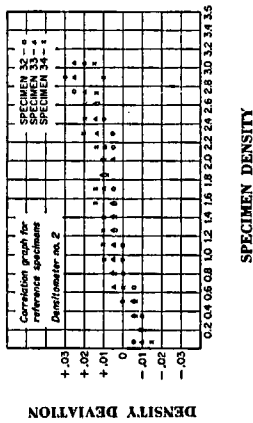
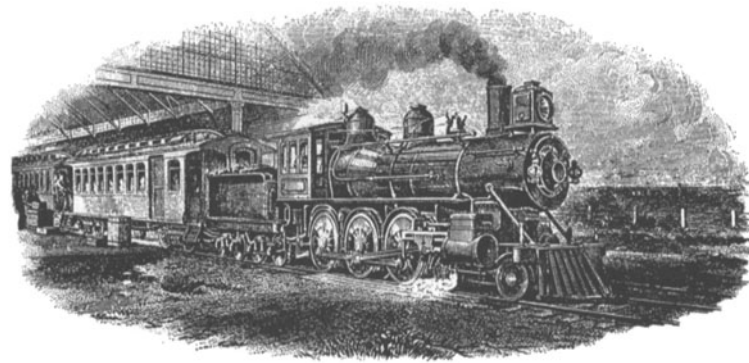


Appendix

(The Appendix is not a part of this SMPTE Recommended Practice, but is included to facilitate its use.)



USA Standard diffuse visual density value (from reference specimen calibration chart).



Biographical Note

Gerald M. Best, who "retired" in 1962 after 34 years in the motion-picture industry (30 years with Warner Bros. Studios where he was Chief Recording Engineer and four with the Disney Studios) is actively successful in a new career. Within the last seven years he has authored five books about railroads.

Mr. Best was graduated from Cornell University in 1917. Following graduation he served with the U.S. Army during World War I. After the war he remained for a time in France to continue his studies at the University of Nancy. He returned to the United States in 1919.

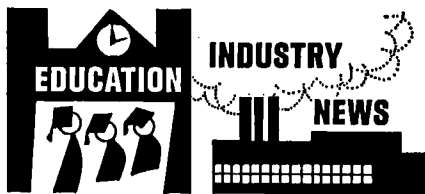
During his years with the motion-picture industry he became widely known as an authority on sound recording. He contributed a great deal to the development of "talking pictures" and he has been granted a number of patents for his inventions and developments. He published widely in various scientific and technical journals. A number of papers which he authored have appeared in the *Journal*, among them, "Economies in Sound-Film Processing" (September 1933); "Automatic Sound-track Editing Machine" (September 1937); "Latest Developments in Variable-Area Processing" (with A. C. Blaney) (March 1939); "Soundtrack Projection Microscope" (August 1939); "Soundtrack Projection Microscope" (August 1939); "Modern

Studio Laboratory" (with F. R. Gage) (September 1940) and "Film Conservation Methods at Warner Bros. Studios" (November 1943).

Mr. Best has long been interested in the romance and history of the great railroads — inseparably a part of the romance and history of America. It is a subject that seems to have special appeal for the general public now that the railroads are following the buffalo and the pinto pony into folklore if not yet wholly into history. So, instead of making his interest in railroads a mere hobby, Mr. Best is rapidly becoming an authority on the "iron horse." (Publication of five books in seven years must surely be indicative of a career rather than a hobby.)

Author Best's most recent book is *Iron Horse to Promontory* in which he tells the story of locomotives, the rolling stock and the story of the men who ran the trains on the Pacific railroad. This book is especially timely because of the Centennial of the Golden Spike being celebrated this year.

Mr. Best has been a member of the Society since 1934. He became a Fellow in 1949 and was made a Life Fellow in 1965. His activities in behalf of the Society include 17 years of service on the Board of Editors (1951 to the present). He has also served on the Progress Report Committee and he has been a Manager of the (then) Pacific Coast Section, having been elected in 1945.



Academies Awards

Academy of Motion Picture Arts and Sciences

SMPTE members and sustaining member firms were again preponderant on the roster of Academy Award winners in the Scientific-Technical category when Class I Statuettes and Class II Plaques were presented for achievements during 1968.

Members thus honored include Dr. Herbert Meyer, Donald W. Norwood, Edmund M. DiGiulio, Norman S. Hughes, Carl W. Hauge and Edward H. Reichard. Sustaining member firms receiving awards include Eastman Kodak Co., Producers Service Co., Todd-AO, Mitchell Camera Co. and Consolidated Film Industries.

Class I Statuettes were awarded jointly to Dr. Herbert Meyer, Motion Picture and Television Research Center; Philip V. Palmquist, Minnesota Mining and Manufacturing Co., and Charles D. Staffell, Rank Organization, for the successful development of the reflex background projection system for composite cinematography. According to the citation, this system is comprised of a reflex screen material of high reflectivity in combination with the coaxial camera-projector configuration by which a projected background

may be photographed together with the foreground action.

Eastman Kodak Co. was the recipient of a Class I Statuette for the development and introduction of a color reversal intermediate film for motion pictures. The citation noted that this achievement in film manufacturing technology provides the motion-picture industry with an important new film, making it possible to produce in one printing stage color duplicate negatives that meet exacting specifications as to graininess, sharpness, contrast and color fidelity.

Class II Plaques were awarded for nine achievements by eight individuals and nine firms:

(1) to Donald W. Norwood for the design and development of the Norwood Photographic Exposure Meters. The exposure meters employ a hemispherical light collector in a manner which takes into account both light intensity and the geometry of illumination to determine the optimal exposure for any subject.

(2) to Eastman Kodak and Producers Service Co. for the development of a new high-speed step-optical printer. The printer, utilizing a novel film transport, is capable of manufacturing reduction prints from original 35mm negatives at high speed with optimal image quality. (See "A New High-Speed Step Optical Printer" by Charles Cowan, E. B. McGreal, Oscar Jarosch and Manfred Michelson, *Jour. SMPTE*, 76: 331-334, Apr. 1967.)

(3) to Edmund M. DiGiulio, Norman S. Hughes and Niels G. Petersen of Cinema Product Development Co. for the design and application of a conversion which makes available the reflex viewing system for motion-picture cameras. The reflex conversion kit, which may be applied to conventional motion-picture cameras, replaces coupled finders and consists of a beam-splitting mirror which presents to the cinematographer a bright, flicker-free view of the image at all times.

(4) to Optical Coating Laboratories, Inc., for the development of an improved