SECTION MEETINGS

Atlanta, May 23 — Virgil Lowe, executive vice-president, Fortel, Inc., and members of his staff, presented the TBC-32, a new 1-in. Type-C time-base corrector, designed in cooperation with RCA. The presentation included a description of the entire process from original design goals through the final manufacturing. Following the presentation, the 15 members and guests were taken on a tour of the Fortel plant.

Members of the Fortel engineering design staff described some of their other products, including M-format time-base correctors, and a color-correction device. — John F. Swanson (Secretary-Treasurer), Cox Communications, Inc., 1601 West Peachtree St., N.E., Atlanta, GA 30309.

Detroit, May 17 — Video switchers were the subject of the May meeting held at General Television Network in Oak Park, Mich. Ron Naumann, Grass Valley Group, discussed the general development of video switchers. Using 35-mm slides, he showed the specific features of the Grass Valley 300-3A production system. The Grass Valley unit, he explained, like most advanced switchers, is essentially a video mix/effects system with three basic operational modes. The first generates a limited group of pushbutton mix/effects suited to the fast pace of live broadcasting. The second mode allows the generation of much more complex mix/effects using the complete capability of the unit at a post-production pace. The third mode allows any of the sophisticated post-production effects to be recorded in the E-MEM. They can then be instantly recalled and used as easily as first mode effects. This allows the most complex mix/effects to be generated in advance and then used in broadcasting.

The Grass Valley 300-3A is quite impressive. It contains 825 pushbuttons, 97 rotary pots, 5 lever arms, and 1 joystick. The associated digital video effects unit (DVE-2AN) occupies over 6 ft of rack space when equipped with all 4 input channels. In this configuration, the effects unit weighs just under half a ton and uses up to 2810 W. — Charles Nairn (Secretary-Treasurer), Com Tec, Inc., 909 Fisher Bldg., Detroit, MI 49202.

New York, May 18 — Preservation of our heritage of moving images on motion-picture film and videotape, one of the important projects carried on at the Museum of Modern Art, was the theme of the meeting, which was held at the museum with about 120 members and guests in attendance.

Mary Lea Bandy, director, Department of Film, gave an introductory talk and introduced the speakers; John Gartenberg, Barbara London, and Peter Williamson, all on the staff of MOMA's film department. Topics covered included archive policies regarding preservation; the deterioration of nitrate-base films; typical problems and solutions involved in the preservation of film; restoration of film on non-standard film formats; and experiences with the preservation of videotape.

Gartenberg's presentation covered the film department's organization and general archive policies. Williamson's presentation covered the on-going preservation and restoration work on the museum's film collection. Several film examples were shown, including restoration of 68-mm Mutoscope negatives; 35-mm Biograph negatives; deteriorating nitrate-base negatives; hand-stenciled prints; and two- and three-strip Technicolor negatives.

London presented a detailed discussion of the museum's involvement in video art and the preservation of its videotape collection.

The program concluded with a description of the museum's new theater given by the designer, William Szabo. — C. Bradley Hunt (Program Chairman), Eastman Kodak Co., 1133 Avenue of the Americas, New York, NY 10036.

Peter Williamson at the New York Section meeting. He described techniques used in the preservation of film at the Museum of Modern Art.

Ottawa, April 27 — Carl M. Shrader, director of photographic service, National Geographic Society, presented a multiprojector slide show of representative photographs selected from 12 issues of *National Geographic* magazine. Shrader gave a lively account of the countries, cultures, and animal life photographed for the magazine. He explained how the photographs were selected. He responded to a number of questions about the photographic methods leading to publication, the photographers employed, and the equipment used.

Following a coffee break, courtesy of Carleton Audio Visual Ltd., the National Geographic film, *Rain Forest*, was screened. This impressive film was photographed in the rain forest of Costa Rica. It showed animal life and how the destruction of the rain forest, which is slowly going on to make room for the encroachment of civilization, is destroying the web of life, thus endangering and eventually destroying the living species that inhabit it.

The meeting was held in the Alumni Theatre, Carleton University, Ottawa, with an attendance of 55 members and guests. — Ross Mutton (Chairman), Carleton University, Colonel By Dr., Ottawa, Canada KIS 5B6.

Ottawa, May 18 — A presentation entitled "How Secure is Video Scrambling?" was given by David Coll, Dept. of Systems and Computer Engineering, Carleton University. He explained the various types of scrambling systems for a television signal including jamming, video inversion, sync suppression, and carrier suppression. He described integral scrambling techniques, such as random dynamic line inversion, dynamic line swapping, line dicing, and video, digital, analog, and audio-only encryption. He provided illustrations of how these techniques can be used alone or integrated in conjunction with changing by frame, field, or line. If delay systems are used, he said, the changes can be effected by line or by pixel. He then described a scrambling system that replaces the horizontal sync pulse by a data burst.

Next on the program was Richard L. Preece, Director of Network Services, Canadian Satellite Communications Inc. (Cancom), who described his company's experiences in scrambling television signals

on a satellite delivery system. Cancom is licensed to distribute Canadian and American off-air programming to remote areas of northern Canada, providing these areas with television service more nearly like that available in the south. In addition, Cancom distributes radio signals over the same system.

Preece described the reasons why Cancom decided to scramble their signal. First, it was a requirement of the CRTC, promulgated mainly to prevent the stations then being distributed from becoming superstations. Second, with an open skies policy, scrambling prevents unauthorized reception of the signal. Cancom chose Oak equipment for the scrambling, because Oak Industries was the only company which had a proven working system three years previously, when the decision to scramble was made. Preece described the various coding system options and the inherent versatility. The system, he explained, is quite flexible, allowing for 49 levels of tiering and complete control from the head end of the operation. Deletions of individual components or the entire service can be made by computer from the central control. He described some problems with the bandwidth of the receivers and said he looked forward to decreasing costs of decoders and to the advent of direct broadcast satellite transmission.

The meeting was held at the National Film Board Theatre, Ottawa, with an attendance of 35. Following the presentations and a question-and-answer period, the audience was invited to the Cancom offices (in the same building) for a demonstration of decoding equipment — Ross Mutton (Chairman), Carleton University, Colonel By Dr., Ottawa, Canada KIS 5B6.

Rocky Mountain, March 24 — The Caribou Ranch Recording Studio was the scene of the meeting, hosted by Jerry Mahler, chief engineer for the ranch. The meeting consisted mainly of a buffet dinner, prepared by the Caribou cooking staff, and a tour of the ranch and the recording studio. More than 150 members and guests attended. — Jeff Grazi (Secretary-Treasurer), Communication Unlimited, Inc., 6528 Mar Vista Pl., Denver, CO 80220.

San Francisco, February 17 — The meeting was held at the employee cafeteria of Ampex Corp., Redwood City, which had been set up with audiovisual facilities, including slide projectors, and the Ampex VPR-3, a Type-C, 1-in. videotape recorder. The speakers were Tom Hasty and Glen R. Rose, assisted by Jay Baker and Mitchell Yawitz.

Hasty spoke on the Ampex VPR-5, reviewing the work done by both Ampex and Nagra with the aim of creating the world's smallest and lightest Type-C videotape recorder. The use of dc-current-management with microprocessor control economizes on power consumption, thus extending battery life. The VPR-5 can record either for 20 minutes with small tape reels or up to one hour with larger reels. Some of the features described by Hasty include the built-in SMPTE time code, the time-base-corrector interface, and the plug-in modular design.

Glen Rose described the VPR-3, which is a studio production VTR. He described the circuit innovations which permit the machine to start up quickly and to be responsive to user requirements. He demonstrated the machine, showing the operational sequences and other features that make the VPR-3 easy to service.

The meeting was attended by more than 100 members and guests. — Donna Foster-Roizen (Secretary-Treasurer), Telegen, 1742 Willow Rd., Palo Alto, CA 94303.

San Francisco, April 26 — "Film and the Future" was the subject of the first presentation, which was given by Chris Clark, Eastman Kodak Co. He reiterated his company's commitment to innovation in imaging technology and showed a series of slides illustrating this theme.

Don Adams and Beverly Wood, Eastman Kodak, continued the program, Adams described the DataKode, a transparent magnetic layer which does not interfere with normal picture projection while providing control codes to be recorded on it for editing, automation, and other film control functions. DataKode provides an electronic address for each film frame and is machine-readable, thus bringing computerized automation to film.

Wood covered new film-stock materials, such as the 7291 and 7294 emulsions, and also showed a short 16-mm film illustrating some of the capabilities of these advanced films. The films are intended to replace current Eastman Kodak Color Negative products 7247 and 7293 — Donna Foster-Roizen (Secretary-Treasurer), Telegen, 1742 Willow Rd., Palo Alto, CA 94303.

Toronto, May 12 — Walter Bebenek, Ampex Canada, gave a brief history of the development of magnetic tape recording from the introduction of the VR-1000 in 1957 at the NAB Convention, through the VR-2000, ACR-25, VPR-2, and the third generation of Type-C by Ampex. He noted that the helical scan 2-in. VR-8000, made in 1958, did not have interchangeability. He noted also that a $3 million, 2-in. VTR had been delivered to NASA. Following standardization of Type-C, Ampex introduced the VPR-2, and Sony, the BVH-1000.

The VPR-3, he told the audience of more than 200 gathered at the Gemini I Room in the Constellation Hotel, is the third generation of the development of the Type-C format. Its features include air-guided and vacuum-controlled tape handling, tape acceleration to 500 in./sec shuttle in one second with one-hour reel; fail-safe dynamic braking, and superior built-in audio features. However, the development of Type-C continues to move on, Bebenek said. Slide and equipment demonstrations were used to illustrate the presentation.

Tom Hasty gave a presentation on the latest portable Type-C VTR, the VPR-5, which was developed jointly by Ampex and Nagra. Although it is a 20-min VTR, the mechanics for changing to accommodate one hour are self-contained. A time-base corrector and data base are provided.

The meeting was preceded by a dinner at the Crock and Block Restaurant. — Fung F. Lam (Secretary-Treasurer), Sony of Canada Ltd., 411 Gordon Baker Rd., Willowdale, Ont., Canada M2H 2S6.

OBITUARY

André Coutant

André Coutant, past president of UNIATEC, died May 25, 1983, at the age of 76. He was a native of Paris, France, and began his career in 1925 at the Continsouza Research Laboratory. In 1939, he became technical director for Eclair. Among his many inventions and developments was the Eclair 16, which won the French Exportation Prize in 1965.

In 1949, Coutant invented the Magnetoscope. In 1959, he founded Kinotechnique, of which he was president and general manager. His inventions included cameras and other equipment for various applications, including special cameras for military use, cameras for scientific research, and automatic sensitometric devices for cinematographic tracking of space vehicles.

Coutant achieved worldwide recognition and was the recipient of many honors and awards. He was an officer of the Legion of Honor, Commander of Cinematographic Merits, and Knight in the Order of Research and Invention.

Correction for Theater Evaluation Form

The Theater Evaluation Form appearing on pages 758 and 759 of the July *Journal* was printed incorrectly, and was confusing as to whether optimum was at the center or right-hand side of the rating scale. Please substitute the revised form appearing on pp. 990-991 for the original form printed.