



SMPTE Journal®

VOL. 100, NO. 8

AUGUST 1991

EXECUTIVE

Frank J. Haney
Editorial Vice-President

Frederick M. Remley
Chairman/Board of Editors

Lynette Robinson
Executive Director

EDITORIAL STAFF

Jeffrey Friedman
Editor

Joyce R. Hurwitz
Associate Editor

Elizabeth L. Ghaffari
Assistant Editor

Carol King
Assistant Editor

Mathew V. Kuriakose
Graphics/Production Supervisor

MaryAnn Fruscianté
Production Coordinator

Marilyn Waldman
Editorial/Program Coordinator

ADVERTISING/EXHIBITS

Alan Ehrlich
Advertising/Exhibits Manager

ENGINEERING

Sherwin H. Becker
Director of Engineering

Mark S. Hyman
Staff Engineer

Ferdinand V. Gall
Staff Engineer

ARTICLES

A New Drum and Heads for the D-2 Digital VTR
H. Ono, T. Okamoto, N. Kaku, K. Oguro, S. Ozaki, and F. Scott 596

The Design of a Very High Performance Motion-Picture Screening Room
R. Evans Wetmore, Gerald Nash, and Glenn Berggren 601

101 Years of Television Technology (SMPTE Classic Reprint)
Richard S. O'Brien and Robert B. Monroe; with contributions by Charles E. Anderson and Steven C. Runyon 606

Coming Together (Point of View)
Michael J. Sherlock 630

SMPTE REPORTS

Approaches to Videodisc-Based Editing
Stanley D. Becker and Larry S. Spangler 633

Report From the Ad Hoc Group on Video-to-Film Transfer Characteristics
Gavin Schutz 637

The 26th Annual SMPTE Television Conference, St. Francis Hotel,
San Francisco, Calif., February 7-8, 1992 640

133rd SMPTE Technical Conference and Equipment Exhibit,
Los Angeles Convention Center, October 26-29, 1991 641

Notice of Special Meeting of Voting Members 644

Section Officers and Managers as of July 1, 1991 646

SMPTE NEWS AND DEPARTMENTS

Calendar	594	Engineering News	651
Highlights	595	New Products	652
Information for Authors	645	Classified	656
Section Meetings	648	Professional Services	657
Obituaries	650	Sustaining Members	664

STANDARDS AND RECOMMENDED PRACTICES

Approved SMPTE Recommended Practices 659

RP 80-1991, Labels for Cartridge Spools for 2-in Quadruplex Video Magnetic Tape; RP 101-1991, Requirements for Recording American National Standard Time and Control Code on Quadruplex Video Tape Recorders; RP 87-1991, Reference Carrier Frequencies, Preemphasis Characteristic and Audio and Control Signals for 3/4-in Type E Helical-Scan Video Tape Cassette Recording; and RP 102-1991, Frequency Response and Operating Level of Recorders and Reproducers for Audio 2 Record for 2-in Quadruplex Video Magnetic Tape Operating at 15 and 7.5 in/s

SMPTE Journal (ISSN: 0036-1682) published monthly by the Society of Motion Picture and Television Engineers, 595 West Hartsdale Avenue, White Plains, NY 10607. Second-class postage paid at White Plains, N.Y., and at additional mailing office. Copyright © 1991 by the Society of Motion Picture and Television Engineers, Inc. All rights reserved. Printed in the U.S.A. No part of this issue may be reproduced without written permission of the publisher. Statements and opinions expressed in articles or editorials in the *SMPTE Journal* are expressions of contributors and do not necessarily represent the policies or opinions of the Society. Advertisements appearing in this publication are the sole responsibility of the advertiser. MEMBERSHIP in the Society is open to any individual according to that person's qualifications. The Society's Headquarters welcomes inquiries from individuals who may apply for these grades: Active (annual dues \$50.00), Associate (annual dues \$50.00), and Student (annual dues \$15.00). All members receive the *SMPTE Journal*. Subscriptions are available to nonmembers. Annual rates \$75.00 United States; \$75.00 plus \$10.00 postage elsewhere. Single issues, \$6.00 plus \$2.00 postage. *Journals* will be mailed overseas by airmail printed matter to subscribers at a surcharge of \$50.00 to Europe and \$65.00 to Asia (in addition to the subscription rates listed above).

POSTMASTER: Send change of address to *SMPTE Journal*, 595 West Hartsdale Avenue, White Plains, NY 10607-1824.