larson, Holmes & Narver, Inc.

CP56-719. Emergency Electrical Service for Hospitals. M. L. Beeson, County of Los Angeles and P. Belsky, Westinghouse Electric Corp.

CP56-720. Adequate Capacity in Electrical Services and Distribution Switchgear for the Cannery. R. S. Wilson, Processors and Growers Association.

CP.* Safety. E. E. Carleton, California Division of Industrial Safety.

2:00 p.m.—Transmission and Distribution

56-721. The Alcunector—An All Weather Connector for Aluminum to Copper Conductors. E. W. Greenfield and A. H. Selker, Kaiser Aluminum & Chemical Corp.

56-722. Emissivity and Its Effect on the Current Carrying Capacity of Stranded Aluminum. C. S. Taylor and H. E. House, Aluminum Co. of America.

56-723. General Purpose Overhead Distribution Above 5,000 Volts in Urban Areas. W. R. Bullard, Ebasco Services, Inc.

CP.* Protection and Application of Series Capacitors Used with Distribution Transformers. G. G. Auer, L. W. Robbins and N. M. Neagle, General Electric Co.

CP*. Study of Twin Conductor Arrangements. E. T. B. Gross, Illinois Institute of Technology.

2:00 p.m.—Rotating Machinery

56-633. Experience with High Voltage D-C Insulation Testing of Generator Stator Windings. E. C. Schurch, U. S. Bureau of Reclamation.

56-724. Analog Computer Representations of Synchronous Generators in Voltage Regulation Studies. M. Riaz, Massachusetts Institute of Technology.

56-725. The Design of a Very Slow Speed Reluctance Motor for Atomic Reactor Rod Mechanism Drive. D. A. Guerdan, Westinghouse Electric Corp.

CP56-806. A Note on the Speed-Torque Curves of AC Adjustable Speed Drives. J. E. Gibson, Yale University.

2:00 p.m.—Magnetic Amplifiers

56-726. Magnetic Amplifier Control of Switching Transistors. H. W. Collins, Westinghouse Electric Corp.

56-727. Magnetic Logic Circuit Control System Design Considerations. R. I. Van Nice, Westinghouse Electric Corp.

56-728. Magnetic Pulse Generator Practical Design Limitations. M. F. Thompson, R. R. Trautwein and E. R. Ingersoll, North American Aviation, Inc.

CP56-729. The Efficiency of Magnetic Pulse Generators. B. M. Wolfframm, Magnetic Research Corp.

CP56-730. Instabilities of Push-Pull Magnetic Amplifiers Feeding the Field of an Electrical Machine. H. F. Storm, General Electric Co.

2:00 p.m.—Instruments and Measurements

2:00 p.m.—Land Transportation

CP56-764. Developing and Building Rapid Transit Rail Cars. E. C. Wrausmann, St. Louis Car Co.

CP.* Modern Brakes for Modern Rapid Transit Cars. C. M. Hines, Westinghouse Air Brake Co.

CP.* First Year's Operating Experience with New Control Equipment on 100 New York City Subway Cars. G. W. Weber, General Electric Co.

CP56-765. Recent Developments in Light Weight Rapid Transit Equipment. H. S. Robinson and J. A. Schoch, Westinghouse Electric Corp.

2:00 p.m.—Computers in Business and Electric Utility Problems

CP.* Some Opportunities for Operations Research in the Electric Power Industry, W. J. Platt.

CP.* Computers in Business and Industrial Control Problems. E. M. Grabbe and Harry Larson.

CP56-661. Quasi-Random Access Memory Systems. G. L. Hollander, Clevite-Brush Development Co.

Wednesday, June 27

9:00 a.m.—Power Systems in the Steel Industry

56-657. Electric Power Systems for Steel Plants. H. N. Cox and L. G. Levoy, General Electric Co.

CP56-731. Centralized Control of Power Systems in the Steel Industry. W. A. Derr and W. L. Metz, Westinghouse Electric Corp.

SYMPOSIUM—The Problem of Fluctuating Loads in the Steel Industry.

56-637. Voltage Dips and Flicker. A. A. Kroneberg, Southern California Edison Co.

CP.* Operating Experience with a High Speed Turbine Load Regulator. D. E. Young, United States Steel Corp.

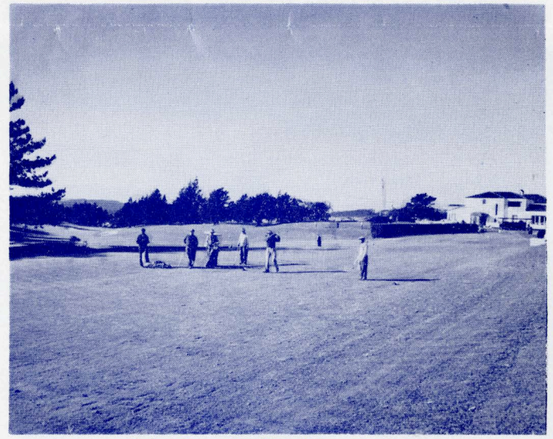
CP.* The Power-Distribution System of an Integrated Steel Plant. Donald Stewart, Jr., Kaiser Steel Co.

9:00 a.m.—Communication Switching Systems

56-662. Design Features of Bell System Wire Spring Relays. H. M. Knapp, Bell Telephone Labs., Inc.

56-650. Manufacture of Wire Spring Relays for Communication Switching Systems. J. W. Rice, Western Electric Co., Inc.

56-658. Capability of Sealed Contact Relays. O. M. Hovgaard, Bell Telephone Labs., Inc.



Lake Merced Golf and Country Club
San Francisco, California

56-663. The Development of Automatic Manufacturing Facilities for Reed Switches. J. A. Hosford, Western Electric Co., Inc.

56-645. Traffic Considerations in Community Dial Offices. S. J. Lanigan and T. J. McDonough, Rural Electrification Administration.

9:00 a.m.—Industrial Power Rectifiers

CP56-664. Resistance Instrument for an Aluminum Reduction Pot Lines. L. H. Wolgast, Reynolds Metals Co.

CP.* Measurements of Arc Drop on Mercury-Arc Rectifiers. J. E. Hudson, General Electric Co.

CP.* Operating Experiences with the Mechanical Rectifier. Thomas Cootsona, Food Machinery and Chemical Corp.

CP.* A Description of the Electrical Installation of the Anaconda Aluminum Plant at Columbia Falls, Montana. H. W. Kanzler, Anaconda Aluminum Co.

9:00 a.m.—Transmission and Distribution

56-629. Simplified Method for Calculating Intermediate Faults on Mutually Coupled Transmission Lines. M. J. Lantz, Bonneville Power Administration.

56-627. Electrical Resistance to the Earth of a Live Tree. F. M. Defandorf, National Bureau of Standards.

56-732. Reduced Insulation in Power Systems at the Higher Voltages—The Problems it Presents. P. L. Bellaschi, Portland, Oregon.

56-733. A New Approach to the Calculation of the Lightning Performance of Transmission Lines. C. F. Wagner, Westinghouse Electric Corp.

9:00 a.m.—Transformers

56-734. A Study of the Co-Ordination of Modern Arresters and Transformer Insulation. E. J. Adolphson and F. J. Vogel, Allis-Chalmers Mfg. Co. Re-presented for discussion.

56-735. Switching Surge and Long Duration Voltage Tests on Transformer Insulation. W. C. Farneth and F. J. Vogel, Allis-Chalmers Mfg. Co. Re-presented for discussion.

56-628. Minimum Cost Loading of Transformers. A. Klopfenstein, Southern California Edison Co.

CP56-736. Reduction of Audible Sound of Transformers by the Suspension Method of Installation. C. P. Xenis, Consolidated Edison Co. of N. Y., Inc.

CP.* Low-Remanence High-Aluminum Iron. D. Pavlovic and K. Foster, Westinghouse Electric Corp.

CP56-805. A Field Survey of Transformer Oil Quality. W. J. Degnan and E. J. Shimanski, General Electric Co.

9:00 a.m.—Magnetic Amplifiers

CP.* Teaching Magnetic Amplifier Circuits. H. C. Bourne, University of California.

56-626. Alternating Current Control of the Half-Wave Bridge Magnetic Amplifier. T. Bernstein, General Motors Corp. and N. L. Schmitz, University of Wisconsin.

CP56-737. A Stable Low-Level Magnetic Amplifier. R. Cockrell, Boeing Airplane Co.

CP.* Fast Response Low-Level Magnetic Amplifiers. A. Hoffman, Convair.

56-738. Inverse Time Underfrequency Relay. R. G. Hoft, General Electric Co.

9:00 a.m.—Management

CP.* Organizing to Build the Commonwealth Edison Nuclear Power Plant. J. E. Maider, Commonwealth Edison Co.

CP.* Management Development in the Communications Field. Glen Ireland, Pacific Tel. & Tel. Co.

CP.* How an Engineering Education Fits an Individual for a Management Position. G. C. S. Benson, Claremont Men's College.

9:00 a.m.—Wire Communication Systems

CP56-799. A Subscriber Carrier System Using Single Sideband Suppressed Carrier Operation. W. E. Noller, Lynch Carrier Systems, Inc.

CP56-798. Application of Single Sideband Subscriber Carrier to Rural Telephone Lines. G. L. Curtis, Lynch Carrier Systems, Inc.

CP56-800. FM Subscriber Carrier. Elvin Krasin, Panhandle Electrical Construction Co.

CP.* P1 Carrier System. R. C. Boyd and E. H. Perkins, Bell Telephone Labs., Inc.

CP56-802. A New 5 Channel Carrier System for Subscriber Use Employing Transistors. B. R. Stachiewicz, R. L. Layburn and D. F. Jamieson, Stromberg-Carlson Co.

2:00 p.m.—Substations

CP56-739. Insulator Washing in Substations. R. S. Melville, Southern California Edison Co.

CP56-740. Cleaning Insulators in Energized Substations. C. L. Collins and J. H. Rutter, Dept. of Water & Power, Los Angeles.

56-636. New Lightning Arrester Standard. H. R. Armstrong, Detroit Edison Co.; F. M. Defandorf, National Bureau of Standards; and A. M. Opsahl, Westinghouse Electric Corp.

CP56-741. The Application of Lightning Arresters on a Large Power System. H. R. Armstrong, Detroit Edison Co.

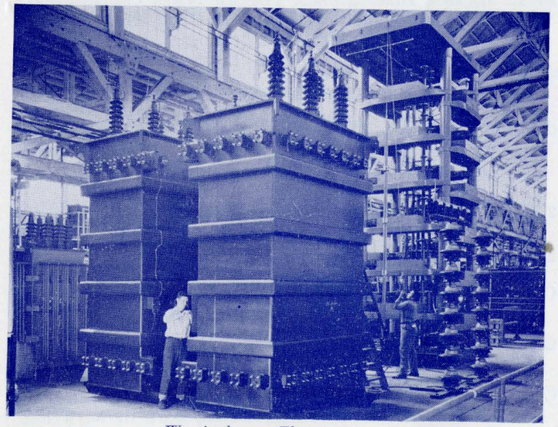
2:00 p.m.—Communication Switching Systems

56-631. Recent Developments in Four-Wire Switching of Long-Distance Telephone Circuits. Imre Molnar, Automatic Electric Co.

56-665. The Full Stature of the Crossbar Tandem Switching System. John Meszar, Bell Telephone Labs., Inc.

56-668. Electronics in Telephone Switching Systems. A. E. Joel, Bell Telephone Labs., Inc.

CP56-666. A Magnetic Drum Storage System Considered for Use as a Common Sender in Nationwide Dialing. H. F. May, Bell Telephone Labs., Inc.



Westinghouse Electric Corp.
Sunnyvale, California

56-667. Recent New Features for the Number 5 Crossbar Switching System. J. W. Dehn and R. E. Hersey, Bell Telephone Labs., Inc. Re-presented for discussion.

2:00 p.m.—Transformers

56-742. Determination of Impulse Stresses Within Transformer Windings by Computers. J. H. McWhirter, C. D. Fahrnkopf and J. H. Steele, Westinghouse Electric Corp.

56-743. Effect of Impulse Testing on Transformer Iron Loss. J. H. McWhirter, T. R. Specht and W. D. Albright, Westinghouse Electric Corp.

56-744. Ultrasonic Detection and Location of Electrical Discharges in Insulating Structures. J. G. Anderson, General Electric Co.

56-745. Evaluation of Dielectric Strength Gauges for Transformer Oil. K. H. Weber and R. B. Kaufman, General Electric Co.

CP56-746. Use of Aluminum Strip Conductor in Dry Type Transformers. J. C. Meekins, T. E. Lewis, J. Staley, Reynolds Metals Co.

2:00 p.m.—Magnetic Amplifiers

56-747. The Series Magnetic Amplifier—Part I—The Four Modes of Operation. R. C. Barker, Yale University.

CP56-748. The Series Magnetic Amplifier—Part II—The Mechanisms of Gain and Time Constant. R. C. Barker, Yale University.

56-749. Diode Shunting in Magnetic Amplifiers. J. L. Lowrance and J. E. Dolan, Bendix Aviation Corp.

CP.* A Silicon Diode Reference Unit. W. H. Woodworth, Michelson Lab.

56-750. The Simple Reactor Circuit; Its Operation and Mode Transition. J. F. Ringelman and A. L. Fenaroli, Westinghouse Electric Corp.

CP.* Evaluation of Materials for Reducing Vibration Effects on Toroidal Cores. W. F. Horton, Lear, Inc.

2:00 p.m.—Television and Aural Broadcasting Systems

CP.* Recent Developments in High Fidelity Amplifiers and Other Equipment. F. H. McIntosh, Frank H. McIntosh Consulting Radio Engineers.

CP.* Remote Control of Directional and High Power Standard Broadcast Stations. A. P. Walker, Association of Radio and TV Broadcasters.

CP.* The Impact of Recent Research on Television and Aural Broadcasting Systems. G. H. Brown and C. N. Hoyler, RCA Labs. (Demonstration)

2:00 p.m.—Problems of Getting Young Engineers from College into Industry

Panel on Electronics: D. I. Cone, Pacific Tel. & Tel. Co.
F. E. Terman, Stanford University
J. M. Cage, Purdue University
W. R. Hewlett, Hewlett-Packard Co.

Panel on Power: R. O. Brosemer, General Electric Co.
J. C. Beckett, Wesix Electric Heater Co.
W. R. Johnson, Pacific Gas and Elec. Co.
M. S. Oldacre, Stanford Research Institute

2:00 p.m.—Safety

CP.* Field Treatment of Electric Shock Cases. W. B. Kouwenhoven, The Johns Hopkins University.

CP56-761. Emergency Lighting for Fire Safety. R. S. Moulton, National Fire Protection Association.

CP56-669. Testing for Safety—Safely. J. A. MacNabb, Underwriters' Labs.

2:00 p.m.—Analog-Digital Converter and Combined Computation

CP.* Ad-da-verters 1—Specifications for Analog-Digital-Analog Converting Equipment for Stimulation Use. R. M. Leger, Convair.

CP.* Logical and Functional Organization of the Ad-da-verter System. B. M. Gordon, EPSCO, Inc.

CP.* Design and Construction of Ad-da-verter System. Eli Anfenger, EPSCO, Inc.

CP.* Ad-da-verters IV—Combined Analog-Digital Computer Operation. J. L. Greenstein, Convair.

Thursday, June 28

9:00 a.m.—Mining and Metal Industry

CP.* This is Automation. A. C. Parsons, General Electric Co. (Movie)

CP56-675. Automatic Control Systems in Steel Processes. W. K. Scott, United States Steel Corp.

CP.* Computer Applications in the Metal Working Industries. L. F. Stringer, Westinghouse Electric Corp.

CP.* Automatic Control for Continuous Processing Lines. F. L. Reed, Westinghouse Electric Corp.

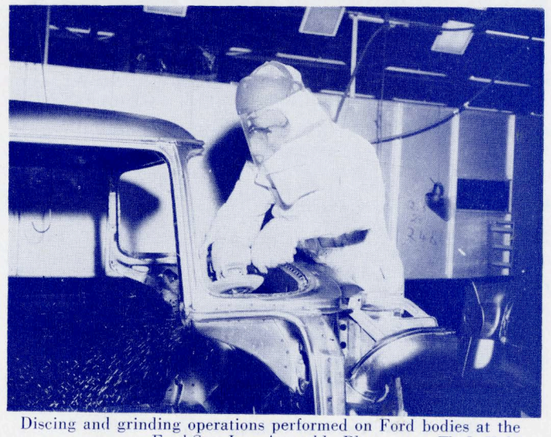
9:00 a.m.—System Engineering

CP56-642. The Connecticut Capacity Coordinating Plan. E. C. Brown, The Hartford Electric Light Co.; C. T. Hughes, Connecticut Light & Power Co.; and R. G. Warner, United Illuminating Co.

CP56-670. Summary of Some Aspects of Tie Line Bias Control on Interconnected Power Systems. Nathan Cohn, Leeds and Northrup Co.

CP.* Automatic Operation of Interconnected Areas. A. F. Glimn, L. K. Kirchmayer and H. H. Chamberlain, General Electric Co.

CP56-671. Penalty Factors from Power System Equations. P. G. Lubisich, Los Angeles Department of Water and Power.



Discing and grinding operations performed on Ford bodies at the Ford-San Jose Assembly Plant. *W. J. Holden*

56-672. Some General Theorems on Power Flow in Linear Networks. J. F. Calvert and T. W. Sze, University of Pittsburgh. Re-presented for discussion.

9:00 a.m.—Switchgear

56-751. Mechanical Features of New Frame Mounted Outdoor Oil Circuit Breakers. E. R. Perry, J. F. Claffie, W. L. Vance, Allis-Chalmers Mfg. Co.

56-752. The Development and Testing of a 300 KV Air-Blast Circuit-Breaker for Severe Duties. J. Christie, D. F. Amer, A. F. B. Young, A. Reyrolle & Co., Ltd.

CP56-701. A New Universal Mechanically Trip-Free, Four Bar Linkage Mechanism for Intermediate Voltage Power Circuit Breakers. H. L. Peek, Allis-Chalmers Mfg. Co.

CP56-753. Gas Blast Switch—Tests on 230 kv System. P. E. Richardson, U. S. Bureau of Reclamation; Arem Foti, I-T-E Circuit Breaker Co.

9:00 a.m.—Carrier Current

56-651. Application of Transistors in Power Line Carrier Relaying. W. C. Feaster, The Potomac Edison Co.; E. E. Scheneman, Westinghouse Electric Corp.

56-630. A Microwave Communication System for the Southern Colorado Power Co., G. D. Perry, Jr., Southern Colorado Power Co.; E. Langone, General Electric Co.

CP56-754. Frequency Shift Microwave Channelizing Equipment for Line Protective Relaying. M. E. Strong, W. R. Robinson, Westinghouse Electric Corp.

CP56-801. A Four-Channel Power Line Carrier System. F. F. Garzoli, Lynch Carrier Systems, Inc.

9:00 a.m.—Television & Aural Broadcasting Systems

CP.* Television Networks for the San Francisco Convention. E. D. Barcus and A. E. MacMahon, Pacific Tel. & Tel. Co.

CP.* Color Kinescope Recording on Embossed Film. C. H. Evans and R. B. Smith, Eastman Kodak Co.

56-673. A Video Visual Measuring Set with Sync Pulses. P. T. Sproul, Bell Telephone Labs., Inc.

CP.* VHF Propagation Over Rough Terrain. A. G. Sparling, Stations KHQ AM & TV.

9:00 a.m.—Chemical Industry

CP56-674. Electrical System for a Nuclear Reactor. E. P. Peabody and D. S. Brereton, General Electric Co.

CP.* Cathodic Protection for Steel Retention Tanks Containing Reactor Coolant Water. C. S. Bucholz, General Electric Co.

CP.* Minimizing the Fifth and Seventh Harmonics from A.C. Distribution System. W. R. Kiltz, The Dow Chemical Co.

CP56-480. Expansion of Electrical Facilities in Chemical Plants Utilizing Existing Switchgear. H. N. Hickok, General Electric Co.

9:00 a.m.—Electronic Circuitry

56-756. Magnetic Regulation Transistor Power Supply. L. F. Lyons, Bendix Aviation Corp.

CP56-757. Keyed, Phase-Sensitive Demodulators. Robert B. Mark, P. R. Johannessen, W. X. Johnson, Massachusetts Institute of Technology.

56-758. Application of Junction Transistors to Carrier Frequency Computing Amplifiers. W. A. Curtin, Radio Corp. of America.

56-759. Synchronization Accuracy Obtainable with Multiplier Phototubes. L. Levi, Fairchild Controls Corp.

CP56-760. A Comprehensive Timing System for Field Testing. C. K. Raynsford, Vitro Labs.

56-803. Styroflex Aluminum Sheathed Air-Dielectric Cable. E. J. Merrell, A. L. McKean and J. Arbuthnott, Jr., Phelps Dodge Copper Products Corp.

9:00 a.m.—Industrial Power Systems

56-625. Distributing Large Single Phase Loads in Limited Capacity Three Phase Power Systems. G. F. Aroyan, University of California and K. G. Lakey, United States Navy.

CP.* Petroleum Refinery Electrical Power Systems. G. R. Dunbar, Westinghouse Electric Corp.

CP56-767. A Transient Stability and Voltage Study for a Modern Oil Refinery Distribution System. C. W. Boice, C. F. Braun & Co., S. R. Durand and D. Dalasta, Allis-Chalmers Mfg. Co.

2:00 p.m.—Mining and Metal Industry

56-639. Transient Characteristics of D-C Metal Rolling Motors and Generators. E. P. Smith, General Electric Co.

56-638. Analysis of Tandem Cold Reduction Mill with Automatic Gage Control. R. A. Phillips, General Electric Co.

56-656. Incremental Control Equations for Tandem Rolling Mills. J. H. Courcoulas and J. M. Ham, University of Toronto.

CP.* Modern Computer Analysis for the Design of Steel Mill Control Systems. J. E. Reider and P. Spergel, Industrial Nucleonics Corp.

2:00 p.m.—Power Generation

56-768. Development of the Electrical Aspects in Outdoor Steam-Electric Operating Stations on the Pacific Gas and Electric Company System. Einar Nilsson, Pacific Gas & Electric Co.

56-769. Outdoor versus Indoor Steam-Electric Stations in the Houston Area. L. K. Del'Homme, Houston Lighting and Power Co.

CP56-660. Salient Electrical Features of Muskingum River Plant. V. P. Rader and C. P. Zimmerman, American Gas & Electric Service Corp.

CP56-770. Design Changes for Unit 3, Meramec Plant. R. W. Gaskins, Union Electric Co. of Missouri.

CP56-771. Refinements in Design of Steam-Electric Generating Stations. J. L. Cohon, Southern California Edison Co.

Our Transportation to Pittsburg Steam Plant

2:00 p.m.—System Engineering and Computers

56-676. Transient Stability Angular Increment Computer. H. Wood, Southern California Edison Co.

56-677. Digital Computer Solution to Determine Economical Use of Hydro Storage. D. L. Johnson, University of Washington.

56-678. Exact Economic Dispatch Digital Computer Solution. R. B. Shipley and Martin Hochdorf, Tennessee Valley Authority.

56-679. The Use of Computing Machines in the Statistical Evaluation of Electrical Components. W. E. Andrus, Jr., International Business Machines.

56-680. Analysis of a Sampled Data Servo-Mechanism Performed on the IBM 650 Magnetic Drum Data Processing Machine. B. M. Tostanoski, International Business Machines.

2:00 p.m.—Switchgear

56-772. Current Limiting Fuses—Their Characteristics and Applications. P. C. Jacobs, The Chase-Shawmut Co.

56-773. Co-ordination of Current Limiting Fuses and Low Voltage Air Circuit Breakers. M. S. Carlson and W. H. Edmunds, I-T-E Circuit Breaker Co.

CP56-774. A New High Interrupting Capacity Low Voltage Circuit Breaker. W. H. Edmunds, I-T-E Circuit Breaker Co.

56-775. Testing Large Air Circuit Breaker Trip Devices. C. H. Titus and L. H. Sperow, General Electric Co. Re-presented for discussion.

2:00 p.m.—Basic Sciences

56-681. Dynamax, A New Crystal and Domain Oriented Magnetic Core Material. G. H. Howe, General Electric Co.

56-682. Investigations Concerning Polarization in Barium Titanate Ceramics. G. W. Marks, USN Electronics Lab.; D. L. Waidelich, University of Missouri; and L. A. Monson, USN Electronics Lab.

CP.* High-Permeability High-Aluminum Iron. D. Pavlovic and K. Foster, Westinghouse Electric Corp.

56-787. The Analytical Design and Evaluation of Electromagnets. M. J. Kelly and J. E. Wallace, International Business Machines Corp.

56-684. Graphical Determination of the Fourier Series Coefficients. W. H. Middendorf, University of Cincinnati.

2:00 p.m.—Television and Aural Broadcasting Systems

CP.* Projection Display for Color Television Receivers. D. E. Foster, Hazeltine Research Corp. of California.

CP.* Adaptation of the CHROMATRON Tube for Military Applications. D. R. Cone, Chromatic TV Labs., Inc.

CP56-688. New Slow Scan TV System for Closed Circuit Applications. G. H. Fathauer and R. H. Smith, Jr., Thompson Products, Inc.

2:00 p.m.—Chemical Industry

CP.* The Germanium Rectifier is Growing Up. R. M. Crenshaw, General Electric Co.

CP56-689. Electric Cable Insulation in Chemical Plants. J. E. Parker, Carbide and Carbon Chemicals Co.

CP56-491. High Voltage D-C Testing of Cables and Cable Fault Locations. B. J. Nankervis, The Dow Chemical Co.

CP56-470. Corona in Metal-Clad Switchgear. H. O. Borque, Ethyl Corp.

2:00 p.m.—Radio Communication Systems

CP.* Emergency Use of Microwave Radio in Northern California. M. W. Walther and C. S. Watkins, Pacific Tel. & Tel. Co.

56-692. Impedance of Thin Wire Loop Antenna. J. E. Storer, Harvard University.

CP.* Tacan. H. Busignies, Federal Telecommunications Labs.

Friday, June 29

9:00 a.m.—Power Generation and System Engineering

CP56-635. Probability Calculations for System Generation Reserves. Carl Kist and G. J. Thomas, Department of Water and Power, Los Angeles.

56-643. Accuracy Considerations in Economic Dispatching of Power Systems—Part I. A. F. Glimn, L. K. Kirchmayer, General Electric Co., V. R. Peterson and G. W. Stagg, American Gas and Electric Service Corp.

50-641. A New Automatic Dispatching System for Electric Power Systems. K. N. Burnett, D. W. Halfhill and B. R. Shepard, General Electric Co.

56-776. Eastlake Reappraised. C. F. Paulus, Cleveland Electric Illuminating Co.

9:00 a.m.—Insulated Conductors

56-702. An All Purpose Directional Impulse Method of Cable Fault Locating and Identification. E. K. Anderson, Jr., Consolidated Edison Co. of N. Y., Inc.

56-703. High Temperature Power Cable with Silicone Insulation. C. T. Hatcher, Consolidated Edison Co. of N. Y., Inc. and A. R. Lee, General Electric Co.

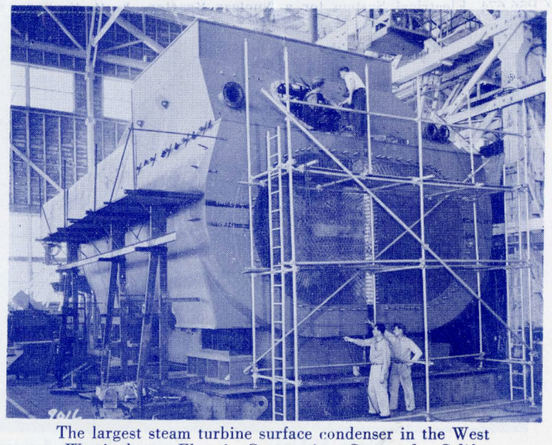
CP56-704. Analysis of Conductor Economics. R. C. Blankenburg, Southern California Edison Co.

CP.* Jointing Aluminum Sheathed Power Cable. E. J. Merrell and R. A. Russbach, Phelps Dodge Copper Products Corp.

CP56-705. Aluminum Sheathed Cable with Welded Splice Sleeves. C. T. Nicholson and G. P. Adams, Niagara Mohawk Power Corp.

9:00 a.m.—Computing Devices and Applications

56-693. Some Engineering Aspects of the Machine Translation of Language. R. E. Wall, Jr., University of Washington.



The largest steam turbine surface condenser in the West Westinghouse Electric Corporation, Sunnyvale, Calif.

CP56-694. Zero Signal Reliability in Magnetic Shift Registers. O. J. Van Sant, U. S. Naval Ordnance Lab.

56-695. Magnetic Data Recording Theory; Head Design. A. S. Hoagland, University of California.

56-696. Optimum Linear-Segment Function Generation. Howard Hamer, Electronic Associates.

9:00 a.m.—Basic Sciences—Semiconductors.

CP.* Physics of Semiconductors. C. Kittel, University of California.

CP.* Transistor Physics. W. Shockley, Shockley Semiconductor Lab.

CP.* Junction Transistors. L. Valdez, Shockley Semiconductor Lab.

CP.* Application of "3-5" Compounds to Devices. H. W. Henkels, Westinghouse Electric Corp.

9:00 a.m.—Feedback Control Systems

56-777. An Experimental Treatment of Nonlinear Servomechanisms. R. S. Neiswander, Aerojet-General Corp.

56-778. A Time Dependent Nonlinear Compensating Network. J. C. Clegg, University of Utah.

56-779. A Step-by-Step Method for Transient Analysis of Feedback Systems with One Nonlinear Element. T. M. Stout, Ramo-Wooldridge Corp.

56-640. A General Technique for Approximating Transient Response from Frequency Response Asymptotes. G. A. Biernson, Massachusetts Institute of Technology.

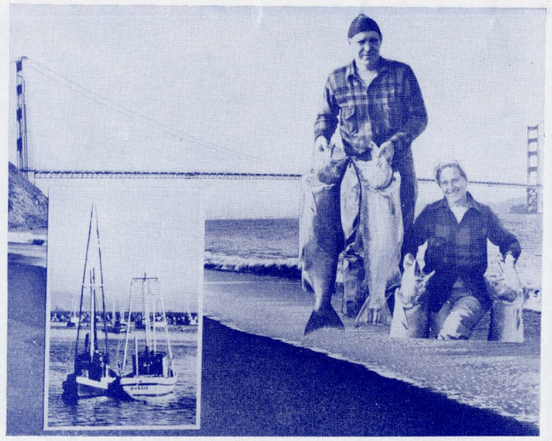
9:00 a.m.—Wire Communication Systems

56-780. Where We Are and Where We Are Going in Telephone Transmission. H. R. Huntley, American Tel. & Tel. Co.

56-781. Transmission Rating of Telephone Sets. K. S. Johnson and J. B. Eppes, Jr., Rural Electrification Administration.

CP56-782. Pacific Coast Tool Transmission Network. W. L. Carter and R. L. Messner, Pacific Tel. & Tel. Co.

56-783. Telephone Carrier Frequency Networks. G. D. Wallenstein, Lenkurt Electric Co.



Salmon Fishing *Redwood Empire Association*

56-784. Influence of Noise on Telephone Signaling Circuit Performance. L. A. Weber, Bell Telephone Labs., Inc.

9:00 a.m.—Nucleonics

CP.* Progress in the Development and Design of the Dresden Nuclear Power Plant. J. R. Walcott, General Electric Co.

CP.* Control and Instrumentation of the Dresden Nuclear Power Plant. E. P. Peabody, General Electric Co.

CP.* Description of the Pressurizer Water Reactor (PWR) Power Plant at Shippingport, Pennsylvania. (a) Nuclear Power Generation, J. W. Simpson, Westinghouse Electric Corp. and M. Shaw. (b) Turbine Generator Plant. R. B. Donworth and W. J. Lyman, Duquesne Light Co. (c) Core Design. I. H. Mandil and N. J. Palladino.

CP.* Sodium Graphite Reactor. Chauncey Starr, North American Aviation.

CP.* A Developmental Fast Neutron Breeder Reactor. A. Amorosi, A. P. Donnell and H. A. Wagner, A.P.D.A.

2:00 p.m.—Power Generation

CP56-785. Hydroelectric Development on the North Fork of the Kings River. W. R. Johnson, D. P. Dinapoli and J. B. Cooke, Pacific Gas & Electric Co.

56-786. Electrical Features of the Sir Adam Beck-Niagara Generating Station #2 the Hydro-Electric Power Commission of Ontario. W. E. Taylor, Hydro-Electric Power Commission of Ontario.

CP.* Single-Line Diagrams—Hydro Stations of Aluminum Company of Canada, Ltd. J. T. Madill and W. O. Codrington, Aluminum Co. of Canada, Ltd.

CP.* Round-Table Discussion—Cloud Seeding. C. P. Smith.

2:00 p.m.—The Place of Analog Versus Digital Computers in the Solution of Engineering Problems

CP56-687. Analog Versus Digital Techniques for Engineering Design Problems. D. B. Breedon, Westinghouse Electric Corp.

56-697. Numerical Integration of Differential Equations on the 704 EDPM. H. H. Anderson and J. R. Johnson, International Business Machines.

CP.* Factors Favoring an Analog Computer, R. Favreau.

CP.* Some Relationships Between Analog and Digital Computers. R. Hamming.

CP.* Panel discussion.

2:00 p.m.—Basic Sciences and Solid State Devices

CP56-788. Two Simple Solid State Analog Dividers. E. A. Sack, Pittsburgh, Pa.

CP56-789. Discontinuous Transition Time Between Stable States in Ferroresonant Circuits. Sheldon Plotkin, University of California.

56-686. Subharmonic Response of the Ferroresonant Circuit. Egon Brenner, The City College.

56-685. Computation of the Impedances of Nonuniform Lines by a Direct Method. L. A. Pipes, University of California.

CP56-683. Series Circuit Incorporating a Nonlinear Reactor. R. P. Evans, North American Aviation, Inc.

55-804. A Phasor Method of Nonlinear Network Analysis. J. P. Neal, University of Illinois.

56-755. Signals from switched Ferroelectric Memory Condensers. C. F. Puluari and G. E. McDuffie, Jr., The Catholic University of America.

2:00 p.m.—Feedback Control Systems

56-644. Discrete Compensation of Sampled-Data and Continuous Control Systems. E. I. Jury and Wm. Schroeder, University of California.

56-790. Hidden Oscillations in Sampled-Data Control Systems. E. I. Jury, University of California.

56-791. Feedback Techniques Applied to the Single Phase Transformer. E. Mishkin, Polytechnic Institute of Brooklyn.

56-792. Envelope Transfer Function Analysis in A.C. Servosystems. Marvin Panzer, Polytechnic Institute of Brooklyn.

CP56-793. Theory of A-C Servomechanisms. C. W. Hewlett, Jr., General Electric Co.

2:00 p.m.—Radio Communication Systems

56-659. Microwave Facilities with Built-In Reliability. R. G. Kuck, The Pacific Tel. & Tel. Co.

56-698. Automatic Protection Switching for TD-2 Radio System. G. H. Klemm, Bell Telephone Labs., Inc.

56-699. Microwave for Telephone Companies. W. C. Fisher, Lenkurt Electric Co., Inc.

56-700. Southwest Oregon Radio System for Bonneville Power Administration. D. J. Marihart, Bonneville Power Administration and D. L. Wylie, Chicago, Milwaukee, St. Paul & Pacific R.R. Co.

2:00 p.m.—Nucleonics

CP.* General Purpose Electronic Areas for Nuclear Research. A. J. Stepeika.

CP.* The Problems of Making Major Repairs to Production Reactors. E. E. Weyerts and W. J. Dowis, General Electric Co.

CP.* The Westinghouse Testing Reactor. A. R. Jones, Westinghouse Electric Corp.

CP.* The Belgian Thermal Reactor. R. L. Witzke and G. Tavernier, Westinghouse Electric Corp.

CP.* Unnumbered Conference Papers 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.

1956 SUMMER AND PACIFIC GENERAL MEETING COMMITTEE

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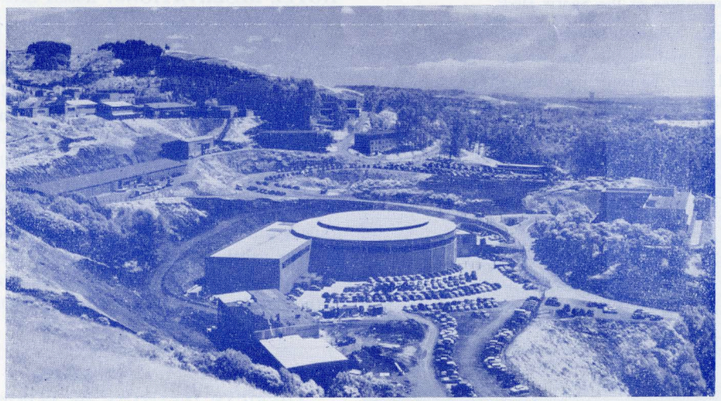


The Radiation Laboratory of the University of California

fashion show at the Sheraton-Palace Hotel. A bus trip down the San Francisco Peninsula and a tour of the world famous Roth Gardens will occupy Wednesday morning followed by lunch at Rickey's Studio Inn at Palo Alto, and a stop at Sunset House during the return trip to San Francisco. On Thursday a tour and shopping trip to Chinatown, the largest such settlement in the world outside China, and lunch, Japanese style, at Yamato's Restaurant will climax the separate activities planned for the ladies.

Women are cordially invited to play golf Tuesday morning, June 26th. If a sufficient number play, a tournament may be arranged. Women may participate in the Salmon Derby on Wednesday. For the Thursday night banquet and dance, dress will be formal for the ladies, optional for the men. On Friday the ladies will join the men on the sightseeing boat trip up the bay to Pittsburg Steam Plant.

At the time of the Convention the weather in San Francisco will probably be quite cool; Fall-type clothing is recommended. Baby sitting service will be available.

Tickets for the fashion show lunch will be $3.50. Tickets for the Peninsula tour and lunch, including transportation, will be $5.25.

SPORTS

GOLF: Lake Merced Golf and Country Club in San Francisco, beautifully situated with even terrain, will be host to all meeting registrants for a tournament commencing at 12 Noon on Tuesday, June 26th. Registered male members of Districts 8 and 9 (Pacific Coast members) may compete for the John B. Fisken Cup, a perpetual trophy. This cup is awarded for low net score—18 holes medal play. Several other beautiful and valuable prizes will be open to all players. Entrance fee is $5.00 per person, not including caddy. Caddies and carts will be available. Bring your own clubs, but if you can't, the Committee will be as helpful as possible in arranging for equipment. Lunch can be obtained at the Club prior to start of play.

The women of the meeting are cordially invited to play the same course early Tuesday morning, June 26th. It is hoped that a sufficient number will play to warrant a tournament with prizes for the ladies.

Golfers should register at the Sports Information Desk for starting time and transportation, if desired. Club handicaps or average of last three scores should also be registered with the Committee. Any golfers desiring non-competitive golf on days other than June 26th should consult the Committee at the Sports Desk.

SALMON DERBY: Salmon fishing is generally excellent outside the Golden Gate during June, and whether you are an Izaak Walton or a rank neophyte, you'll never be sorry you decided to take part in this A.I.E.E. Salmon Derby. Preparation is absolute minimum as all you need to do is bring some *warm* loafing garb—everything else is provided, even the license if you do not have one. Of course, if you have some pet fishing gear you want to use, bring it along.

The cabin power boats, accommodating 6 to 10 persons each, are clean and comfortable. Boat skippers are very helpful and will be glad to give full instructions to the lesser experienced on how to fish. Fishing tackle and bait, as well as a box lunch, will be furnished each person.

You will leave by bus from the Palace, St. Francis, or Fairmont hotels about 5:30 a.m., June 27th, for the short trip across the Golden Gate Bridge to Sausalito, from where the "A.I.E.E. Fishing Fleet" will leave about 6:30 a.m. for the salmon fishing grounds. The trip out under the impressive Golden Gate Bridge, with beautiful views of San Francisco in the background, will be long remembered.

Our fleet will return to Sausalito about 2:30 p.m., each boat loaded to the gunnels (we hope) with salmon, and some could be 50 pounders. Facilities will be available for packing your catch for shipment home, or maybe you will want to mount the "big one" for your den. You should be back in San Francisco by 3:30 or 4:00 p.m. at the latest.

In addition to impromptu "pots," you will compete for special Derby prizes which will be awarded during the luncheon on Thursday.

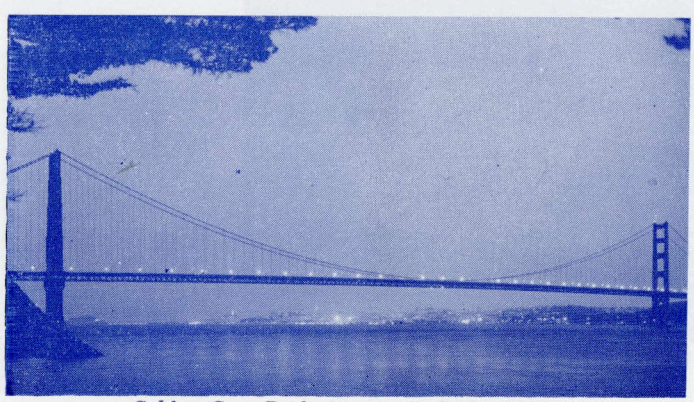
Plan now for this big A.I.E.E. Salmon Derby. Form your own party if you wish and ask the Committee to assign you your own boat. The Committee will do everything possible to group boat companions as desired. Check in promptly with the Sports Committee on arrival, but also it would be most helpful to the Committee if you would send in as soon as possible your advance registration card and indicate on it your intention to participate in the big Salmon Derby. Tickets, all inclusive, $15.00.

GENERAL INFORMATION: General information may be obtained at the registration desk. A table for mail and memoranda will be maintained and there will be a bulletin board for posting notices and messages. Information on inspection trips and entertainment features will also be displayed.

Late June weather in San Francisco will probably be pleasantly cool. Fall-type clothing is recommended.

HOTEL RESERVATIONS: Rooms have been set aside for members and their guests at these hotels: Fairmont (Headquarters hotel), $10.50-19; Mark Hopkins, $10-20; Huntington, $8-15; Chancellor, $5.75-8.75; Plaza, $9-15; Hillcrest, $4-5.50; Alexander Hamilton (twins only), $10-12; Canterbury, $8-10; Cartwright, $7-8; and Cecil, $5-8.50. Rooms will be available in nine other hotels at prices of $6-10. Write for reservations to A.I.E.E. Hotels Committee, Box 4588, San Francisco 1, California. Include your preference as to hotels, type of accommodations, price range, date of arrival, and mention the 1956 Summer and Pacific General Meeting. All reservations will be handled on a first-come-first-serve basis.

Some motels are available in San Francisco. A list of these and rates may be obtained by writing to: Mr. E. A. Nickelsen, California Pacific Utilities Company, 405 Montgomery Street, San Francisco 4, California.



Golden Gate Bridge *Redwood Empire Association*

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