

Section Meetings

Detroit April 18, 2000

Thirty six members and guests were treated to a behind-the-scenes look at the inner workings of a modern cineplex facility, courtesy of the Star Southfield Theater in Southfield, MI. At the heart of this 20-theater operation is a pair of projection "corridors" (booth is inadequate to describe the size), each room a city block long, about 15 ft wide that spans the entire width of the building. Fully automated 35mm projectors, complete with their own racks of audio playback equipment, dot the expanse every 30 to 50 ft. Each system has the capability to play back SDDS, THX, and conventional SR stereo sound and is also equipped with a 35mm slide projection system and nonfilm audio sources to play back pre-show advertising. In a separate build-up/break-down area, incoming film is assembled onto pancakes, and foil cue tabs are strategically applied to trigger the lighting and audio level controls where appropriate. The two halves of the house, each with ten screens, are mirror images of each other with identical layout and configurations. Cleanliness and maintenance are the watchwords at this facility; projector movements and the complex film path are kept scrupulously clean to avoid scratches and sprocket damage. This is aided by a series of air filters and regular swabbing of the decks! Each lamphouse is forced-air-cooled and the projection head is liquid cooled to protect the film and prolong its useful life, as well as ensure stable projection conditions.

One interesting feature of the facility's design is the ability to project the same

film in tandem at two or three viewing theaters. A series of rollers are installed along the length of the wall opposite the projectors, enabling film exiting one projector to be routed down the corridor to the next, where it winds its way through the second projector and onto a take-up platter, or perhaps back down the hall to yet a third projector. Attendees were told that the rather heavy platter of film comprising *Titanic* was transported in this way upon its final showing, to save steps in getting all the footage back to the break-down area. It took three operators to carry the built-up platter down the corridor to the projector when the film debuted.

Theater sizes range from 150 to 750 seats, and each projector is appropriately lamped for the size of screen and throw distance. A tremendous amount of thought and a high degree of engineering went into each area to ensure the best possible playback and strict adherence to the requirements of the various sound types that need to be accommodated. When asked if electronic playback was on the horizon, attendees were told that it might be 5 to 10 years in the future.—Bob Zeichner, Membership Chair

Pasadena City College Student Chapter March 14, 2000

With 37 in attendance the meeting commenced with the introduction of the guest speaker, Leslie Jackson-Houston, producer, unit production manager, and first assistant director. A native of Los Angeles, CA, Jackson-Houston attended Claremont



Pasadena City College Chapter March meeting. Guest speaker, Leslie Jackson-Houston.

SMPTE Section Calendar Rocky Mountain

Wednesday, June 21

Meeting (tentative), Jampro representatives will be on hand to discuss antennas. Location: the AMFM Inc. studios in the Tabor Office Building, 1200 17th St., 23rd fl.

Friday, July 7

Deadline to apply for SBE Certification Exam during the August 18-28 Local Window.

Wednesday, July 19

Annual Picnic at Lookout Mountain, KWGN TV2 transmitter "on the deck."

August Meeting

To be announced

Friday, September 22

Deadline to apply for SBE Certification Exam during the November 10-20 Local Window.

College and graduated from Pixar College with a B.A. in communications. While working toward a master's degree at USC Annenberg School of Communications, she was a correspondent on the "Tonight Show" with Johnny Carson. Jackson-Houston cut her studies short after being accepted into the assistant director's training program at USC. Since completing the 400-day on-the-job training program, she joined the Directors Guild and has worked in the mediums of film and video, with multicamera film sitcoms comprising most of her workload.

Jackson-Houston recently produced a cable program for Showtime and works on a consistent basis as a first assistant director on the ABC sitcom "The Hughleys." She elaborated on the differences between a first assistant director and a stage manager; mainly the medium in which the production is captured. The stage manager works on videotape productions and the first assistant works on film; both control the stage floor and keep production flowing. When hired as a unit production manager (UPM) she acquired the crew, film/video, transportation, and all necessities for production. As a producer she is responsible for keeping production on schedule and within budget.

In closing, Jackson-Houston stated that "the entertainment industry is a freelance business. By preparing and appearing to be prepared, work will come."—Kassa Zakadi, Chairperson

Rochester March 14, 2000

Well beyond the scope of terrestrial or even satellite television, this atypical program featured an overview of the Chandra X-ray Observatory. The presenter was Keith A. Havey, senior project engineer with Eastman Kodak Co.'s Chandra Program, Image Acquisition Systems. Havey's team played an integral role in the analysis, design, and construction of the X-ray telescope launched on space shuttle mission STS-93 in July 1999. Kodak's hardware on the mission included a 24 to 48-in. diameter high-resolution mirror assembly (HRMA) of four nested hyperboloid and four nested paraboloid glass surfaces for channeling X-rays to a receiver; a 26-ft cylindrical optical bench assembly, the largest composite structure in space; miscellaneous mechanisms and contamination covers; and thermal and mechanical control electronics—including 26 heaters, to maintain a mirror cavity average temperature requirement of $69.8 \pm 2.5F$.

Havey explained that assembly in a Class 100 clean room and support structure accounted for one-third of the hardware cost. Alignment tolerances of 1.3 were maintained on the iridium-coated HRMA, allowing for optical resolution of a stop sign from 12 miles. In orbit, however, the X-ray capabilities of Chandra have astonished many, with views of galaxies, nebula, and quasars up to six billion light years away. Havey concluded the presentation with a video depicting the wide range of institutional and industrial collaboration on the project. For instance, although TRW manufactured the Chandra spacecraft and its high-resolution CCD array was sourced from the Massachusetts

Institute of Technology and Penn State, the observatory is controlled by the Harvard-Smithsonian Center for Astrophysics—John P. Weiksnar, Section Manager/Membership Chair

San Francisco April 27, 2000

In January 1999, SMPTE and the Westinghouse/CBS affiliate KPIX presented one of the Bay Area's first public demonstrations of realtime, over-the-air DTV and HDTV. Audience reaction was enthusiastic, as Bay Area broadcasting history was being made. Now, almost 18 months later, how is terrestrial digital TV doing, both locally and nationally?

The April meeting titled "(H)DTV: So Far, So Good?" attracted more than 100 SMPTE and AES members and guests, who returned to the KPIX studios in San Francisco to hear equipment manufacturers and several San Francisco call-letter stations give their perspective on the impact of DTV on broadcast engineering and production departments, based on their experiences over the past 18 months. A panel discussion including Paul Black, KPIX, David Lingenfelter, KICU (San Jose), Ed Cosci and Bob Hofert, KTVU (SF/Oakland), Ron Wilensky, TCI (Technology for Communications International Inc.), and Lee MacPherson, KGO (San Francisco), shared their views on the near-term future of the technology.

The meeting started with a presentation by Ron Wilensky, who spoke about the challenges facing broadcasters, especially in the smaller marketplace. The industry has to come to grips with some difficult decisions, both financial and technical, with the transition to DTV. TCI recently sold an antenna system to local PBS station

KCSM, and Wilensky spoke about how new antenna designs can future-proof DTV channel allocations. Glen Sakata, Faroudja Laboratories Broadcast Group, discussed the need to create high-quality pictures using up-conversion techniques, citing that, as we move into the HDTV era consumers will no longer accept poor image quality. He stressed the need to start with high-quality pictures in order to provide good up-conversions. David Lingenfelter spoke about KICU's involvement with Intel in creating the Center for Datacasting Innovation. He explained how broadcasters can learn from the real-world experience that the partnership is providing. Intel has been developing data applications while KICU acts as the carrier/transmission site for the data. The project is slated to continue until December 31, 2001. Lee MacPherson noted that KGO's conversion to digital has proceeded exceptionally well.

The presentations were followed by an open panel discussion with local broadcast engineers discussing their experiences of putting stations on the air with a DTV signal. The panel ended after Ed Cosci related a story of how he and a San Francisco police officer, with 20 minutes to air, delivered a piece of HDTV equipment from a remote truck in the field to the studio to replace a defective studio unit. This saved the day for KTVU as the station aired the Bay Area's first live HDTV broadcast of the 1998 Chinese New Year's parade. It was a death defying trip and all the owners of HDTV sets got to see the pioneering broadcast live and in beautiful high definition. After the meeting, attendees had the opportunity to examine HDTV equipment provided by Panasonic, JVC, and Faroudja Laboratories.—Howard Kirsch, Section Manager

Books, Booklets, and Brochures

Focal Press has announced publication of the following new books:

Practical Cinematography by Paul Wheeler discusses the principles of cinematography and the expertise that is unique to the director of photography. It combines basic theory such as color temperature and sensitometry, and practical skills such as the preparation of an equipment list.

By combining a mix of theory and practical application, **Placing Shadows: Lighting Techniques for Video Production, Second Edition** covers the physical properties of light and the selection of proper instruments and their place-

ment for the best possible effect. For the advanced amateur as well as the novice producer looking to enhance the look of their productions, this book by Chuck Gloman and Tom Letourneau covers the fundamentals.

Basic TV Technology: Digital and Analog, Third Edition, teaches students and beginning professionals the technical fundamentals underlying all television and video systems and demonstrates how various pieces of equipment work, what their functions are, and how they are integrated to form a complex video system. Written by Robert L. Hartwig, this edition offers new topics, which include the PAL

system, nonlinear editing, open architectures vs. dedicated equipment, and an update on HDTV and the FCC's plans for its future.

TV Technical Operations by Peter Ward is an introduction for new entrants into the broadcast industry. It is designed to prepare and provide them with the knowledge necessary for working in mainstream television. Discussions focus on essential techniques, technologies, and work attitudes.

To place an order call (800) 366-2665, fax: (800) 446-6520, or contact customer service at custserv@bh.com.