15th Annual SMPTE Television Conference

6–7 February 1981, St. Francis Hotel, San Francisco

San Francisco will be the site of the 15th Annual Television Conference, and the host Section, which has made all of the local arrangements, is looking forward to another successful conference.

The program "Production and Post Production in the Eighties," is listed below, as well as all other activities planned for attendees. Spouses activities, under the direction of **Fran Kennedy**, will be offered during the two day conference.

Friday Evening Reception

A reception will be held on Friday evening at Sabella's Restaurant, located at Fisherman's Wharf, and is open to all conference registrants.

Get-Together Luncheon

On Friday, the Get-Together Luncheon at the St. Francis will be held at noon with guest speaker **Pat Polillo**, Vice President and General Manager of KPIX — Westinghouse Broadcasting. Tickets are $25 each.

Spouses Program

This program, put together by **Fran Kennedy**, will be on Friday and Saturday, will cost $20, and is open to all interested spouses. Continental breakfast will be available on Friday and Saturday mornings. On Friday there will be local activities, on a dutch-treat basis. On Saturday a bus will take the spouses to Fisherman's Wharf, and from there a ferry will transport the group to Angel Island. Lunch will be at Tiberon, after which people will be free to sight-see or depart at their leisure.

Registration Rates

Member Registration	$ 90
Nonmember Registration	100
Member Daily	60
Nonmember Daily	65
Ladies Registration	20
Get-Together Luncheon	25

Equipment Exhibit

As an adjunct to the Technical program, the Conference will feature an Equipment Exhibit. This Exhibit will complement the program because it will contain only equipment that relates directly to the subjects being discussed at the technical sessions. Most of the major manufacturers of the appropriate equipment will participate. A list of exhibitors will be available from SMPTE Headquarters after 6 January.

ADVANCE PROGRAM

This program contains all papers accepted for the Television Conference as of 18 November 1980. Additional papers are being reviewed and will be included in the Final Program, available at the Conference. Questions about specific papers or sessions should be addressed to Program Chairman **Louis (Dee) Pourciau**, 15 Valencia Court, Portola Valley, Calif. 94025, (415) 851-2988; or to Conference Planning Manager **Lynne Robinson**, SMPTE, 862 Scarsdale Ave., Scarsdale, N.Y. 10583 (914) 472-6606. The final program, with titles of papers, authors, and times of presentation, will be available from SMPTE Headquarters on 23 January, and at the Conference.

Friday Morning, 6 February

Digital Television Recording

A Report on the Digital Television Tape Recording Study Group User Survey
D. Schnuelle, *TPC Communications, Sewickley, Penn.*

Error Correction and Concealment
D. Nasse, *CCETT, Rennes, France*

Aspects and Considerations About the Mechanical Format of Digital Video Tape Recording
H. Groll, *Bosch-Fernseh, Darmstadt, W. Germany*

A Format for Digital Television Recording
John Baldwin, *Independent Broadcasting Authority, London, England*

Digital Video Tape Recording with Increased Packing Density: A Progress Report
M. Morizono, H. Yoshida, Y. Hashimoto, and T. Eguchi, *Sony Corp., Tokyo, Japan*

Formats for Digital Video Tape Recorders
M. Felix, *Ampex Corp., Redwood City, Calif.*

A New Modulation Code for Magnetic Digital Recording Characterized by Low Reduced Error Percentage
M. Artigalas, *Thomson-CSF, Stamford, Conn.*

Mechanical Tape Format Considerations for Digital Television Recording
C. Robert Thompson, *RCA, Camden, N.J.*

Friday Afternoon

New Camera Technology

Reflections of a Camera Designer
L. Germany, *Pye TVT, England,* and H. Blom and E. Tienkimp, *Philips, The Netherlands*

A Sub-Camera Using Built-in Computer Control System
T. Sueoka, *NHK, Tokyo, Japan*

High Resolution Camera System
A. Franken, *Philips, The Netherlands*

Advances in EFP Camera Design
John Ryan, *Ampex Corp., Redwood City, Calif.*

Digital Television Error Reduction
A. A. Goldberg and J. Rossi, *CBS Technology Center, Stamford, Conn.*

Lag Reduction and Lag Characteristics of Television Camera Tube Signals
R. G. Neuhauser, *RCA Corp., Lancaster, Penn.*

D.V.T.R. Editing Considerations for Multiplexed Audio Versus Separate Audio Edge Tracks
Kenneth Clunis, *3M/Mincom Div., Camarillo, Calif.*

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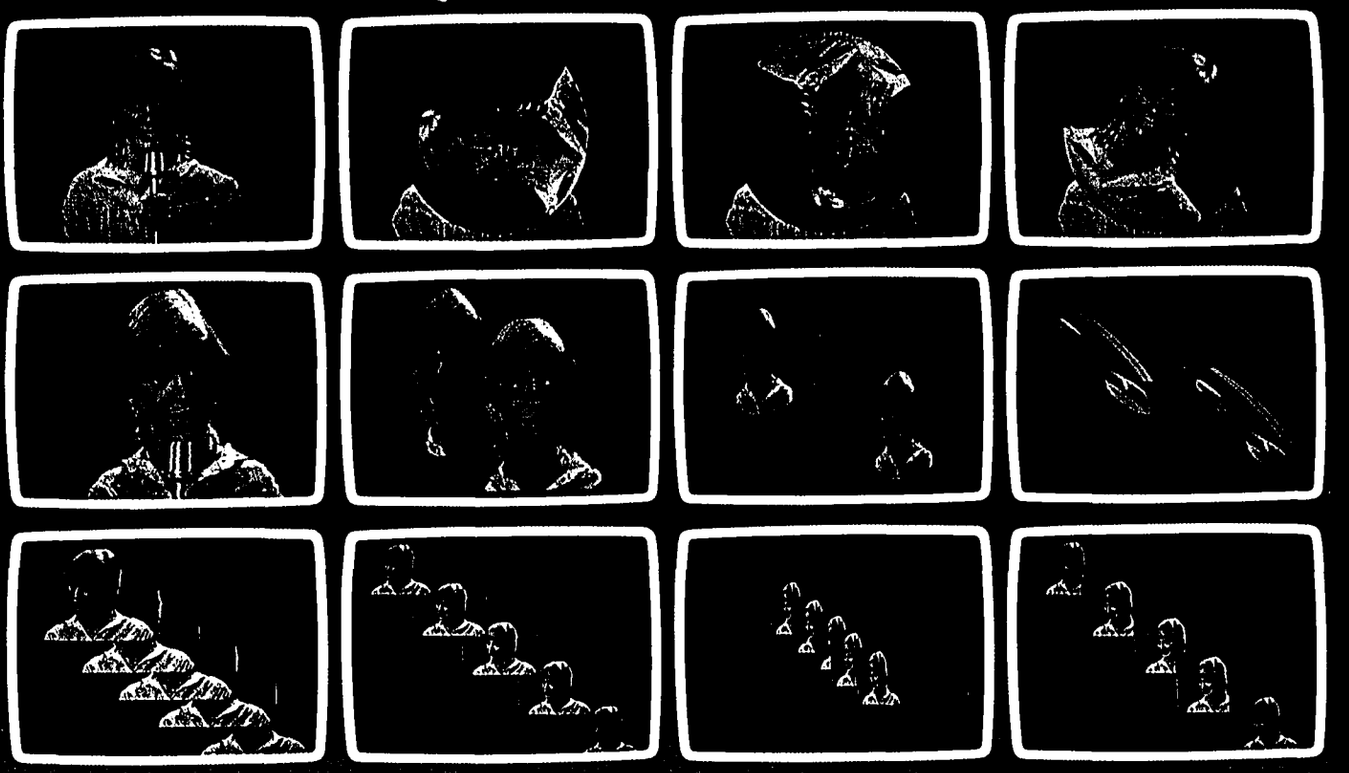
The Quantel DPE 5000.



The digital effects system that will turn your head around.

Rotate it 360 degrees.

Manipulate it into an infinity of forms.

Flip it. Tumble it. Spin it.

But because not every broadcaster needs all these capabilities now, we've built the DPE 5000 to grow. Endlessly.

You can buy the basic single channel system and generate an array of optical quality digital effects. Infinite compression. Variable picture positioning. Freeze. Border generation. Position, size, and transition rate preselect. Horizontal and vertical squeeze. Key tracking.

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"No-Blank" noise reduction with blanking correction.

"Autosequence" effects recall system.

"Digiflip" flip, tumble, and spin.

"Autoflex" effects package for special shapes.

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And up to four additional channels to give you effects on five pictures simultaneously.

All these options can be added to your basic DPE 5000 at any time. And this goes for *any* DPE 5000—all the way back to serial number 1. We want your digital effects system to grow, not become obsolete.

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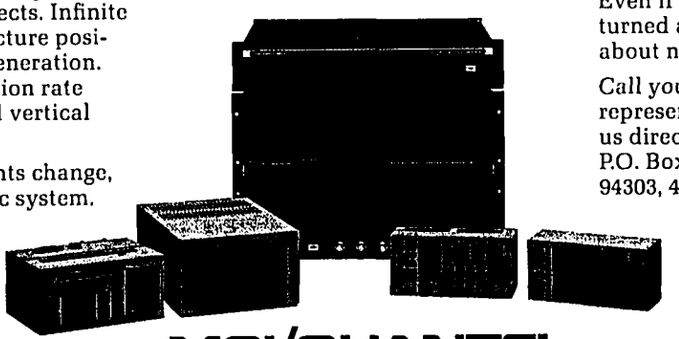
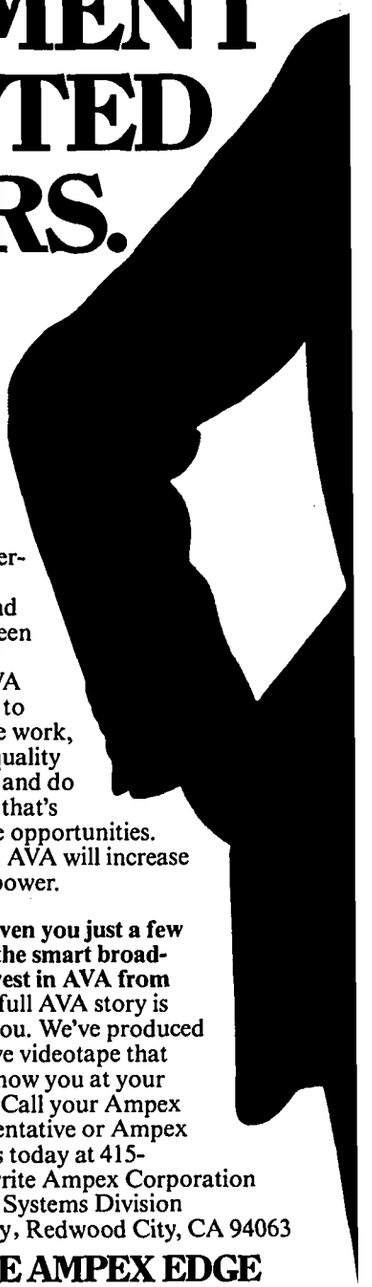
Call your nearest MCI/Quantel representative. Or get in touch with us directly. Micro Consultants, Inc., P.O. Box 50810, Palo Alto, California 94303, 415/856-6226.



MCI/QUANTEL

The digital video people.

AT $200,000 AVA FROM AMPEX IS A SMART INVESTMENT FOR PROFIT-ORIENTED BROADCASTERS.



AVA is a new, computerized video art system that will change the look of TV graphics. At $200,000 it represents a major buying decision. So we've asked ourselves the same question that you will ask. Why should I invest that kind of money in a new concept?

Local News. It's a way to own the market. If ratings are good for the 6:00 news, then the stage is set for the following programming.

With AVA, you'll open a new world of possibilities in news presentations. That unique "look" that means so much in the ratings race can belong to your station.

AVA allows the TV artist to "stretch out" with new, innovative techniques and allows him to perform a full range of video art tasks that, up until now, were extremely time consuming or just not practical for TV productions!

Furthermore, AVA lets the artist work entirely in the TV medium. With all graphic tie-ins—maps, symbols, prominent people, free hand compositions, any original art—your news department will realize greatly improved turnaround time.

Fast-breaking news stories will not be a problem. If necessary, original art can be turned out in minutes and fed immediately to your news program.

Local Commercials Are Bread and Butter. AVA has some nice tricks in store for your commercial and program producer. As the artist creates on the AVA screen, a computer remembers each stroke of the "brush." That means AVA can recall each action created and replay the creation of that picture in an animated fashion.

Add to this the ability to introduce almost any visual effect into your commercial production, and you'll begin to see profit potential. Your sales staff will have an unbeatable sales tool, as well. AVA can produce hard copies of any art work desired. Thus, your sales people can make custom presentations to potential clients.

Station promos. How good should they be? Your creative people will love the possibilities AVA brings to promotions. That unique, quality look AVA brings to news and commercials will also bring a new, fresh look to promotion.

Since AVA opens up creative possibilities, you'll find your staff eager to produce exciting new video art for station promotion.

AVA will reduce costly mistakes. Video art slides have been known to disappear moments before air time. And a last minute search of the art files often turns up an original graphic that, to put it kindly, is a mess. AVA's computer storage system will reduce those types of error.

Recall of often-used graphics is built-in with the AVA system. The operator simply recalls the desired art work by selecting the name or number assigned. When the recalled artwork appears on the AVA screen, it can be broadcast as shown, or last minute changes made!

With AVA your image is consistent and always professional.

AVA lets people do their best. Getting the most out of your best people can make the difference between mediocrity and success; between profit or loss!

With AVA you'll be able to produce more work, increase the quality of that work, and do it with a staff that's excited by the opportunities.

In short, AVA will increase your people power.

We've given you just a few reasons why the smart broadcaster will invest in AVA from Ampex. The full AVA story is available to you. We've produced an informative videotape that we'd like to show you at your convenience. Call your Ampex Sales Representative or Ampex Headquarters today at 415-367-2911 or write Ampex Corporation Audio-Video Systems Division 401 Broadway, Redwood City, CA 94063

GET THE AMPEX EDGE

AMPEX

15th Annual SMPTE TV Conference

(Continued from page 46)

Saturday Morning, 7 February

Multichannel Sound for Television

Japanese Multichannel and Stereo Television Sound Experience
K. Iizuka, *Tokyo Broadcasting System, Inc., Tokyo, Japan*

Future Direction for Television

The NHK High Resolution Wide-Screen Television System
Dr. T. Fujio, *NHK, Tokyo, Japan*
High Definition Television
M. Joseph Polonsky, *Thomson CSF, Gennevilliers, France*
Comparisons of High Resolution Television
Dr. Wendlantt, *Dortland University, Germany*
NHK Demonstration on High Resolution Television

Saturday Afternoon

The All-Digital Studio

World Standardization — Now or Never
T. Robson, *Independent Broadcasting Authority, London, England*
Systems Engineering Considerations in the All-Digital Television Production and Transmission Centre
Michael S. Tooms, *Protel Broadcast Services, Ltd., Camberley, England*
Digital Decoding of PAL and NTSC Signals Using Field Delays, Comb Filters, and Line Lock Sampling
C.K.P. Clarke, *British Broadcasting Corp., London, England*
Test Signals in the Digital Domain
J. Judge, *Tektronix, Beaverton, Ore.*
Panel Discussion on Digital Video Component Tests Performed by the SMPTE Committee on New Technology:
Chairman Robert Hopkins, *RCA Corp.;* Participants: Frank Davidoff, William Connolly, Charles Ginsburg, and Ken Davies

Industry News & Educational Activities

Vladimir Kosma Zworykin, 91-year-old television pioneer, has been honored by the Eduard Rhein Foundation of Germany for his many contributions to "fully electronic" television. Eduard Rhein, a German writer, publisher, and physicist, personally presented Dr. Zworykin, Honorary RCA Vice President, with the first Rhein Ring award. The Rhein Foundation established the award of the Ring as a "prize of honor" for persons who have made significant contributions to audiovisual techniques.

Dr. Zworykin, a member of the U.S. National Inventors Hall of Fame, in 1968 received America's highest technical honor, the National Medal of Science from President Lyndon Johnson. Dr. Zworykin's developments of the iconoscope, a revolutionary camera tube that made possible practical television picture transmission, and the kinescope, or television picture tube, are credited with having made fully electronic television possible by eliminating the need for spinning disks and other mechanical devices used in early television systems.

German recognition of Dr. Zworkykin's accomplishments "is truly befitting" according to Prof. Walter Bruck, President of the Rhein Foundation's Scientific Advisory Board and inventor of the PAL system used in Germany. He said, "It was in Germany that Dr. Zworykin's iconoscope was used for live transmission for the first time. Two television cameras employing iconoscopes broadcast the 1936 Berlin Olympic Games."

Three rare television receivers from the 1930s have been donated to the Academy of Television Arts and Sciences/UCLA Television Archives by Harry Lubcke, who directed development of Los Angeles's first electronic television station, W6XAO. Two of the receivers, both of the 12-in variety, were designed and built by the W6XAO staff in 1937 and 1938. The third receiver, a TRK-12, was manufactured by RCA in 1939 and is one of the earliest receivers to be sold publicly.

The Television Archives have also acquired a TK-10 studio camera deposited by television station KTLA, Los Angeles. Built by RCA, the TK-10 was the first production camera to be sold in quantity, beginning in 1946. The name "Emmy" for the Television Academy Award was coined by Harry Lubcke as a nickname for the image orthicon tube first used in the TK-10.

The Television Archives are jointly run by the Academy of Television Arts and Sciences and the University of California at Los Angeles. The recent acquisitions are part of a major effort by the ATAS/UCLA Television Archives to build a Technology and Design collection relating to the development of broadcast equipment and home receivers. The collection will be used for research and educational exhibits.

Assisting the Archives as technical advisors to the Technology and Design collection are television historian Edwin H. Reitan, with ITT Gilfillan, and Albert Abramson, with CBS, Hollywood. Robert Rosen, Archives Director, said the decision to establish a Television Technology and Design collection was in response to the immediate and critical need to preserve important samples of the technology which enabled the television medium to advance. Already many items representing major historical milestones no longer exist.

Artifacts in this "lost" category include the earliest television cameras of the iconoscope and orthicon pickup tube varieties, electronic television receivers developed in the early and mid-1930s, and the experimental color television receivers used in the field testing of color television.

The North American Photonics Association is a new international scientific organization formed 5 October 1980 in Madison, Wis., by a group of leading technologists in the field of high speed imaging technology representing the United States and Canada. Photonics is the scientific discipline that deals with the detection, recording, and measuring of high speed phenomena by means of images formed of photons. The new organization aims at advancing the technology of high speed imagery by means of advanced education, training, and more widespread dissemination of technical information.

Elected officers of the new organization are: President, William G. Hyzer; Vice-President, Donald Clayton; Secretary-Treasurer, Robert Rowlands. Board members are: Robert Shoberg, Gilbert Pendley, Lincoln Endelman, and Eugene O'Connell.

Further information is available from Prof. Robert Rowlands, University of Wisconsin, 1415 Johnson Dr., Madison, WI 53706.

The Video Movie (provisional name), a single unit color video camera-cassette recorder has been developed by Sony Corp. of America and released as a prototype. In announcing the new recorder (which weighs only 2 kg — about 4.4 lb) Sony spokesmen revealed plans to "invite other technically qualified manufacturers to discuss ways of arriving at a common videocassette and video recording format."

The prototype Video Movie system consists of a one-chip CCD color video camera, an extremely small VTR, and the attachable Home Editor. The camera's one-chip image sensor, measuring 10 × 12 mm, provides certain advantages, other than light weight (the camera with its lens and viewfinder weighs