

# JOURNAL OF THE SMPTE



ENGINEERING • SCIENCE • TECHNOLOGY  
FOR MOTION PICTURES • TELEVISION • INSTRUMENTATION • HIGH-SPEED PHOTOGRAPHY

- 81 New Concepts in Motion-Picture Projector Design • *Lloyd M. Adams*
- 85 A Three-Element Projector Condensing System • *Chan Street*
- 88 Apollo Mission Simulation With Visual Presentation  
• *Riley David McCafferty and Lawrence W. Lockwood*
- 95 The Weather Satellite Program • *Glenn E. Matthews*
- 105 A Single Weighting Characteristic for Random Noise in Monochrome and NTSC Color Television • *John R. Cavanaugh*
- 109 An Interchangeable-Magazine Television Slide Projector • *W. F. Fisher and B. F. Floden*
- 115 Performance and Capabilities of New Plumbicon TV Camera Pickup Tubes • *R. S. Levitt*
- 121 A Review of the Effects of Squeegees in Continuous Processing Machines • *Phil E. Perkins*
- 123 Molded Squeegee Blades for Photographic Processing  
• *Leslie I. Edgcomb and John S. Zankowski*
- 126 A Photoelectric Film Tachometer • *David J. Degenkolb and Jack P. Hall*
- 128 Approved ANSI Standards:  
PH22.75-1969, Designation of A and B Windings for Motion-Picture Raw Stock; PH22.99-1969, Specifications for 35mm Three-Record Azimuth Alignment Test Film, Magnetic Type; PH22.41-1969, Dimensions of Photographic Sound Record on 16mm Motion Picture Prints; PH22.114-1969, Specifications for 16mm Azimuth Alignment Test Film, Perforated One Edge, Magnetic Type; PH22.65-1969, Specifications for Scanning-Beam Uniformity Test Film for 35mm Motion-Picture Sound Reproducers
- 133-176 Contents on inside back cover

107th SMPTE Technical Conference • April 26-May 1 • Drake Hotel, Chicago

volume 79 • number 2

**FEBRUARY 1970**