

# Section Meetings

**Houston, July 19, 1989** — Digital audio tape (DAT) recording was discussed at the Houston Section's July meeting. Clayton Blick and Harry Friedman, both of Sony Professional Audio, described how this recording format was developed and how it operates.

The DAT system, as agreed upon by 70 audio equipment manufacturers, is a 16-bit, 44.1-MHz sampling rate system with error correction of up to 37% missing data. The slow 1/3 IPS tape speed permits a full two hours of recording on each side of the specially designed metal tape cassette, which can be rewound in less than 40 sec.

The DAT system has been designed for consumer use, but its high quality has tempted professional audio studios to experiment with the equipment. One such studio is Digital Services, Inc., where the meeting was held. John Moran, of DSI, discussed why he chose to incorporate the Sony PCM-2500 DAT unit in his remodeled all-digital facility. He described some of the problems and successes of this experiment. According to Moran, the major problems stem from the characteristics of equipment that has been designed for consumer use, not for professional applications.

After the formal presentation, the PCM-2500 was demonstrated for the 35 members and guests in attendance. — Robert Musburger (Secretary/Treasurer), University of Houston.

**Philadelphia, June 6, 1989** — The new Eastman Kodak EXR motion-picture films were discussed at the Philadelphia Section's June meeting. Frederick Nobbs and Michael Johnson, Eastman Kodak Co., spoke about the significant improvements in exposure latitude, optimum speed-to-grain ratio, and improved image definition. The second part of the program was the screening of the film *A Drive to Glory* — highlights of Super Bowl XXIII. The film was produced by NFL Films Inc. and was shown to demonstrate the full range of performance of the EXR film family. Thirty-five members and guests attended the meeting held at NFL Films Inc. in New Jersey. — Jim Izydorczyk (Chairman), Sigma Electronics Inc.

**San Francisco, August 17, 1989** — Joseph Castellano, Stanford Resources, and Ivor Brodie, SRI International, spoke about flat-panel television displays at the August meeting of the San Francisco Section.

Castellano described flat-panel technology and theorized about what can be expected in the next decade. He said the factors that led to the development of flat-panel image displays are compact-image display, the need for image visibility in sunlight, the requirements of wall-display television, and a proxy technique developed by the semiconductor industry to

build flat-panel image displays. He explained that much research is being done on this technology, especially in Japan.

Ivor Brodie explained the technology involved in producing a flat-screen image device and a prototype was passed around. The basic concept, according to Brodie, is an X-Y matrix to address every pixel of the display. Each pixel consists of three color elements, each of which can be addressed. Following his presentation, Brodie showed a videotape illustrating the laboratory procedures used in his research. A lively question-and-answer period followed. Seventy-six members and guests attended the meeting at Stanford Research International. The meeting was coordinated by Aubrey Harris, Stanford TV Network. — Vernon L. Kipping (Secretary/Treasurer), consultant.

**Washington, D.C., January 10, 1989** — Station automation with MII cart machines was discussed at the January meeting of the Washington, D.C., Section. Harris Sullivan, WRC-TV, spoke to the 83 attendees about the operation of his MII studio. He explained how the new MII machines were integrated into the station with minimal disruption to normal operations. Dale Buzan, Utah Scientific, spoke about his company's TAS (Total Automation Systems), which provide automation and manual control access to any device that is capable of being remotely controlled at WRC-TV. He explained the integration of this system with the station's custom traffic system.

Phil Livingston, Panasonic Broadcast Systems Co., discussed his company's M.A.R.C. II cart machine. He explained the development of Panasonic's cart machines, starting with the research done in the early 1970s. He used color slides to show the step-by-step development of the early machines. Livingston also explained the development of the MII format and covered the advantages of using metal particle videotape for video recording.

Following the presentation, Sullivan and members of the WRC-TV engineering staff led the attendees on tours of the station, one of the largest U.S. installations using MII videotape machines. — John Wesley Nash (Secretary/Treasurer), Communications Engineering, Inc.

**Washington, D.C., February 15, 1989** — The program for the February meeting of the Washington, D.C., Section was the first of a two-part series on high-definition television. A distinguished panel addressed the problems, concerns, and different interests of their organizations with regard to high-definition television.

Robert Hopkins, United States Advanced Television Systems Committee (ATSC), presented a tutorial on HDTV and gave the history of HDTV standards in North America and around the world. The ATSC was formed in 1983 to coordinate and develop voluntary national tech-



Some of the attendees at the Philadelphia Section's June meeting, from left to right: Ed Maguire (Past Chairman), Art Spieller (NFL Films Inc.), Michael Johnson (Eastman Kodak Co.), Jim Izydorczyk (Chairman), and Fred Nobbs (Eastman Kodak Co.)

nical standards for advanced television systems.

John M. Pullen, U.S. Army, spoke about the interests of the Defense Department in the development of HDTV. Lynn Claudy, National Association of Broadcasters, spoke about broadcasters' specific interests in and concerns about HDTV.

William Hassinger, Federal Communications Commission, outlined the procedure to develop an HDTV standard in the U.S. and the role of the FCC. Hassinger's speech prompted the audience to ask him and the other panel members what would be a realistic timetable to achieve an HDTV transmission standard in the U.S. There was general consensus of the panel members that it was unrealistic to expect a terrestrial HDTV broadcast standard in North America before 1993.

The last panelist to speak was Brenda L. Fox, National Cable Television Association, who described HDTV research projects going on or being planned by the cable industry in the U.S. She also explained the role the cable industry hopes to play in the development of HDTV. The meeting, held at the studios of USIA-TV, was attended by 65 people. — John Wesley Nash (Secretary/Treasurer), Communications Engineering, Inc.

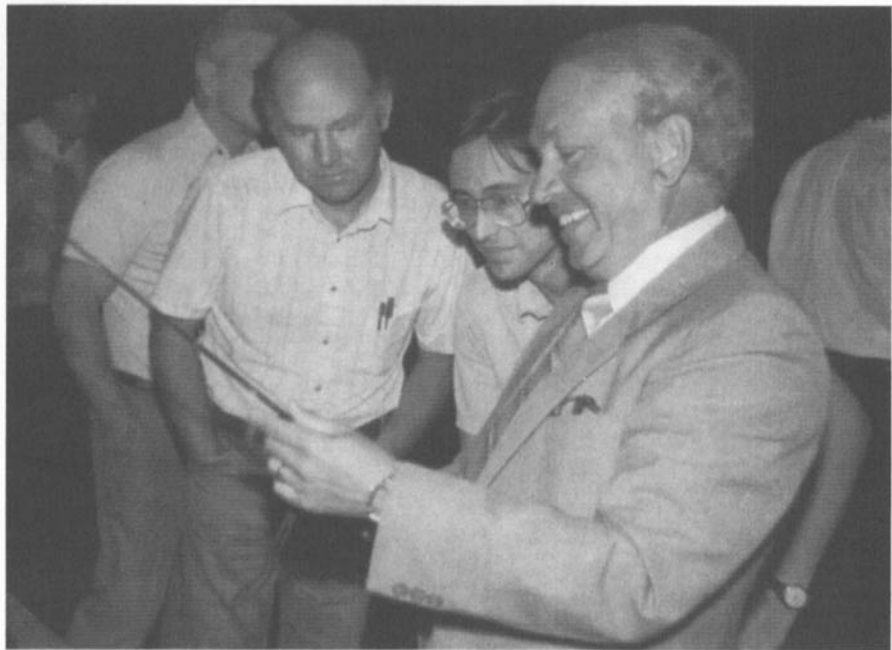
**Washington, D.C., March 14, 1989** — The second part of the series on HDTV was presented at the March meeting of the Washington, D.C., Section. R. Colin Parkhill, BTS Broadcast Television Systems; Benjamin Crutchfield, Advanced Television Test Center; Larry Thorpe, Sony Advanced Systems; and John F. Swanson, Cox Broadcasting, spoke about the development and testing of HDTV equipment.

Parkhill discussed the development of HDTV broadcast cameras with emphasis on the costs of such products. He explained how the cost of the development of these products is directly related to the number of different HDTV standards adopted throughout the world and how a single world standard could reduce the cost of such products.

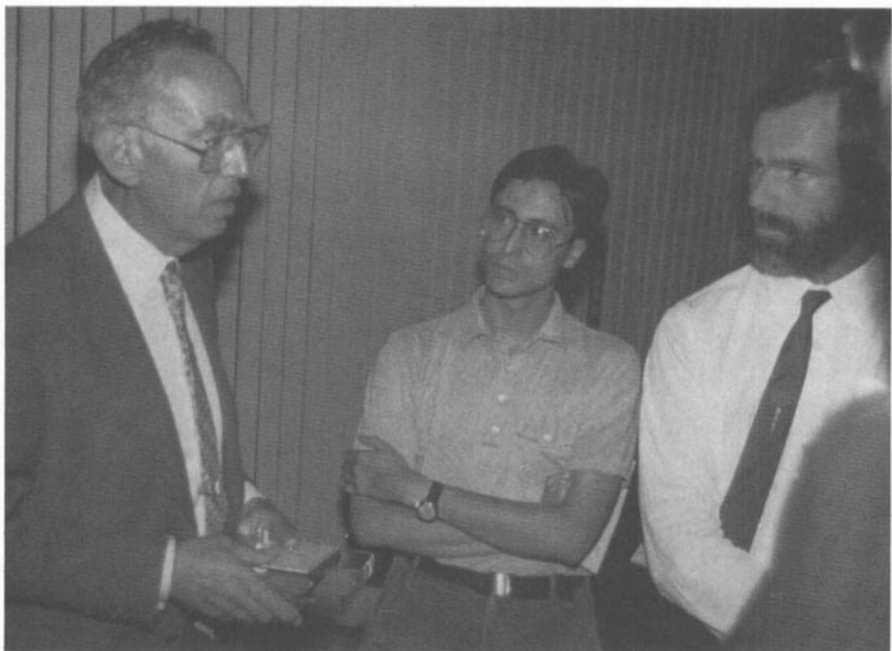
Crutchfield outlined the role of the ATTC in the development and testing of future HDTV standards. Thorpe spoke about Sony's role in development and research for HDTV. He reviewed the major milestones of technical development and explained the different HDTV standards developed around the world. He commented on the improbability of a single HDTV standard.

Swanson joined the other speakers in a roundtable discussion of costs and realistic timetables to expect HDTV broadcasts. A question-and-answer session followed. Sixty-seven people attended the meeting, which was held at the Naval Imaging Command of Anacostia Naval Station. — John Wesley Nash (Secretary/Treasurer), Communications Engineering, Inc.

*SMPTÉ Journal, November 1989*



*Joseph Castellano, Stanford Resources, (right), discusses flat-screen display equipment with attendees at the August meeting of the San Francisco Section.*



*Ivor Brodle, SRI, (left) explains flat-screen image technology at the San Francisco Section's August meeting.*

**Washington, D.C., April 10, 1989** — Integration of personal computers into the television and film industries was discussed at the Washington, D.C., Section's April meeting, held at Apple Computer, Inc.'s Maryland office.

The forty-five attendees were shown two short videos produced by Apple Computer. The first explained the use of Apple Macintosh computers as MIDI controllers in recording and audio post-production studios. The second demonstrated the use of "HyperCard" and "HyperTV" as training mediums in corporate and industrial markets.

Steven Lewis, Apple Computer, spoke about the graphics capabilities of Macintosh computers. He answered questions on specific software and hardware options and applications. Samir Joglekar, Apple Computer, demonstrated the capabilities of the main conference room at the facility, where a Macintosh computer controls a variety of functions. He showed how one computer operates the lights, curtains, videotape machines, and projectors while it is also being used as the main source for sound and projected graphics. — John Wesley Nash (Secretary/Treasurer), Communications Engineering, Inc.

Washington, D.C., May 16, 1989 — The May meeting of the Washington, D.C., Section was held at the new studios of WJLA-TV, where a presentation called "State of the Art CCD Television Cameras — From the User's Standpoint," was given.

Fred Himelfarb, a consultant for Panasonic Broadcast Systems Co., explained the difference between the three types of CCD sensors used in today's broadcast cameras: interline transfer, frame interline transfer, and frame transfer. He discussed fixed pattern noise in CCD cameras, cost versus performance ratios, and the use of solid-state coolers in CCD cameras. Using a CCD camera from Panasonic and test equipment supplied by WJLA-TV, Himelfarb demonstrated the proper way to test and evaluate the performance of CCD cameras.

John Tollefson, WJLA-TV, spoke about the design and construction of his new studio, explaining the necessary building modifications, air conditioning, and technical grounding systems. Following

the presentations, the 81 attendees were given a walking tour of WJLA-TV. — John Wesley Nash (Secretary/Treasurer), Communications Engineering, Inc.

Washington, D.C., July 6, 1989 — Dolby Stereo Surround System was discussed at the July meeting of the Washington, D.C., Section, which was held at the studio of Black Entertainment Television (BET).

Robert S. Warren, Dolby Laboratories, Inc., explained the history and origin of the Dolby Surround System, which is a method of preparing stereo sound tracks to bring multidimensional sound to the home or movie theater. Using visual aids, Warren explained the advantage of optical sound over mag stripe for the film distribution process. He also explained the encoding and decoding process of Dolby Surround Stereo. Parts of the movie *Beetle Juice* were shown on laser disc to demonstrate the system. Questions from the audience initiated discussions about proper monitoring techniques during the post-production mixing process and the

general movement toward increased use of this process. Warren also showed parts of the July 4th celebrations at the Washington, D.C., Mall, which had been recorded by WETA-TV in Dolby Surround a few days earlier.

Jefferi K. Lee, Black Entertainment Television, described the design criteria for his new studio, which included the ability to do full television production, network operations, and satellite uplinking.

The final speaker of the evening was Larry Brody, of Communications Engineering, Inc., the consulting firm that designed the BET facility. Brody discussed the engineering and construction techniques used. He spoke about the difficulty of finding a site in Washington, D.C., that was suitable for both the production and satellite transmission requirements of BET. After the formal presentations, the 65 attendees toured the studio. The staff demonstrated the equipment in each area and answered questions. — John Wesley Nash (Secretary/Treasurer), Communications Engineering, Inc.

## Special Meeting of the Voting Members of the SMPTE

White Plains, N.Y., 2:00 P.M., December 15, 1989

### To the Voting Members of SMPTE:

NOTICE IS HEREBY GIVEN, that a special meeting of the Society of Motion Picture and Television Engineers, Inc., will be held at 2:00 p.m., local time, December 15, 1989, at 595 West Hartsdale Avenue, White Plains, New York.

The purpose of this meeting will be to vote on proposed amendments to the Society's Bylaws. These amendments have been processed by the Revisions Committee and unanimously approved by the Board of Governors at its July 12, 1989, meeting.

### Director of Education

At the June 12, 1989, Board of Governors meeting, unanimous approval was given to include a position for an Education Director on the Board of Governors, to be responsible for the Society's educational programs.

### Bylaws, Article III, Board of Governors, Section 1. Number and Term of Office.

*Amend to read:* The Board of Governors shall consist of: (1) the elected officers; (2) the Past President of the Society; (3) individuals elected by the membership as hereinafter prescribed; (4) not more than five Directors (see Administrative Practices Sec. XIII, K, Sec. XIV, K, 1, and Sec. XVI, E) appointed, two each by the

Editorial and Engineering Vice-Presidents and one by the Sections Vice-President and subject to approval of the Board of Governors, for a term of one year; (5) International Governors elected as hereinafter prescribed; (6) not more than three individuals elected by the Board of Governors for a term of one year when in the opinion of the Board such additional members will more adequately represent the interests and activities of the Society's membership.

(Bold-faced words represent the changes to the current Bylaws wording.)

For the purpose of voting on these proposed amendments to the Society's Constitution and Bylaws, the Board of Governors has authorized me to solicit proxies pursuant to Article XI of the Bylaws in order to ensure a quorum at this Special Meeting.

After consideration of the proposed amendments please mark, sign, and return your proxy. If you attend this Special Meeting in person, your proxy will be returned to you upon request, and you may vote in person if you so desire.

By direction of the Board of Governors.

October 20, 1989

Maurice L. French, President