

FOUNDED 1916



**EXECUTIVE**

Edward P. Hobson  
*Editorial Vice-President*

LeRoy E. DeMarsh  
*Chairman/Board of Editors*

Frederick C. Motts  
*Executive Director*

**JOURNAL STAFF**

David J. M. Juhren  
*Director of Publications*

Dianne Ross Purrier  
*Managing Editor*

Mathew V. Kuriakose  
*Publications/Production Manager*

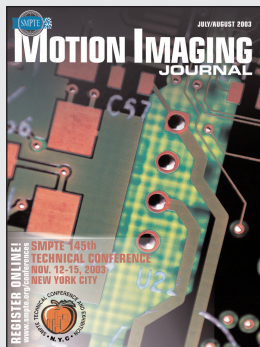
**ENGINEERING**

Carlos V. Girod, Jr.  
*Director of Engineering*

Mark S. Hyman  
*Staff Engineer*

**MEETINGS**

Dianne Gabriele  
*Meetings Manager*



Printed in the USA

# SMPTE MOTION IMAGING Journal

VOL. 112, NO. 7 & 8

JULY/AUGUST 2003

Web Site: <http://www.smpte.org>

E-Mail: [smpte@smpte.org](mailto:smpte@smpte.org)

**MESSAGE FROM THE PAST-PRESIDENT**

*John L. Mason* ..... 202

**MESSAGE FROM THE EXECUTIVE DIRECTOR**

Frederick C. Motts ..... 203

**SMPTE REPORTS**

Section Meetings ..... 205

Engineering News ..... 207

SMPTE Technical Conference and Exhibition  
November 12-15, 2003 ..... 209

SMPTE's Seminar at IBC 2003 ..... 211

SMPTE Almanac by Michael Dolan ..... 216

**PAPERS**

Relationships between Pixel Count, Aliasing, and Limiting  
Resolution in Digital Motion Picture Systems  
*Roger R. A. Morton, Christopher L. DuMont, and Michelle A. Maurer*, ..... 217

Digital Restoration Systems: Coping with Reality  
*A. Kokaram, R. Bornard, A. Rares, D. Sidorov, J. H. Chenot,  
L. Laborelli, and J. Biemond* ..... 225

Multimedia on TV and the Future for Mobile Usage  
*Albrecht Ziemer* ..... 232

**ENGINEERING REPORT**

Final Report: R30 Technology Committee Study Group  
on Content Identifier Harmonization ..... 237

**SMPTE NEWS AND DEPARTMENTS**

Stanley Baron Receives 2003 SMPTE Progress Medal ..... 248

New Products ..... 248

Errata ..... 249

Professional Services ..... 251

Membership Application ..... 252

Membership Renewal ..... 253

SMPTE Sustaining Member List ..... 254

*SMPTE Motion Imaging Journal* (ISSN: 0036-1682) published monthly by the Society of Motion Picture and Television Engineers, 595 West Hartsdale Ave., White Plains, NY 10607. Periodicals postage paid at White Plains, N.Y., and at additional mailing office. Copyright © 2003 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 Motion Imaging 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. Subscription rates: SMPTE members, \$27.00 included in membership dues; Straight Subscription U.S., \$140.00; elsewhere, \$155.00; airmail \$195. Single copy, \$15.00 plus shipping. MEMBERSHIP in SMPTE is available according to qualifications at the following annual dues: Active Member, \$135.00; Student Member, \$35.00. All members receive the *SMPTE Motion Imaging Journal* as part of membership. **SMPTE owns the copyrights to all published material, unless otherwise stated.**

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