Section Meetings

Napa Valley College
September 4, 2002

During the first meeting of the year, President Bobby Pond, along with Vice-President Dominic Chappellet, welcomed members and encouraged visiting student to participate in open enrollment. The presidential heads revealed plans for two upcoming trips to local broadcast facilities, encouraging students to attend these academically beneficial excursions. Before bringing the meeting to a close, Pond introduced newly elected officers: Treasurer Duncan Meyer-McQuire, Secretary Faye Pilgrim, and Webmasters Wayne Quan and Skye Cassano. Instructor Gary Vann was also in attendance.—Faye Pilgrim, Secretary

Napa Valley College
September 5, 2002

Alumni Jassen Hansken and Toni Savage spoke to 16 future graduates of NVC's telecommunications program. Hansken, class of '99, informed students on the practicalities of aggressive/assertive job hunting. He suggested that aspiring engineers take entry-level positions in and outside the technical field to ensure future placement. Hansken acknowledged that classes in AutoCAD; networking; and nontechnical courses, which encourage creative thinking, helped him over the years. He encouraged maintaining the good habits taught by instructors Gary Vann and Ernie Abbott. Hansken closed with a positive economic forecast for future hiring and said alumni, popular post-production magazines and other industry print media, and the internet were important resources for success in finding employment.

Toni Savage offered her experience as an entry-level job seeker. Since a week after graduation in 2001, Savage has held the position of master control engineer at the college of San Mateo. She told students that being responsible for on-air quality control has enhanced her skills with the vectorscope and waveform monitor; that other engineering skills have been necessary to resolve equipment failures; and that jobs in smaller facilities require filling multiple positions from production assistant to engineer. She encouraged students not to get behind in coursework and agreed with Hansken that the tri-merited degrees of telecommunications, electronics, and RF (taught by instructor Larry Clark) are truly assets in the multimedia industry.—Faye Pilgrim, Secretary

Napa Valley College
September 20, 2002

During a tour of KTLN/Golden Gate Productions, Chris Coty, a graduate of NVC telecommunications program, introduced students to the resources of a broadcast/production company. Primarily, the Christian family programming network KTLN, an affiliate of the Total Living Network in Chicago, leases studio time in addition to producing its own shows locally. On the set of one show, "People Like You," Coty walked students through the details of live production. As a bonus, Mike Bruining demonstrated the benefits of using the Avid 7.1 for the show's creatively challenging assignments. Students were then escorted to the master control room where broadcast veteran T. A. Garsva demonstrated the operation of an on-air facility. He explained the station's break equipment, including customized server software and a redundant Tektronix Profile.

Coty informed students that like most small market stations KTLN transmitted a digitized version of its analog signal, meeting FCC standards for the original May date. Under the instruction of Chief Engineer Paul Haines, Coty has learned to maintain the station's machine room, which houses everything from CCDs to antiquities such as an Ampex VPR-3. Traffic Operator Fred Wille ended the tour with more broadcast memorabilia.

Thanks to the invitation of Production Manager Charles Wilson and the management of KTLN, the Napa Valley student chapter experienced a Bay Area gem.—Faye Pilgrim, Secretary

Nashville
September 19, 2002

Tom Hoffman, NorthStar Studios, a new subsidiary of the Christian Broadcasting Network, hosted the meeting held at NorthStar's facilities, which were recently purchased from Quest Digital Media. A sample reel of productions completed at the young company was shown, and tours of the facility were conducted at the end of the meeting.

The guest speaker for the evening, Steve Mahrer, Panasonic, gave an overview of the history of film and video, citing the advantages and disadvantages of each. Then he explained the film features that have been incorporated into the new AJ-DHC27F variable frame-rate camera/recorder, displaying some impressive footage of projects shot with the camera on a new 50-in. plasma panel display. Also exhibited was the AJ-HD150 and DVCPRO HD studio VTR for 1080i/720p, with an optional converter board; a multiformat HD/SD converter that allows conversion among ten different formats; and the AV-DVX100, an inexpensive DV camera that supports 480i/60 (NTSC), 480p/24fps, and 480p/30fps image capture.

Attendance at this meeting (59) was the best for a Nashville section meeting in at least three years.—Buddy Gailey, Secretary/Treasurer

Rocky Mountain
September 19, 2002

Rick Marsh, guest speaker at the Rocky Mountain Section meeting in September.

AT&T Broadband provided the facilities for the meeting with 12 members attending. As most broadcast facilities grow and change, so do power concerns. It can be a challenge to find solutions for keeping up with power needs. Using this as a theme, Rick Marsh, Power Management Systems and Sales, dove right into common power problems related to our industry and then discussed various solutions. It was interesting to hear how many external and internal influences there are and how they impact power quality. For example, computers, laser printers, and HVAC units produce varying effects by "cycling of inductive loads." Marsh then presented several ways of managing these power issues—some may require going above and beyond code. Protecting these important loads is another issue and Marsh's discussion centered on various means, including transient voltage surge suppression, power conditioning/voltage regulation, UPS systems, and backup generators. He then addressed the economics of each.—Rome Chelsi, Section Chair

Pasadena City College
September 10, 2002

Student Chairman Kassa Zakadi called the meeting to order for the 21 students and faculty in attendance and provided a brief introduction to SMPTE: he explained how it benefits students and its members and used a *SMPTE Journal* to introduce industry professionals and their related issues. He spoke of upcoming conferences and pertinent registration information. Kassa then opened the floor for nominations for the Chairperson of the SMPTE PCC Student Chapter for the academic year of 2002/2003. Jeff Chong, Jaime de La Pena and Eduardo Garcia were nominated. After the closest election in 20 years at the college, with the election decided by one vote, Chairperson Kassa handed the meeting to the new Chairperson Eduardo E. Garcia.—Sergio Q. Moran, Student Member

Eduardo E. Garcia

Pasadena City College
September 24, 2002

With 33 members in attendance, PCC welcomed back one of its own, Serena Hongphairoch, who attended PCC after receiving her B.A. in sociology at UCLA. She is continuing her success by working on a master's degree in film at Chapman University, while maintaining a variety of positions at KLCS-TV.

Serena Hongphairoch was the guest speaker at the September meeting of the Pasadena City College Chapter.

The first topic for Hongphairoch was her ever-changing positions at KLCS-TV. She stressed the importance of memorization and urged the beginning student to learn the facts and figures critical to working in a professional environment. She explained how her hands-on training with the character generator at PCC helped her with the more complex CG equipment used at KLCS-TV and expressed how fortunate the students at the college were to be working with state-of-the-art equipment, as her station is beginning to take the necessary steps toward digital broadcasting. She also discussed working with mini DV, 8mm, and 16mm film.

Hongphairoch, who is also the founder of the student chapter of SMPTE at Chapman University, then commented on her experiences as a student there. She explained thoroughly to expect from a rigorous course in film and continued by describing production techniques used in her student film projects.

Fueled by her wealth of information, the members eagerly asked questions until our time with her ran out. Following the meeting, a frenzied networking session by a large portion of the audience spilled into the halls for well over 20 minutes.—Eduardo E. Garcia, Chairman

New York Section Meeting Special Report
September 25, 2002

Apollo 13—The IMAX Experience was the highlight of the meeting on large format film production. The two-hour film, directed by Ron Howard and starring Tom Hanks, was re-mastered using the IMAX DMR process. It was shown on a screen over 100 ft wide and 80 ft high. The visual and aural effect was spectacular, and viewers were truly immersed into the story.

The evening began with an hour-long social gathering in the huge atrium of the theater along with a catered buffet sponsored by the Eastman Kodak Co. The program had been publicized to all the trade and other motion picture and television organizations in the metropolitan NY area. Through the generosity of Loews Cineplex Entertainment Corp. and its director of marketing for IMAX, Lynn Marschke, the entire facility and technical staff was donated to the Society for the evening. This entailed canceling several public showings and the NY Section is grateful for Loews Cineplex's support for this industry-wide event.

After filing into the 600-seat theater, the audience of over 200 film and television professionals heard two papers on large format films. Beverly Pasterczyk, Eastman Kodak's large format film specialist, presented an illustrated talk, "What's New In Large Format Film Production?" She began by stating that large format films have a long history. In 1929 Fox Films introduced its 70mm Grandeur sound film *The Big Trail*, starring John Wayne. Fifty years ago, in *This Is Cinerama*, three 35mm films were projected simultaneously side-by-side onto a very large curved strip-screen system. The giant screen extended beyond the range of peripheral vision, causing the viewer to be immersed in the action. Thereafter, many of the large film formats were photographed on 65mm negatives and printed on 70mm film with six tracks of stereophonic sound re-recorded onto magnetic stripes. In the 70s and 80s, traditional Hollywood movies were shot in 35mm and blown up to 5-perforation (perf) 70mm, mainly because the print carried magnetic stripes that could accommodate 6-track stereo sound. When digital photographic sound was introduced in the early 90s the need for such magnetic striped prints declined, and it is rare for a traditional commercial movie to be released in 70mm.

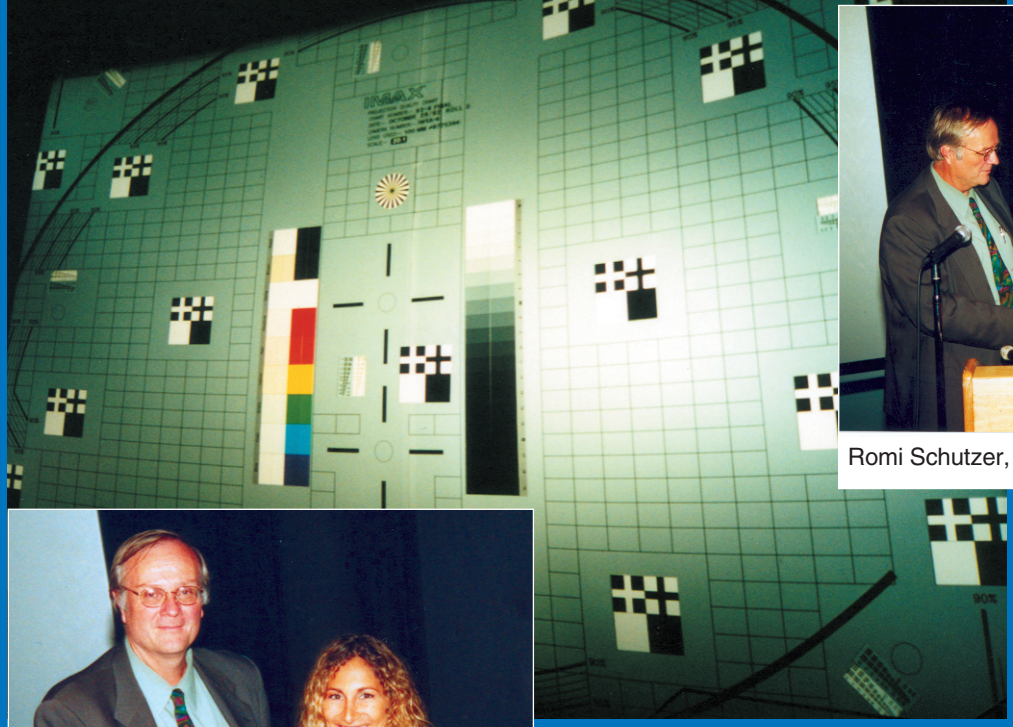
The end of 65mm origination of "traditional Hollywood movies" was precipitated by the advent of wide screen capture capability on 35mm, such as Twentieth Century Fox's anamorphic system CinemaScope. Its first film, *The Robe*, had a 2.55:1 aspect ratio and four magnetic stripes for stereophonic and surround sound. With the realization that 35mm capture and production was less expensive, 65mm production became rare. Exceptions include Ron Howard's use of 65mm negative for *Far and Away* in 1992, and Vittorio Storraro's historical sequences for *Little Buddha* a few years later. The last such film to use a 65mm negative was a production of *Hamlet* in the U.K.

65mm 5-perf production for large format presentation is, however, used today for "ride films," where seat-belted viewers sit on a platform that moves and lurches in all directions as the accompanying film is projected on a large screen. Showscan's technology gave the audience an enthralling experience with its 5-perf 60 frame/sec film. It was shown with the audience on a motion simulator that complemented the film image. Although the company is defunct, there are libraries of subjects that can still be seen in theme parks and other special venues around the world.

Today, the more common use of large format origination is either 8-perf 65mm or 15-perf 65mm. The IMAX Corp. developed the 15-perf capture and projection technology, which is the highest quality image that can be presented. Some IMAX theaters have 3-D capability and others feature a dome (Omnimax), which offers a different experience. Ride attractions at theme parks such as Disneyland and Universal Studios feature content originated on 65mm negative for either format. Iwerks Entertainment features the design and development of special venues, such as Iwerks 360, in which the audience is completely surrounded by motion pictures for a truly engrossing experience; 65mm negative is used mostly for these venues, because the demands of the theater (increased brightness, screen size) require the highest quality images possible. Eastman Kodak Co. continues to manufacture the 65mm and 70mm raw stock films needed for these productions and is committed to continuing their improvement.

The second speaker, Romi Schutzer, vice-president, Corporate Marketing and Communications, IMAX Corp., presented an overview of a new process, IMAX DMR (Digital Mastered Release). The goal of DMR is to take the best of Hollywood's 35mm live action event films and convert them to a picture not only eight stories high and over 100 ft wide but also, with unparalleled image and sound quality.

A few day's earlier, *Apollo13—The IMAX Experience* had its New York premier, with both director Ron Howard and James Lovell, the commander and real life hero of Apollo 13, in attendance. Schutzer's presentation began with a comparison of four test sequences from the film. The scenes were first shown in the original 35mm format and then in the IMAX 15-perf 70mm (15/70) format: the 15/70 footage was brighter and sharper and the audience more immersed in the action. There were also differences in the sound, which takes



IMAX projection quality chart, shown on Loews Cineplex curved screen, at the New York Section meeting on September 25, 2002.

Romi Schutzer, IMAX Corp., and Richard Carlson.

Motion Picture Program Chair Richard Carlson and guest speaker Beverly Pasterczyk, Eastman Kodak Co.

advantage of IMAX's six-channel uncompressed surround sound system through speakers custom designed for the theater's geometry and driven by ultralow distortion amplifiers capable of delivering up to 12,000 watts of power. It was an awesome, riveting experience to see and feel the rocket soar away from the launch pad as if you were standing just 50 ft away.

The DMR process starts with the conversion of the 35mm frames into digital form at a very high resolution, capturing all the detail of the original elements. The software mathematically analyzes and extracts the important image elements in each frame from the original fine grain structure. Removing that fine grain and sharpening the focus to enhance the quality of the underlying image is the basis of IMAX, technology that makes the images sharper and brighter, removes unwanted artifacts such as blemishes on the original film and adjusts the colors for the unique characteristics of the IMAX screen. The re-mastered film is then converted from digital data back to 15/70 film using a proprietary laser film recorder. Since the area of the 15/70 film frame is 10 times greater than a 35mm frame, it is capable of supporting substantially higher image resolutions.

The projection system is another factor in the improved sharpness of the projected image; its rolling loop mechanism is used to advance the film. The steadiness achieved with the rolling loop movement is 0.004% compared to 0.12% for 35mm projectors using the conventional Geneva intermittent pull-down system. The combination of less magnification than required for 35mm and the full support of each frame by a vacuum system results in steadiness of the image about 100 times higher than for 35mm. Again, this adds to the sharpness of the image on the screen. Film flutter (in and out motion of the frame) is not an issue because the large 15/70 film frame is exposed to substantially less heat per unit area than 35mm, resulting in no perceptible film buckle. Yet the amount of light per unit area is greater than with 35mm, resulting in a brighter screen image, even on such a large screen.

Apollo 13—The IMAX Experience, a two-hour film, required the conversion of 200,000 frames to over 7 Tbytes of digital data, equivalent to about 9,000 CDs of data. With the computers on hand, the DMR required 10 weeks of processing. With more computers a feature length film can be converted in a shorter period of time. The next release, premiering on November 1, is *Star Wars: Episode II, Attack of the Clones—The IMAX Experience.*

The IMAX brand has traditionally had a strong association with wholesome family films. The best candidates for conversion will be epic, visually driven films with powerful musical scores and special effects that seek a family-oriented audience. When Schutzer said "Roll *Apollo 13*, please," the audience, sitting in front of one of the largest screens in the industry, knew it was going to see and feel the result of a major milestone in the evolution of filmed entertainment. (IMAX, The IMAX Experience, and DMR are trademarks of IMAX Corp.)—Edgar Schuller, Chair, Archival Papers and Historical Committee