

136th SMPTE Technical Conference and World Media Expo Los Angeles Convention Center • Los Angeles, Calif. October 13-15, 1994

With "The Digital Era...Ready or Not," SMPTE promises to help ease the transition to digitization at its 136th Technical Conference and World Media Expo. In three intensive days of technical presentations and an optional day of innovative tutorials and workshops, state-of-the-art technology and industry developments, with an emphasis on digital imaging, will be explored.

All-Day Tutorial

The Paramount movie lot will be the site for the "Film Formats Seminar," a joint presentation with the Technical Council of the Motion Picture-Television Industry (TCMPT). This preconference seminar takes an unusual approach to the study of film formats; according to Seminar Co-Chairman Rob Hummel, Walt Disney Co., the same exact footage will be shot in a variety of ways in order to allow for easier quality comparisons. This event will be held on Wednesday, October 12, starting at 10:00 a.m. Program Vice-Chairman Frank Haney, Fox Television Stations, Inc., is also co-chairing this tutorial.

Preconference Workshop

Digital imaging and the principles of electronic editing of feature films will be the focus of a special two-hour, hands-on, preconference workshop. Industry experts using state-of-the-art equipment will present a total of eight sessions on Wednesday, October 12. Program Vice-Chairman John Baptista, Consolidated Film Industries, is serving as the workshop chairman.

Paper Sessions

"The 136th Technical Conference will look at the realities of the digital era, as well as its compromises and missing links," says Program Chairman Howard T. La Zare, FilmTec International. "We will explore how images are transformed to convey a story in visual ways that were only dreamed about a short time ago. We will follow the technologies that bring those images to the minds and the eyes of the viewing public."

A complete list of papers to be presented is included in this Special Conference Preview Section.

World Media Expo

More than 350 companies to date have signed on to exhibit at the World Media Expo. Every conference registration includes free admission to this exciting new event designed to keep you abreast of industry trends. The exhibit hours are 9:00 a.m. to 6:00 p.m. on Thursday and Friday, October 13 and 14, and 9:00 a.m. to 4:00 p.m. on Saturday, October 15.

Information Booths

The International Broadcasting Convention (IBC), the International Television Symposium (Montreux), and the Technology Council of the Motion Picture-Television Industry (TCMPT) will have information booths in the SMPTE Conference area of the Los Angeles Convention Center.

Social Events

By attending the conference, not only will you receive vital technical information, you will also have a chance to renew old acquaintances and make new ones. Plenty of networking opportunities will be available at the social events planned to take place during the conference. These events include:

• *Opening Welcome Reception: Wednesday, October 12*

All conference registrants and partners are invited to attend the complimentary Opening Welcome Reception. Take advantage of the opportunity to socialize with your peers in a relaxed atmosphere before plunging into the intensity of the papers sessions.

• *Honors and Awards Luncheon: Thursday, October 13*

Full-conference registrants can participate in the recognition of their peers for outstanding contributions to the field by attending the Honors and Awards Luncheon; those expected to be honored are listed in this Special Conference Preview Section.

• *SMPTE Reception and Banquet: Friday, October 14*

This gala event is the social highlight of the week, offering food, cocktails, entertainment, and stimulating conversation.

• *Fellows Luncheon: Friday, October 14*

Fellows and Life Fellows (only) are welcome to attend this luncheon honoring those who have attained a distinguished level of membership in the Society. Those to be elevated to the level of Society Fellow are listed in this Special Conference Preview Section. Tickets for the Fellows Luncheon may be purchased on the registration form.

Partners Program

As always, a full Partners Program is scheduled, thanks to the efforts of Partners Program Chairperson Phyllis La Zare and Co-Chairperson Denyse Haney. See the tentative schedule in this Special Conference Preview Section.

Student Education Fair

Registrants are encouraged to mingle with students at the Student Education Fair, to be held Saturday, October 15. According to Student Affairs Co-Chairperson Bob Ringer, Ringer Video Systems, local high school students are invited to attend for the purpose of acquainting themselves with educational institutions offering technical training in motion pictures and television. Gail K. Ringer, Ringer Video Systems, is also serving as Student Affairs Co-Chairperson.

Exchange of Sessions

Through a reciprocal arrangement with the Society of Broadcast Engineers (SBE), everyone fully registered at the SMPTE conference will receive a ticket to attend one papers session at the SBE conference, which will be running concurrently to SMPTE's.

Fax-on-Demand

The SMPTE Fax-on-Demand service is a source for additional information about the conference. Consult the service for such documents as final registration and housing forms, as well as information concerning hotels, airlines, and car rentals; workshops, tutorials, and programs; and SMPTE membership.

The number for the SMPTE Fax-on-Demand is (301) 216-1850. You must call

from the touch-tone handset on your fax machine, and a voice on the other end will tell you how to access one or more documents.

Event Locations

All technical sessions (with the exception of two, to be announced) will be held at the Los Angeles Convention Center, located at the Intersection of the Harbor and Santa Monica Freeways.

The conference headquarters, as well as the location of both the Partners Program and the SMPTE Reception and Banquet, is the Hyatt Regency Hotel, 711 South Hope Street, Los Angeles, CA 90017.

Hotel Information

For a complete listing of selected hotels, their locations, and daily rates, please refer to the housing form. Instructions for mailing, faxing, or phoning in a reservation are also on this form.

Blocks of rooms at all hotels have been reserved for SMPTE registrants. To obtain the special room rates you must make and receive confirmation of your hotel reservation by **SEPTEMBER 12, 1994**. After this date, rooms and rates are based upon availability and discounts may not apply.

Round-trip shuttle service will be provided to and from the downtown hotels and the Los Angeles Convention Center.

Select hotels have limited shuttle service (inbound in the morning and outbound when the World Media Expo closes); these include the Beverly Hilton, Carlyle Inn, Century Plaza Hotel, J. W. Marriott, Red Lion Hotel Glendale, Sheraton Universal, Radisson Wilshire Plaza, and the Universal City Hilton and Towers.

This is the Industry Event of the Year!

If you are involved in the growing world of multimedia, computer graphics, broadcasting, film, video, or related professions, don't miss the 136th SMPTE Technical Conference and World Media Expo!

— Aileen Moroney

PROGRAM AT A GLANCE

WEDNESDAY OCTOBER 12, 1994	THURSDAY OCTOBER 13, 1994	FRIDAY OCTOBER 14, 1994	SATURDAY OCTOBER 15, 1994
<p>AM</p> <p>Workshop "Video Editing/Digital Imaging for Motion-Picture Feature Films" Sessions A&B: 8.00 am Sessions C&D: 10.00 am</p> <p>Tutorial TCMPT/SMPTE Joint Presentation "Film Formats Seminar"</p>	<p>AM</p> <p>World Media Expo</p> <p>Opening Session</p>	<p>AM</p> <p>World Media Expo</p> <p>Paper Session "Digital Terrestrial Broadcasting"</p> <p>Paper Session "Film Technology I"</p> <p>Paper Session "Video Compression I"</p>	<p>AM</p> <p>World Media Expo</p> <p>Paper Session "Archival & Special Applications"</p> <p>Paper Session "Dedicated & General-Purpose Computer Platforms I"</p> <p>Paper Session "Special Venues"</p>
	<p>MIDDAY</p> <p>Honors and Awards Reception and Luncheon</p>	<p>MIDDAY</p> <p>Fellows Luncheon</p>	
<p>PM</p> <p>Workshop "Video Editing/Digital Imaging for Motion-Picture Feature Films" Sessions A&B: 1.00 pm Sessions C&D: 3.00 pm</p> <p>Tutorial TCMPT/SMPTE Joint Presentation "Film Formats Seminar"</p> <p>Opening Welcome Reception</p>	<p>PM</p> <p>World Media Expo</p> <p>Paper Session "Advanced Technology"</p> <p>Paper Session "Information Highway & Digital Storage"</p> <p>Paper Session "Studio & Post-Production"</p>	<p>PM</p> <p>World Media Expo</p> <p>Paper Session "Conversion to a Digital Broadcast Plant"</p> <p>Paper Session "Film Technology II"</p> <p>Paper Session "Video Compression II"</p> <p>SMPTE Reception and Banquet</p>	<p>PM</p> <p>World Media Expo</p> <p>ACVL/SMPTE Joint Presentation "Users' Perspective of Video Editing/Digital Imaging for Motion-Picture Feature Films"</p> <p>Paper Session "Dedicated & General-Purpose Computer Platforms II"</p>

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at the Russian White House.



Quick. Find the first shot fired
at the Russian White House.



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THE SMPTE CONFERENCE PROGRAM

The papers and sessions listed below are firm as of July 7, 1994. However, changes are possible between press time and the conference. For up-to-date program information, call or fax Marilyn Waldman, SMPTE Program Coordinator, Phone: (914) 761-1100; Fax: (914) 761-3115.

WEDNESDAY, OCTOBER 12

Film Formats Seminar

Video Editing/Digital Imaging for Motion-Picture Feature Films Workshops

THURSDAY MORNING, OCTOBER 13

OPENING SESSION

Introduction: Program Chairman Howard T. La Zare, FilmTec International

Welcoming Address: SMPTE President Irwin Young, Du Art Film Laboratories, Inc.

Engineering Report: SMPTE Engineering Vice-President Kenneth Davies, CBC

Keynote Address: to be announced

THURSDAY AFTERNOON

ADVANCED TECHNOLOGY

Digital TV: Does Interlacing Lead to Bandwidth Reduction?, Stephan Hartwig, University of Dortmund, Dortmund, Germany

Bandwidth Efficient Digital Waveform Transmission on Video Subcarriers, Kenneth C. Crandall, TFT, Inc., Santa Clara, Calif.

Object-Oriented Television, V. Michael Bove, Jr., MIT Media Laboratory, Cambridge, Mass.

A Proposal for Rating the Subjective Sharpness of Television Pictures, Hans Klering jun and Max Rothaler, Institut für Rundfunktechnik GmbH, Munich, Germany

Digital Display Systems Based on the Digital Micromirror Device, Vishal Markandey and Robert J. Gove, Texas Instruments, Inc., Dallas, Tex.

ATM High-Resolution Imaging Testbed, Phyllis Wreagh, DemoGraFX, Santa Monica, Calif.

A Scalable Parallel Video Processing Architecture Applied to High-Definition Format Conversion, Clarence J. Hau, Panasonic Technologies, Inc., Burlington, N.J.

3-D Subband Coding Compression System for Program Production, W. Glenn, J. Marcinka, and R. Dhein, Communications Technology Center, Florida Atlantic University, Boca Raton, Fla.

INFORMATION HIGHWAY & DIGITAL STORAGE

"Digital Courier" — Image Transmission Via Telecommunication Lines, Bruce Williamson, Atlab Australia, N.S.W., Australia

A New WORM Optical Disk System for Professional Applications, Sumitaka Matsumura and Fumio Matsui, Pioneer Electronic Corp., Saitama, Japan

The Future of Disk-Based Video Storage, Chris Loberg and Matt Danilowicz, Dynatech Video Group/Utah Scientific, Salt Lake City, Utah

Characterization of the Recordable Digital Videodisc, Dr. Jordan Isailovic, Optical Disc Corp., Santa Fe Springs, Calif.

Digital Era, Not Ready — But..., Richard Williams and Al Cruz, Rich Millenium, Inc., W. Los Angeles, Calif.

System Implications of Digital-Disk Multiple-Channel Video Storage Systems, Marc Walker, BTS, Salt Lake City, Utah

Multichannel Video Server Applications in TV Broadcast and Post-Production, Mark Ostlund, BTS, Salt Lake City, Utah

Multimedia in Israel, Gideon Flat and Saville Kaufman, IEC (Israel) Tel Aviv, Israel

STUDIO AND POST-PRODUCTION

The Digital Wetgate-Noise Reducer of the 3rd Generation from BTS, Gerhard Wischermann, BTS, Darmstadt, Germany

Behind Gamma's Disguise, Thor Olson, Management Graphics, Inc., Minneapolis, Minn.

The All-Digital Camcorder — The Arrival of Electronic Cinematography, Laurence J. Thorpe and A. Takeuchi, Sony Business & Professional Products Group, Montvale, N.J.

Studio 101 for HDTV/NTSC Simul-Production, T. Hasegawa, J. Misawa, and H. Kouchi, NHK, Tokyo, Japan

Progressive-Scanning Camera and Program Production System, N. Hirano, T. Kurosaki, and A. Hori, Nippon Television Network Corp., Tokyo, Japan

Development of "Digital Color Corrector System," Y. Yamamura, K. Aoki, and R. Watanabe, NHK, Tokyo, Japan; and M. Wada, T. Higashi, and C. Matunaga, For-A Co., Ltd., Tokyo, Japan

A Multistandard Digital Film Transfer Facility, Dieter Poetsch, BTS, Darmstadt, Germany

Engineering Human Interfaces for Editing Machines, Norman H. Strassner, Strassner Editing Systems, N. Hollywood, Calif.

Digital Applications in an Automated Master Control Environment, Robert M. Polan, Louth Automation, Menlo Park, Calif.

FRIDAY MORNING, OCTOBER 14

DIGITAL TERRESTRIAL BROADCASTING

Version 2 of "UniPack": A Universal Packet Header Proposal, G. Demos, D. James, D. Singer, Apple Advanced Technology Group, Cupertino, Calif.

Optimal Image Formats for Advanced Television and the N.I.I., Gary Demos, DemoGraFX, Culver City, Calif.

COFDM for Digital Television Terrestrial Broadcasting, Ytuan Wu, CRC, Ontario, Canada; and William Y. Zou, PBS, Alexandria, Va.

Multilevel OFDM System for Terrestrial Digital TV Transmission, M. Saito, S. Moriyama, and S. Nakahara, NHK, Tokyo, Japan

Field Testing of Advanced TV Transmission Subsystem, Jules Cohen, Jules Cohen & Associates, P.C., Washington, D.C.

A 60.00 Field/Second Variation on NTSC for Simulcasting with ATV, Charles W. Rhodes, Advanced Television Test Center, Inc., Alexandria, Va.

Panel Discussion

FILM TECHNOLOGY I

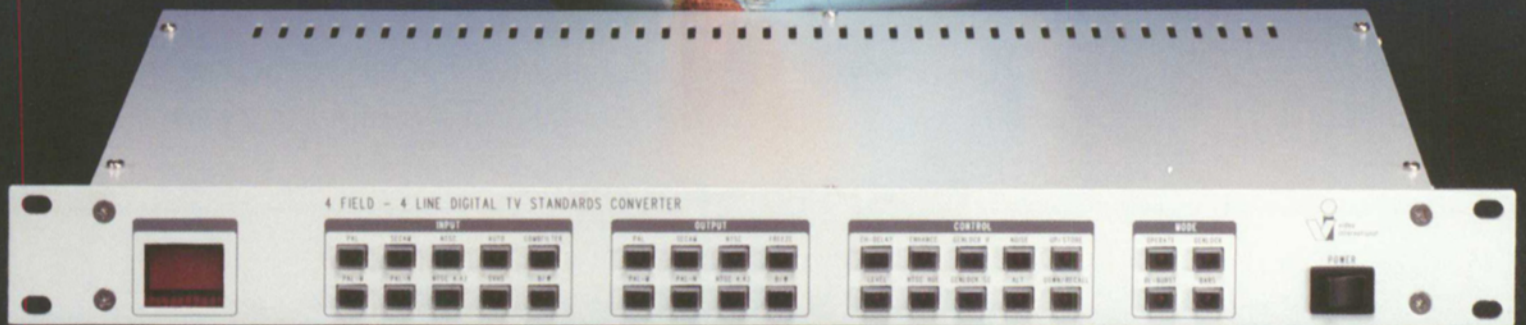
Film Projection: The Last Step of the Production: Its Flaws and Its Future, Glenn Berggren, Sigma Design Group, Claremont, Calif.

Fujicolor Motion-Picture Film "Super F-Series," Ken Hisao Kishimoto and Koza Noguchi, Fuji Photo Film Co., Ltd., Kanagawa, Japan

Eastman EXR 500T Film 52/7298 — A High Speed Wide-Latitude Color Negative Film, Christopher L. DuMont, Eastman Kodak Co., Rochester, N.Y.

A New Choice: A Medium-Speed Camera Negative Film with a Different Look, J. C. Brewer, B. Kelly, and J. F. Sawyer, Eastman Kodak Co., Rochester, N.Y.

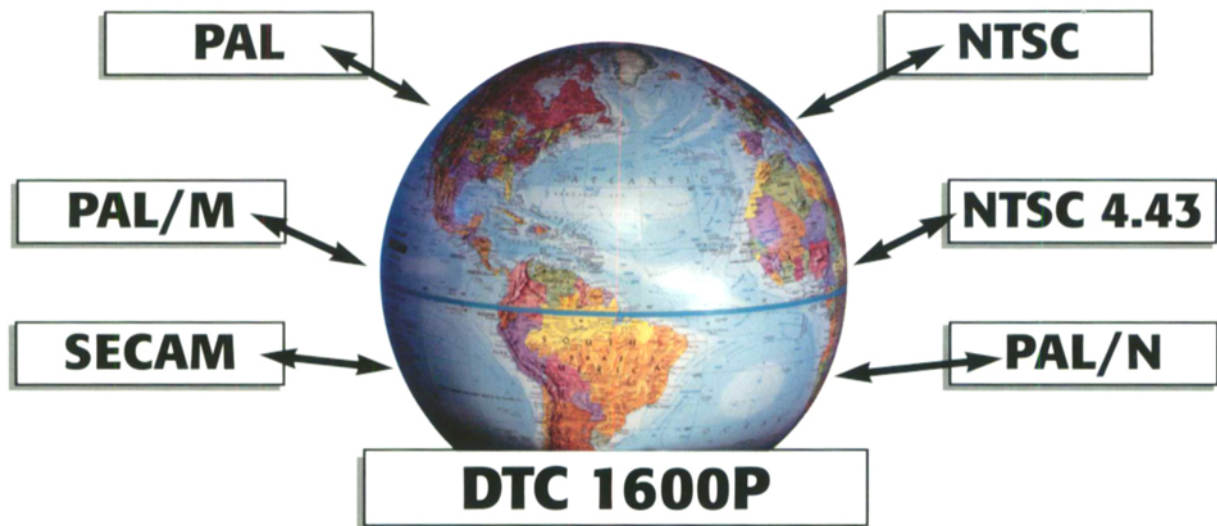
Eastman Keycode Numbers — Transfer Verification Films, Donald Ver Ploeg, Eastman Kodak Co., Rochester, N.Y.



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Specifications

INPUTS

Television StandardsPAL, SECAM, NTSC, PAL-M, PAL-N, NTSC 4.43
 Composite Video1 Vp-p/ 75 ohm (loop-through input)
 Component Video Y/CS-VHS, Hi8, Betacam SP via 4 pin connector

OUTPUTS

Television StandardsPAL, SECAM, NTSC, PAL-M, PAL-N, NTSC 4.43
 Composite Video1 Vp-p/ 75 ohm, 2 independent outputs
 Component Video Y/CS-VHS, Hi8, Betacam SP via 4 pin connector

PROCESSING

Bandwidth4 MHz
 ConversionDigital 4-Field, 4-Line interpolation, motion adaptive
 Quantizing8 bit, 4:2:2 luminance and chrominance
 Differential Gain2%
 Noise ReductionDigital adaptive up to 20db
 Signal To Noise60db CCIR weighted, flatfield

POWER SYSTEM

Power Supply85VAC to 264 VAC
 Frequency50/60 Hz
 Power Consumption60 VA

DIMENSIONS44.45mm (H) x 444.5mm (W) x 381mm (D)

WEIGHT4 pounds approximate

OPTIONS

Genlock1Vp-p/75 ohm composite video or black-burst signal
 5.5 MHz bandwidth/YUV component in/output combfilter

Video International Development GmbH
 Ulmenweg 11
 D-30890 Barsinghausen
 Germany
 Telefon (05105) 8 11 44
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 Telefax (516) 243-4314

Eastman Black-and-White Motion-Picture Products: A Commitment to Excellence, S. Hallatt, G. Farrell, S. Gerlach, D. Frisk, W. Standhart, S. Champagne, and D. Kestner, Eastman Kodak Co., Rochester, N.Y.

Improving the Sharpness of Projected Film Images, David S. Richards, Action Capture, Costa Mesa, Calif.

The COSHARP Printer: A Progress Report, J. Mosley, M. West, J. Hopkinson, The Technology Council of the Motion Picture/TV Industry, Studio City, Calif.

VIDEO COMPRESSION I

Video Production Systems Using Compressed Video, Stevan Vigneaux, Avid Technology, Inc., Tewksbury, Mass.

Statistical Multiplexing of MPEG-2 Video Channels, Mike Perkins and David Arnstein, DiviCom, Inc. Milpitas, Calif.

MPEG Compression Techniques for Interactive Media, Jeffrey Niedermayer and Gail Wellington, Optimage, West Des Moines, Iowa

A Wavelet Image and Video Compression Bitstream Standard, John Huffman, Aware, Inc., Cambridge, Mass.

Compressed Digital Video: Accelerating the Video Communications Revolution, Paul Haskell, Compression Labs, Inc., San Jose, Calif.

Architecture and VLSI Implementation of the MPEG-2:MP@ML Video Decoding Process, Mihailo M. Stojancic and Chuck Ngai, IBM Microelectronics, Advanced Digital Video Lab, Endicott, N.Y.

FRIDAY AFTERNOON

CONVERSION TO A DIGITAL BROADCAST PLANT

Testing in the Digital Era, Konrad Finck, Advanced Audio Visual Systems, Sioux Falls, S. Dak.

Elimination of Serial Digital Signal Jitter for Interface to an Analog Video Environment, Keith Y. Reynolds, Grass Valley Group, Nevada City, Calif.

Total Digital Studio System in Broadcasting Station, Y. Ushiyama, H. Takahashi, H. Tagami, and Y. Watanabe, NEC Corp., Tokyo, Japan

PBS: Through the A to D Converter, David Horowitz, Horowitz Television Technology, Yardley, Pa.

Moving Towards the Digital Broadcast Centre, Steve Haines, Quantel, Newbury, U.K.

Connecting Your System, From the Present to the Future, Marc Walker, BTS, Salt Lake City, Utah

Practical Implementation of SMPTE RP165 Error Detection and Handling, Eric Fankhauser and Singar Bala, Gennum Corp., Burlington, Ont., Canada

Panel Discussion

FILM TECHNOLOGY II

Noninstrumental Indexing of Silver in Fixers in the Digital Era, P. Sivaprasad, Gemini Colour Laboratory, Madras, India

Film Storage and Spotting the "Vinegar Syndrome," Morten Jacobsen, Dancan International Sales, Farum, Denmark

Fire Suppression Update, Chris R. Reimer, Facilities Protection Systems, Inc., Anaheim, Calif.; and Milton R. Shefter, Miljoy Enterprises, Inc., Beverly Hills, Calif.

Imbibition Release Prints Utilizing Digital Technology, Edward Delters, Chromax, Inc., Santa Barbara, Calif.

Digital Noise Filter for Soundtrack Restoration, Steven E. Boze, Walt Disney Pictures and Television, Burbank, Calif.

3 PERF 35mm for Handheld HDTV Origination, Jean-Pierre Beauviala, Aaton, Grenoble, France

Dual-System Digital Soundtrack for 16mm Film, David G. Gray, Jr., Florida State University Film School, Sarasota, Fla.

Preserving, Copying, and Assuring Access to our Moving Picture and Sound Content Heritage, Ed H. Zwaneveld, National Film Board of Canada, Saint-Laurent, Que., Canada

Reengineering Negative Inspection and Cutting — A Study of Its Work Process Ergonomics and the Definition of Computerized Workstations for Each Activity, I. Dupuis, D. LeBorgne, C. Perreault, R. Juteau, P. Bellerose, M. Morelli and E. H. Zwaneveld, National Film Board of Canada, St. Laurent, Que., Canada

VIDEO COMPRESSION II

Transmission of Component Digital Television Signals Over the Telephone Network, Richard A. Mizer, Pacific Bell, San Ramon, Calif.

Eye-Pleasing Alternatives to Motion-Compensated DCT, Rod Sheffield and Pat Walker, Horizons Technology, Inc., San Diego, Calif.

Panel Discussion

Using MPEG Compression Technology to Multicast Full-Motion Video to Remote Sites, Mark Koz, FutureTel, Inc., Sunnyvale, Calif.

So, What Makes Parallelizing MPEG So Difficult?, Brian Quandt, Heuris Logic, St. Charles, Mo.

Compression Optimization In a Hybrid Nonlinear Editing System, Kazuo Kajimoto, Matsushita Electric Industrial Co., Ltd., Osaka, Japan; Sigeharu Kawamoto, Matsushita Communication Industrial Co., Ltd., Yokohama, Japan; and Ralph Biesemeyer, Panasonic Broadcast & Television Systems Co., Secaucus, N.J.

SATURDAY MORNING, OCTOBER 15

ARCHIVAL AND SPECIAL APPLICATIONS

The International Broadcasters Videotape Number IBTN, Peter J. Marshall, Channel 4 Television, London, U.K.

Designing Technologically Diversified Broadcast-Quality Production Facilities in a University Setting, Bradley G. Albers, Florida State University Graduate School of Motion Pictures, Television and Recording Arts, Sarasota, Fla.

Com-3: A Cross-Effect-Free Compatible Composite Coding Technique, Roderick Snell and Simon Auty, Snell & Wilcox Ltd., Petersfield, U.K.

A Visual Language for the Management of Digital Film Archives, Thomas J. Greenway and Ronaldo Mouchawar, EDS Digital Film Systems, Troy, Mich.

Real-Time Locus Indication System for Flying Golf Ball, Y. Yamanouchi, K. Enami, D. Kato, T. Yamada, and T. Kageura, NHK, Tokyo, Japan

Design & Implementation of a TDM Communications System, Steven G. Christensen and Ralph K. Strader, Telex Communications, Inc., Minneapolis, Minn.

GPS and ENG: Automatic On-Air Maps Showing the Location of Your News Helicopter, John Sprung, Tech Council/Viacom Production, Studio City, Calif.

D6, Getting Viable, Wolfgang Schiffler, BTS, Darmstadt, Germany

CineRoboqueue: The Automated Electronic Public Film Library and Video File Server of the National Film Board of Canada, K. Hilbchen, R. Forget, J. Durtrasac, A. Deltell, J. J. Leduc, and E. H. Zwaneveld, National Film Board of Canada, St. Laurent, Que., Canada

Computer Data Archival to Digital Videotape, John Krooss, Viewgraphics, Inc., Mountain View, Calif.

DEDICATED & GENERAL-PURPOSE COMPUTER PLATFORMS I

Extending the Vision: The Cineon Developer's Toolkit, Carlo Hume, Mary Abraham, and Mark Schneider, Eastman Kodak Co., Rochester, N.Y.

Digital Film Workstations — Evolution in The Video Compositing Suite, C. Bradley Hunt, Eastman Kodak Co., London, U.K.

Nonstandard Platforms — Ready for the Digital Era, Peter Owen and Bob Pank, Quantel Ltd., Newbury, U.K.

Using Supercomputers for Television Broadcast: Virtual Sets, Virtual Actors, Real Technologies, Greg Estes, Silicon Graphics, Inc., Mountain View, Calif.

The IBM Power Visualization System: A Digital Post-Production Suite in a Box, D. A. Epstein, S. R. Alpert, D. P. Dumarot, A. Garcia, J. W. Hamilton, M. R. Laff, B. C. Liang, W. R. Koons, C. S. McDowell, A. W. Ng, J. L. Pittas, R. C. Plotkin, and D. Soroker, IBM Visualization Systems, Thomas J. Watson Research Center, Yorktown Heights, N.Y.

Designing an Open Architecture in Dedicated Hardware, Steve Blonstein, Abekas Video Systems, Inc., Redwood City, Calif.

SPECIAL VENUES

Postcards from the Edge...Mounting a 65mm/15perf Camera in Extreme Filming Situations, Martin S. Mueller and Barbara Pleason Mueller, Hayden Lake, Ida.

Consumer Choice & Creative Distribution on the New Entertainment Frontier, Michael Van Himbergen and Jeffrey A. Diamond, MediaFusion Inc., Los Angeles, Calif.

Large Format — Special Technologies for Special Venues, Paul D. Panabaker, Imax Corp., Mississauga, Ont., Canada

CG Production & Post-Production (Changes to the Development Process of Special Venue Film Production), Christian Kubsch, Ridefilm Corp., South Lee, Mass.

Preservation & Distribution Methodologies for Specialty Films, Christopher Reyna, Imagica USA Inc., Los Angeles, Calif.

Large Format Negative Films + The Right Turbulation = Excellent Quality, John Baptista, Consolidated Film Industries, Los Angeles, Calif.

SATURDAY AFTERNOON

USER'S PERSPECTIVE OF VIDEO EDITING/DIGITAL IMAGING FOR MOTION-PICTURE FEATURE FILMS (JOINT PRESENTATION WITH ACVL)

User's Perspective — Avid, Avid Systems

User's Perspective — Lightworks, Lightworks Systems

User's Perspective — Cineon, Cineon Workstation

User's Perspective — Domino, Quantel Domino

DEDICATED & GENERAL-PURPOSE COMPUTER PLATFORMS II

Problems and Potential — General Purpose Computers in Post-Production, George Joblove, R/GA Digital Studios, Hollywood, Calif.

Flame: Visual Effects Online, Gary Tregaskis and Terry Higgins, Discreet Logic, Montreal, Que., Canada

The Digital Production Environment at ILM, Lincoln Hu, Industrial Light & Magic, San Rafael, Calif.

Panel Discussion

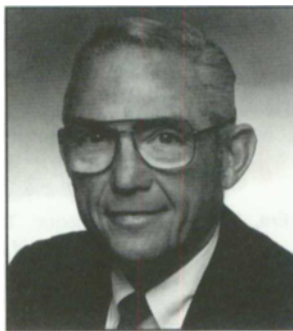
Forging a Dynamic Synthesis Between General-Purpose Platforms and Dedicated Systems Within a Post-Production Facility, Neil B. Feldman, Video Post and Transfer, Inc., Dallas, Tex.

A Welcome From SMPTE's President

Dear Colleagues:

I would like to personally invite you to this year's most exciting, educational, and technological event: the 136th SMPTE Technical Conference and World Media Expo. In addition to SMPTE's well-known technology programs, you'll find some important innovations. This year's conference promises to be more comprehensive than ever, with over 100 presentations and special pre-conference tutorials and hands-on workshops to choose from.

SMPTE's is the only conference that focuses on the very latest technological advances and the everyday challenges you face as a technology manager, user, or developer. As has been our tradition, expert authors will provide you with the technological insights and the management strategies needed to succeed in an increasingly digital environment. The conference theme, "The Digital Era...Ready or Not," is emphasized in the array of topics to be addressed and reflects our commitment to helping you stay abreast of the technological changes impacting the profession.



As an added value, your conference registration includes admittance to the World Media Expo. New this year, the World Media Expo promises to be one of the industry's largest exhibits, with more than 300 companies participating to date. Here is your ideal opportunity to examine the newest advancements first-hand and discuss them with the industry's leading authorities. And all of this takes place in one of the nation's most ideal settings for a conference and expo of this type — Los Angeles, California.

If you attend only one conference this year, make it the 136th SMPTE Technical Conference and World Media Expo. This is one you don't want to miss. I look forward to seeing you there.

Irwin Young
President

**Partners Program
Tentative Schedule**

Wednesday, October 12

Afternoon Welcoming Tea
at The Hyatt Regency

Thursday, October 13

San Antonio's Winery
Off-Site Luncheon
or
Honors and Awards Luncheon
J. Paul Getty Museum

Friday, October 14

Richard Nixon Library
Luncheon
Pacific Asian Museum

Saturday, October 15

Cheryl Marks Nutrition Lecture
Luncheon
Old Time Music Hall
(Classic Movies, Live Entertainment)
or
Griswald's Live Theatre Entertainment

EVENTS SUBJECT TO DAY CHANGE

Society Announces 1994 Honors and Awards Recipients

The Society has announced the 1994 winners of its prestigious Honors and Awards. The various medals and plaques will be presented at the annual Honors and Awards Luncheon on Thursday, October 13, 1994, during the 136th SMPTE Technical Conference and World Media Expo at the Los Angeles Convention Center. The following awards will be given for outstanding achievements in the industry:

- Honorary Membership in the Society will be awarded to **Masahiko Morizono**, Sony Corp., Tokyo, Japan, for his lifetime of pioneering work in the advancement of motion-picture and television technology, especially in audio and videotape recording technology, as well as his leadership and technical contributions in his company's entry into the broadcast television equipment field and its many contributions. Mr. Morizono is also honored as a worldwide leader in HDTV issues and the electron beam recorder (EBR) for motion-picture and television applications. He is recognized as a living pioneer in the industry.

- The Agfa-Gevaert Gold Medal Award, which recognizes the individual's outstanding leadership, inventiveness, and/or other achievements in the research, development, or engineering of new techniques and/or equipment that result in a significant improvement to the interface between motion-picture film and television imaging systems, where the combined advantages contribute to the further development of visual communications systems, will be awarded to **Dieter Poetsch**, BTS-Broadcast Systems Television, Darmstadt, Germany. Mr. Poetsch was also made a new Fellow of the Society.

- The Citation for Outstanding Service to the Society, which recognizes individuals for dedicated service to the Society over a sustained period of time, particularly at the Section level, will be awarded to **Harvey Rogers**, YTV Canada, Inc.; and **Angelo D'Alessio**, BTS-Broadcast TV Systems, Rome, Italy.

- The Eastman Kodak Gold Medal Award, which recognizes outstanding contributions that lead to new or unique educational programs utilizing motion pictures, television, high-speed, and instrumentation photography or other photographic sci-

ences, will be given to **David Hawkrige**, director of the Institute of Educational Technology, The Open University, U.K. Professor Hawkrige's pioneering work has provided the research foundation and model for the integration of television and other learning technologies in Great Britain's Open University. Systems based on the University's distance learning model have had an international impact on the delivery of education to dispersed student groups, both in industrialized nations and in developing countries, where they provide one of the few educational opportunities available.

- The Fuji Gold Medal Award, which recognizes outstanding engineering achievements in the design and development of new or enhanced techniques and/or equipment that have contributed significantly to the advancement of photographic or electronic image origination, will be presented to **David Corley**, D&S Corley Ltd., Kleinburg, Ontario, Canada.

- The John Grierson International Gold Medal Award, which recognizes significant technical achievements related to the production of documentary motion-picture films, will be awarded to **W. Tuckerman Blays**, Key Largo, Fla., for his significant technical achievement in the development and innovative application of Aquacolor® and Multiple-Filter Systems for underwater photography.

- The Journal Award is presented to the author(s) of the most outstanding paper originally published in the *Journal* during the previous year. The 1994 award will be given to **David K. Fibush**, Tektronix, Inc., Beaverton, Oreg., for two papers, "Error Measurements in Studio Digital Television," and "Jitter Effects and Measurement in Serial Digital Television," both of which appeared in the August 1993 issue.

- Journal Certificates will be awarded to **Laurence J. Thorpe**, Sony Advanced Systems Co., Ridgewood, N.J., for his paper, "HDTV and Film — Digitization and Dynamic Range," in the June 1993 issue; and **Arnold M. Lund**, Ameritech, Hoffman Estates, Ill., for "Influence of Image Size and Resolution on Viewing Distance," in the May 1993 issue.



Masahiko Morizono

- The Technicolor/Herbert T. Kalmus Gold Medal Award, which recognizes outstanding contributions in the development of color films, processing techniques, or equipment useful in making color motion pictures for television use, will be presented to **Ed H. Zwaneveld**, National Film Board of Canada, Montreal, Que., Canada. Zwaneveld's numerous research and development projects initiated and directed at the NFB have resulted in significant advances in motion-picture laboratory and post-production practices, especially the DigiSync reader and decoder for machine-readable key numbers on motion-picture film.

- The David Sarnoff Medal Award, which recognizes outstanding contributions in the development of new techniques or equipment that have contributed to the improvement of the engineering phases of television, including theater television, will be given to **Bruce Penney**, Tektronix, Inc., Beaverton, Oreg.

- The Samuel L. Warner Memorial Medal Award, which recognizes outstanding contributions in the design and development of new and improved methods and/or apparatus for sound-on-film motion pictures, or any step in the process, will be presented to **David W. Gray**, Dolby Laboratories, Inc., Los Angeles, Calif.

- The Alexander M. Poniatoff Gold Medal Award for Technical Excellence will be presented to **Kees A. Schouhamer**, Philips Research Laboratories, Eindhoven, The Netherlands.

New Fellows of the Society

The Society also announced the elevation of several members to Fellow status. A Fellow is an individual who has, by proficiency and contributions, attained an outstanding rank among engineers or executives in the motion-picture, television, or related industries. The new Fellows of the Society will be honored and will join their peers at the Annual Fellows Luncheon, to be held Friday, October 14, 1994, at the Los Angeles Convention Center.

The following have been named as new Fellows: Leslie Robert Free, Consultant (Australia); Ronald J. Gnidziejko, NBC; Mervin L. Graham, Graham-Patten Systems, Inc.; Peter D. Hammar, Hammar Communications; Raymond C. Hills, Ray Hills Associates (U.K.); Edward P. Hobson II, Graham-Patten Systems, Inc.; Paul Kellar, Quantel (U.K.); J. Richard Monaco, Monaco Film & Video Labs, Inc.; William W. Peck, Eastman Kodak Co.; Dieter Poetsch, BTS-Broadcast Television Systems

GmbH (Germany); Milton R. Shefter, Miljoy Enterprises, Inc.; Richard L. Thomas, Eastman Kodak Co.; Christian Tremblay, Miranda Technologies, Inc. (Canada); Eleonora L. Vinogradova, NIKFI (Russia); Thomas G. Wallis, Eastman Kodak Co.; and R. Evans Wetmore, Fox, Inc.

The Society extends its congratulations to all of the awards winners and new Fellows. Watch for further details in future issues of the *Journal*.

—Joyce R. Hurwitz

SMPTE 136th Technical Conference Los Angeles Arrangements Committee

General Arrangements**Chairperson:**

Milton R. Shefter
Miljoy Enterprises

Co-Chairperson:

John Brooks
Brooks/Flemming Assoc.

Past Local Arrangements**Chairperson:**

Louis J. Wolf, Jr.
Universal Studios

Program & Papers**Chairperson:**

Howard La Zare
FilmTec International

Conference Vice-President:

Edward Hobson II
Graham-Patten Systems

Registration**Registration Chairperson:**

Margret Byrne
American Film Institute

Banquet/Opening Reception**Banquet Chairperson:**

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Universal Studios

Co-Chairperson:

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Photo-Tronics

Facilities/Security**Chairperson:**

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Membership**Chairperson:**

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Audio/Visual Projection**Co-Chairperson:**

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Audio/Visual Facilities**Chairperson:**

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Co-Chairperson:

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Capp's Electronics

Student Affairs**Co-Chairperson:**

Gail K. Ringer
Ringer Video Services

Co-Chairperson:

Robert J. Ringer
Ringer Video Services

Message Center**Chairperson:**

Paul Van Camp
Forward Momentum

Partners Program**Chairperson:**

Phyllis La Zare

Co-Chairperson:

Denyse Haney

Awards & Fellows Luncheon**Chairperson:**

T. Russell McMurtray
Consultant

SMPTE Office:

Edward Liiv
Hollywood Group Services



1994 WORLD MEDIA EXPO

List of Exhibitors

(as of June 24, 1994)

- 3M
360 Systems
Accuracy in Media
Accu-Weather
Acoustical Solutions, Inc.
A.D.A.M. Software, Inc.
Advanced Audio Visual Systems
Advanced Designs Corp.
Airworks
Alden Electronics, Inc.
AlgoRhythmic Technology
American Association of Retired Persons
American Cancer Society
American Medical Association
Ametron Audio Video, Inc.
Andrew Corp.
Anthro Corp.
Anton/Bauer
Aphex Systems
Arbitron
Arrakis Systems
ASC Audio Video Corp.
Associated Press
ATI/Audio Technologies, Inc.
AT&T
Audio Accessories, Inc.
Audio Precision
Audio Processing Technology
Audion Laboratories
Auditronics
Australian Broadcasting Corp.
Autogram Corp.
Automated Weather Source
Avid Technology
Avitel Electronics Corp.
A-Ware Software
BAF Communications Corp.
Balboa Capital Corp.
BASYS Automation Systems
BBC/Public Radio International
BBH Software
Belar Electronics Laboratory, Inc.
Belden Wire and Cable Co.
Benchmark Media Systems
Best, Inc.
B&H Photo Video
BIA Publications, Inc.
Bittree, Inc.
Bloomberg Financial Markets
Boeing Co.
Bradley Broadcast
British Information Services
Broadcast Design International
Broadcast Electronics
Broadcast Products
Broadcast Programming
Broadcast Selections & Sales
Broadcast Store
Broadcasters General Store
BSW/Broadcast Supply Worldwide
BTS
Bureau of the Census
Burk Technology
Cablewave Systems
Call for Action
Canon USA
Capitol/OGM Production Music
Caption Colorado
Carpel Video, Inc.
CBS/Custom Business Systems
- CCA Electronics
CCS Audio Products
Celcast Communications Products
Centers for Disease Control
Chemical Manufacturers Association
Cinema Products Corp.
Circuit Research Labs
Clark Wire and Cable
ClearCom
CNN
Coalition for Vehicle Choice
Colby Systems Corp.
Columbine Systems, Inc.
Comark Communications, Inc.
Communication Graphics, Inc.
Comprompter, Inc.
Computer Concepts Corp.
Computer Prompting & Captioning Co.
Comrex Corp.
ComStream
Consumer Reports TV News
Continental Electronics Corp.
Crown International, Inc.
Cybertech Systems, Inc.
Dalet Digital Media Systems
Dan Dugan Sound Design
Data Center Management
Data Check Corp.
Datacount, Inc.
Dataworld, Inc.
Dawn Satellite
Denon Electronics
Diaquest
Dielectric Communications
Digi-Net Syndication, Inc.
Digital DJ
Digital Generation Systems
Direct Mail Express
Disneyland Broadcast Publicity
Distilled Spirits Council of the U.S.
Divicom
DNF Industries
Dolby Laboratories
Dorrough Electronics
Dow Jones & Co.
Dr. Red Duke's Health Report
Dynair Electronics
Dynatech Video Group
EarthWatch Communications, Inc.
Econco
Editing Technologies Corp.
Enco Systems, Inc.
Energy-Onix
ENG Mobile Systems, Inc.
Ensemble Designs
ERI
Esoteric Sports Tours
Etak, Inc.
Eventide
Execucocach
E-Z UP International, Inc.
FEE
Fidelipac
FilmHouse, Inc.
FirstCom Broadcast Services
FM Systems, Inc.
Focal Press
Fonet, Inc.
Fresh/The Music Library
Frontline Communications Corp.
- Fuji Photo Film, U.S.A., Inc.
Fujinon, Inc.
Fun Industries
Gentner Communications
Gepco International, Inc.
Global Climate Coalition
Graham-Patten Systems
Grass Valley Group
Griffin Reports
Harris Allied
Hazel's Fantasy Factory
Henry Radio, Inc.
Hewlett-Packard
Hitachi Denshi America, Ltd.
Hi-Tech Enterprises
Holiday Industries, Inc.
Hollywood General Machining, Inc.
Hungerford, Aldrin, Nichols & Nichols
IDB Broadcast
IDC Communications, Inc.
Ikegami Electronics
Image Design Film Technologies, Inc.
IMAS, Inc.
Inovonics, Inc.
Int'l Memory Products of Illinois
International Tapetronics
Investment Company Institute
ITS Corp.
Ivanhoe Broadcast News
JAM Creative Productions, Inc.
Jampro Antennas, Inc.
Jefferson Pilot Co-Opportunities
Jensen Transformers
JVC Professional Products Co.
Kapan Kent Co., Inc.
Kavouras, Inc.
KD Kanopy, Inc.
Killer Tracks
Kino Flo, Inc.
Kintronic Labs
Knight-Ridder/Tribune
Labor Institute of Public Affairs
Larcant-TTC, Inc.
LDL Communications, Inc.
LDS Church Public Affairs
Leitch, Inc.
Lloyd/Lulljak Productions
Logitek
Loral Microwave NARDA
Magic Teleprompting, Inc.
Magnasonic Corp.
Major Networks, Inc.
Management, The
Management Graphics
Market Buy Market
Marketron
Marti Electronics
Matrox Electronic Systems Ltd.
Mead Data Center
Measured Marketing, Inc.
Media Audit (Int'l Demographics)
Media Directives, Inc.
Media Touch Systems
Metro Networks
Mexico Today
Micronet, Inc.
Microwave Radio Corp.
Mighty Minute Programs
Miranda Technologies
Modulation Sciences, Inc.
Mohawk/CDT2822
- Moody Broadcasting Network
Moseley
Motorola
MPR Teltech
Music & Media
National Guard Bureau
NBA Radio
NEC America, Inc.
Nemal Electronics
Network Connection
Network Music, Inc.
Neutrik U.S.A.
News Technology Corp.
Newsmaker Systems
NewsWire 2000 LLC
Nikon Electronic Imaging
Nucomm, Inc.
Nvision
Odetics
Omicron Video
Omnia Group
Omnimusic
Omnitronix, Inc.
Opamp Labs
Orban (formerly AKG Acoustics)
Otari Corp.
Pacific Radio Electronics
Pacific Recorders & Engineering
Panasonic
People's Radio Network
PESA Chyron Group
Phillips Business Information, Inc.
Pike & Fischer, Inc.
Pinnacle Systems
Pioneer New Media Technologies
Potomac Instruments
Poynter Institute
Prime Image
Prime Sports Radio
Pristine Systems
Pro-Bel, Inc.
Promusic, Inc.
Prophet Systems
Provideo
Pulizzi Engineering, Inc.
QTV-O'Connor
Quantel
Questar Systems, Inc.
Radio Computing Services
Radio Deluxe
Radio Design Labs
Radio Express, Inc.
Radio Ink Magazine
Radio Labio
Radio Systems, Inc.
Radio Vision
Ramko Research
Rank Cintel, Inc.
Raytheon Semiconductor
RE America
Register Data Systems
Reuters America
Roland Corp.
RPMC, Inc.
RTI-Research Technology Int'l
Rules Service Co.
Sachtler Corp. of America
Sadie, Inc.
Sanders Media Adventures
Schedual by VizuAll, Inc.
Scott Studies Corp.
- Second Chance Body Armor
Senior Report
Shively Labs
Sigma Electronics, Inc.
Smarts Broadcast Systems
Softtech Systems, Inc.
Softimage, Inc.
Solid Electronics Laboratories
Solid State Logic
Sound Ideas
Southern Baptist Radio-TV Commission
Sports Network
Sports Newsatellite
StandardNews
Starquest Prime Time Productions
Storage Concepts, Inc.
Strata Marketing, Inc.
Superadio
Superior Electric
S.W.R.
SYNCOM
TA&A/Toby Arnold & Assoc.
Tapscan, Inc.
Technical Aesthetics Operations
Tektronix, Inc.
Telecast Fiber Systems, Inc.
Telect
Telex Communications
Telos Systems
TFT, Inc.
Thompson Creative
Thomson Tubes Electronics
TM Century, Inc.
Track Research
Trompeter Electronics, Inc.
Truevision, Inc.
Ultimate Corp.
United Media
Universal Weather
U.S. Army Reserve
U.S. Space Camp
U.S. Tape and Label Corp.
U.S.A. Radio Network
Valentino, Inc.
Veetronix, Inc.
Verrier, Doug Telecom. Consultants
Victory Battery Co.
Videomedia
Videotek, Inc.
Vinten TSM
Vyvx, Inc.
Washington International Teleport
Weather Metrics
Weathernews, Inc.
Weather Services Corp.
Wegener Communications
Welwood International, Inc.
Wheatstone Corp.
Who Did That Music
Will-Burt Co.
Winsted Corp.
Wireworks Corp.
Wohler Technologies
Wolf Coach, Inc.
Worldwide Television News
Wright Line
WSI Corp.
Yaie Electronics, Inc.
Zack Electronics, Inc.
Zaxcom