SECTION MEETINGS

Hollywood, May 13—Depth Perception in Color Photography was demonstrated to an audience of 275 SMPTE members and their guests at Paramount Studios by Jerome T. McGarry, Eastman Kodak Co. Through the use of slides he showed how lighting, object size, focus, and perspective affect the appearance of a third dimension on a flat plane. He explained to the audience that "what we see" depends largely on "what we think we see."

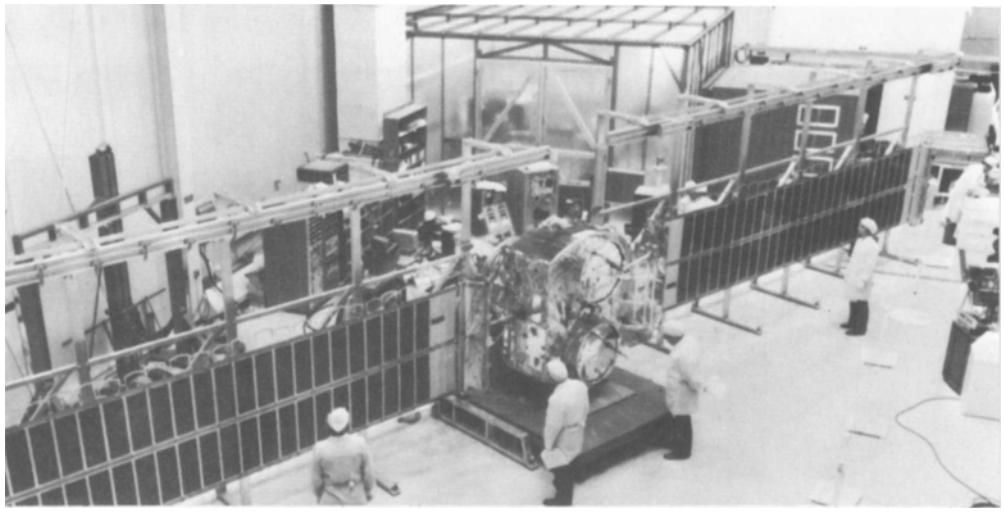
Richard L. Thomas, Eastman Kodak Co., discussed the engineering parameters and low-light capabilities of Eastman high speed negative film 5293/7293 using several demonstration films. Members of the audience seemed especially interested in the low-light characteristics of the film and many questions were directed to the speaker following the presentation. — Charles D. Kircher (Secretary-Treasurer), Foto-Kem Industries, 2800 West Olive Ave., Burbank, CA 91505.

New England, November 11 — The State of the Art was the subject of the meeting held at the Cahners Room, WGBH-TV. The meeting, attended by 85 SMPTE members and their guests, was conducted by Karl Renwanz, Director of Engineering, who introduced WGBH staff members, each of whom gave a brief description of his area of responsibility.

Renwanz then conducted the group on a tour of the primary teleproduction areas. Highlights of the tour included the Mach-1 editing suite containing four Sony BVH-1000 Type C VTRs. The Rank Cintel Scanner used as a 16/35-mm telecine was demonstrated and explained in detail. A new telecine camera, designed and built at WGBH, was shown and used on air for the first time. The unit is a modified SK-70 ENG/EFP.

Next on the program was an auto trip down Western Ave. to the WGBH Film Department, where the group viewed the custom-built sound mix room. — Paul R. Beck (Secretary-Treasurer), Emerson College, 71 Cross St., Foxboro, MA 02035.

New England, February 27 — Highlights of the meeting, held at the Community Playhouse Theater, included "behind the scenes" photos from *Star Wars*, *The Empire Strikes Back*, and a screening of *Raiders of the Lost Ark*. An audience of 400 persons gave their undivided attention to Tom Holman, Chief Engineer, Lucasfilm Inc., who presented a slide lecture covering both recent and early developments at Lucasfilm. Introductory remarks were given by John Allen, distributor of Klipsch Theater Loudspeakers.



Hermes spacecraft in the process of being assembled in the David Florida Laboratory.

Holman also presented a black-and-white editorial print of the first reel of *Star Wars* and the separate double system 35-mm fullcoat soundtrack with the original actors' dialogue, prior to the dubbing of effects and voiceovers. The audience loved it. He then ran a high-quality print with full mixed soundtrack with stereo surrounds. The audience was most impressed.

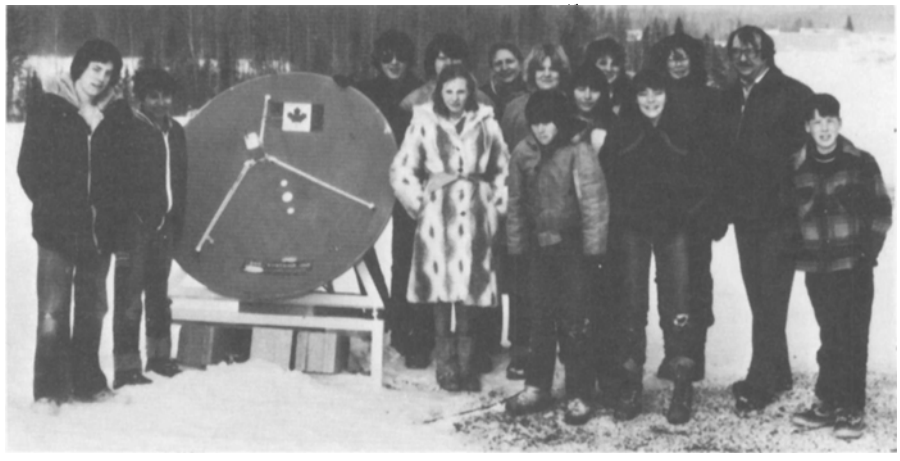
More discussions led to a similar presentation of the first reel of *Raiders of the Lost Ark* with only natural sound, followed by the finished product in color with stereo surrounds. The audience then enjoyed a screening of the entire *Raiders* film with full audio effects and surrounds. — Paul R. Beck (Secretary-Treasurer), Emerson College, 71 Cross St., Foxboro, MA 02035.

Ottawa, April 29 — Fifty SMPTE members and their guests witnessed Direct Broadcasting Satellite trials at the Communications Research Centre of the Department of Communications in Ottawa.

George Davies, Director of Space Applications, Communications Research Centre, presented a brief history of these expriments, starting with the trials of Hermes at 12-GHz with transponders at both 200 and 20 W. He then described the test using the Anik B with a 20-W transponder. Pilot projects starting in September 1979 were conducted in the Northwest Territories, British Columbia, Quebec, the Maritimes, and Ontario.

The presentation was followed by a demonstration of reception from the Anik B using both 1.8- and 1.2-meter dishes. The results in the respective −3, −6, −9 and −12 dB loss of signal were shown to compare the effects of rain on the two receiving dishes. Most rainfall causes a −3 db loss of signal. Davies mentioned that, in tests, most observers preferred three signals of somewhat inferior quality to one signal of superior quality. When Anik C is launched in November 1982 it will have 16 transponders, which would be capable of four signals in four signal coverage areas of the country.

Following a coffee break, the members and guests were taken on a tour of the David Florida Laboratory. They viewed the thermal vacuum facility used for environmental testing of satellites, the vibration facility used to simulate launch conditions, and the anechoic chamber for RF testing. During the tour, the group viewed an Anik D spacecraft undergoing integration and tests. Davies pointed out the special facilities in the laboratory, which is rented by companies such as SPAR Aerospace and will be used in the future by the European Space Agency. — Ross Mutton (Chairman), P.O. Box 2427 Sta. D, Ottawa, Ont., Canada K1P 5W5.



A 1.8-meter TVRO Earth DBS receiving terminal at Beardmore, Ont., Canada.

Pasadena City College, April 22 — Keith A. Glidden, the new Secretary-Treasurer of the Pasadena City College Chapter, in a letter to Sections Vice-President Harold Eady, writes, "I arranged for a tour of Compact Video, Inc., a post-production house in Burbank, for all interested students. Due to the great response the tour was divided into two groups, the first attending Friday, April 2, and the second on Friday, April 9. A total of 18 students attended the tour, which lasted approximately 75 minutes and was hosted by Nick Chase, a former PCC student now working for Compact . . ."

The subject of the April 22 meeting, held on the campus, was the College's media services program and how it can serve the students. Bob Miller of Media Services explained just what Media Services does for the campus and how important this branch is. They work in conjunction with the library and instructional television with the aim of being as useful as possible. He explained how Media Services can also help train employees to do their job better. He said that we have some 600 students each semester who can be helped by the use of self-instructing video classes (i.e., using video to help students with their other classes. Miller's job is to provide quality instruction for telecommunications students as well as quality instruction in video for the entire campus. He revealed that the college hopes to have its own cable system to serve the community and to send its programming into the home. — Keith A. Glidden (Secretary-Treasurer), Pasadena City College Student Chapter.

Philadelphia, May 11 — The program included a detailed evaluation of Kodak films, beginning in 1950 with type 5247, and a tutorial paper on the various components of zoom lenses.

Approximately 30 SMPTE members and guests assembled in the Peirce-Phelps auditorium heard E. J. Burns, Eastman Kodak Co., describe the new Eastman color high-speed negative film 5293/7293, relating it to the development of Kodak films beginning in 1950 with type 5247. A demonstration film and slides were included in the presentation.

Robert R. Gonelli, Total Spectrum Manufacturing Inc., presented a tutorial paper on the various components of zoom lenses. Using a disassembled lens for demonstration, Gonelli outlined various "do's" and "don'ts" for users of lenses. He also provided advice on preventative maintenance, such as the use of a U/V filter, regular cleaning of the lenses, tightening of all screws, and careful cleaning of electrical contacts. — Michael Muderick (Secretary-Treasurer), Penn Mutual Life Insurance Co., 101 Earlington Rd., Havertown, PA 19083.

San Francisco, December 15—On a wet and windy night, 68 SMPTE members and their guests met at the Eastman Kodak offices to hear Joe Semmelmayer and Mike Gittinger present a well-illustrated program on the new Kodak color negative and print films. The program began with a film, *Behind the Scenes*, which depicted the manufacture of motion-picture film, following which Joe Semmelmayer, Eastman Kodak, presented a paper on the new high speed color negative films 5293/7293. The 16-mm and 35-mm demonstration film clips showing the new stock's good grain characteristics and wide exposure latitude drew applause from the assembled cinematographers and laboratory personnel.

Mike Gittinger, Eastman Kodak, completed the program with an informal presentation on the new 5384/7384 color print film including the projection of a number of 35-mm examples. An extended discussion period followed. — Glen Pensinger (Secretary-Treasurer), San Jose University, 958 Jeanne Ave., San Jose, CA 94303.

San Francisco, May 12—Photoinstrumentation was the topic of the meeting held at the Eastman Kodak Co. offices. Representatives of four companies that produce high-speed systems showed equipment capable of frame rates from 500 to 20 million frames/sec to an audience of 36 SMPTE members. The program, arranged by Robert Shoberg, SMPTE Vice-President for Photonic Affairs, and Lincoln Endelman, Past Vice-President for Photonic Affairs, provided a broad view of the entire field of photo/electronic instrumentation.

Gil Pendly, Visual Instrumentation Inc., described the Locam 16-mm camera system, which is capable of up to 500 frames/sec. He also showed a new hexadecimal data recording accessory which accepts, formats, and prints data on the frame edge at rates up to the camera's max of 500 frames/sec.

Steve Ferrell, Redlake, showed the Hycam rotating prism camera which can work at rates up to 11,000 frames/sec.

Joseph Owren, Marco Scientific, explained the workings of the firm's Image Converter camera, which uses an image converter tube for light amplification to take groups of exposures with equivalent shutter speeds in the billionth-of-a-second range.

James Weatherford, Spin Physics, described and demonstrated a video instrumentation system using CCD sensors. A 34-track analog recording and digital picture reconstruction provides instant electronic instrumentation pictures at rates up to 2,000 frames/sec.

Following the presentations, members of the audience gathered around the various pieces of equipment asking questions and closely observing their operation. — Glen Pensinger (Secretary-Treasurer), San Jose University, 958 Jeanne Ave., San Jose, CA 94303.

Florida/Caribbean, April 20 — John Lupo, 3M Co., gave a presentation on 3M's Photogard Coating. The presentation included a slide demonstration. Lupo explained what the Photogard Coating is, how it is applied, and the beneficial effects it can have on any film. He used slides to compare film with and without the coating. A 16-mm film was also used for comparison purposes. A question-and-answer period followed the presentation with questions from all of the 18 members of the audience. The meeting was held in Orlando in the Court of Flags resort. — James Caron, Cine-Craft Inc., 105 Pineapple Lane, Altamonte Springs, FL 32701.

Nashville, March 11 — Robert P. Coleman, Victor Duncan, Inc., discussed the Pancom II camera before an audience of 27 in the auditorium of the Hospital Corporation of America. He demonstrated the new camera which can use all of the Panavision lenses and which offers the operator many features previously available only with a film camera, such as through-the-lens viewing.

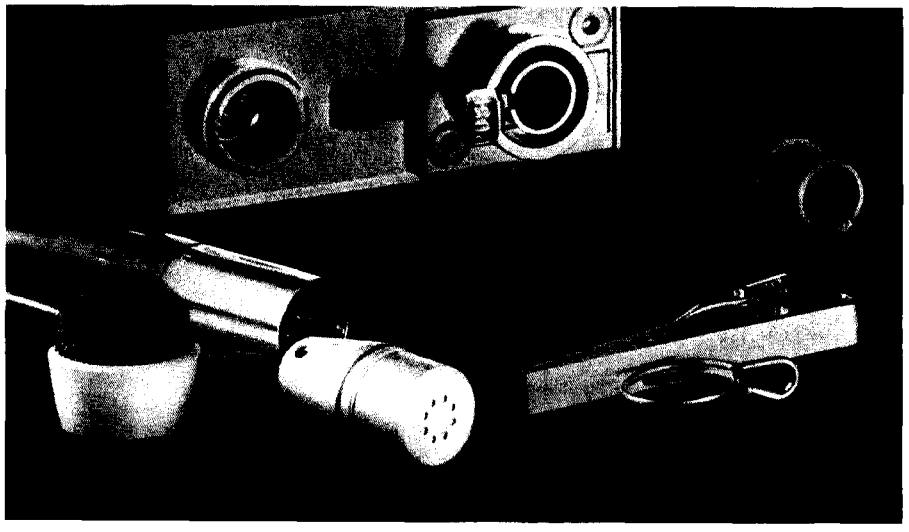
Junaid Sheikh then discussed the Ampex ADO (Ampex Digital Optics) system. He showed samples of special effects possible with the new ADO, the most spectacular being the system's ability to create perspective on moving effects. — Dixie Lee Parman (Secretary-Treasurer), UMC/Kinswood Productions, 3800 Nebraska Ave., Nashville, TN 37209.

New York, November 10 — Glenn Kenel, Eastman Kodak Co., began the program with a paper on Eastman Kodak's new high-speed negative film stock 5293/7293. He gave a brief history of the various negative film stocks Kodak has offered since 1950, citing their individual exposure indexes (EI) and relative grain structures. In comparison with the improved 5247/7247 stock that was introduced in 1976, the new 5293/7293 negative has more than an 80% increase in speed. Kenel pointed out that this is an advantage when your light levels are low or should you wish to cut energy costs. The higher EI can also extend daylight shooting hours or give greater depth of field.

The 5293/7293 negative is developed in the present ECN II process. It is compatible with the present color negative film in color reproduction and contrast level and therefore can be successfully intercut.

To illustrate this new film's capabilities, Kenel presented a reel of 35-mm footage. This contained examples of scenes which were shot at the film's published EI of 250 and processed normally and also footage that was rated much higher yet still processed normally. The effects of force developing were also shown. Finally, scenes shot in 5247 were intercut with 5293 as a striking proof of their compatibility.

Think of us as your mike expert.



The CO94.
All miniatures are not created equal.

Until now, the engineer faced with selecting a miniature microphone was hard pressed to find any dramatic differences in performance. That is, up until the Electro-Voice CO94.

For starters, the CO94 offers unprecedented dynamic range. It has 10 dB greater sensitivity and 20 dB greater input SPL handling capability than the best known competitor. This high performance in a package so small makes the CO94 ideal for stereo spaced-omni recording, binaural recording and close miking of high output musical instruments, as well as standard lavalier applications.

The CO94 also offers exceptional powering flexibility. It can be powered by a standard 9-volt radio-type battery. Or it can be phantom powered from a mixing board, recorder, or in-line supply. The 9-volt battery can even be used as a redundant power source to "back up" the phantom power. Plus, the CO94's advanced electronic design permits powering from virtually any DC power supply, (even an "el cheapo" battery eliminator) capable of delivering between 8 and 50 volts. The internal regulation and filtering will make the CO94's impedance converter swear it's being powered by an over-priced import supply.

These and many other performance features set the CO94 a giant step above the other miniatures you previously had to choose from. The CO94 is a versatile new kind of tool, and just one more reason why you should think of Electro-Voice as your microphone expert.

Electro-Voice
a gulton company

600 Cecil Street, Buchanan, Michigan 49107

In Canada:
Electro-Voice, Div. of Gulton Industries (Canada) Ltd.,
345 Herbert St., Gananoque, Ontario K7G 2V1.

After the presentation, Kenel acknowledged within the audience Sol Negrin, one of the cinematographers who had originally tested the new negative. Negrin described his personal experience with the film. As part of his experimentation, he had processed footage rated at 1000 EI both normally and pushed one stop. Both had good definition in the final result, although the pushed film did show more highlight information. When he shot with a mixture of incandescent and fluorescent lighting, he was pleased with the good balance in the end result. Overall, he praised the film highly.

One of the questions raised during the question and answer period that followed Kenel's paper concerned the range of printing lights used on the test footage, which was 18–23. Another point discussed was the decrease in setup time made possible by this stock.

In conclusion, it was pointed out that the real use of this new stock is as a complement to 5247/7247, not necessarily instead of it. Because of its compatibility with 5247/7247, 5293/7293 serves to expand the latitude of the present color negative stock.

S. Spira, Spiratone Inc., gave a historical view of the discoveries that led to the development of motion pictures. He presented a slide show which illustrated the principles of such precinema toys as the Zoetrope and the Praxinoscope. The scope of the paper ranged from the 1820's to the 1890's. During the question-and-answer period that followed, Spira responded to a query concerning the earliest reference to the persistence of vision theory. He indicated that the earliest proven record of this was in 1820. Although there was an earlier article with reference to this theory, authorship is impossible to determine since it is signed with initials only.

About 190 members and guests attended the meeting which was held at the United Engineering Center. — Jamie Ellis (Publicity Chairman).

New York, January 18 — Nancy Littlefield, Director, New York Mayor's Office of Film, Theatre and Broadcasting, explained the official New York City attitude toward film and television production to an audience of 150 members and guests at the United Engineering Center. Littlefield began her presentation with a brief history of production in New York and then discussed the present situation. She indicated that since the Lindsay administration, when the Office was formed, production has been actively encouraged. "Twenty years ago," she said, "few feature movies were made in New York, compared to 1980 when over 60 features were produced."

New York City makes it possible to obtain a filming permit overnight and will provide police for keeping the peace during the filming. "The major problem now," Littlefield said, "is the shortage of large studios, thus forcing production to other parts of the world."

A long series of questions and answers followed the presentation — Richard S. Marcus (Secretary-Treasurer), Television Engineering Consultant, 1380 Riverside Dr., New York, NY 10033.

New York, February 16 — The invited speakers were Calvin Hotchkiss of Eastman Kodak Co. and William Kradelman of Laumic Co.

Hotchkiss presented the first paper on Eastman Kodak's Ektrachrome high-speed daylight film 7251. This is a 16mm color reversal film which is balanced for daylight but will give acceptable results with metal halide and xenon arc discharge lamps without filtration. It is rated at 400 EI and allows an improved depth of field. It can be force processed one stop with little loss. If necessary, the film can be pushed 2 or 3 stops in developing, although the results will be noticeable. 7251 is compatible with the VNF-1 and RVNF processes. It is available on acetate and estar base. The resolving power of this film is comparable with that of 7239. To illustrate his paper, Mr. Hotchkiss presented a series of slides and projected a print to demonstrate the capabilities of 7251. A question and answer period followed his presentation.

Kradelman gave the second paper which was on the Videola film-to-tape transfer system. This system uses the CEI 310 negative to positive video camera and the L100 computer-assisted scene-to-scene color correction system built by Corporate Communications Consultants, Inc. A flickerless prism optical system provides gentle film handling and eliminates jerkiness. The actual video image is a series of dissolves from one film frame to the next. The system is independent of television scanning and so the picture footage can be transfered at any speed. Although separate soundtracks can be transfered there are up to four sound inputs — the sound must be transfered at normal speed. Dichroic filters within the camera head allow color correction. If a drastic color correction is needed from one scene to another, it is possible to "dissolve" into the correction and thus reduce the apparent difference between the scenes.

A question-and-answer period followed, during which the application of the Videola system was discussed. Mr. Kradelman believes that the system is ideal for production and editing houses. He also felt it would be useful to transfer dailies. Another query raised was whether an anamorphic lens could be attached. Although this is not possible at present, Mr. Kradelman stated that his company was in the process of achieving this.

After the questions, Mr. Kradelman invited the audience forward to examine the system more closely. The meeting, held at the United Engineering Center, was attended by more than 120 members and guests. Hospitality was provided by the Laumic Co. — Jamie Ellis (Publicity Chairman).

New York, March 16 — RCA Selectavision Videodiscs were discussed in depth at the meeting at the United Engineering Center. Dr. Jon K. Clemens, Director of the Videodisc Systems Research Laboratory, RCA Research Center, Princeton, N.J., examined the technology and application of the RCA Selectavision Videodisc System. He began with an overview of videodisc systems, their capabilities and limitations, using slides to illustrate his points. The disc systems differ in their pickup method, tracking method, disc size, tolerance to defects, method of protecting the signal track, and choice of features, he explained. The system constraints are playing time, minimum wavelength, track pitch, rotation rate, and the features that are desired. For example, the faster the rotation rate, the longer the wavelength becomes but the playtime is necessarily reduced.

The RCA Videodisc has an r/min of 450. It is a grooved disc with a diamond stylus. The disc itself is made conductive by carbon. There are 60 minutes of playtime per side and four television frames per revolution. Dr. Clemens then demonstrated the system. The disc has the ability to search either by "bands," general divisions within the disc, or by specific times.

A question and answer period followed, during which many points were raised. Dr. Clemens stated that the advantage of this system over others is its durability and reliability. In response to another question on the life expectancy of the stylus, Dr. Clemens said that, although literature states 200 to 300 hours, in actual tests they have lasted thousands of hours. Of course, there are many variables involved, the most important of which is the condition of the disc. If it is not properly lubricated, the life expectancy is less. When asked how one could tell when the stylus is no longer functioning properly, Dr. Clemens stated that a double picture is one of the first signs. Another point of interest that was brought up was the fact that RCA is planning to interface this system with stereo and computer systems.

After a lively period of questions and answers, Dr. Clemens invited the audience of more than 100 individuals to come forward after the meeting and take a closer look. — Jamie Ellis (Publicity Chairman).

Philadelphia, April 13 — The program was on film and video. The first paper was given by Paul Mareth, a writer-producer with Juramar Communications, who gave an interesting insight into the history of motion picture production and the crossovers that film producers have made into video. He compared the large studio productions prior to 1950 with the more recent "independent" productions that have been done in the last 30 years, emphasizing the growing interdependence of film and video.

He concluded the presentation with a showing of his recent film, *Projections*, which was the first locally produced, and also the first 16-mm film, to be screened at the Ritz Three Theater in Philadelphia.

The second paper was presented by Tom O'Connor, Sales Engineer with the Grass Valley Group. O'Connor gave a full explanation of the features of the Grass Valley Mark II DVE which brings film style lab effects to the world of video. He also showed a demo tape of digital effects that included samples from all over the world. About 100 members and guests attended the meeting which was held in Studio B of the E. J. Stewart Production facilities. — Michael Muderick (Secretary-Treasurer), Penn Mutual Life Insurance Co., 101 Earlington Rd., Havertown, PA 19083.

San Francisco, April 15 — Topics of the meeting, held at Sony Broadcast Training Center in San Jose, Calif., was "Specifics of Capability and Future Uses of Laser Optical Videodiscs." Vicki Vance of Sony Communications Corp. began the program with a presentation on the development of videodiscs and the characteristics of currently available videodiscs. Following the presentation, three members of DesignWare, a San Francisco firm, provided demonstrations and explanations of the uses and capabilities of laser optical discs.

Dr. John Ittelson described and demonstrated the varying levels of complexity common in interactive instructional programming. Levels were categorized by the type of user, input and interactive capability, nature of the output devices, and type of memory. Steve Booth reviewed the technical details of the laser optical videodisc system, including mastering techniques and specifics of playback and servo technology. Michael Slade gave a presentation on production considerations and possible uses the disc might have in video editing systems.

An informal hands-on question-and-answer period followed. There was considerable interest in the instructional applications but there was great skepticism that this type of disc would ever play much of a part in video editing systems. About 75 members and guests attended the meeting. — Glen Pensinger (Secretary-Treasurer), San Jose University, 958 Jeanne Ave., San Jose, CA 94303.

Toronto, April 15 — Roger Beck of Ward-Beck System Ltd. gave a detailed description of the WBS Microcom Intercom System. Slides were used throughout the presentation to illustrate the operation of the communication system. About 50 members and guests attended the meeting which was held at Ryerson Polytechnical Institute. — Fung Fai Lam (Secretary-Treasurer), Sony of Canada Ltd., 1325 Melton Dr., Mississauga, Ont., Canada L4Y 1L6.