

JOURNAL OF THE



SMPTE

721 **Eight Papers on Video-Tape and Recording**

Signal Translation Through the Ampex Videotape Recorder • *Charles E. Anderson* —
The Processing Amplifier in the Ampex Videotape Recorder • *Ray M. Dolby* — Factors
Affecting the Splicing of Video Tape • *Kurt R. Machein* — Electronic Marking and
Control for Rapid Location of Vertical Blanking Area for Editing Video-Tape Record-
ings • *Joseph Roizen* — Magnetic Tape for Video Recording • *Robert A. von Behren*
— Washington, D.C., Convention Discussion — Interchangeability of Videotape
Recorders • *Charles P. Ginsburg* — Los Angeles Convention Discussion

745 Improved Television Viewfinder for Motion-Picture Production • *Karl Freund*

747 A New Additive Color System for Motion-Picture Photography
• *Lionel H. Wheeler*

750 The Electrostatic Uniangular Microphone • *Harry F. Olson and John Preston*

754 A Portable Sprocket-Type Magnetic Tape or Film Recording System
• *G. R. Crane and E. W. Templin*

758 A Film-Processing Machine of Flexible Characteristics
• *Irwin A. Moon and F. Alton Everest*

763 A Color Timing Calculating Machine • *G. T. Keene, A. J. Sant and J. D. Clifford*

768 Errata: A Color Timing Method and Calculator for Subtractive Motion-Picture
Printers • *George T. Keene*

769 Subtractive Color Printer With Geneva Scene-Change Mechanism
• *Harry Brueggemann*

771 An Annotated List of Articles Pertaining to the History of Motion Pictures —
1950-1956 (Including Some Historical References on Television)
• *Mildred B. Krainock*

News Columns

Papers Program for the 85th Convention 776
 Equipment Exhibit 776
 Photography's Place in Space 778
 Education, Industry News 778
 SMPTE Elections 784
 Biographical Note: Raymond Davis 786
 Obituaries: John W. Butler; Stephen Szeglin 788
 BOOKS REVIEWED 790

Dictionary of Photography and Motion-Picture Engineering Vol. 1: English-German-French, by Wolfgang Grau, reviewed by Pierre Mertz; *An Introduction to the Theory of Random Signals and Noise*, by Wilbur B. Davenport, Jr., and

William L. Root, reviewed by Pierre Mertz; *The Transistor, 1948-1958*, special issue of The June 1958 Bell Laboratories Record; *The Reproduction of Colour*, by R. W. G. Hunt, reviewed by Lloyd E. Varden; *Posing Patterns*, by L. E. Broome; *Animals in Motion*, by Eadweard Muybridge; *Psychological Effects of the "Western" Film: A Study in Television Viewing*, by F. E. Emery and David Martin.

Current Literature 794
 SMPTE Test Films 795
 New Products 796
 Employment Service 799

Advertisers

Ampex Corp. 783
 Berndt-Bach, Inc. 789
 Birns & Sawyer Cine Equipment Co. 796
 Camera Equipment Co. 781
 Camera Mart, Inc. 778
 Filmline Corp. 798
 Fish-Schurman Corp. 780
 General Film Laboratories, Inc. 797
 Frank Herrfeld Engineering Corp. 792
 Hollywood Film Co. 800
 Houston-Fearless Corp. 793
 Kling Photo Corp. 779

La VeZZi Machine Works 795
 Magnasync Mfg. Co., Ltd. 777
 Motion Picture Laboratories, Inc. 794
 Movielab Color Corp. 785
 Peerless Film Processing Corp. 782
 Professional Services 790
 Rank Precision Industries Ltd. 784
 SMPTE 788
 S.O.S. Cinema Supply Corp. 791
 Taylor, Taylor & Hobson Ltd. 787
 Westrex Corp. 786

Meeting Calendar

American Physical Society, Nov. 28-29, U. of Chicago & Hotel Windermere, Chicago.
 ASME, Annual Meeting, Nov. 30-Dec. 5, Hotel Statler and Hotel Sheraton-McAlpin, New York
 Electronic Industries Association, Conference on Reliable Electrical Connections, Dec. 2-4, Statler-Hilton Hotel, Dallas, Texas.
 American Institute of Chemical Engineers, Annual Meeting, Dec. 7-10, Netherland Plaza Hotel, Cincinnati, Ohio.
 American Association for the Advancement of Science, Annual Meeting, Dec. 26-31, Sheraton-Park Hotel, Washington, D. C.
 IRE, AIEE, EIA, American Society for Quality Control, National Symposium on Reliability and Quality Control, Jan. 12-14, 1959, Bellevue-Stratford Hotel, Philadelphia.
 Institute of the Aeronautical Sciences, Annual Meeting, Jan. 26-29, 1959, Astor Hotel, New York.

Society of Plastics Engineers, Annual Meeting, Jan. 27-30, 1959, Commodore Hotel, New York.
 American Physical Society, Annual Meeting, Jan. 28-31, 1959, New Yorker Hotel, New York.
 85th Semiannual Convention of the SMPTE including International Equipment Exhibit, May 4-8, 1959, Fontainebleau, Miami Beach.
 86th Semiannual Convention of the SMPTE including Equipment Exhibit, Oct. 5-9, Statler, New York.
 87th Semiannual Convention of the SMPTE, May 1-7, 1960, Ambassador Hotel, Los Angeles.
 88th Semiannual Convention of the SMPTE, Fall, 1960, Shoreham Hotel, Washington, D. C.
 89th Semiannual Convention of the SMPTE, Spring, 1961, Royal York, Toronto.
 90th Semiannual Convention of the SMPTE, Oct. 15-20, 1961, Statler, New York.

Journals Available/Wanted

These notices are published as a service to expedite disposal and acquisition of out-of-print Journals. Please write direct to the persons and addresses listed.

Available

Issues beginning in 1953 available on a nominal basis. Write: Mitchell M. Badler, 1711 Davidson Ave., Bronx 53, N. Y.

Complete set of Transactions, except Nos. 6 and 9, and all Journals published to date, including indexes. All in good condition. Price \$500. W. W. Hennessy, RFD #2, Pound Ridge, N. Y.

Complete set of Journals from May 1937 to June 1954, including special volumes and membership directories, excellent condi-

tion; also Mar., May 1934 and July 1935 issues. Write: Harry R. Lubcke, 2443 Creston Way, Hollywood 28, Calif. HO 9-3266.

Jan.-Dec. 1950; Jan., Feb., Apr.-Dec. 1951; Jan.-Mar. 1952. Also available are vols. 6 and 7 of The Television Society (British) covering the period Jan. 1950 through Sept. 1955. Write: Andrew N. McClellan, 65 Hillside Drive, Toronto 6, Ont., Canada.

Dec. 1946, Feb.-Dec. 1947, 1948-1955 complete. All copies in perfect condition; for sale as entire lot only. Write: Joseph W. MacDonald, 2414 Sullivant Ave., Columbus 4, Ohio.

Jan. 1947 to Dec. 1957 complete and in perfect condition. For sale only as a set. Write: Charles J. Marshall, 2816 Royalston Ave., Kettering 19, Ohio.

Complete set of Journals Jan. 1949 to Dec. 1958. Perfect condition. What offers? Write: J. G. Jackson, 210 Kingsway South, Port Alberni, B.C., Canada.

All Journals June 1940 to Oct. 1958, except Aug. 1943, Jan., May, Nov. 1946, Dec. 1953. Write: David Waddell, 95 North St., Stoneham 80, Mass.

Wanted

Jan. 1938. E. Raymond Arn, Film Associates, Inc., 4600 S. Dixie Ave., Dayton 9, Ohio.

High-Speed Photography, Vols. 2 & 3. Morton Sultanoff, Terminal Ballistics Laboratory, Aberdeen Proving Ground, Md.

High-Speed Photography, Vols. 1, 2 & 3. John H. Waddell, Fairchild Camera & Instrument Co., 5 Aerial Way, Syosset, N. Y.