

JOURNAL

of the Society of Motion Picture and Television Engineers

Publication Office: 20th and Northampton Streets, Easton, Pa.

OFFICERS

President, 1953-54

HERBERT BARNETT, 10 East 52d St., New York 22, N.Y.

Executive Vice-President, 1953-54

JOHN G. FRAYNE, 6601 Romaine St., Hollywood 38, Calif.

Past-President, 1953-54

PETER MOLE, 941 North Sycamore Ave., Hollywood 38, Calif.

Engineering Vice-President, 1954-55

AXEL G. JENSEN, Bell Telephone Laboratories, Inc., Murray Hill, N.J.

Editorial Vice-President, 1953-54

NORWOOD L. SIMMONS, 6706 Santa Monica Blvd., Hollywood 38, Calif.

Financial Vice-President, 1954-55

BARTON KREUZER, Radio Corporation of America, Camden, N.J.

Convention Vice-President, 1953-54

JOHN W. SERVIES, 92 Gold St., New York 38, N.Y.

Secretary, 1953-54

EDWARD S. SEELEY, 161 Sixth Ave., New York 13, N.Y.

Treasurer, 1954-55

GEO. W. COLBURN, 164 North Wacker Dr., Chicago 6, Ill.

Governors, 1953-54

F. E. CARLSON, General Electric Co., Nela Park, Cleveland 1, Ohio

GORDON A. CHAMBERS, 343 State St., Rochester 4, N.Y.

LEROY M. DEARING, Drawer 791, Hollywood 28, Calif.

WILLIAM A. MUELLER, 4000 West Olive Ave., Burbank, Calif.

CHARLES L. TOWNSEND, 49 Hillcrest Dr., Dumont, N.J.

MALCOLM G. TOWNSLEY, 7100 McCormick Rd., Chicago 45, Ill.

Governors, 1954-55

FRANK N. GILLETTE, Manville Lane, Pleasantville, N.Y.

LORIN D. GRIGNON, 1427 Warnall Ave., Los Angeles 24, Calif.

RALPH E. LOVELL, 2743 Veteran Ave., West Los Angeles 64, Calif.

GARLAND C. MISENER, Anasco, Binghamton, N.Y.

RICHARD O. PAINTER, 738 E. Liberty, Milford, Mich.

REID H. RAY, 2269 Ford Rd., St. Paul 1, Minn.

Governors, 1954

PHILIP G. CALDWELL, ABC Television Center, Hollywood 27, Calif.

EVERETT MILLER, 94 Rossmore Ave., Bronxville, N.Y.

JAMES L. WASSELL, Anasco, 247 E. Ontario St., Chicago 11, Ill.

Subsection Chairmen

BEN AKERMAN, Sta. WGST, 2646 Cheshire Bridge Rd., N.E., Atlanta 5, Ga.

IRA L. MILLER, JR., Audio Visual Arts, 519 Pennsylvania Ave., Ft. Worth 4, Texas

WILLIAM A. PALMER, 1452 Hamilton Ave., Palo Alto, Calif.

Student Chairmen

HAL ARTHUR (USC), 8659 Nash Dr., Los Angeles 46, Calif.

MORTON A. DAVID (NYU), 57 Seventh Ave., Brooklyn 17, N.Y.

Editorial Office

55 West 42d St., New York 36, New York

Editor—VICTOR H. ALLEN

Advertising Manager—DENIS A. COURTNEY

Board of Editors

Chairman—ARTHUR C. DOWNES,

2181 Niagara Dr., Lakewood 7, Ohio

D. MAX BEARD

GERALD M. BEST

GEORGE R. CRANE

HAROLD E. EDGERTON

CARLOS H. ELMER

CHARLES R. FORDYCE

LORIN D. GRIGNON

A. M. GUNDELFINGER

CHARLES W. HANDLEY

ARTHUR C. HARDY

CHARLES W. WYCKOFF

CLYDE R. KEITH

GLENN E. MATTHEWS

PIERRE MERTZ

C. DAVID MILLER

JOHN A. NORLING

HERBERT W. PANGBORN

BERNARD D. PLAKUN

R. T. VAN NIMAN

JOHN H. WADDELL

DEANE R. WHITE

Papers Committee Chairman

WILLIAM H. RIVERS, Rm. 326, 342 Madison Ave.,

New York 17, New York

Subscriptions to nonmembers, \$12.50 a year; single copies, \$2.00 for one-part issues, \$2.50 for special two-part issues. A 10% discount is allowed to individual members and accredited agencies on orders for subscriptions and single copies. A list of priced and gratis publications is available. Order from the Society's Headquarters Office, 55 West 42d St., New York 36.

THE SOCIETY is the growth of thirty-eight years of achievement and leadership. Its members are engineers and technicians skilled in every branch of motion-picture film production and use, in television, and in the many related arts and sciences. Through the Society they are able to contribute effectively to the technical advance of their industry. The Society was founded in 1916 as the Society of Motion Picture Engineers and was renamed in 1950.

Membership in Sustaining, Active, Associate or Student grades is open to any interested person according to his qualifications. Information about membership, technical activities and standards and test films for the industry is available from Society Headquarters.

SOCIETY OF MOTION PICTURE AND TELEVISION ENGINEERS

Headquarters Office: 55 West 42d St., New York 36, N.Y.

Telephone: LOngacre 5-0172

Executive Secretary: BOYCE NEMEC

Entered as second-class matter January 15, 1930, at the Post Office at Easton, Pa., under the Act of March 3, 1879, and published monthly. Copyright, 1954, by the Society of Motion Picture and Television Engineers, Inc. Permission to republish Journal text material must be obtained in writing from the Society's Headquarters Office, 55 West 42d St., New York 36. The Society is not responsible for statements of contributors. Printed by Mack Printing Company, Easton, Pa.