
Components of the Future

The 19th Annual SMPTE Television Conference

February 15–16, 1985, San Francisco

The 19th Annual Television Conference of the Society of Motion Picture and Television Engineers (SMPTE) was held Friday, February 15, through Saturday, February 16, at the Westin St. Francis Hotel in San Francisco. More than 800 television engineers, scientists, and technical and management people from all corners of the globe attended this internationally famous conference.

The theme of the two-day meeting was "Components of the Future." The topics of the conference sessions were: Digital Components (Friday morning), Analog Components (Friday afternoon), Future Technology (Saturday morning), and Stereo Audio in Television (Saturday afternoon).

Equipment Exhibit

A 43-booth equipment exhibit was held Friday and Saturday in conjunction with the technical program.



General Arrangements Chairman Glen Pensinger (left) and Program Chairman John Streets.



The Board of Governors meeting on Thursday morning. From left to right, Sections Vice-President Si Becker, Executive Vice-President Carlos Kennedy, President Harold Eady, presiding, Past-President Leonard Coleman, and Financial Vice-President Blaine Baker.

Equipment relating directly to the conference theme was featured.

Among the companies that participated in the exhibit were:

- Abekas Video Systems, Inc.
- Ampex Corp.
- Asaca/Shibasoku
- B&B Systems, Inc.
- Dolby Laboratories
- DSC
- Fortel, Inc.
- FOR-A Corp. of America
- Grass Valley Group
- Harris Corp. Broadcast Group
- HEDCO
- Ikegami Electronics (USA), Inc.
- Image Video Ltd.
- Kintek
- 3M Co.
- Merlin Engineering
- MCI/Quantel
- Nagra Magnetic Recorders, Inc.
- NEC America, Inc./Broadcast Equip. Div.
- Orban Assoc., Inc.
- Panasonic Industrial Co.
- Sony Broadcast Products Co.
- Sound Technology, Inc.
- Thomson-CSF Broadcast Inc.
- Utah Scientific, Inc.

Get-Together Luncheon

The San Francisco Television Conference featured a Get-Together Luncheon on Friday afternoon with SMPTE President Harold J. Eady, Novo Communications, Inc., presiding. Joe Roizen, Telegen, was the luncheon's guest speaker. The texts of Eady's and Roizen's addresses follow.



SMPTE President Harold Eady addressing the press at the press briefing.



Edward Messina welcoming the press at the SMPTE press briefing.



Conference Arrangements Chairman Glen Pensinger introducing Harold Eady at the Get-Together Luncheon. Joe Roizen is at left.



Newly-elected members of the Board of Governors attending the Governors Training Seminar are: seated, left to right, Joseph Ulasewicz, Herman Badler, Glen Pensinger, and Earl Arbuckle III. Standing, left to right, are Michael Fisher, Murray Forrest, John Newell, James Caron, and Fred Remley.



Editorial Vice-President Howard T. La Zare at the press briefing.



Conference Vice-President Maurice French talks to the press.



Engineering Vice-President Richard Streeter at the press briefing.



The Get-Together Luncheon during the speech by Joe Roizen.

President's Introductory Remarks

By Harold J. Eady

We have come a long way in 19 years since our first Television Conference, which was held during a major snowstorm in Detroit. Appropriately so, at that time we called it the Winter Television Conference. The technological change since 1966, when the late Howard Town initiated the idea of an annual TV Conference, has been quite staggering.

It is truly a pleasure for me, at my first public function as the new SMPTE President, to welcome you to this conference in San Francisco, the third largest SMPTE Section in the world. I say world, as we have become truly an international Society. Of our present 8200 plus members, over 1800 are from outside the United States.

The San Francisco Section has grown from 276 members to 566 over the past eight years. This is a good example of what can be done throughout the Society. For everyone involved in the motion-picture and/or



SMPTE President Harold Eady welcoming attendees at the Get-Together Luncheon.

television industries, membership in the SMPTE is a must and a bargain! The Society is a very prestigious organization and as members, we receive many benefits such as the *SMPTE Journal*, national and section meet-

ings, involvement in engineering committee work, and contribution towards one of the most important aspects of the SMPTE — standardization.

You are probably thinking I'm on a membership drive. Well I am! There are many in our industry who would certainly benefit from Society membership, so let's recruit them!

I would like to extend my personal congratulations to the present San Francisco chairperson, Mrs. Donna Foster-Roizen, for her diligent effort in maintaining a very strong section. Also, I would like to express my personal congratulations and appreciation from the Society's officers and governors to two individuals and all of their committees for making this conference possible; Local Arrangements Chairman Glen Pensinger of San Jose State University, and Program Chairman John Streets of Merlin Engineering Works.

I wish you all a good conference, and I thank you very much.

Guest Speaker's Luncheon Address

By Joseph Roizen

Mr. President, distinguished guests, fellow members, and ladies and gentlemen. First, let me say that I feel greatly honored to have been asked to address this group at our Annual Television Conference, and I would like to thank the Program Committee for extending this welcome invitation.

In choosing a topic for this luncheon speech, I had discarded any notion of a technical presentation, since seated among you are the acknowledged experts from the world's leading TV research organizations, who have come here to inform us, during the course of our conference, of the most recent technological advancements in their laboratories. Since you are getting

your information directly from the "horse's mouth," so to speak, I didn't want to risk sounding like the other end of the horse.

Fortunately, I didn't have to look very far for an idea that would both spur my imagination and hopefully present you with a challenge for the future. My oldest son, Ron, is a sociologist at the University of California, Berkeley (the Mecca of his acquired religion). When I asked him for some comments on how television has not lived up to its societal potential, he pointed out rather vehemently that perhaps its greatest failing was its almost invisible role in international relations between adversary social systems. "When was the last time you saw a meaningful Russian program in America?" he asked me, and he went on to point out that the converse was probably equally rare or non-existent.

Two other incidents occurred this week that further catalyzed the ideas I am about to present. First, just a few days ago, while watching a national network morning show, I heard Charles Wick, director of the United States Information Agency, say that he was about to make an unusual proposal to the Reagan administration. Wick's revolutionary idea, based on modern satellite television technology, was to hold bilateral press conferences between the leaders and the press corps of the world's two major adversaries, the U.S. and the Soviet Union. This morning as we drove into San Francisco, a newscast on our car radio carried a UPI story that several members of the Russian Politburo would come to Washington to visit our seat of government and observe the operation of the House and Senate firsthand.

Both the comments of my son, and Charles Wick's remarks, focused my

Joseph Roizen is president, Telegen, Palo Alto, Calif.

attention on a now historical political incident in the international arena, in which some new television technology of that era (circa 1959) had played a major role. Since I had a personal association with both the technical and the geopolitical aspect of this famous (or infamous) event, I would like to take this opportunity to expand on its role in the annals of broadcasting.

I am speaking of the "Nixon/Khrushchev Kitchen Debate" which took place in the American National Exhibition, Sokolniki Park, Moscow, on July 28, 1959. This impromptu and animated exchange, between these leaders of opposing political and social systems, was covered by an RCA TK41 color camera, and recorded on an Ampex VR1000B quad VTR with a 1010 color system. Aired by all American networks and the CBC, this roughly 18-minute debate was seen by 72 million viewers, the largest television audience for a single program to that date, and was of sufficient import to win Ampex an Emmy Citation.

In retrospect it appears to be the only incident that ever presented two national leaders of opposing political systems in an unrehearsed argument over the merits of capitalism versus communism. Even more surprising is that the entire debate, without benefit of censorship or editorial license, was shown to huge audiences over the national networks of both countries.

There are some important sidelights



Guest speaker Joe Roizen.

to this unusual videotape that are worth pointing out. During the debate, Khrushchev, apparently not very cognizant of American history, asked Nixon for America's age, and guessed at 300 years. When corrected that the U.S. was only 183 years old, he compared the achievements in the USSR's 42 years of existence under communism with the U.S., and stated jocularly, "With the rapid progress we have been making, it won't be long before we will bury you in an avalanche of consumer goods, and as we pass you (America), we will wave bye-bye and invite you to try and catch up with us." This was all said with a

great degree of hand-waving and finger-wagging to pantomime his good-natured challenge. When reported in the print media, the taken-out-of-context term, "we will bury you," made ominous-sounding headlines in the U.S. press. However, when seen on television, it was Nikita at his country bumpkin best, outfoxing city slicker Richard Nixon at his own game.

During the tape, Nixon suggested that better relations between the Soviet Union and the U.S. would surely come from more television program exchange. "You should see us more on your television, we should see you more on ours," was one of Nixon's comments, and after some further discussion about the problem of the language barrier they agreed to have appropriate translations made of the sound track, and to run the recorded debate in both countries soon after. Khrushchev sealed the deal with a hearty palm-slapping handshake, and they walked off camera to see the replay on the Ampex machine.

Unfortunately, that was the last time such an extemporaneous and incisive glimpse of arch-rivalry between international political leaders ever showed up on our screens. Since then we've seen only canned statements or preagreed and mostly empty rhetoric that is jointly issued at the end of any multinational meeting dealing with the crucial issues of the day, in Geneva, in Washington, or elsewhere.

When taken in its full context, the Nixon/Khrushchev Kitchen Debate was a breath of fresh air in the then murky atmosphere of international relations. Both American and Russian audiences, seeing the good-natured exchange between their Top Banana and our Number Two (who was trying harder), could hope that this could be the start of a more pragmatic dialogue about bettering future relations between their two respective countries. By contrast today, we have frequent short excerpts on television of seemingly intransigent statements by either Ronald Reagan or Constantin Chernenko, none of which serve to allay our fears about eventual nuclear confrontation. Television, in this case, even with its vaunted high-tech satellite instantaneity, is not serving mankind in a beneficial or even benign manner; it may, in fact, be exacerbating the problem.

What I would like to propose, therefore, to all of you who play a significant part in the television world, is



Harold Eady (right) shakes hands with luncheon guest speaker Joe Roizen at the reception prior to the Get-Together Luncheon.



Conference Vice-President Maurice L. French (left) and Editorial Vice-President Howard T. La Zare.

that each of us strive to increase the exchange of programming between ourselves, and with those countries with which it is vital that we have a better understanding of each other's social systems. The fact that "Dallas" or "Dynasty" play to big audiences in England, France, or Sweden, is fairly inconsequential, since these countries already share many political institutions with us, and could be categorized as friends. Mr. Wick's idea of bilateral news conferences with the Soviet Union is a good start, but we should also try to exchange other more general programs of art and culture and non-embargoed technology. PBS must surely produce an hour or two every week that would attract Russian viewers, and it is hard to imagine that the five channels in Moscow do not have an equivalent amount of programming that would draw American viewers. Almost anything that would image normal and median day-to-day living in both societies would ultimately help to build bridges of understanding that would reduce the likelihood of an ultimate and devastating conflict that neither side really wants. Broadcast television would then be serving its most important role, if it contributed its significant share to easing international tensions.

While the foregoing is a serious and, I believe, achievable proposal, I am tempted to delve into the realm of po-

litical conjecture, by extrapolating the UPI report I mentioned earlier. If Politburo members come to observe our Senate and House in action, we can expect some reciprocity from the Soviet government for our lawmakers to have an inside look at their workings in the Kremlin.

Let us imagine then that "detente" with the USSR reaches its ultimate

level, an exchange of leaders for a three-month period, where President Reagan goes to Moscow to run things over there while Chairman Chernenko comes to Washington. One can assume that certain aspects of running large governments must be the same, and both leaders would find these similarities heartening. There would, of course, also be some dramatic differences that neither chief of state could avoid. Chernenko would suddenly find his state of health a daily item on the national news, with open speculation about his fitness for office. He would probably take umbrage at Jack Anderson's columns, the *Washington Post* in general, and perhaps even the *National Enquirer*.

Reagan's letters home to Nancy might also reflect a stunned realization that everything about the "Evil Empire" is not necessarily bad from his new perspective. "You won't believe this, Nancy, but when I first got here I asked for discipline in the schools and crime abatement in the streets, and boy, did I get it! I gave a State of the Soviet Union address on their TV the other day, and absolutely no one even asked for equal time! There hasn't been a leak on sensitive information out of the Kremlin for at least ten years, and every bill I send down to the Politburo gets passed with a 100% unanimous vote — if only Tip O'Neill could see me now!"

Well, ladies and gentlemen, it is



SMPTE Financial Vice-President Blaine Baker and SMPTE Past-President Charles Anderson at the pre-luncheon reception.

unlikely that this flight into political fantasy is ever likely to come true, but I would like to come back to the main theme of my presentation here today.

These are indeed exciting times in the world of television, both on the technology side and on the new possibilities for greater program exchange. The satellites and portable uplinks that make television neighbors of all the diverse peoples who inhabit our planet Earth, provide us all with a near-term window of opportunity to channel this priceless resource toward the aims of international goodwill and universal peace. Let us hope that these worthy goals for global television are indeed achievable.

Acknowledgments

The Society expresses its thanks to the following companies and organizations for providing necessary services and equipment:

Audio cassettes, 3M Co.; audio recording, W.A. Palmer Films; Coffee Club, Sony Broadcast Products Co.; audio cassette machines, San Jose State University; audio/visual equipment, Ampex Corp. (VPR-6), General Electric Co. (video display projector); Spouses Continental Breakfast, Ampex Corp.; Spouses Program, W.L.R. Research, Graham-Patten Systems, Barclay Research Group, Hedco, Fujinon, Thomson-CSF Canon, Ikegami, and Angenieux.



SMPTE Executive Vice-President Carlos Kennedy with SMPTE Engineering Vice-President Richard Streeter at the Get-Together Luncheon.

Other Social Activities

Other social activities included a Friday evening Wine and Cheese Party at the Elks Club, a program for spouses, and a Coffee Club. For those staying on in San Francisco after the conference a champagne trolley tour of the city was conducted on Sunday.

Spouses were treated to a tour of the wine country and luncheon at a Sonoma winery on Friday. Events on Saturday included breakfast and a

fashion show and private tour at Neiman-Marcus, followed by a free afternoon to browse in the many boutiques and craft shops in the area.

Committee Meetings

Approximately 30 engineering meetings, plus meetings of at least four administrative committees — the Revisions Committee, Nominating Committee, Conference Committee, and Editorial Advisory Committee — were held at the conference. In addition, the Executive Committee was convened on Wednesday before the conference, and the Board of Governors met on Thursday.

Conference Chairmen

The Conference General Arrangements Chairman was Glen Pensinger, San Jose State University. The Papers Program Chairman was John Streets, Merlin Engineering Works. The conference was under the overall supervision of SMPTE Conference Vice-President Maurice L. French, Canadian Broadcasting Corp., and Editorial Vice-President Howard T. La Zare, Deluxe Laboratories, Inc.

Members of the program committee were Vinson R. Perry, Sony Corp.; Joseph Roizen, Telegen; Gary E. Thomson, Consultant; and Merrill Weiss, Imagex.

The chairmen for specific conference functions were: *Registration*, Donna Foster-Roizen; *Audio Visual*, Vern Kipping, Consultant; *Spouses*,



Sections Vice-President Si Becker with San Francisco Section Chairperson Donna Foster-Roizen at the Get-Together Luncheon.



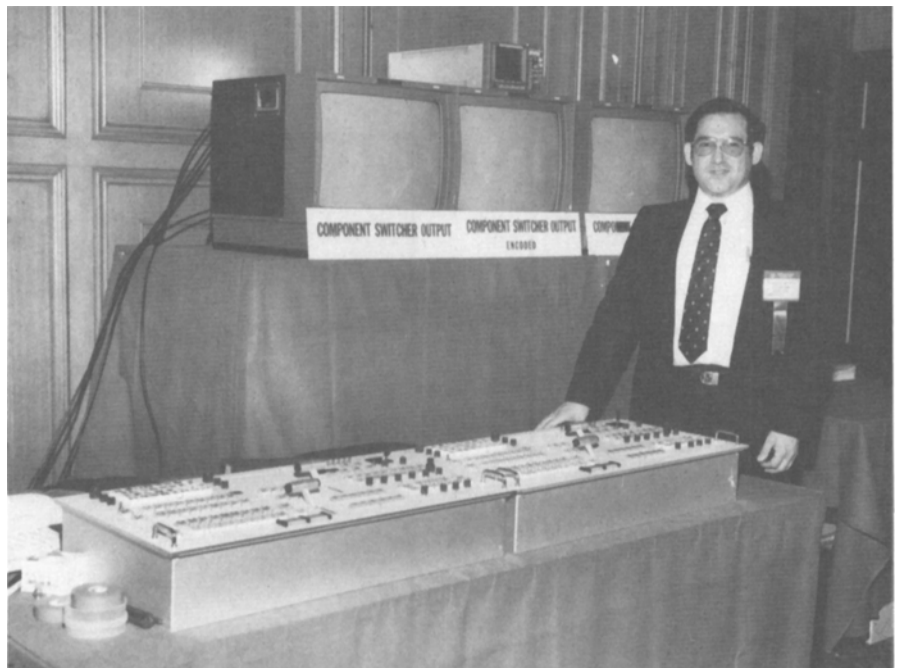
The Wine and Cheese Party held at the Elks Club on Friday evening.

Helen Brill, Maggie Wagner, and Pat Rorden; *Wine and Cheese Party*, Donald E. Lincoln, Sutro Tower Inc., Joseph A. Semmelmayr, Eastman Kodak Co., and Jack E. Phillips, KALW; *Sunday Tour*, Charles E. Anderson, Monaco Video; *Membership and Publications*, John A. Carlson, Monaco Labs; *Opening Tapes*, Christin Hardman, CMX Systems/Orox; *Audio Recording*, William A. Palmer, W.A. Palmer Films, Inc., and Gary Youngs, Image Video.

Papers Program

There were 32 technical papers on the program. Synopses of the papers follow. A panel discussion, concluding the session on Analog Components, was also on the program. Participants on the panel were: Merrill Weiss, Imagex, moderator; Birney Dayton, Grass Valley Group; Stanley Baron, Thomson-CSF; Larry Thorpe, Sony Broadcast Products; Charles Poynton, Poynton Vector Corp.; Dominique Nasse, TDF/CCETT; and David Griffin, Rock Solid Productions.

In addition, the Working Group on



Merrill Weiss at the SMPTE demonstration of component television.

Component Analog Video Standards held a demonstration of component video handling on Friday and Saturday. This was the first demonstration

to combine both analog and digital component signal handling which represents recent SMPTE standards activity.

Editorial Vice-President's Opening Remarks

By Howard T. La Zare

It is indeed a pleasure to welcome you to the Society of Motion Picture and Television Engineers 19th Annual Television Conference.

The basic objective of our Society is to advance the engineering and technical aspects of the motion-picture and television industries and related arts and sciences. The objectives of this mandate are achieved through the exchange of information at its technical conferences, local section meetings, and special seminars; through the publication of technical journals and books; and through the standards work of our permanent engineering committees. This conference typifies that mandate in action — the merging of thoughts, actions, and deeds toward our common goals.

The theme of our conference today is "Components of the Future." It will be divided into four areas of interest, covering two days of presentation. Today's subjects will be Digital Components and Analog Components. Saturday's presentations will be Future Technology and Stereo Audio in Television.

Additionally, there will be demonstrations on Component Video Signal Handling. These demonstrations will be presented concurrently during the entire conference in the Olympic Rooms. This presentation will be the first demonstration to combine both analog and digital component signal handling, representing recent SMPTE standards activities. These presentations will incorporate several component video signals in both serial and parallel forms, demonstrating the ease of translation of component video signals from serial to parallel and analog to digital. The advantages of component processing are expected to be readily apparent even when the final signal is displayed in NTSC.

Concurrent with these presentations are the equipment exhibits which will occupy the Italian, Colonial, and Georgian rooms.

This spectacular conference, with all of its ramifications, was orchestrated by a unique and hard-working group of dedicated individuals from



SMPTE Editorial Vice-President Howard T. La Zare delivering the Welcome to the Conference on Friday morning.

the local section who have spent many months preparing for these two days. We owe them our heartfelt gratitude and sincere thanks.

The papers portion of this conference was ably coordinated by Pro-

gram Chairman John Streets, capably assisted by his Topic and Session Chairmen, Gary Thompson, Merrill Weiss, Vinson Perry, and Joseph Roizen.

The responsibility for preparing the arena for this conference, with all its mind-boggling details, fell upon General Arrangements Chairman Glen Pensinger and his committee, which included: Vern Kipping, Audio Visuals; Donald Lincoln, Joseph Semmelmayr, and Jack Phillips, Wine and Cheese Party; our former President, Charles Anderson, Sunday Tour; Helen Brill, Maggie Wagner, and Pat Rorden, Spouses Program; Donna Foster-Roizen, Registration; John Carlson, Membership and Publications; Christine Hardman, Opening Tapes; and William Palmer and Gary Youngs, Audio Recording.

These dedicated people, who gave of themselves so that we could enjoy this conference, deserve a big round of applause and our sincere thanks for a job well done.

Without further ado, I wish you all a marvelous conference and an enlightening and worthwhile experience.



Members of the Spouses Committee: front row left to right, Sue Kuca and Glennis Dole; rear left to right, Pat Rorden and Helen Brill.