
Biographical Sketch

Blaine Baker,

SMPTE

Financial

Vice-President, 1983

Blaine Baker, President of Motion Picture Laboratories, Inc., Memphis, Tenn., has been elected Financial Vice-President of the SMPTE. He will fill the post left vacant when Leonard F. Coleman, former Financial Vice-President, was elected SMPTE President.

A native of Arkansas, Baker was graduated from the University of Arkansas with the B.A. degree in Communications. In 1947, at the age of 18, he was National Winner of the American Legion Writing Contest with an essay on "The American Contribution to the War Effort."

He served in the Korean War, enlisting in the U.S. Air Force in October, 1950, and serving until October, 1954 as an instructor in the Radio Mechanics School. Prior to his enlistment he began his professional career in Cape Girardeau, Missouri, as a radio technician with (then) KFVS. (In 1953 he had been granted a First Class Radiotelephone License by the FCC.)

At the end of his term of enlistment, he returned to KFVS-TV in Cape Girardeau as Production Manager. Later he became Manager for Versatile TV Productions. In 1966 he joined Motion Picture Laboratories in Memphis, becoming the company's president in 1978.

Baker became a member of the SMPTE in 1966, and in 1981 he was made a Fellow. He has been a Governor of the Society for two terms and has been extremely active in Section affairs, serving as Chairman of the Nashville Section and also as Program Chairman and Membership Chairman. He spends a great deal of time arranging programs and persuading members of the Nashville Section to attend the meetings. On several occasions he offered the use of the MPL plane to Memphis members to enable them to attend meetings in Nashville;



Baker holds a commercial pilot's license, which he has held for the last 25 years.

Baker has always been most generous to the academic community. Each year he speaks to film students at various universities, telling them how to work with the laboratory, providing up-to-date information on equipment and new technology, and answering questions on all phases of filmmaking. He is a featured speaker each year at the Audiovisual Institute for Effective Communication, which is held semi-annually at Indiana University.

Among other activities, he produces the "Traveling Seminars" for MPL, which travel from city to city introducing new systems. He has been appointed by the Governor of Tennessee to serve on the State Film Commission, and he serves currently on the Board of Directors of the Memphis State University Speech and Hearing Center.

Baker's main leisure-time activity is tennis. It's lots of fun and keeps him fit, he said. Baker's two main interests are his family and the SMPTE. His family consists of his wife, Anne, and his three children, daughters Sherry and Terrye, and son Daniel. Mrs. Sherry Kelley is 30, Terrye is 27, and Daniel is 18.

His devotion to the SMPTE is evidenced by his many contributions of time and effort to uphold its traditions and advance its interests. "The SMPTE is a moving force internationally in advancing the technology of motion picture and television engineering," he said, adding, "In view of the almost incredible advances that have been made within the last decade and that are still going forward at an astonishing rate, the influence of the SMPTE in maintaining a rational approach to these advances is of inestimable value."

SECTION MEETINGS

Ottawa Section Holds All-Day Meeting

Ottawa, September 16 — A film, *Behind the Scenes*, courtesy of Kodak of Canada Ltd., was the opening event of the All-Day Meeting held at the National Archives of Canada, Ottawa, with an attendance of about 100 members and guests.

The first speaker was Leonard Green, Assistant Technical Director of the National Film Board in Montreal. His presentation, entitled "Past and Present," traced the technical developments of the Film Board from its origins as the Canadian Government Motion Picture Bureau in 1921, through the formation of the National Film Board in 1939. He recalled the early days on John Street, Ottawa, where work was carried on in buildings that reached a chilly 35°F during the winter. Green illustrated his talk with numerous historical pictures, including 1955 photos of construction phases of the present facility in Montreal. He also included a clip from the first color feature produced by the Film Board in 1951, *Royal Journey*, shot on Eastman 5247 film. The feature depicted the Royal Visit of the (then) Princess Elizabeth and the Duke of Edinburgh. Green completed his presentation by describing the latest technological developments at the National Film Board, including a new computer-controlled audio console in Theatre I, and on-going experiments with 3D IMAX photography.

The second speaker was Robert O'Reilly, Assistant Vice-President, Corporate Affairs, Canadian Broadcasting Corporation, who spoke on the subject, "Public Broadcasting in Canada." To the question, "Do we have a Canadian broadcasting system?" he answered, "No." He explained that this regrettable situation has been brought about by American programming



Budge Crawley holding the Oscar for *The Man Who Skied Down Everest*.

through cable penetration, home video recorders, pay television, and Telidon. In the 1960's, he pointed out, CBC reached 40% of the broadcast market; by 1980, due to the diversification of programming material, this share had dropped to 18%.

O'Reilly suggested that to compete, CBC must offer distinctive programming such as that provided by CBC Radio. He cited the success of the move of *The National* to prime time coupled with the addition of *The Journal*. He pointed out that the future may hold vertical programming for the CBC with such services as sports and children's programming. He also told of plans for a national teletext service using Telidon technology.

Following a coffee break, Ray Brulé, Technical Manager, Recording Materials Division, 3M Canada, presented a paper entitled "Realm of the Reel: A History of Video Recording." He told how, in 1885, Chichester Bell saw magnetism as a means of providing information storage. He then traced the history of wire recorders in the 1930's: the German development of the magnetophone which used plastic with magnetic particles, and, following World War II, 3M's development of magnetic oxide on paper — the Scotch 100 audio recording tape.

Brulé told then how Ampex joined in the developments, particularly in research into recording video. Instead of needing a bandwidth of 2-3 KHz, the video required 3-4 MHz — proving, as he said, that one picture is worth a thousand words. In 1956, Ampex brought out the quad VTR, and 3M developed the accompanying videotape. Since then the recording industry has gone into color, videodisc, and 1-in., 3/4-in. and 1/2-in. videotape formats. He completed his presentation by briefly describing work directed toward developing a digital video recording standard undertaken by the SMPTE Digital Standards Committee.

Following lunch, Budge Crawley, noted for his work over the years with Crawley Films, including production of the Oscar-



Ross Mutton, Ottawa Section Chairman; Ray Brulé, Governor; Budge Crawley; Harold Eady, Sections Vice-President; Len Green, Governor.



Members and guests enjoyed a Governors' Wine and Cheese reception following the all-day meeting.

winning *The Man Who Skied Down Everest*, discussed the development of the Canadian motion picture industry. He spoke of the domination of Canada by the American film production industry, and how the Canadian film companies have in the past tended to gravitate toward the public sector. He commented also on how

Canadian actors and writers head to Los Angeles, New York, and London.

Crawley described the 100% capital cost allowance implemented by the government to promote film production in Canada. He said that this has resulted in the production of 300 films that have not been released, and he suggested that the law be changed to make the profits of films produced in Canada tax-free.

He then went on to describe how he became involved in the film business in the late 20's, and that he has made between two and three thousand films. "It is not a very precise business," he said. He concluded by describing the early beginnings in Ottawa of the National Film Board.

Next on the program was a presentation by Kirk Lidbetter, President, United Audio Visual Resources, and Bob Leitch, Synoptic Media and Communications Corp., on "Telidon: Audiovisual Tool." Lidbetter related some innovative uses of the Telidon videotex technology with particular reference to the Info Hut, a user-operated electronic information kiosk at events such as the Canadian National Exhibition, the Pacific National Exhibition, and Future Pod at Ontario Place.

Leitch presented a history of Telidon, discussing two-way video communication



Ottawa Sections Officers: Harry Ross, United Video; Mike Hooper, Panasonic Canada; André Proulx, Optical Art Corp.; Doug Murphy, Canadian Broadcasting Corp.; Dennis Mole, Public Archives Canada; Robert Vaive Department of Communications; Ron White, Amesbury Distributors; and Ross Mutton, Carleton University.



René Paquette, Rachel Barrette, and Jacques Gagné admiring the Montage presented by BKSTS to the Canadian Sections of the SMPTE.

and the potential of Telidon in teleshopping, training, integration into existing media, and linking with microcomputers. The presentation was completed by Lidbetter, who gave a detailed explanation of the Info Hut, describing its use in public displays, how the control device was redesigned for audiovisual and public use, and the addition of touch-sensitive screens to improve the interactive access.

Next on the program was Dennis Mole, Chief, Video Disc Systems, Public Archives of Canada, who presented a paper entitled "Video Disc Technology." He described the three types of videodisc — modulated groove, transmissive and reflective laser, and direct read-after-write. He told of the interest in videodisc at the Public Archives, noting that videodisc requires relatively small storage space, and provides protection of the original material while providing access to the public. He pointed out that videodisc is permanent and may be accessed by a microcomputer. Tests so far have involved shooting original material on 35-mm motion picture film one frame at a time. Objects are shot as complete entities and then in matrices, enabling close-up views to show details. The film can then be transferred to either 2-in. or 1-in. master tape from which the master disc is produced.

Mole revealed that the Archives are looking into the possibility of storing computer data, motion-picture film, videotape, and printed material on disc. It was estimated that the total collection in the Public Archives would require one million discs. Because of the great quantity of material to be recorded, coupled with the low number of individual disc copies, recordable disc technology is currently being considered.

The presentation closed with a demonstration of the disc tests currently being carried on at the Public Archives.

Next on the program was André Proulx, President, Optical Art Corporation, who

presented a paper entitled "Computer Animation." He displayed examples of computer-controlled motion picture graphic materials using slit scan techniques. He explained how the computer is used to control the opening and closing of the shutter, coupled with camera movement on an x, y, z axis in relation to the artwork. The artwork can be either a 35-mm color slide or 35-mm Kodalith from which color can be produced in the shooting process through filtering and multiple exposure.

The final event on the program was a slide presentation about the SMPTE showing the many benefits to members, presented by Harold J. Eady, SMPTE Sections Vice-President.



Ron White on recruiting phone at Ottawa section meeting.

The Governors' Reception, courtesy of Hitachi Canada, Kodak Canada, Sony of Canada, and Technics-Panasonic Canada, made an enjoyable end to the All-Day Meeting of the Ottawa Section. — Ross Mutton (Chairman).

Chicago, September 14 — A presentation on Zoom Lens and Optical Systems by Ted Washburne, Fujinon Optical, was well received by an audience of 40 members and guests assembled at the Swedish Club. Both the film and the video people present were extremely interested in the discussion, as the subject of zoom lens and optical systems is important to both fields. The slide presentation and the question-and-answer period were very informative, as was the program. — Norman Thelen (Secretary-Treasurer), Encyclopaedia Britannica, 8513 W. North Terr., Niles, IL 60648.

Chicago, October 12 — The meeting began with a tour through the Museum of Fine Arts Research and Holographic Center. Program Chairman Man-Sung Son then introduced the guest speaker, John Hoffmann, World Class Holographer, who gave a presentation on Holographic System Designs. A lively 45-min question-and-answer period centering around the displays in the Museum preceded the presentation.

During the program it was brought out that holography requires a great deal of engineering skill, as well as skill in both light and film structure in addition to the creative aspects involved.

Following a film on holography, pro-



Ted Washburn and guests during the question-and-answer period.



Joe Pusateri, Manager; Michael Bailey, Section Chairman; and Paul Markun, Arrangements Chairman, preparing slides for the evening's presentation.

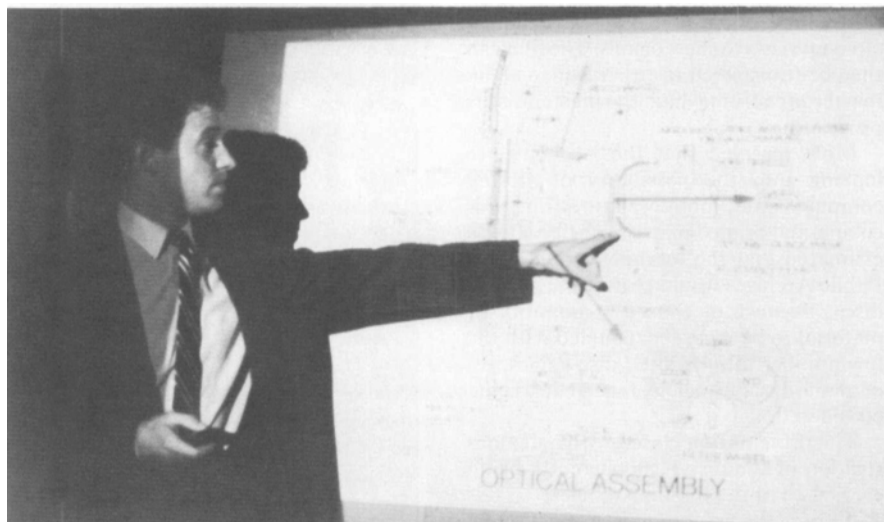
duced by Encyclopaedia Britannica Educational Corp., Hoffman again took the floor to answer questions. He noted that Kodak and Agfa-Gevaert both contributed greatly to the progress of holographic designs through the manufacture of the required films and technical aid.

Interestingly, it was pointed out that the Russians are far ahead of any other country in the development of holographic techniques. They have already produced a 15-sec motion picture using these techniques. In reference to light/lasers, it was pointed out that the Russians have a light source far in advance of anything yet developed elsewhere. The design and construction of such a light source is one of the major reasons they are so far ahead in the development of holographic techniques.

After the presentation, many members of the audience returned to the Museum, where Hoffman answered additional questions about certain displays. — Norman Thelen (Secretary-Treasurer), Encyclopaedia Britannica Educational Corp., 8513 W. North Terr., Niles, IL 60648.

Dallas/Fort Worth, October 19 — FPS Studio hosted the meeting, providing a

wine and cheese reception prior to a tour of the studio facilities. The audience of 57 then gathered to hear Peter Wolfe, Peter Wolfe Concepts, describe the special techniques required in set design. In a fascinating talk illustrated with slides of set renderings for numerous productions, he



Ted Washburn showing the audience a significant part of an optical assembly.

recounted many of the problems, successes, and mistakes encountered during his 30 years in the business of creating sets.

Dave Calhoun, WFAA-TV, demonstrated basic lighting techniques for a simple set in the studio. The results were displayed on two monitors near the set for comparison. Dave enlightened the audience with a description of the numerous problems associated with using video in the field. Included in his list were carrying 800 pounds of equipment, and the need for backup cameras, recorders, and monitors, monitor setup, and the technical staff required to maintain the equipment. — John C. Norris (Past Chairman), Eastman Kodak Co., 6300 Cedar Springs, Dallas, TX 75235.

Detroit, September 21 — The design philosophy of the Panacam Reflex electronic camera was discussed by R. A. Sheffield, CEI/Panavision, at the meeting held in the Victor Duncan offices, Madison Heights, Mich. He said that Panavision's goal was to combine the best of film, optical, and electronic technology. The film contributions, he explained, include oversize reflex viewing, aerial image focusing, and follow focus controls. The optical contributions, Sheffield said, include Panavision 35-mm lenses, servo feedback power zooming, and a dichroic prism assembly, which gives each lens the same angle of view on the electronic camera that it would have on a 35-mm film camera.

The electronic contributions include a soft white clipper to extend the apparent video latitude, sophisticated image enhancement, safe title/safe action markers, built-in generator, and a microprocessor to provide automatic setup and error messages to the operator through the electronic viewfinder.

A question-and-answer period followed the presentation. Refreshments were supplied by Victor Duncan. — Charles Nairn (Secretary-Treasurer), Communications Technology, Inc., 909 Fisher Bldg., Detroit, MI 48202.

Ohio, September 21 — The Panavision Panacam reflex video camera was described and demonstrated by Henry Lassige, Alpha Video and Electronics Co., at the Cleveland Hilton South auditorium. The Panacam, the speaker told the audience of 15, is a marriage of film and television technology which has produced a television camera that can be used by film crews with little or no retraining. The complete line of Panavision lenses and accessories is coupled by a special lens system to a Panavision/CEI 310 television camera resulting in a television camera that operates like a Panaflex film camera. In addition to the reflex viewfinder, a television viewfinder may be used as needed. Picture registration is constantly maintained by a microprocessor system that also monitors and/or controls many functions of the camera. Operator instructions are displayed on the monitor when adjustment is required. The extensive use of automatic circuits allows the use of the camera without the requirement of adding additional personnel.

A videotape was shown comparing the Panaflex with the Panacam for television. The 35-mm film was transferred on a Rank flying spot scanner to videotape and split-screened with a Panacam recording of the same material. Pictures were subjectively very similar.

A brief question-and-answer period followed the presentation. — David A. Ginaven (Secretary-Treasurer), Rex Humbard Foundation, 4571 Stagecoach Trail, Akron, OH 44321.

Ottawa, October 26 — "Affordable Computer Graphics" was the subject of a presentation by Robert Cook, BCB Electronic Sales Ltd., at the Mitel Corp. for an audience of 50 members and guests. Cook began the presentation by describing the architecture and background of computer graphics systems and explaining the various components including the CPU, key-



(L to R) W. Pfeifer, J. Kietzer, and J. Hancock at October Chicago meeting.

boards, CRTs, bit pads, and floppy disks. He also referred to the various output options on NTSC video, RGB, and TTL.

Cook then described the low and high resolution systems, their differences, and the capabilities of the most sophisticated systems up to 16 million color options. He explained how the various systems can produce animation, how the information is stored, and how the run-length encoding expands the storage capacity of a system.

After a coffee break, Cook showed the flexible capabilities of the Via Video System One computer graphics system and gave members of the audience an opportunity for hands-on operation of the equipment. — Ross Mutton (Chairman), P.O. Box 2427, Sta."D", Ottawa, Ont., K1P 5W5 Canada.

Pacific Northwest, November 10 — The Sony Betacam was the subject of the meeting held at Sea-Tac Red Lyon Inn in Seattle. Charles Hintz, Sony America,

gave a detailed report on the system's design and construction, followed by a hands-on demonstration. The meeting, held in conjunction with the regional convention of the Society of Broadcast Engineers was attended by 15 members. — Richard J. Yeamans (Secretary-Treasurer), KOMO AM/TV, 100 Fourth Ave., N., Seattle, WA 98109.

Toronto, October 19 — The new SK-1 solid state camera using the new MOS image pickup device was the topic of the meeting held at Hitachi of Canada, Scarborough, Ont., with an attendance of 140 members and guests. Martin Greenwood, Hitachi of Canada, explained the metal oxide semiconductor image-pickup device that replaces the conventional vacuum tube. Early developers, he said, were too optimistic about the changeover and, because of various technical difficulties, tube-type and solid state device will coexist for the time being.

As a result of camera miniaturization development in the past years, Hitachi made an effort to introduce the 3 MOS SK-1 camera with immunity to burn from high intensity lighting, with less than 0.05 permanent registration error, with 385×485 elements across the chip, and with immunity to vibration, among other features. The only tube device in the camera is the viewfinder which adopts a 1-in. CRT. Two disadvantages are vertical smear and MOS noise.

During the question-and-answer period the causes of vertical smear, MOS switching noise, and sensitivity spectrum were discussed.

Following refreshments, courtesy of Hitachi of Canada, Greenwood gave a demonstration of the SK-1 and a side-by-side comparison with the FP-21-3-tube color camera. — Fung F. Lam (Secretary-Treasurer), Sony of Canada Ltd., 411 Gordon Baker Rd., Willowdale, Ont., M2H 2S6 Canada.



Inside the Museum — thoughtful observation of an unusual display.