

Opening Address

By Howard T. La Zare

Good morning ladies and gentlemen, members and guests. Welcome to the 22nd Annual SMPTE Television Conference. The theme of our conference, "Technology in Transition," conjures up visions of new ways, new methods, and new things. Indeed, this very month, January, through the years boasts a legion of technological innovations, including the first successful heart transplant operation performed by Dr. Christian Barnard on January 2, 1968. He captured the imagination of the world and dramatized a whole new frontier for science. New frontiers, indeed are all around us — some much closer than we think.

The first atomic-powered submarine, the *Nautilus*, was launched on January 21, 1954. On January 25, 1915, Alexander Graham Bell completed the first U.S. transcontinental phone call, from New York to San Francisco, thus inaugurating a new era in speedy communications.

On January 27, 1880, the young inventor Thomas A. Edison received a patent for his new invention, the light bulb. Edison was born on February 11, 1847, in Milan, Ohio. He was not so much a scientist as he was a man who was forever asking the question, "Why do they . . . ?" except that the way he looked at things, he was more likely to be asking, "How can we . . . ?" I like to think of the electric light as being similar to the process of learning, where we shed some light on dark regions of our minds in the quest for knowledge. In this month in 1830, a newfangled idea called a railroad began operating out of Baltimore. That first U.S. train, believe it or not, was horse-drawn — and the list of wondrous inventions and discoveries goes on and on.

You may ask, "What's so special about January?" The odds of significant events happening in that month are about the same as any other month. Right? Right! But what is significant is that all these events were firsts.

Our Society is also among the legions of the first. It was the first to bring order to the chaos that prevailed in the early 1900s within the motion-picture industry.



SMPTE Editorial Vice-President Howard T. La Zare opens conference proceedings on Friday morning, January 29.

The scene was set during World War I, when the U.S. Army recognized the urgent need for motion pictures for training our armed forces and for recording military events. Manufacturers were making film systems to their own specifications, working in their own universe with little or no concern for interchangeability. Who said history doesn't repeat itself!

After numerous attempts and resulting failures to form a unifying trade or standard-making organization, in 1915 C. F. Jenkins, a film equipment inventor, and two of his closest colleagues met in Atlantic City in an attempt to resolve the situation. They considered the many avenues that were explored by other engineers facing similar problems. They recognized the success of the organization of the American Society of Mechanical Engineers, which was formed in 1909, and soon they agreed to model their proposed new Society after it. The Society would be formed of engineering specialists. In July, 1916, joined by seven other concerned engineers, they drafted a constitution for their new Society. Jenkins was elected Chairman of the new group, to be called the Society of Motion Picture Engineers.

A second meeting was scheduled for July 24. Invitations were sent out

to approximately 90 key engineering executives in the motion-picture industry, asking them to attend this meeting and to discuss the proposal. The idea was enthusiastically accepted, and the first meeting of the new Society was set for October of that year. At that meeting, Jenkins was elected President, the constitution ratified, and an emblem for the Society approved. Six committees were established:

- The Committee on Cameras and Perforations
- The Committee on Projection
- The Committee on Motion-Picture Devices
- The Committee on Optics
- The Auditing Committee
- The Membership Committee

Our Society certainly has grown and evolved since its humble beginning. We now have over 9000 members worldwide; 21 sections including 4 international; 7 student chapters; 24 Governors, including 3 International and 3 Governors-at-Large; 4 Directors, 2 Editorial and 2 Engineering; 9 Officers; 14 Administrative Committees plus the Executive; 13 Honors and Awards Committees; a Standards Committee made up of the chairmen of the 8 main Engineering Committees; and numerous subcommittees and working groups. We have representation on 20 other committees in 14 different organizations worldwide, and we have a permanent paid staff of approximately 29. Indeed, we are considered the premier standard-setting organization in our fields of concern throughout the world.

Our history certainly is one that we can all be proud of, and many of you in the audience today will carry this Society to even greater heights.

Our Society's method of setting standards has at times come under criticism as being too slow to respond to industry's needs. It might be compared to the commander who stood off to the side as his troops rushed forward. "What are you doing back here?" he was asked. He replied, "I am waiting to see which way they go . . . so I can lead them."

This, of course, is the proper price that we pay for due process and con-

sensus in our standard-making system — and this must be so. That is not to say that we do not take a leadership role when necessary, such as in the formation of the D-1 Digital Component Recording Format Standard which our Society, in association with the EBU, developed and which was highly honored and recognized by being presented with the acclaimed and coveted Emmy by the National Academy of Television Arts and Sciences. This was the second time our Society was so honored.

Anyone who has been asked to say a few words at the opening of a conference or convention is immediately faced with a challenge. That challenge is to sum up, in comparatively few words, the attractiveness or significance of what you are about to see and hear, and then to get out of the way as fast as you can to let everyone see and hear and judge for themselves. The challenge lies in the fact that it is very hard to decide how much to say and how much to leave, at least momentarily, to your imaginations.

There is a familiar exercise in psychology that helps to point the way. If you set a table on the street to sell some baubles, it is very likely that, in the rush of pedestrian traffic, few if any will stop to look at your wares. But if one or two do stop to inspect your exhibit, the chances are that any number of others will then crowd around it. We all want to get a chance to see what everyone else wants to see. That, ladies and gentlemen, is why we are here today.

Our conferences provide an unique opportunity to experience first-hand the latest and most innovative technology that our industries have to offer. It prevents that ominous and ultimately fatal disease of engineers — obsolescence. Education and exposure to the latest and most innovative technology is the only cure!

One of the most difficult things in these times of feverish communication is to keep a secret. Every time there is an ambitious endeavor in the world of technology, there is a stream of advance reports, most of them usually tinged with, but not overlaid with, accuracy.

On that rare occasion, when nobody knows anything at all in advance, there is an advance diagnosis. One whisperer says, "I haven't heard

much about it at all; it must be pretty bad," and another says, "They are keeping it quiet because it is a real blockbuster." The fact of the matter, of course, is that all this, whether seemingly flattering or destructive for the particular project, fades into insignificance when, at long last, the new entity appears for itself.

How fortunate we are that our conferences are as successful as they are without any of the hoopla and major advertising campaigns and exposure required by most conventions. A hard-boiled publicist has been known to say, "Give me three weeks, four searchlights, and five famous people in the audience and I will give you a successful grand opening. . . even for a can of sardines!"

We are successful without searchlights and heavy advertising because we serve our membership and related industries' needs by providing a forum for engineers to exchange ideas and information and to be stimulated by being exposed to new technology. Thus we are supporting our Society's objectives, which have remained the same for almost 72 years. Those objectives are:

- To advance the theory and practice of engineering in our fields of concern
- To establish standards and practices employed therein
- To disseminate scientific knowledge

The preliminaries are now over and the main event is about to start.

Part of the fun of a conference is the excitement of being with your peers and respected colleagues. I would be refusing to face facts if I did not admit that your presence here is indeed part of the show. Someone viewing a play by Shakespeare or a sculpture by Michelangelo or hearing a sonata by Beethoven all alone may be transfixed, but how much more enjoyable the experience is when it is shared with people by your side.

So here today we are assembled for what I suppose I can call a collective experience — one which we are all looking forward to, and one which will proceed as soon as I get out of the way. Let me then give you the essential advance billing and credits for what you are about to enjoy.

This morning's opening session will be on Video Recording Formats. This certainly seems appropriate, since

many of the major changes in video technology have resulted from changes or improvements in recording formats. Other presentations will deal with 3-D laser videodisc technology, the properties and technical characteristics of videotape, and other video recording subjects.

Following this morning's session, we will have our traditional Get-Together Luncheon. Our guest speaker will be Joseph A. Flaherty, vice-president of engineering and development for CBS. Any of you who have been fortunate enough to hear Joe speak in the past know we are in for a treat!

This afternoon's topic is Distribution and Processing. The intermixing of video signals from analog to component to high-definition television has necessitated a change in the way we process and distribute signals. This session will deal with these issues with papers from both users and manufacturers.

Saturday morning's topic is Planning and Maintaining Systems. This session will be devoted to the television studio. These presentations will deal with planning the physical layout of a studio, design and implementation of equipment, and the proper maintenance of today's complex digital equipment systems.

Papers in the Saturday afternoon session on Post-Production will address edit decision lists, the integration of analog and digital formats, mixing and synchronization, systems control, and other video and audio post-production subjects.

In addition to the papers program, there is an exhibition of equipment that supports these presentations. On display are some of the television devices and systems that will be discussed by the authors during these four sessions.

The papers program was prepared by Program Chairman J. Wayne Caluger, assisted by his committee. The staging of the conference, with all its ramifications, was prepared by Local Arrangements Chairman Bill Watson and his supporting committee. Please look in your conference booklet to see all the volunteers who donated their time and energy for all of our benefit. We owe them all a debt of gratitude and a round of applause.

And now, ladies and gentlemen, on with the conference.

Thank you!



SMPTE Governors and members of the Executive Committee at the Board of Governors meeting.

SMPTE Committee Meetings

Several SMPTE administrative and engineering committees and working groups held meetings before, during, and after the conference. The Society's Executive Committee met on Wednesday, January 27, and on January 28, immediately following an orientation for newly elected SMPTE Governors, there was a meeting of the full Board of Governors. The Nominating and Sections Committees had meetings on January 29, and the Educational Advisory Committee met on January 30.

The following SMPTE engineering committees and working groups met in Nashville:

Wednesday, January 27

- Ad Hoc Group on NTSC Documentation
- Subcommittee on Digital Control for TV
- Working Group on Professional Studio Monitors
- Ad Hoc Group on HDTV Colorimetry

Thursday, January 28

- Working Group on Editing Procedures
- Committee on New Television Technology
- Working Group on Stereo and Multi-Channel Audio Recording for TV
- Working Group on Studio Video Standards
- Working Group on 1-in. Interchange Reference Tape Study Group on Application of Optical Disc



SMPTE President M. Carlos Kennedy speaking at the orientation for the newly elected Governors of the Society.

Sunday, January 31

- Working Group on High Definition Electronic Production
- Committee on Television Technology



President M. Carlos Kennedy speaking at the Get-Together Luncheon.

Get-Together Luncheon

The SMPTE Get-Together Luncheon was held on Friday, at noon, in Opryland's Washington Ballroom. Duane Muir, Nashville State Tech., the Membership/Hospitality Chairman for the conference and also chairman of the Society's Nashville Section, opened the luncheon with brief welcoming remarks. Following lunch, SMPTE President M. Carlos Kennedy, Ampex Corp., took the podium to introduce guest speaker Joseph A. Flaherty, Jr., the vice-president and general manager of engineering and development, CBS, Inc., and SMPTE Governor-At-Large.

SMPTE Engineering Demonstrations

The 22nd Annual SMPTE Television Conference featured two engineering demonstrations. The SMPTE Working Group on Studio Video

Standards showed the S-MAC system in Ryman Hall, and in Donelson Hall the Society's Working Group on Professional/Studio Picture Monitor Systems demonstrated a method for proper monitor alignment and set-up.

Equipment Exhibit

In Opryland's Ryman Hall, 16 companies exhibited new video equipment and systems. Twenty-one booths were occupied. The exhibit, which was designed to parallel the lectures in the technical program, featured cameras, VTRs, video graphics systems, audio mixing consoles, editing equipment, and video test and measurement instruments. The equipment exhibit ran during both days of the conference and was well attended.

The companies that participated in the television conference were Adams-Smith (Hudson, Mass.); Alpha Audio (Richmond, Va.); Cinema Products Corp. (Los Angeles, Calif.); DSC (Gainesville, Fla.); FOR-A Corp. of America (Newton, Mass.); Graham-Patten Systems, Inc. (Grass Valley, Calif.); Harrison Systems, Inc. (Nashville, Tenn.); Magni Systems, Inc. (Beaverton, Ore.); New England Digital Corp. (Junction, Vt.); Paltex (Tustin, Calif.); Panasonic Broadcast Systems Co. (Secaucus, N.J.); Quantel Corp. (Stamford, Ct.); Rohde & Schwarz (Lanham, Md.); Toko America (Mt. Prospect, Ill.); Unique Business Systems Corp. (Santa Monica, Calif.); and Wave-Front Technologies (Dallas, Tex.).

Other Activities

The conference program attracted several of the major broadcast-oriented trade publications to Nashville, among them *Broadcasting*, *Broadcast Engineering*, *Broadcast Management/Engineering*, *Television Broadcast*, *Electronic Media*, and *Videography*. On Thursday evening, January 28, the Society held a press briefing, at which SMPTE President M. Carlos Kennedy and other members of the Executive Committee discussed the conference and answered questions from the media.

Following the press briefing, it was over to the Washington Ballroom for the reception. The reception — which was sponsored by Ampex Corp., Caluger & Associates, Harrison Systems Inc., MPL Film & Video Inc., Jim Owens Entertainment, Scene

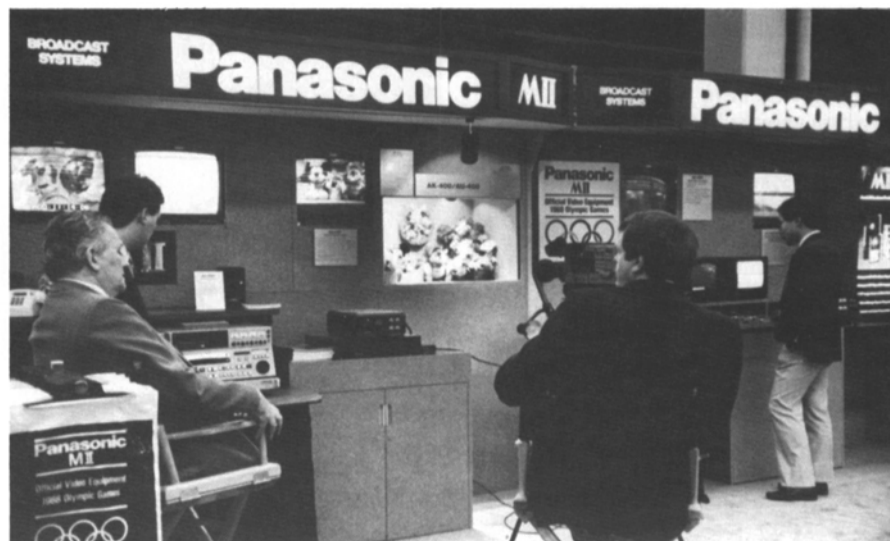
Three Inc., Steadi-Film Corp., and 3M Co.—provided conference attendees with an opportunity to meet one another and exchange ideas in a comfortable social setting.

The coffee club, courtesy of Sony Corp., was open from 7:45 to 9:45 a.m. on both days of the conference.

Many of the spouses who accompanied their husbands to the conference participated in an entertaining and educational program, which included a tour of historic Nashville. They also attended the taping of "Crook & Chase," a popular program seen regularly on the Nashville Network. Spouses enjoyed a continental breakfast on both Friday and Saturday mornings. The breakfast was provided courtesy of Midwest Communications Corp.



Registration Chairman Jim Edwards in the registration booth.



Panasonic Broadcast Systems was one of 16 companies in the equipment exhibit.



22nd Television Conference attendees saw demonstrations of some of the industry's latest technology at the equipment exhibit.