NEWS

Communications Experts Consider Opportunities for High Definition Television in Canada at HDTV Colloquium in Ottawa

Leading experts in the Canadian television, film, and communications technology industries convened on October 18–21, 1982, in Ottawa, Ont., Canada. They participated in the 1982 High Definition Television Colloquium, where future opportunities for Canada in the rapidly developing field of high definition television (HDTV) were discussed.

After three days of lectures and discussions with visiting experts from Japan, the U. S., Britain, The Netherlands, and West Germany, conference organizers concluded that the new technology promises significant industrial possibilities for Canada, most notably in the areas of signal processing technology and terrestrial and satellite distribution systems. The technology will also offer new challenges to Canadian television and film producers.

Sponsored by the Department of Communications, the Canadian Broadcasting Corp., and Teleglobe Canada, the colloquium was the first of its kind in the world. Attended by 170 delegates, it was intended to familiarize Canadian broadcasters, filmmakers, and manufacturers with the progress of various high definition television experiments in other countries, and to identify areas of special interest to Canada.

Douglas Parkhill, Assistant Deputy Minister for Research at the Department of Communications, was chairman of the HDTV colloquium. He noted that in their discussions, delegates pointed out the need for international cooperation in the development of standards for the new technology and in the allocation of portions of the radio frequency spectrum for experimentation and eventual implementation of HDTV services. Delegates also proposed a cooperative effort within Canada to conduct research in this area, Parkhill said.

Kenneth Davies, Assistant Director of International Engineering for the CBC and vice-chairman of the conference, said the colloquium highlighted the importance of HDTV in the international broadcasting community. He urged Canadian broadcasters, cable operators, and communications equipment manufacturers to work together to push for the adoption of international standards and to develop an industrial base within Canada to serve domestic and international markets. "Canada has great strength in a number of areas related to this technology. HDTV could also provide important new markets to Canadians in the area of content development," Mr. Davies said.

HDTV, sometimes known as high resolution television or electronic cinema, is an emerging technology that is expected to reach the consumer market in three to five years. It will be of increasing importance to Canada's broadcasting, communications, scientific, and arts and cultural communities. HDTV has been described as the third age of television, the first two being the black-and-white and the color eras.

The goal of HDTV researchers is to create video systems with an image quality equal to or better than 35-mm motion picture film, thus allowing the use of much larger display screens. Such systems would have the advantages of lower costs and

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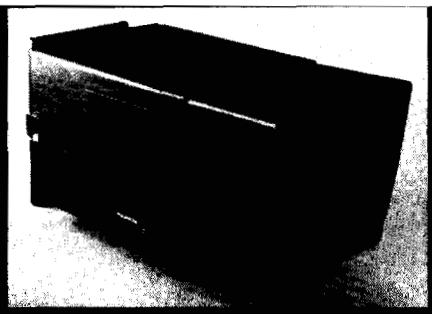

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Fujinon's New 17x16.5*

*F & F Productions took the 17X outside and down to Guayaquil, Ecuador for its 14-camera coverage of the 4th World Swimming & Diving Championship. George Orgera (F & F vice president and general manager) picked the 17X because "We knew it would deliver the performance we needed under lighting we couldn't control. Then again, the only lenses we use are Fujinon."

more flexible production techniques and would be able to provide both home and theater audiences with very high-quality images.

A number of prototype systems have been developed using about twice as many scanning lines and higher resolution than conventional television systems, thus greatly increasing the quality of the image. Prototype HDTV systems were demonstrated in Japan, the U. S., and Europe earlier this year by the Japanese Broadcasting Corp. (NHK) to a number of broadcast and production groups. In California, filmmaker Francis Ford Coppola and television producer Glen Larsen have made demonstration tapes using the NHK technology and have urged the film and television communities to take advantage of HDTV applications. The NHK prototype system, produced in cooperation with a number of users of Sony, Panasonic, and Ikegami equipment, employs 1,125 scanning lines and provides resolution and contrast levels comparable to 35-mm film. NHK has also experimented with even higher resolution systems using 1,600 lines.

Potential uses for high-definition technology include the production and distribution of theatrical films in the television medium and new services to consumers using broadcasting satellites or cable systems. It may also be used to create enhanced-quality images in the current television distribution systems. A number of proposals for such uses were discussed during the colloquium. One group is forecasting volume production of HDTV receivers in the near future, with one million in operation in North America by 1990, rising to 30 million sets by the end of the century.

Other potential uses of HDTV include business, medical, engineering, educational, and scientific applications; teleconferencing; high-resolution videotex and teletext systems; and videotape and videodisc interfaces.

Further information about the colloquium, including the availability of the published *Proceedings*, is available from Kenneth P. Davies, HDTV Colloquium Committee, c/o CBC-EHQ, Montreal, Que., H4W 1R5 Canada.

The Piracy and Counterfeiting Act of 1982 (P.L. 97-180) was signed into law by President Reagan on May 24, 1982. The law provides for the increase in maximum fines and imprisonment from $25,000 and two years to $250,000 and five years for persons convicted of pirating and counterfeiting records, tapes, and films. Additionally, first-time offenders can be subject to the maximum penalty. According to the Senate Judiciary Committee, piracy and counterfeiting of audio and video products have grown rapidly in recent years, resulting in a significant loss to the film and recording industries. (Information for this item was supplied by *Nesda Electronics and Business News Digest.*)

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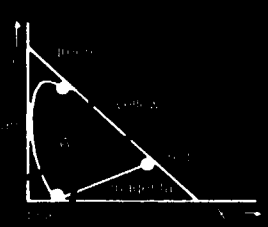

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A new multi-million dollar contract has been signed by NEC America, Inc., and NBC-TV for the expansion of the network's NEC Model TKA-105 routing switcher. The announcement was made by R. Dennis Fraser, Corporate Vice-President and General Manager of the Broadcast Equipment Division of NEC America.

Already the largest switcher in the world — 150 inputs × 270 outputs (for a total of 40,500 crosspoints) with 270 controllers, the switcher is installed at NBC's Burbank headquarters. Under the terms of the contract, the existing system will be expanded by more than 85% and will consist of 210 inputs × 360 outputs (for a total of 75,600 crosspoints) and 360 controllers. Model TKA-105 provides digitization of all audio signals with up to four discrete audio channels for each video input and LSI devices in all critical circuits for stability and reliability as well as lower power consumption.

According to Fraser, the TKA-105 offers performance specifications that are superior to the equipment signals it routes. With its built-in capability for outside data interface permitting computer, minicomputer, or microcomputer switching commands as well as switcher status feedback loops, the entire routing-switcher system may be operated and controlled by computer.

The expansion of NBC's TKA-105 routing switcher is scheduled for completion by the middle of 1983.

TVC Video, Inc., the newest subsidiary of TVC Image Technology, has officially opened its doors as a full service post-production facility for which President Eric V. Knutsen has announced several staff appointments.

Eric V. Knutsen

Alan Mitosky

Richard Caldwell

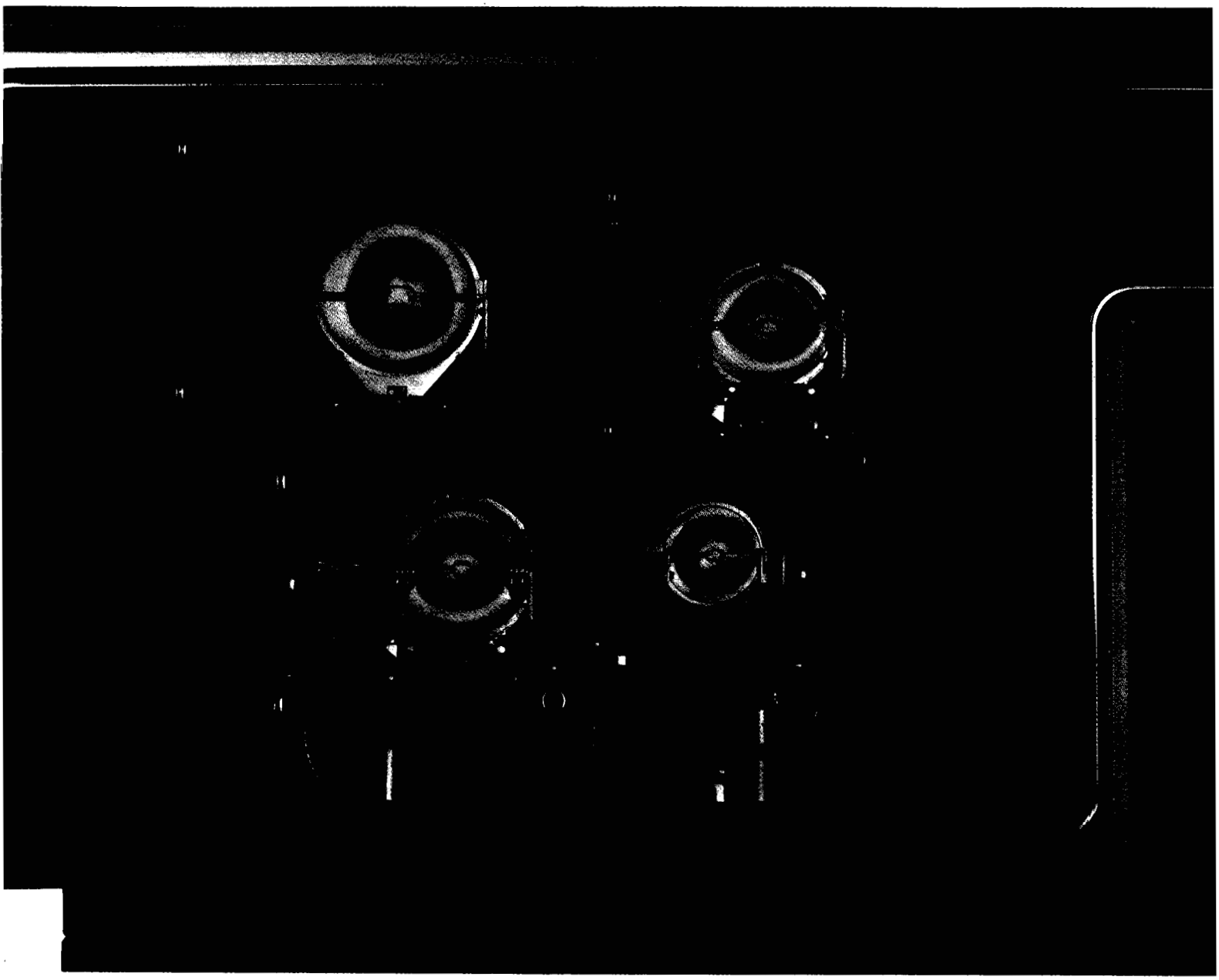
John Rice

Alan Mitosky has been appointed Vice-President, Marketing and Sales. He was formerly an administrator for the Foundation for Independent Film and Video and previously had served as president or chief operating officer for several film distribution companies where he was involved with acquisition and marketing of theatrical films.

Richard Caldwell now serves as Director of Engineering for TVC Video, Inc. He began his career with the British Broadcasting Corp. and is trained in all aspects of optical and mechanical engineering. He spent the early part of his career in Scotland. Later he went to Canada, where he worked with CFTO-TV as operations and maintenance engineer and then as editing systems engineer. He moved to the U. S. in 1980, and prior to joining TVC Video he was senior field engineer for CMX Systems in New York, where he had the responsibility for the installation and testing of new editing systems throughout the U. S. and Europe.

John T. Rice has been appointed Director, Client Services. He served most recently as Director of Marketing and Program Development for M. Joseph Zink Video Productions where he was responsible for the packaging of original productions as well as the sales division and public relations activities.

Barry Spitzer has been named Editor for TVC Video. He was formerly chief post-production editor for ABC-TV's "20/20" news magazine program.



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ART BIGGS ON MASTER CONTROL AUTOMATION.

In the 1950's, two broadcasting engineers in Tulsa built a small, crude, mechanical device to automate station breaks. One of those engineers, Art Biggs, is now Vice President, Engineering, Corinthian Broadcasting—and his interest in master control automation remains strong. The respected, 34-year veteran of the industry works with the engineering staffs of all six Corinthian stations, of which two—WISH-TV, Indianapolis, and KXTV, Sacramento—are now using BIAS Master Control Automation.

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"At first, some of the engineering staff were enthusiastic, some were skeptical. But within three weeks after it was released to them, they did their first total day's operation on the MCA system. And now, even the most skeptical depend upon it."

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"MCA brings the traffic department and technical department closer together. This makes everything go more smoothly for everyone."

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"I think some engineers are afraid that with MCA, they'll be giving control of their operation to a machine and be a robot, sitting there, watching it. Actually, the exact opposite is true. Even the most vocal of our engineers who opposed the idea have found that MCA frees them from so many nitty-gritty, demanding, split-second, button pushers, that they have more time to learn what all the machine can do and can do even more than they could before. Now, if you take it away from them for some reason, there's a lot of yelling to get it back. They've learned they didn't relinquish control—they gained a tool that gives them greater control."

WHO NEEDS IT?

"How do you know if you need MCA? If the chief engineer is constantly trouble-shooting switching errors or one engineer is a total slave to switcher buttons, MCA can certainly help. It also liberates personnel from many manual chores, such as log-keeping, to make their time more productive."

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Barry Spitzer

Bill Katz

Bill Katz has been named Colorist for TVC Video in its film-to-tape department. One of the pioneers in handling film-to-tape transfers, he was at Teletronics in the early days of this technique. During his years with Teletronics he was in charge of feature film work. He has transferred over 400 feature films to tape and has been involved with related scene-by-scene color correction.

TVC Video is located at 225 E. 43 St., New York, NY 10017. The two-story complex features all format duplication and has an insert studio, viewing and screening facilities, and such pre-editorial services as time base correction, noise reduction, image enhancement, freeze field or frame, luminance/chrominance delay correction, and time coding.

Shure Electronics of Illinois (SEI) is a newly formed division of Shure Brothers, Inc. It will be involved in the manufacturing and marketing of communication microphone products including mobile and base station microphones and circuitry products. Manufacturing facilities for SEI will be located in Wheeling, Ill. Marketing and Engineering Departments will be located at Shure headquarters, 222 Hartrey Ave., Evanston, IL 60204.

A magnetic film transport unit and a digital analyzer are used at Eastman Kodak Co. in Rochester to evaluate a special magnetic coating developed for use with motion-picture film. The new Kodak Datakode magnetic control surface is expected to cut post-production costs in the television and motion-picture industries to a significant degree. It records digital data much like magnetic tape recording, letting filmmakers link motion-picture film with computer-automated post-production equipment. David S. Hoadley is shown operating the magnetic film transport and a digital analyzer evaluating the Datakode magnetic control surface for motion-picture film.

NEW PRODUCTS

Further information about these items can be obtained from the addresses given. As in the case of technical papers, the Society is not responsible for manufacturers' statements, and publication of these items does not constitute endorsement of the products or services.

An all solid state, color closed circuit television has been announced by Cohu, Inc., Electronics Div., P.O. Box 85623, San Diego, CA 92138. Designated Model 1610, it consists of a small camera head and a compact control unit. Features include an MOS image sensor said to be energy efficient, to provide good resolution, and to maintain vivid color independent of scene luminance. The 1610 has balanced spectral response and no geometric distortion or lag.

A television switcher/special effects generator for remote and studio production has been announced by ECHOlab, Inc., 175 Bedford Rd., Burlington, MA 01803. Called the SF/3 production switcher, it is a self-contained, computer-based video switcher with computer control of all