## American Institute of Electrical Engineers

# FALL TECHNICAL PAPER PROGRAM September, 1945 

## Meet by Mail

FEATURED on the Fall Technical Paper Program are two important symposiums - Radio-Frequency Cables and Central Station Auxiliaries. The former, presented in report form, is comprised of 17 papers and four summaries of discussions by authors who have taken a prominent part in the theory, development, manufacture, and testing of radio-frequency cables. The report records an example of co-operation, which was important to the development of radar. The latter symposium presents an up-to-date crosssection of existing practices and trends in the design and selection of power supply and drives for central-station auxiliaries in the light of the newer factory assembled equip. ment and "unit-type" station designs. Both the points of view of operating people and manufacturers are presented.

Many of the papers will aid in reconversion and be of value in the operation and maintenance of electrical equipment thereafter.

One of the ways to help advance the theory and practice of electrical engineering is through the submission of pertinent discussion of the papers. If you have had contemporary experience or have any comments related to the treatment of subject matter in any of the papers, please submit your remarks in writing. Discussions should be mailed in triplicate before October 15 to C. S. Rich, Secretary, Technical Program Committee, A.I.E.E. 33 West 39th Street, New York 18. N. Y. Separate discussions on each paper should be submitted rather than general remarks on groups of papers.

Closing date for 50 per cent of the Winter papers-November 7; for remainder November 23

## Symposium on Radio-Frequency Cables

45-145. Report of Conference on Radio-Frequency Cables. Sponsored by AIEE Committee on Communication with the co-operation of the Army-Navy RadioErequency Cable Coordinating Committee. 65 cents by mail.

## Communication

45-155. Judging Mica Quality Electrically. K. G. Coutlee, Bell Telephone Laboratories, Inc. 25 cents by mail.
45-149. Optimum Air Gap for Various Magnetic Materials in Cores of Coils Subject to Superposed Direct Current. V. E. Legg, Bell Telephone Laboratories, Inc. 20 cents by mail.
45-146. A Study of Wave Shapes for Radio-Noise-Meter Calibrations. C. W. Frick, General Electric Co. 30 cents by mail.

## Protective Devices

45-147. Lightning Arresters for Distribution Apparatus. Edward Beck and A. D. Forbes, Westinghouse Electric Corp. 20 cents by mail.
45-148. Phase-Comparison Carrier-Current Relay, A. J. McConnell, T. A. Cramer, and H. T. Seeley, General Electric Co. 30 cents by mail.

## Symposium on Central Station Auxiliaries

45-151. Electric Drives for Steam-Electric Generating-Station Auxiliaries. WV. R. Brownlee and J. A. Elzi, Commonwealth and Southern Corp. 15 cents by mail.
45-150. Power Systems for Auxiliary Drives in SteamElectric Stations. J. B. McClure and S. I. Whittlesey, General Electric Co. 25 cents by mail.
[Over]

## advance copies of papers

Preprints of technical papers may be obtained by mail by remitting price indicated to the A.I.E.E. Order Department, 33 West 39th Street, New York 18, N. Y.; if purchased at A.I.E.E. headquarters Se less per copy. For convenience an order form is enclosed. Coupon books in 85.00 denominations are available for those who wish to avoid remittance by check or otherwise. Most of the papers ultimately will be published in ELECTRICAL ENGINEERING or the TRANSACTIONS.

45-152. Auxiliary Power Supply for Generating Stations. V. E. McCallum, Commonwealth Edison Co. 15 cents by mail.
45-153. Central Station Auxiliary-Drive Motors for Constant and Adjustable Speed. Hal Gibson. General Electric Co. 15 cents by mail.
45-168. Modern Practice in Power Plant Auxiliary Equipment and Systems. H. N. Muller, Westinghouse Electric Corp. 15 cents by mail.

## Power Transmission

45-160. Costs Study of 69- to 230-Kv Short Underground Power-Transmission Systems and Tie Lines, J. G. Holm, Boston, Mass. 30 cents by mail.
45-141. The Frequency of Occurrence and the Distribution of Lightning Flashes to Transmission Lines. R. H. Golde, The British Electrical and Allied Industries Research Association. 30 cents by mail.
45-144. Sag and Tension Caleulations for Cable and Wire Spans Using Catenary Formulae. J. F. Nash and J. F. Nash, Jr., Appalachian Electric Power Co. 25 cents by mail.

## Air Transportation

45-154. Instability in D-C Aircraft Systems. H. B. Bunce, J. C. Cunningham, and W. M. Davidson, Westinghouse Electric Corp. 20 cents by mail.
45.158. Parallel Operation of Main Engine Driven 400Cycle Aircraft Generators. L. G. Levoy, Jr., General Electric Co. 20 cents by mail.
45-163. Constant Speed Drives for Aircraft. Alternators. C. J. Breitwieser, Consolidated Vultee Aircraft Corp. 20 cents by mail.
45-165. Resonant-Circuit Constant-Current Regulators. G. M. Kevern, Air Technical Service Command. 15 cents by mail.

45-161. The Electrical Resistivity of Resin-Treated Wood and Laminated Hydrolyzed-Wood and Paper Base Plastics, R. C. Weatherwax and A. J. Stamm, U. S. Department of Agriculture. 20 cents by mail.

## Electric Machinery

45-156. Dielectric Strength and Protection of Modern DryType Air-Cooled Transformers. P. L. Bellaschi and Edward Beck, Westinghouse Electric Corp. 15 cents by mail.
45-162. Fundamentals of the Amplidyne Generator. J. L. Bower, General Electric Co. 30 cents by mail.
45-143. Per-Unit Impedances of Synchronous Machines-II. A. W. Rankin, General Electric Co. 15 cents by mail.
45-167. The Direct- and Quadrature-Axis Equivalent Circuit of the Synchronous Machine. A. W. Rankin, General Electric Co. 30 cents by mail.
45-166. Wound- and Dummy-Rotor Method of Quality Control and Trouble Shooting of Induction-Motor Windings and Cores. P. H. Trickey, Diehl Manufacturing Co. 15 cents by mail.

## Industrial Power Applications

45-164. Maintenance of Cood Brush Performance. W. C. Kalb, National Carbon Co., Inc. 20 cents by mail.
45.157. Capacitors for High-Frequency Induction-Heating Circuits. F. M. Clark and M. E. Scoville, General Electric Co. 20 cents by mail.
45-140. Electric Power in a Steel Plant. R. W. Graham, Bethlehem Steel Co. 15 cents by mail.

## Selected Subjects

45-139. Control of Load, Frequency, and Time of Interconnected Systems. C. K. Duff, Hydro-Electric Power Commission of Ontario. 25 cents by mail.

45-142. Statistical Methods in the Development of Apparatus Life Quality. E. B. Ferrell, Bell Telephone Laboratories, Inc. 20 cents by mail.

45-159. The Self-Inductance of a Toroidal Coil without Iron. H. B. Dwight, Massachusetts Institute of Technology. 15 cents by mail.

## 1ssued by

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

