



*SMPTE President Maurice L. French speaking at the Get-Together Luncheon.*

## The 23rd Annual SMPTE Television Conference

February 3 and 4, 1989

St. Francis Hotel, San Francisco, Calif.

**By Nancy T. Engel**

The 23rd Annual Television Conference of the Society of Motion Picture and Television Engineers was held February 3-4, 1989, at the St. Francis Hotel in San Francisco, Calif. The conference was attended by 658 people.

Most of the attendees had positive reactions to the first SMPTE Television Conference without an equipment exhibit. The general consensus was that the absence of an equipment display allowed people to concentrate more on the technical papers. To make a comparison to conferences with equipment exhibits, 507 people attended the 22nd Annual SMPTE Television Conference in Nashville; and 640 people attended the 21st Annual SMPTE Television Conference in San Francisco.

### The Technical Program

The theme of this year's conference was "Better Video Images." Friday's sessions contained presentations on getting the most from the currently available technology, while Saturday's sessions centered around future production and broadcast technologies. Better Video Images in Current

Production were discussed on Friday morning, and Better Video Images in Current Broadcast were discussed on Friday afternoon.

On Saturday, Better Video Images in Future Production were discussed in the morning; Better Video Images in Future Broadcast were discussed in the afternoon. The implications and different facets of HDTV were explored in depth on Saturday.

During the conference, 29 papers were presented. Three well-attended panel discussions were also part of the technical program. Program Chair Peter Hammar (Hammar Communications) noted that the audience was "motivated and intensely interested in the topics of the panel discussions." He described the discussions as a great learning experience for everyone involved.

The technical program was supervised by SMPTE Editorial Vice-President Frank J. Haney (Capital Cities/ABC, Inc.) and Peter Hammar. The session chairs were Sterling Davis (KTVU-TV), Peter J. Ludé (Ludé Broadcast Engineering), David J. Bancroft (Ampex Corp.), and Roy Trumbull (KRON-TV).

Conference Vice-President Stephen D. Kerman (Tektronix, Inc.) su-

pervised the nontechnical parts of the conference. Working with Kerman were General Arrangements Chair John A. Carlson (Monaco Labs) and the local committee. The local committee members were: Linda Kulmaczewski (Sony Technology Center), Registration Chair; Foster Roizen (Telegen), Registration Co-Chair; Paul Wrangell (UC Santa Cruz), Membership Chair; Jim Moye (Monaco Labs), Membership Co-Chair; Vern Kipping (consultant), AV Chair; Aubrey Harris (Stanford



*Conference Vice-President Stephen D. Kerman speaking at conference.*

University), AV Co-Chair; Les Lieurance (Gordon News Film), PA and Recording Chair; Susan A. Carlson, Spouses Program Chair; Marcia De Hart, Spouses Program Co-Chair; Lincoln Endelman (consultant), Sunday Tour Chair; Glen Pensinger (San Jose Univ.), Sunday Tour Co-Chair; Donald Lincoln (Sutro Tower, Inc.), Wine and Cheese Party Chair; Joe Semmelmayr (consultant), Wine and Cheese Party Co-Chair; and Gary Youngs (Television Associates, Inc.), Opening Tapes Chair.

A complete list of the papers presented appears below in chronological order.

### Papers Presented

#### **Better Video Images in Current Production**

System Wide Integration of Analog and Digital Component Video in a Post Production Environment, *Jim Farney and Bob Frey, Pacific Video Resources, San Francisco, Calif.*

Better Video Through Digital Post-Production Techniques, *Thomas E. Kennedy and Bert Swackhamer, One Pass Film and Video, San Francisco, Calif.*

Conversion to MII, A Major Broadcasters Evaluation, *David Layne, KCNC-TV, Denver, Colo.*

Naturalistic Camera Moves in Image Compositing, *Richard Patterson, Ultimatte Corp., Reseda, Calif.*

The Gemini Process: Theatrical-Quality Video-to-Film Transfer, *Stewart Dickson and Bill Villarreal, The Post Group, Hollywood, Calif.*

Component Digital Switching, *Andy Sheldon, Abekas Video Systems, Inc., Redwood City, Calif.*

601 — In Use, *A. J. Mitchell, The Moving Picture Co., London, England*

Panel Discussion, Moderator: *Sterling Davis, KTVU-TV, Oakland, Calif.*

#### **Better Video Images in Current Broadcast**

8-City DS3 Digital Video Trial — Progress and Networking Features, *Robert J. Blackburn, Bell Communications Research, Morristown, N.J.*

Objective Measurement Methods of Motion Artifacts for 45Mbit, NTSC, DPCM, Bit-Reduction Video CODECS, *Howard Meiseles, Capital Cities/ABC, New York, N.Y.*

International Transmission of HDTV Signals, *Keiichi Kubota, Yuichi Iwa-*

*SMPTE Journal, April 1989*



*Maurice L. French congratulates guest speaker Julius Barnathan after his presentation.*



*On-site registration.*

*date, Kenzo Seo, and Matsuo Matsumoto, NHK (Japan Broadcasting Corp.), Tokyo, Japan.*

How to Use 4:2:2 in the 16/9 Aspect Ratio, *Max Artigas and J. L. Grimaldi, Thomson Video Equipement, Cergy St.-Christophe, France*

Progress Report on Improved NTSC, *Yves Faroudja, Faroudja Laboratories, Inc., Sunnyvale, Calif.*

Reduction of Multipath Effects and Channel Distortion in Broadcast Television, *Melih Pazarci, IIT-Telecommunication Systems Center, Chicago, Ill.*

Surviving in Broadcasting's Standards "Ménage à Trois," *C. Robert Paulson, Artel Communications Corp., Hudson, Mass.*

Panel Discussion, Moderator: *Peter Ludé, Ludé Broadcast Engineering, San Francisco, Calif.*

#### **Better Video Images in Future Production**

EBU Activities in the World-Wide Search for HDTV Studio Standards, *Charles P. Sandbank, BBC, London, England, and David Wood, EBU, Brussels, Belgium*

Reducing Financial Aliasing in HDTV Production, *Charles A. Pantuso, FVF, Austin, Tex.*

Second Generation HDTV Camera, *Laurence J. Thorpe, Sony Advanced Systems, Teaneck, N.J.*

Engineering and Programme Produc-

tion Experience with High Definition Television, *Norman W. Green, Derek P. Allsop, and Mike A. Elgey, Independent Television Associations, London, England*

HDTV Graphic System, *T. Fujimori, Sony Communications Products Co., Teaneck, N.J.*

Compatible Hierarchy of Studio Standards for HDTV, *Jean Chatel, Thomson Video Equipement, Cesson-Sevigne, France*

NTSC Compatible Advanced Television System and Implications for Studio Standards. *S. Merrill Weiss and Kerns H. Powers, National Broadcasting Co., New York, N.Y.*

Future HD Video Production, *Kotaro Wakui, Dentsu, Inc., and Noboru Yura, Imagica, Tokyo, Japan.*

### **Better Video Images in Future Broadcast**

The European Perspective on HDTV, *John R. Forrest and Gary Tonge, Independent Broadcasting Authority, Hampshire, England*

High Definition Transmission, Signal Processing and Display, *William E. Glenn and Karen G. Glenn, New York Institute of Technology, Dania, Fla.*

Spectrum-Compatible High-Definition Television Transmission System, *Wayne Bretl, Richard Citta, Ronald Lee, P. Fockens, Zenith Electronics Corp., Glenview, Ill.*

High Definition Television and Today's Broadcasting World, *Yozo Ono, NHK (Japan Broadcasting Corp.), New York, N.Y.*

Evolutionary Approaches to Advanced Television — Making the Migration Possible, *S. Merrill Weiss, National Broadcasting Co., New York, N.Y.*

A Compatible High-Definition Television System Using the Noise-Margin Method of Hiding Enhancement Information, *W. F. Schreiber, E. H. Adelson, B. Girod, P. Shen, P. Monta, H. Sallic, K. Zangi, and W. Chou, The Media Laboratory, MIT, Cambridge, Mass., and A. N. Netravali, AT&T Bell Laboratories, Murray Hill, N.J.*

The Economic Impact of HDTV, *Sidney Topol, Chairman of EIA ATV Committee, Washington, D.C.*

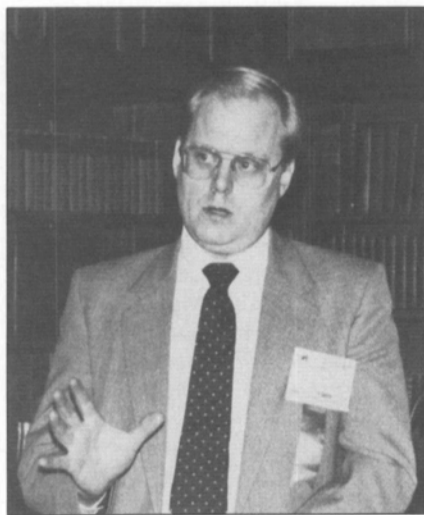
Panel Discussion, *Moderator: Joseph Roizen, Telegen, Palo Alto, Calif.*



*The Board of Governors meeting.*



*Session Chair Sterling Davis*



*Program Chair Peter Hammar*



*General Arrangements Chair John A. Carlson*

## Get-Together Luncheon

On Friday, February 3, 450 people attended the Get-Together Luncheon, held in the California East and West Rooms of the St. Francis Hotel. Extra tables and chairs had to be brought in to accommodate the last-minute registrants who wanted to hear Julius Barnathan, the guest speaker.

SMPTE President Maurice L. French (Canadian Broadcasting Corp.) welcomed everyone and introduced Barnathan, president of broadcast operations at Capital Cities/ABC, Inc. Barnathan is responsible for the planning, designing, and acquiring of equipment and facilities for all broadcast areas of the network. He received Emmy Awards for the 1976 and 1984 Summer Olympics and the 1980 Winter Olympics. He has been with Capital Cities/ABC, Inc., since 1954. Barnathan gave a lively and thought-provoking speech. The texts of French's and Barnathan's speeches appear at the end of this article.

## Other Activities

A coffee club, sponsored by Sony Corp., was held on Friday and Saturday mornings. The buffet-style continental breakfast, served from 7:45 to 10:00 a.m., provided a casual meeting spot before people went in to the sessions.

On Friday evening, Society officers and members of the Program Committee met with the trade press. Maurice L. French, Frank J. Haney, Peter Hammar, Stephen D. Kerman, and Engineering Vice-President Stanley

N. Baron (NBC, Inc.) made short statements and answered questions.

A wine and cheese party was held Friday evening at the Kensington Hotel (formerly the Elks' Club). The reception was sponsored by Station KTVU, Station KRON-TV, Station WPIX, Station KGO-TV, Viacom Cablevision, Sutro Tower, Inc., Telecommunication Properties, and the San Francisco Satellite Center.

The Spouses Program started with breakfast on Friday and Saturday mornings. On Friday, the group visited the kitchen of Judith Hokins, where they were given a demonstration of California spa cooking. On Saturday, the spouses visited three picture-perfect Victorian homes, known as the "Painted Ladies." The owners of the homes led the tours themselves. Lunch was served in the dining room of the third house visited, the Westerfield mansion.

## Engineering Demonstrations

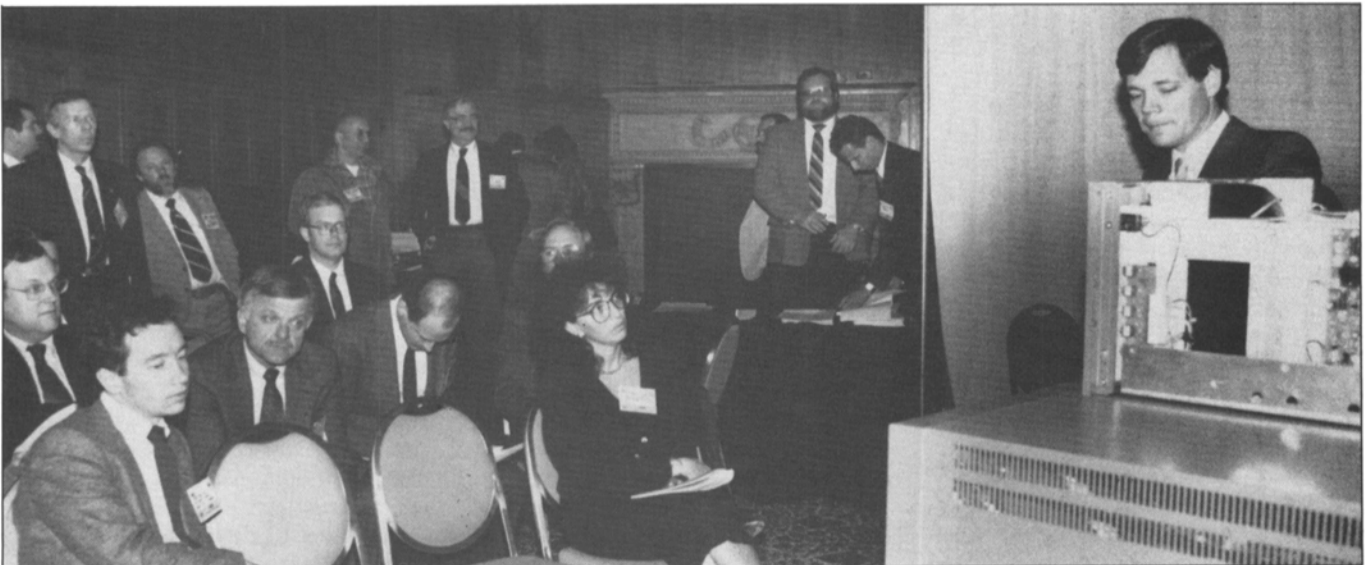
The 1989 Television Conference also featured two engineering demonstrations. The SMPTE Working Group on Professional/Studio Picture Monitor Systems showed that consistency within the NTSC system is possible if monitors are placed in a fixed viewing environment. The Chair of this Working Group, Joe Kane (Reference Recordings), was encouraged by the reaction to the demonstration. He said, "Because the demonstration has made it clear that the system works, a majority of post-production houses and, wherever possible, broadcasters will attempt to implement the Recommended Practice

displayed." Broadcasters were surprised by the results, according to Kane. He said they were seeing quality that they admittedly could not get in their own studios.

The second engineering demonstration was given by the Ad Hoc Group on High-Definition Production Colorimetry. The results of three of the colorimetry parameters specified in SMPTE document 240M, Signal Parameters — 1125/60 High-Definition Production System, were successfully displayed. The Chair of the colorimetry group, LeRoy DeMarsh (Eastman Kodak Co.), said he had received many favorable comments on the demonstration. He was pleased that the audience could see some of the first early-stage equipment developed specifically to comply with the long-range recommendations of the colorimetry committee — an HDTV camera and monitor provided by Sony Corp.

## Post-Conference Tour

On Sunday, 45 people enjoyed a post-conference ride around San Francisco on a 1912 streetcar, Car No. 1. The day started at the historic and ornate Castro Theater with a concert on the theater's Wurlitzer organ. After the concert, John and Susan Carlson generously invited the group to their restored Victorian home to wait for the streetcar, which was running late. Box lunches and champagne were served once the streetcar arrived. The sun had finally come out and everyone thoroughly enjoyed this relaxing way to end the conference and see San Francisco.



Joe Kane demonstrating monitor calibration.