

# SMPTE 2001

## CONFERENCE & EXHIBITION

9-13 July 2001, Sydney Convention & Exhibition Centre

The SMPTE 2001 Conference and Exhibition is almost here! The event, held every two years, is Australia's largest showcase of technology and equipment. With more than 75 papers to be presented, this year's conference, being held on July 9-13 at the Darling Harbour Convention Centre, is expected to be the biggest yet.

The following are brief descriptions of the sessions and topics to be addressed:

**Film:** The motion imaging industry continues to provide content for the cinema as well as television and there is little doubt that it will continue to do so. The conference is devoting a full day to this important parameter of the information and entertainment industries. Topics include: 3-D Scanning: The Process and its Uses in the Film Industry; Ventilated Film Cans and Their Effect on the Diffusion of Decomposition By-Products from Motion Picture Film; Digital Cinema—The Challenge and the Opportunity; D-Cinema; Fibre-Broadband Communication; Digital Film Projection; A Digital Bridge to the Future; and a panel discussion: The Digital Film Revolution—All at Once or a Bit at Time?

**Digital Broadcasting:** With the subject still in its infancy, how are various organizations coping with the introduction of this new and complex activity. Titles include: The First Days of Digital

Television and the Days to Come; ASI Mux and Demux. What is This and Where to Use It; ABCD (ABC Digital); The ABC's New Transmission Center; Remote Management and Control of Broadcast Network.

**Audio:** There was a time when single channel audio came from a single loud speaker at the cinema, from radio and television receivers. How that has all changed! Topics include: The Future of Surround Sound—10.2 Perspective; The Three-Dimensional Audio Sound Field: Delivering Reality; Using TDM to Build Versatile Audio Infrastructure; The Role of Sound in Digital Film and Television.

**Radio:** Although it is a conference delivered by the Society of Motion Picture and Television Engineers, it is felt that the radio industry must be included. Topics will address Digital Audio Broadcasting; and Reel-to-Reel to DAWS.

**Panel: Is IP Up to the Challenge?** The face of contribution quality broadcast distribution is changing. The latest buzz is Net protocols.

**RF Transmission:** The airways continue to be used for the distribution and delivery of television signals in this digital world. Papers include: Implementing Digital Television in Australia; COFDM Modulation for OB/ENG Applications; The Mystery of Single Frequency Networking in DVB-T; Mobile DVB-T Using

Antenna Diversity Receivers.

**HDTV:** Although high-definition television as delivered to the home may be a slow starter, there is increasing activity in using this format, which includes its widescreen application, for production. Topics include: HD Video Servers and Solutions: Easing the Broadcaster's Transition from Standard Definition to High Definition; Program Interchange—A Look Forward; Selling an Image: HD Blue Print for Commercial Production—From Capture to Mastering; HD-DPM: An Enabling Technology for a Multiformat HDTV Camera Head; Obtaining Large Dynamic Range Images from High-Definition Video; Avid DS HD—A Flexible Approach to HD Post-Production; Nonlinear System for High Definition; Impact and Issues Surrounding 24P.

**MPEG:** The family of MPEG is forever procreating. This session will address: The MPEG Legacy and its Future in the Convergence of the Broadcast and IT Industries; The New MPEGs—What are They and do They Matter? MPEG-2 Encoding a Significant Bit Further.

**Measurement:** Methods of ascertaining quality are still very much desirable. Topics include: Picture Quality Tests and Results; Applications of Digital Video Impairments to Improve Statistical Multiplexing Performance; Transport Stream Monitoring for Digital Television Network; HDTV

**Measurements and Monitoring; The Search for a Universal Timing Reference Signal.**

**TV Anycast, Anywhere, and Anytime:** The addition of a system of mass storage in set-top boxes and digital receivers has created new ways to use and view television images and data. Topics include: Anycast, Anywhere, Anytime...the Road Ahead; TV Anytime; Personal TV—An Industry.

**Content Management:** It has been long recognized that "it's the program content, stupid" is where it's at; how to label and control it is even more important. Topics will address: Best Business and Technology Practices for Content Management/DAM; Content Types and Content Aggregation for Mobile Devices; Content Management Systems Report About European Activities; Executive Briefing on Enterprise Content Management; Amazing Tales: Lessons Learned in Implementing Scalable Production Resolution Video Asset Management System; MXF: A Global Material Exchange Format.

**Internet:** This session looks at the internet as a mechanism to assist in the post-production of television programs and a method of delivering these programs. Topics include: Working with Video over the Internet; and Delivering Broadcast Quality Video Intranet Solutions.

**Interactive:** This was discussed at length at the 1999 Conference. Have we made any progress since then? This session will address DVB-RCT: The New Standard for Interactive TV; IP Over Satellite: DVB-RCS Digital Video Broadcast—Return Channel by Satellite; ITV Standards Update; Creating Content for Enhanced TV—Using the Tools, Designing the Experience; Interactive TV—Beyond the Set-Top Box; From Mass Communication to Personal Communication: A Sociological Approach; Delivery of Interactive Data Services by Multiple Networked Content Providers.

**Production and Post:** As the demand for product grows ever larger to feed the new and various forms of delivery, how are those well-established activities coping? Production topics include: Leaning Forward! Convergence and the Brave New Media; Telecine Transfer Techniques for Efficient MPEG Coding; A Second Generation Nonlinear Newsroom; and Context of Subtitling. Post will address the Evolution of Resolution in Film Scanners; Progressive HDTV Telecine Transfers; Digital Content Creation and Production Reaches the Mass Market; Sport Replays: From Stand-Alone Tape Recorders to Networked Disk Recorders.

**Training and Education:** A session on Training was presented for the first time at the 1999 Conference. In view of its great success and SMPTE's encouragement of this important subject, we have again put together a number of papers: A Comprehensive Strategy for Integrating Student Research Projects with the Activities of a Professional Development Team; How We Learned to Fish ...! Education in the Digital Era; The Cost of Professional Training—True or False Economy? Remote Learning and Knowledge Organization.

**Panel:** Integrated Production and Transmission Systems for the DTV Age. Although we are in the early days of the DTV Age, what are the observations of its progress and what problems are still to be solved.

**Storage:** Storage and the handling and control of stored content—what are the changes and what is the future? Topics include: Selecting the Best File Format for Your Broadcast Applications; Video Area Network Attached Storage for Television and New Media Applications; Video Networking Architecture Expanding Business Strategy with Digital Video Platforms; Sharing Media with Media Area Networks; DVB in DVB Through DVB Out.

**Panel:** Training for Production and Technical Careers in Television and Film.

## Features

The conference features the special TV Anytime session, which is an entire day of papers presentations dedicated to the picture film industry, addressing new developments such as D-Cinema.

## New Conference Technology

This year's conference will employ an interactive DIGIVOTE system, which will be located in the main conference hall and will allow speakers to incorporate a survey question in their presentations. A voting panel can be accessed by delegates allowing them to choose one of three options presented by the speaker. When the voting is done, the system will instantaneously calculate the results and present them on the screen as a graph or percentage figure.

## Exhibition

The exhibition traditionally includes a grand display of exciting new products and service developments. This show incorporates leading industry suppliers in broadcasting, radio, film, video, audio, telecommunications, post-production, multimedia, computer graphics and animation, publications, and lighting and location services.

## New Exhibition Shop

A new feature at this year's exhibition will be a SMPTE shop, containing a range of merchandise from exhibitors: bags, T-shirts, jackets, etc. Reference books and CDs will also be on sale. The shop will be located adjacent to the entrance of the SMPTE Exhibition.

## The SMPTE Dinner

This year's dinner will be held on Thursday night, July 12, in the new ballroom of the Sydney Convention Centre. It is the perfect time to wind down and network with local and international peers and colleagues in the industry.

## HEADQUARTERS STAFF

Frederick C. Motts, *Executive Director*: fmotts@smpte.org  
Carl Girod, *Director of Engineering*: cgirod@smpte.org  
David J. M. Juhren, *Director of Publications*: djuhren@smpte.org  
Mark Hyman, *Staff Engineer*: mhyman@smpte.org  
Andrew Zeyer, *Finance Manager*: azeyer@smpte.org  
Linda Alexander, *Marketing and Communications Manager*:  
lalexander@smpte.org  
Dianne Gabriele, *Meetings Manager*: dgabriele@smpte.org  
Mathew Kuriakose, *Production Manager*: mkuriakose@smpte.org  
Dianne Ross Purrier, *Managing Editor*: dpurrier@smpte.org  
MaryAnn Frusciante, *Senior Editor*: mfrusciante@smpte.org  
Marilyn Waldman, *Advertising/Editorial/Program  
Coordinator*: mwaldman@smpte.org  
Zoila Figueroa, *Administrative Assistant/Section Services*:  
zfigueroa@smpte.org  
Daureen Matera, *Membership Services*: dmatera@smpte.org  
Beverly Blakemore, *Publications*: bblakemore@smpte.org  
Anne Seminara, *Test Films*: aseminara@smpte.org

## SECTION CHAIRS

ATLANTA Richard M. Wright: rwright@weather.com  
AUSTRALIA Gerald W. Brooks: brooksg@rexela.com.au  
CHICAGO Peter G. DeBenny: Pete\_Debenny@am.sony.com  
DALLAS/FT. WORTH Samuel H. Peterson, Jr.: sam.peterson  
@grassvalleygroup.com  
DETROIT Mark Anzicek: manzicek@mediaone.net  
FLORIDA/CARIBBEAN Richard Dienhart: dick.dienhart@philips.com  
GERMANY Rolf von Kaldenberg: RvKconsult@aol.com  
HOLLYWOOD Alan J. Masson: alan.masson@kodak.com  
HONG KONG Kwok-Luen Lam: kllam@cabletv.com.hk  
HOUSTON J. Marty Kirkland: mkirkland@uh.edu  
ITALY Franco Visintin: fravisi@tin.it  
MONTREAL/QUEBEC Michel Yeon: yeonm@tva.ca  
NASHVILLE William C. Spencer: wspencer@wnpt.net

## ENGINEERING COMMITTEE CHAIRS

STANDARDS COMMITTEE  
William C. Miller: william.c.miller@abc.com  
FILM STEERING COMMITTEE  
Ioan R. Allen: ia@dolby.com  
TELEVISION STEERING COMMITTEE  
Peter D. Symes: p.d.symes@ieee.org  
AUDIO RECORDING AND REPRODUCTION TECHNOLOGY  
Tomlinson Holman: tomholman@edu.ch  
DATA ESSENCE TECHNOLOGY  
Johann Safar: safarj@panasonic.com  
DIGITAL CINEMA TECHNOLOGY  
Curt Behlmer: cbehlmer@soundelux.com  
FILE MANAGEMENT AND NETWORKING TECHNOLOGY  
Hans Hoffmann: hoffman@ebu.ch

## EXECUTIVE COMMITTEE

PRESIDENT, John L. Mason  
jmason@kodak.com  
EXECUTIVE VICE-PRESIDENT, Gavin Schutz  
schutz@ix.netcom.com  
PAST PRESIDENT, Charles Jablonski  
ENGINEERING VICE-PRESIDENT, William C. Miller  
william.c.miller@abc.com  
EDITORIAL VICE-PRESIDENT, Edward P. Hobson  
ehobson@omneon.com  
FINANCIAL VICE-PRESIDENT, Robert B. Kisor  
Robert\_Kisor@paramount.com  
CONFERENCE VICE-PRESIDENT, Thomas M. Jordan  
tom.jordan@leitch.com  
SECTIONS VICE-PRESIDENT, René Villeneuve  
r.villeneuve@nfb.ca  
SECRETARY/TREASURER, Kenneth C. Fuller  
ken.fuller@nbc.com

NEW ENGLAND John C. Gates: liteguy@bu.edu  
NEW YORK Kenneth R. Hunold: KRH@dolby.com  
NORDIC Stig-Göran Bergholm: bergstg@yle.fi  
OHIO David W. Prince: dprince@princeassociates.net  
OTTAWA Ross Mutton: ross.mutton@carleton.ca  
PACIFIC/NORTHWEST Michael P. Scott: okscott@halcyon.com  
PHILADELPHIA George F. Anderson III: George.Anderson@home.com  
ROCHESTER Vincent T. Slavin: slav@frontiernet.net  
ROCKY MOUNTAIN Rome Chelsi: romec@compuserve.com  
RUSSIA Svetlana S. Nemtsova: 0117095-943 0006 fx  
SACRAMENTO William Carlquist: william.carlquist@grassvalleygroup.com  
SAN FRANCISCO Rick L. Reagan: rickr@sgi.com  
TORONTO Thomas G. H. Allwood: tom\_allwood@rank.com  
WASHINGTON, D.C. Rudolph J. Niznansky: rudy.niznansky@rsd.de

FILM TECHNOLOGY  
Edmund DiGiulio: ed@cinemaproducts.com  
METADATA AND WRAPPER TECHNOLOGY  
Oliver F. Morgan: oliver\_morgan@avid.com  
MOTION PICTURE LABORATORY SERVICES TECHNOLOGY  
Alan J. Masson: amasson@kodak.com  
TELEVISION IMAGE TECHNOLOGY  
Gavin Schutz: schutz@ix.netcom.com  
TELEVISION RECORDING AND REPRODUCTION TECHNOLOGY  
Neil Neubert: nneubert@jvc.com  
TELEVISION SYSTEMS TECHNOLOGY  
S. Merrill Weiss: merrill@mwgrp.com  
THEATRICAL PROJECTION TECHNOLOGY  
Bob Pinkston: bwp@dolby.com  
VIDEO COMPRESSION TECHNOLOGY  
David K. Fibush: davef@exgate.tek.com

## Copies

Individual readers are permitted to photocopy isolated articles for research or other noncommercial use. Permission to photocopy for internal or personal use of specific clients is granted by the Society of Motion Picture and Television Engineers to libraries and other users registered with the Copyright Clearance Center (CCC), provided that the base fee of \$10 per copy plus \$0.50 per page is paid directly to CCC, 222 Rosewood Dr., Danvers, MA 01923, USA. Photocopies of individual articles may be ordered at \$5 per article. Contact Beverly Blakemore at Headquarters.

## Reprints and Republication

Multiple reproduction or republication of any material in this *Journal* requires the permission of SMPTE. Permission may also be required from the author(s). Contact Marilyn Waldman: 914-761-1100; Fax: 914-761-3115; E-mail: mwaldman@smpte.org.

## Subscriptions

The *Journal* is available by subscription. Straight Subscription U.S., \$140.00; elsewhere, \$155.00; airmail \$195. Single copy, \$15.00 plus shipping. Contact Daureen Matera at Headquarters.

## Back Issues

Selected back issues are available. Contact Beverly Blakemore at Headquarters.

## Advertising

Contact Marilyn Waldman: 914-761-1100 Ext. 116; Fax: 914-761-3115; E-mail: mwaldman@smpte.org.

## Microfilm

Copies of the *SMPTE Journal* are available on microfilm from University Microfilms Intl., 300 N. Zeeb Rd., Ann Arbor, MI 48106. USA.

## Manuscripts

For information on the presentation and processing of manuscripts, see Information for Authors, which is published frequently in the *SMPTE Journal*.