

Section Meetings

New York Section Presents Roland Zavada's Investigation of the Zapruder Film

Over 130 members and guests filled Studio 6 at Manhattan Center Studios to hear Roland Zavada, an Honorary Member of the Society, relate his investigation of the photographic evidence collected after the assassination of President John F. Kennedy. Until recently the American public was deprived of full disclosure of the assassination, which clothing manufacturer Abraham Zapruder had recorded with his new Bell and Howell 8mm camera. His 26-second film of the assassination had become the most significant amateur recording of a news event in history. Yet many Americans had continued to seek answers to nagging questions about this tragic event, including the authenticity of the Zapruder film.

Before discussing his involvement with the investigation, Zavada set the scene for this disastrous act by mentioning the personalities and events, which defined the era of the early 1960s. He spoke of the political, economical, and social trends and the influence of the "cold war," the Bay of Pigs invasion, the Cuban missile crisis, the Vietnam War, the Civil Rights Movement, J. Edgar Hoover, and Lyndon Johnson. It was an era when secrecy pervaded many government agencies and surrounded the facts gleaned from the many investigations into the Kennedy assassination.

The Warren Commission and other investigative bodies never inspected many of the documents. Evidence was sealed and stored by intelligence and security agencies for almost 30 years, resulting in increasing mistrust of the federal government by the American public. Various

researchers raised questions about the authenticity of the 8mm film made by Zapruder, including the speculation that anomalies in the film frames were evidence of film alteration. There were questions about the presence of claw shadows and ghost images in the perforation area of the film, multiple exposure areas, claw or aperture flare, claw shadow, and other strange images. It was, therefore, necessary not only to analyze the motion picture, but also to understand how the camera optics had recorded or imaged the film.

In 1997 the JFK Assassination Records Review Board, created by Congress earlier in the Clinton administration, contacted the Eastman Kodak Co. for help in the investigation of photographic evidence. Kodak's former research scientist and standards director for imaging technologies, Roland Zavada, now retired, was recruited. His investigation became very convoluted because some of the evidence, including the actual Bell and Howell 414PD 8mm movie camera, was not available to him. In the investigative process he was obliged to find and contact hundreds of people who were somehow involved with the evidence, including operators at the film processing laboratory, the optical and mechanical designers of the camera, engineers in film manufacturing, and others. He even managed to obtain five identical Bell and Howell cameras that bore serial numbers close to the Zapruder camera. As a result he was able to verify the authenticity of the Zapruder film and ensure that it belonged to the American public. Other areas of investigation, too numerous to mention,

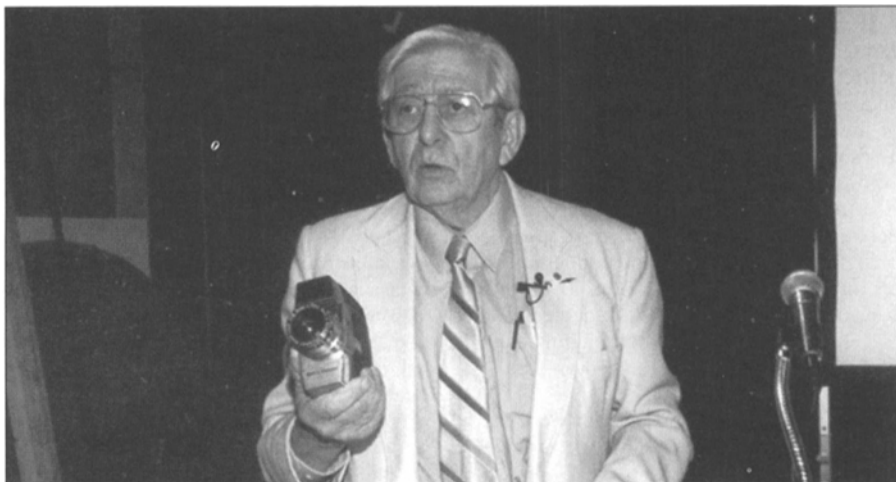


New York Section meeting in April. (l-r) Ed Schuller, Test Materials Chair and Meeting Coordinator; Roland Zavada, Eastman Kodak (Ret.), and Standards Director for Imaging Technologies.

included permanent preservation of all the autopsy photographs of President Kennedy in digitized form and performing sophisticated digital enhancement of selected, representative images. All original documents of the assassination as well as reports by the Review Board, totaling over 4 million pages, are now available to the American public in the National Archives.

An illustrated synopsis of Zavada's presentation was distributed to attendees. The entire meeting was recorded on videotape and, after editing, will be placed in the SMPTE archives. A Q & A session included an anecdote related by Everett Hall who, in 1963, was president of Cine Magnetics Film Laboratory. He recalled that three FBI men visited his laboratory and requested that a copy of a single 8mm film of the Kennedy motorcade be duplicated. A 16mm printing machine was modified to accept the 8mm width film, which was prepared with appropriate leaders and threaded onto the printing machine. When the printing operator turned off the room lights so that the raw print film could be threaded onto the machine, the FBI agent, who was watching every move, complained that he would no longer be able to observe the duplicating operation in the dark room!

At the end of Zavada's presentation many SMPTE members understood that because of the convoluted process of the investigation, he would not have been able to reach his conclusions without the help



Roland Zavada holding Bell and Howell 414PD 8mm movie camera, which he dissected during his investigation of the Zapruder film and camera.

of hundreds of professional and personal contacts made during his many years as a member and Engineering Vice-President of the Society.

The meeting facility, Studio 6 of Manhattan Center Productions, was provided courtesy of Randy Davis, president, with technical coordination by Dan Mathers, chief engineer of the Metro Learning Channel. Prior to the meeting a social gathering and buffet supper was provided by the Eastman Kodak Co.

At the conclusion of the Q & A session, Mathers conducted tours of the video and audio studios and associated technical facilities. The historical venues in the building were also toured, including the recently restored Manhattan Opera House built by Oscar Hammerstein I (ca. 1906) and the ornate Grand Ballroom. The latter was originally built as a Masonic Temple and is one of the acoustically outstanding venues for music recording sessions. A brochure describing the venue as well as Zavada's synopsis are available by contacting Ed Schuller by fax only at (516) 676-3895, listing your name, address, and phone number.—Ed Schuller, Chair, Archival Papers and Historical Committee

Detroit May 9, 2000

The May meeting was hosted by General Television Network in Oak Park, MI. The speaker, Scott Ackerman, TeraNex Inc., with over 15 years experience in both format and standards conversion technologies and an active SMPTE member, presented new techniques used to provide format conversion (up-conversion, down-conversion, and cross-conversion) of DTV signals. He explained why proper de-interlacing of input material is essential to high-quality conversions and described how TeraNex has implemented a motion compensated conversion scheme and the latest software and hardware technology in the company's products to preserve full resolution of interlaced material.

According to Ackerman, the format converter is powerful enough to process a high-definition image on a pixel-by-pixel basis and can be upgraded to support new formats and processing technologies as they emerge. Features such as gamma correct color space conversion, 32-point interpolation, 3:2 pull-down detection, scene-change detection, aspect-ratio control, and "unsharp masking" detail enhancement are included in this product. A TeraNex Xantus format converter was used to demonstrate the technology as well as provide hands-on opportunities for attendees.

A Q & A session and additional product demonstrations followed the presentation.—Helge Blucher, Secretary/Treasurer

Nashville May 18, 2000

The May meeting took place in the projection booth at the new IMAX theater in the Opry Mills Complex. Chief projectionist Pat Caldwell explained the IMAX format to the 36 members and guests crowded into the projection room. He detailed how the film enters the projector and is transported through the system. The size of the plates were enormous and Caldwell described the process of the film in front of the lamp that is projected on the screen, which is also huge and has many small holes so that sound can pass through and also prevent the picture from reflecting back into the audience.

Attendees were amazed at the voltage (36) and the amperage (400) of the 6-xenon projector lamp. The bulb is water cooled with pure filtered water that runs through the lamp housing. It takes two hours to replace this lamp, which lasts for 1,000 hrs, and costs \$6,000.

The presentation was followed by a screening of the film *T-Rex*, in 3-D.—Phil Arnold, Secretary/Treasurer

San Francisco May 18, 2000

The May meeting was hosted by the new Ex'pression Center for New Media in Emeryville, CA. [www.xnewmedia.com.] Attendees, including the AES-SF and other groups, witnessed four presentations on "Local Career Training in New Media and A/V Production and Engineering."

Breaking into the technical or production side of video and audio can be difficult, since there are relatively few places in the country where today's novices emerge from school as professionals ready to work. California and the Bay Area are lucky to have a relatively large talent pool, due in part to the unusually high concentration of local training opportunities.

Ex'pression has been in operation since January 1999. Its president, Gary Platt, a nationally known audio mixing engineer, and Peter Lannen, CEO, gave an overview of the philosophy and goals of the school, a description of the courses, and the expectations of graduating students. Ex'pression is a private institution that prepares students for jobs in website design, graphic arts, sound arts, and video production, in an intensive, total-immersion, 14-month course, culminating in an A.S. degree. The placement rate for the first graduating class was 100%, which is guaranteed as part of the contract with students.

Gary Vann, television instructor/coordinator of Napa Valley College [www.napanet.net/~smp-te-11], stressed his curriculum's focus on the highly technical side of A/V education. It includes equipment

SMPTE Section Calendar Rocky Mountain

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.

maintenance, repair, and installation. Vann described the history and development of the Napa curriculum, which he has developed over the past 20 years. During a Q & A session, members of the large contingent of Napa Valley students attending the meeting spoke about the multiple job offers they had already received, the nearly 100% placement rate, and the respect the Napa program has achieved in the industry.

Vann's presentation was followed by the history of video recording along with personal anecdotal material by Charles Hintz, faculty member at California State University at Hayward, [www.csuhayward.edu] and an engineer in the school's Instructional Media Center. Hintz, who has written some of Napa program's training manuals along with Vann, gave the audience a walk down memory lane, an eye-opener for the many students and young people in the audience.

Phil Kipper, professor and department chair of the Broadcast and Electronic Communication Arts Dept. of San Francisco State University [www.beca.sfsu.edu], ended the program with a discussion on the speed of technological change and the challenges of academia in adjusting to these changes. Students are often ahead of the faculty in terms of comfort with new technologies. He raised questions about the future role of television as an interactive medium and how the Internet is challenging traditional television networks for audience share. Kipper questioned whether television broadcasting as we know it will survive. He expressed doubts about the practical, near-term use of the Internet as a good-quality, digital-video delivery medium and agreed that, for the foreseeable future, the only widespread, consistent, reliable, delivery vehicle for high-quality digital video will be a DVD and a 44-cent stamp.—Peter Hammar, Secretary