



# Los Angeles Technical Meeting

AUG. 29--SEPT. 1, 1944

Headquarters: Biltmore Hotel



The North American P-51 Mustang with new "teardrop" cockpit enclosure affording complete vision in all directions

*Due to serious travel congestion, the Office of Defense Transportation has requested the cancellation of conventions. However, as the program is predominantly devoted to electrical applications to military aircraft, the meeting is to be held as the Los Angeles Technical Meeting. Members who do not have a direct interest in the papers to be presented should give serious consideration to travel conditions and whether or not their attendance would really aid the war effort.*

# AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS

## 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 or at the meeting 5c less per copy. For convenience an order form is enclosed. Only numbered papers will be available in advance-copy form. 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 \$5.00 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*.

44-211. VHF Radio Noise Elimination. T. B. Owen, Douglas Aircraft Co., Inc. 25 cents by mail.

44-209. A New High-Frequency Condenser. W. M. Allison and N. E. Beverly, Sprague Electric Co. 15 cents by mail.

44-213. Radio Noise Elimination in Military Aircraft. G. Weinstein, H. H. Howell, G. P. Lowe, and B. J. Winter, Boeing Aircraft Co. 15 cents by mail.

### 2:00 p.m.—Aircraft Ignition Systems

44-189. Design of an Ignition System for an 18-Cylinder Aircraft Engine. J. R. Harkness, General Elec. Co. 25 cents by mail.

## Tuesday, August 29

9:00 a.m.—Registration

10:15 a.m.—Opening of Meeting

J. M. GAYLORD, Presiding

Address: Brigadier General Donald F. Stace, U.S.A.  
Commanding General—Army Air Force, Material  
Command—Western District

Address: C. A. Powel, President, AIEE  
Report on District prizes

2:00 p.m.—Electric Motors for Aircraft

44-197. Requirements for Aircraft Electric Motors. E. R. Siefkin, Lockheed Aircraft Corp. 15 cents by mail.

44-210. Design Considerations of 400-Cycle Aircraft Motors. M. B. Sawyer, Sr., Sawyer Electrical Mfg. Co. 15 cents by mail.

44-201. Functional Design of Aircraft Electrical Actuator Equipment. C. E. Gagnier, North American Aviation, Inc. 15 cents by mail.

44-205. Problems in Applying Protectors to Electric Aircraft Motors. L. W. Buell, Spencer Thermostat Co. 25 cents by mail.

44-191. Inherent-Overheating Protection of D-C Aircraft Motors. C. G. Veinott, Westinghouse Elec. & Mfg. Co. 20 cents by mail.

2:00 p.m.—Aircraft Radio

44-180. A C Versus D C for Aircraft Radio Power Supply. D. E. Fritz and C. K. Hooper, Westinghouse Elec. & Mfg. Co. 25 cents by mail.

## Wednesday, August 30

9:30 a.m.—Protective Devices

44-214. Field Determination of Current Transformer Errors by the Secondary-Voltage Method. E. C. Goodale and J. I. Holbeck, Bonneville Power Adm. 15 cents by mail.

44-215. An Analysis to Determine the Optimum Bussing Arrangements and Transmission Capabilities at Grand Coulee. B. V. Hoard and G. W. Bills, Bonneville Power Adm. 20 cents by mail.

44-192. 230-Kv High-Speed Reclosing Oil Circuit Breaker. A. C. Schwager, Pacific Electric Mfg. Corp. 15 cents by mail.

44-216. A New Distance-Type Relay with Adjustable Characteristics. S. L. Goldsborough, Westinghouse Elec. & Mfg. Co. 15 cents by mail.

9:30 a.m.—Aircraft—General

44-217. Brief Survey of Power-Supply Developments on British Aircraft. P. W. Carter, British Air Commission. 15 cents by mail.

44-196. Airline Aircraft Electrical Equipment Maintenance. W. A. Petrasek, American Airlines, Inc. 20 cents by mail.

44-218. Aircraft Electrical Horizons. F. W. Godsey, Westinghouse Elec. & Mfg. Co.; W. L. Berry, Hughes Aircraft Co.; T. B. Holliday, U. S. Army Air Forces. 15 cents by mail.

† Wiring Systems—British



# LOS ANGELES TECHNICAL MEETING

## 12:15 p.m.—Luncheon Meeting

## 2:00 p.m.—Aircraft Electricity

- 44-81. A-C and D-C Short-Circuit Tests on Aircraft Cable. J. C. Cunningham and W. M. Davidson, Westinghouse Elec. & Mfg. Co. 25 cents by mail.
- 44-200. Peak Voltages with D-C Arc Interruption for Aircraft. Virgil E. Phillips and Walter P. Mitchel, formerly with General Elec. Co. 20 cents by mail.
- 44-186. D-C Arc Interruption for Aircraft. J. S. Quill and L. T. Rader, General Elec. Co. 25 cents by mail.
- \*CP. Problems Involved in Extending the Use of Electric Power in Aircraft. Mabel M. Rockwell, Lockheed Aircraft Corp.

## 2:00 p.m.—Aircraft Wiring

- 44-220. Solderless Terminals. F. H. Wells, Aircraft-Marine Products, Inc., and J. C. Balsbaugh, Mass. Inst. of Technology. 20 cents by mail.
- 44-221. Historical Development of Electrical Connectors. E. J. Neifing, Cannon Elec. Development Co. 15 cents by mail.

- 44-222. Electrical Connections on Aircraft. F. O. Stebbins and L. A. Taylor, General Elec. Co. 25 cents by mail.

- 44-223. Cable Used for Transmitting Electrical Energy in Airplanes. M. F. Peters, J. J. Phillips, Max Kronstein, and Helen B. Jealous, Titeflex, Inc. 30 cents by mail.

- 44-224. Requirements for Low-Tension Aircraft Cable. R. E. Hedges, Douglas Aircraft Co., Inc. 15 cents by mail.

## 2:00 p.m.—Aircraft Motor Applications

- 44-207. One Type of Rotary Magnetic Clutch and Its Associated Brake Used on Aircraft Electric Motors. Leo Andrews and Fred Shanely, Lear Avia, Inc. 15 cents by mail.
- 44-188. Considerations in Servomechanism Design. S. W. Herwald, Westinghouse Elec. & Mfg. Co. 25 cents by mail.
- 44-198. Some Aspects of the Application of Induction Motors to Aircraft. H. J. Braun, Westinghouse Elec. & Mfg. Co. 15 cents by mail.
- 44-195. Electric Gun Turrets for Aircraft. J. D. Thompson, General Elec. Co. 15 cents by mail.



Lockheed C-69 "Constellation" now in production for the Army Air Forces. This is an all-range, high-performance transport, which broke all transcontinental records when flown from Burbank to Washington in 6 hours and 58 minutes at an average speed of 330 miles per hour.



Thursday, August 31

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

- 44-185. The Influence of Mutual Coupling of Transmission Circuits on Ground-Current Distribution. M. J. Lantz, Bonneville Power Adm. 15 cents by mail.
- 44-226. New 138-Kv Cable Lines in Los Angeles. C. G. Mansfield, Bureau of Pr. and Lt., City of Los Angeles. 30 cents by mail.

9:30 a.m.—Aircraft Electrical Design

- 44-228. Altitude Rating of Electric Apparatus. Paul Lehenbaum, Jr., General Elec. Co. 25 cents by mail.
- 44-229. Plastics in Aircraft Electricity. E. B. Cooper, E. L. duPont deNemours and Co. 25 cents by mail.
- 44-194. Aircraft Electrical Accessory Vibration Investigations. D. R. Miller, General Elec. Co. 25 cents by mail.

2:00 p.m.—Aircraft Brushwear

- 44-208. High-Altitude Brush Problem. D. Ramadanoff and S. W. Glass, National Carbon Co., Inc. 20 cents by mail.
- 44-230. The Testing of Brushes for Life and Performance under Various Altitude Conditions. C. J. Herman, General Elec. Co. 20 cents by mail.

2:00 p.m.—Aircraft Lighting

- 44-206. The Development of Aircraft Position Lights. Jack Vitol, Civil Aeronautics Adm., Department of Commerce. 15 cents by mail.

† Ultraviolet Lighting—British

- 44-233. Airplane Engine and Propeller Test Cell Lighting. D. H. Tuck, Holophane Co. 25 cents by mail.

2:00 p.m.—Aircraft Power Systems

- 44-204. Basic Considerations in the Selection of Generators and Batteries for Aircraft. L. M. Cobb and H. M. Winters, The Glenn L. Martin Co. 15 cents by mail.
- 44-199. Paralleling and Regulation of 24-28-Volt D-C Generators in Multiengine Aircraft. Arthur Siegal and D. G. DeCoursey, Boeing Aircraft Co. 15 cents by mail.
- 44-202. Circuit Protective Devices in Aircraft. Walter Kenworth and E. V. Sundt, Littlefuse Inc. 25 cents by mail.



A WATCHDOG OF THE NAVY—Lockheed Ventura PV-1 bomber and sub-buster in white battle dress for service in the Arctic regions

Friday, September 1

9:30 a.m.—Electronics

- 44-236. Vacuum-Tube R-F Generator Characteristics and Application to Induction Heating Problems. T. P. Kinn, Westinghouse Elec. & Mfg. Co. 30 cents by mail.

\*CP. Electronic Frequency Changers (Summary of papers delivered at Summer Technical Meeting in St. Louis, June 26-30, 1944). Presentation by G. W. Brucker, General Elec. Co.

\*CP. Electronic Voltage Regulators for High-Voltage Circuits. W. H. Pickering, A. W. Schardt and S. C. Snowden, Calif. Inst. of Tech.

\*CP. Physical Aspects of Electroshock and Electronarcosis. Dr. M. S. Plesset, Calif. Inst. of Tech.

\*CP. Physiological Effect of Electric Shock. C. F. Dalziel, Univ. of Calif.

9:30 a.m.—Industrial and Marine Applications

\*CP. A Shipyard Public Address System. W. Ross Aiken, The Permanente Metals Corp.

\*CP. Electrical Propulsion of Ships. W. J. Prise, Moore Drydock Co.

\*CP. Arc-Furnace Regulators. R. A. Geiselman and J. E. Reilly, Westinghouse Elec. & Mfg. Co.



# LOS ANGELES TECHNICAL MEETING



The Assembly Floor at the North American Aircraft Plant in Englewood

## 9:30 a.m.—High Voltages in Aircraft

- 44-203. A 120-Volt Direct-Current Aircraft Electrical System. L. M. Cobb, Glenn L. Martin Co. 25 cents by mail.
- 44-237. Impedance of 400-Cycle Three-Phase Power Circuits on Large Aircraft and Its Application to Fault Current Calculations. Major C. K. Chappuis and L. M. Olmstead, U. S. Army Air Forces. 30 cents by mail.
- 44-238. Higher-Voltage Direct-Current Aircraft Electric Systems. W. L. Berry and J. P. Dallas, Hughes Aircraft Co. 20 cents by mail.

† A-C Systems—British

## 2:00 p.m.—Aircraft Automatic Control and Instruments

- 44-187. Electrical Control in Automatic Pilots. C. M. Young, E. E. Lynch, and E. R. Boynton, General Elec. Co. 20 cents by mail.
- 44-239. Application of Electronics to Aircraft Flight Control. W. H. Gille and R. J. Kutzler, Minneapolis-Honeywell Regulator Co. 15 cents by mail.
- 44-179. Electric Automatic Pilots for Aircraft. P. Halpert and O. E. Esval, Sperry Gyroscope Co., Inc. 20 cents by mail.
- 44-193. Influence of Electricity on Aircraft Instrumentation. C. F. Savage, General Elec. Co. 15 cents by mail.
- 44-240. Instrumentation of 400-Cycle Aircraft Electrical Systems. A. J. Corson, A. G. Stimson, and W. A. Soley, General Elec. Co. 20 cents by mail.

- 44-181. The Gyrosyn Compass. O. E. Esval, Sperry Gyroscope Co., Inc. 15 cents by mail.

## 2:00 p.m.—Aircraft Power Equipment

- 44-84. Blast-Tube Cooling for Aircraft Generators. C. G. Veinott, Westinghouse Elec. & Mfg. Co. 20 cents by mail.
- 44-241. Design Considerations for Direct-Current Aircraft Generators. J. D. Miner, Jr., Westinghouse Elec. & Mfg. Co. 20 cents by mail.
- 44-112. Aircraft Storage Voltage Design. J. L. Rupp, National Battery Co. 15 cents by mail.
- 44-184. Carbon-Pile Voltage Regulators for Aircraft. W. G. Neild, Bendix Aviation Corp. 15 cents by mail.
- 44-190. A 40-Kva, 400-Cycle Aircraft Alternator. H. E. Keneipp and C. G. Veinott, Westinghouse Elec. & Mfg. Co. 20 cents by mail.

## 2:00 p.m.—Special Aircraft Equipment

- 44-182. Solenoid-Operated Hydraulic Valves for Aircraft Applications. G. A. Goepfrich, Bendix Aviation Corp. 15 cents by mail.
- 44-242. Solenoid-Operated Control Valves. V. W. Eckel and O. H. Wisegarver, Adel Precision Products Corp. 15 cents by mail.
- 44-183. Electrically Heated Clothing. G. H. Wotring, General Elec. Co. 25 cents by mail.

† Presentation and availability of these papers depends upon war conditions.

\*CP: Conference presentation; no advance copies of papers available; not intended for publication in TRANSACTIONS.

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



Final Assembly at the Lockheed Plant in Burbank, California



# LOS ANGELES, CALIF., AUG. 29-SEPT. 1, 1944



Shipbuilding in the Los Angeles Harbor

## Hotel Reservations

The Biltmore Hotel has been selected as Headquarters. Additional accommodations have been obtained at the Savoy, San Carlos, and Clark hotels all within two blocks radius.

All reservations must be made through the Hotels Committee by means of the enclosed card. Because of the great demand for hotel facilities reservations made by the Committee will expire August 15th.

Biltmore Hotel—no single rooms available, members should include name of person desired to share room when making reservations. Clark Hotel—no single reservations. All rooms to be vacated prior to noon Sept. 2nd.

Return transportation should be arranged in advance.

## Hotel Rates

Hotel	Single	Double	Triple	Suites
Biltmore	—	\$7.00 to \$10.00	—	\$12.00 to \$20.00
Savoy	\$2.75 to \$4.40	\$3.85 - \$ 4.40	—	—
San Carlos	\$3.00-\$4.00	\$3.00 - \$ 4.00	—	—
Clark	—	\$5.00	\$6.00	—

## Advance Registration

Please fill in and mail the Advance Registration Card promptly, if you will attend the meeting. This will permit the Registration Committee to have badges ready and prevent congestion at the registration desk. In accordance with regular practice a registration fee of \$2 will be charged all nonmembers, excepting Enrolled Students, and the immediate families of members.

H. H. HENLINE, *National Secretary.*

## Los Angeles Technical Meeting Committee

T. M. Blakeslee	<i>General Chairman</i>
P. L. Johnson	<i>Assistant General Chairman</i>
E. S. Condon	<i>Secretary</i>

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P. L. Savage	<i>Inspection Trips</i>
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*Issued by*

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