

Foreword

As always, SMPTE is concerned with developments in the tools and technologies that make moving images possible, and this Progress Report, like the many that have preceded it, addresses some of the recent advances in the arts and sciences that have contributed to the growing accessibility, innovation, and persuasiveness that characterize this form of communication. In summarizing the advances of the recent past, we are also to some extent projecting a vision, the knowledge of which may be particularly helpful in an industry that moves as rapidly as ours. It is my belief that technology describes the envelope in which the realm of possibility is contained, so having an appreciation of the technological underpinnings of our industry is a necessary prerequisite to gaining an understanding of where it may, or may not, be heading. In that sense the recent past provides useful pointers into, at least, the near future.

This focus on technology, and on the tools, processes, and practices that the technology has recently spawned, reflects much of what SMPTE does. SMPTE standardizes many of the parameters and practices surrounding critical new tools and processes, maximizing their availability and utility, and helping reduce their ultimate cost. SMPTE also provides information and educational opportunities so that members can gain an appreciation of new technologies and techniques, as well as instruction in how the advantages they promise may be harnessed in the creation and improvement of the communication of ideas. You will see from the education and engineering reports that your Society was active in both of these arenas in 1995.

In preparing this review we are indebted, once again, to our many contributors from all over the world who have helped us compile the basic information; to the members of the Progress Committee; Engineering Vice-President Mark Richer; Editorial Directors Linda Young and Robert Kisor; Sections Vice-President Fung Fai Lam, as well as his predecessor, John Carlson; and Aileen Moroney, Mathew Kuriakose, and MaryAnn



David L. George

Frusciante of the *Journal* staff for its compilation. But, even with all our effort we can do little more than offer a snapshot of a portion of all the innovation and invention taking place throughout the world during this exciting period.

If 1994 was a year of technological consolidation in our industry in which we paused a moment to reflect on the rapid progress of recent years, then 1995 appears to have been one of commitment in which many of these promising new developments were adopted as the enabling technologies making possible several of the new services and facilities that began or were developed within that period. For example, the trends toward digital distribution in television plants and to MPEG as a transport medium have both been well established and discussion now centers around implementing and improving, rather than adopting, such techniques. To the extent that consolidation continued in 1995, it was related more to increasing concentration of ownership of media, to the rationalization of existing assets, and to increasing vertical integration within the industry than to the technologies related to motion imaging. These moves reflect, to a significant extent, increasing interest in new technologies, especially those related to new methods and means of distrib-

Certain technical trends and subjects were almost explosive in the energies they generated over the past period, such as the increasing interest in servers, nonlinear editing, and ATM and related families of compressed and/or packetized delivery schemes. Significant commitments were made to DBS as an important alternative delivery mechanism with compressed, digital delivery at its core. PALplus began to make inroads in Europe. Focus on the Internet as a developing medium for commercial activity was intense, and interest in expanding the Internet supplanted, at least for a time, previous discussions about other possible manifestations of an "electronic highway." Notable advances continued to be made in audio for motion pictures, and the industry saw the release of its first full-length, fully computer-generated critical and commercial success, *Toy Story*, which provided us with yet more evidence of the continued technological and artistic growth in what is sometimes falsely considered a mature medium.

Agreements reached by year-end were making possible the rapid introduction of digital videodisk (DVD) hardware that, in turn, promises development of a new and exciting distribution environment for programming. However, DVD demands that we change the way we approach program production to conform to the rigidities of the new medium, necessitating that many more program and distribution decisions be made "up front" rather than later on. As a result, practice as well as technology will change, and we will have to learn our way around both in order to take full advantage of the promise of this new medium.

In engineering terms, there were exciting new initiatives undertaken under Engineering Vice-President Ken Davies and his successor Mark Richer and the many important, but usually unheralded, volunteers that support SMPTE standardization activities. Two I found of particular interest were the engineering group formed to address video servers and, in conjunction with the Interactive Multimedia Association (IMA), a combined group that will now begin standards work in

multimedia. You will find more information on these and on the many other engineering activities of your Society in Mark's report.

During the past year, the SMPTE serial digital interface standard (SMPTE 259M) led the way in the introduction and development of a wide range of products to support the implementation of serial digital television in many new and revitalized television plants and new and upgraded video applications. The component rendition of SMPTE 259M has become the North American studio standard of the moment and would appear to be important in the introduction of potential ATV or ADTV services in the future. Servers, large and small, found their way into disk-based and commercial playback systems in many of these facilities and in programming applications in a few. Major networks, including CBS and NBC, have already either converted or committed to a server-based environment as the backbone of their service.

The digitizing of moving images and sound simplifies the conversion of that information to other formats, making it available for distribution over a wide range of media, with a number of different data rates, for a wide variety of applications. As a result, there has been a renewed interest in information gathering and dissemination that has resulted in certain alliances that would have been considered unusual just a few years ago, such as that announced by Microsoft and NBC. Similarly, 1995 saw announcements made about the introduction of new or additional news and information services by several major media players.

Turning our attention to SMPTE activities, your Society held a very successful Advanced Motion Imaging Conference in San Francisco in 1995 and another in Seattle earlier this year. It also put together an impressive program in conjunction with World Media Expo in New Orleans and is looking forward to a successful 138th Technical Conference and World Media Expo in Los Angeles in

Members of the Progress Committee Who Contributed to This Report

David L. George, Chair

Paul Berger
U.S.

Ray Clipson
England

Angelo D'Alessio
Italy

Kenneth P. Davies
Canada

Takeo Eguchi
Japan

Ernst Gensch
Switzerland

Rolf Hengstler
Germany

Eric Hitchen
Australia

Willy Hungerbühler
Germany

Charles H. Jablonski
U.S.

Nobuo Mii
Japan

Toshio Motoki
Japan

Peter Owen
England

Bruce Randall
England

October and Advanced Motion Imaging Conference in New York early next year. Discussions are also underway regarding the addition of a Film Conference in Los Angeles in 1997, thus increasing SMPTE support to the film community and making the Society a West Coast presence on an annual basis. Progress was also reflected in the establishment of a vibrant new section, this time in Hong Kong.

The Internet, and your Society's involvement with it, continued to expand through 1995. SMPTE's home page now features up-to-date information on many Society materials, publications, conferences, and other activities, as well as information on our Sustaining Members and links to related sites. Nurtured by many from a proposal initially put forward by Charles Poynton, and helped along by Rene Villeneuve, smpte.org has become an important communications vehicle, and it will continue to expand its range

of services to make it a primary contact point for SMPTE news and information, both on the national and regional levels.

You will see from the information provided in this report that the past year was anything but static and that the industry has once again demonstrated that new technologies generated new opportunities in 1995 and that new problems and new solutions were constant, although often elusive, companions. In this dynamic environment, along with the immense value of its standardization processes and activities, your Society plays a crucial role in disseminating much needed information on technologies, processes, and applications. Your continued support and involvement is very necessary and much appreciated by all of us who benefit from SMPTE activities and membership.

David L. George
Chairman
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