

# Report on the SMPTE Montreal/Toronto/Rochester Mini-Conference

27-29 April 1979, Montreal

By CHARLES PITTS

Welcomed by the celebrated Mayor of Montreal, Jean Drapeau, to the city he termed the most hospitable on the North American continent, the more than 256 registrants at the Montreal/Toronto/Rochester SMPTE Mini-Conference attended a very intensive series of lectures on a wide variety of subjects dealing with both technical standards and production experiences. All of the sessions papers were well-attended, and as Charles Anderson, SMPTE Executive Vice-President, commented, "The enthusiastic participation in the local Sections' Mini-Conference reflects the growth in importance for its members, throughout the world, of the SMPTE."

## Organizers of the Mini-Conference

The Mini-Conference was organized by members of the Montreal Section under the able Chairmanship of Robert B. Desrosiers, an SMPTE Governor of the Canadian Region, and Co-Chairman, Walter H. Winchell of the Canadian Broadcasting Corp. J. Creighton Douglas of the National Film Board of Canada was Program Chairman. Hotel accommodations were arranged by Ken Hand, Canadian National Railways, at Montreal's prestigious Queen Elizabeth Hotel. Jim LeBlanc, Arri-Nagra Inc., was on hand to provide membership information. A. Dunstan Russell and Pierre Pelletier were on hand (both with Alex L. Clark Co. Ltd.) with their spouses to provide visitor information and to staff the Hospitality Suite. Grant Dearnaley, National Film Board of Canada, was Conference Finance and Registration Chairman. Yvon Jean, Société Radio-Canada, organized the Sunday portion of the program at La Maison de Radio-Canada. Leonard A. Green, National Film Board of Canada, was responsible for audiovisual and other technical facilities. Charles Pitts, Centraide Montréal (United Way), arranged publicity. André Collette, Bellevue Pathé Ltd., acted as Sponsorship Coordinator.

Other Conference organizers included: Suzanne Bertrand, Radio-Québec; Arnold C. Schieman, National Film Board of Canada; René Villeneuve, Kodak Canada Inc.; Alan J. Powell, McGill University. David L. Carr, Eastman Kodak Co., represented the Rochester Section, while Ray J. Brûlé, 3M Canada Ltd., represented the Toronto Section. Adrien Hubert, Communications Québec, Montreal, assumed the duties of photographer throughout the Conference.

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## Opening Session on Saturday Morning

The Mini-Conference got off to a "chilly" start with the showing of the National Film Board of Canada's film, *Ice Birds*. This film, produced by Marc Hébert, tells the story of a young couple whose idea of fun on a sunny winter weekend is to scale glacier-like ice walls. These two members of the Québec Climbers Federation scale a sheer wall of ice as a cascade of blue water roars past them. Clinging fast to the ice several thousand feet above the ground, they seem pleased with their achievement. This is a beautiful film which, among other things, must have required a great deal of courage on the part of the camera crew, since they seem to have gone everywhere the mountaineers went.

Saturday morning Session Chairman Arnold C. Schieman and Co-Chairman Hartwell Sweeney then welcomed registrants and informed them of the simultaneous translation service provided free of charge and of the fact that cassette copies of the papers would be available for one Canadian dollar each.

Lorne C. Perry, Visual Communications, Canadian National Railways, Montreal, was the first speaker. He led off by informing one and all that his intention was to ignore the stated topic of the Conference, "Future Technology." Instead, he said he would prefer to discuss the current position of the audiovisual function within the Canadian National Railways and the role which, in his opinion, audiovisual should be playing within corporate structures.

Audiovisual at the C.N. is an integral part of the corporate communications service. That means that it is not incidental to the public affairs function, but rather that the Visual Communications Department is consulted as issues arise, not after the damage has been done. In order to accomplish this, according to Perry, the Visual Communications group within an organization should have clear access to upper management.

Mr. Perry showed the audience several documents produced by his department, including one in which President Robert Bandeen mentioned the Crown Corporation's mandate as it applies to Newfoundland.

Alan J. Powell, McGill University, provided detailed information on the planning that must go into the creation of media facilities, especially in an academic setting. Placing emphasis on the initial planning stages, Mr. Powell outlined the range of technologies involved, including projection, architecture-lighting, acoustics, and electronics. Mr. Powell also cited in references several documents which have become SMPTE classics in the field of auditorium design.



Robert Desrosiers, Mini-Conference Chairman, addressing Conference participants at the Queen Elizabeth Hotel, site of the Conference.

Victor Adams of Adams and Associates (formerly of the National Film Board of Canada) spoke of his major field of expertise, that of super-8 film. Mr. Adams made a convincing case for its use in many areas of industry and at the same time pointed out the pitfalls confronting super-8 producers and users. Among these, he mentioned the limited choice of stocks, the difficulties involved in reproduction, and the almost total lack of professional services in Canada. Mr. Adams also described the medium as being more demanding than other formats since it does not pardon error. Indeed, critical tolerances are very low and this medium requires skilled use if it is to produce fine results.

Edmund M. DiGiulio, Cinema Products Corp., and an SMPTE Governor of the Western Region, entitled his address "Latest Developments in Film and Television Technology." As others were to do throughout the day, Mr. DiGiulio dwelt on the interface of film and video. Because of the growing demand for transfer, emphasis is being placed on the development of hardware that permits convenient interface. He introduced Cinema Products' new KM-16, which he described as a low-cost, simple, film-to-tape transfer unit that uses a small television field production camera as the video half of the telecine chain. Mention was also made of the newly developed UF-17 which is a flat-bed editing machine that allows adaptation to film time-coding.

J. L. Pauls of the National Research Council of Canada, Ottawa, showed a 16mm documentary entitled *Stair Event*. The documentary, while studying the very serious topic of traffic on stairways in public areas, take at times a humorous look at the social and psychological comportment of crowds. The 16mm documentary is a composite of research films and video shot on domestic equipment and boosted to 16mm.

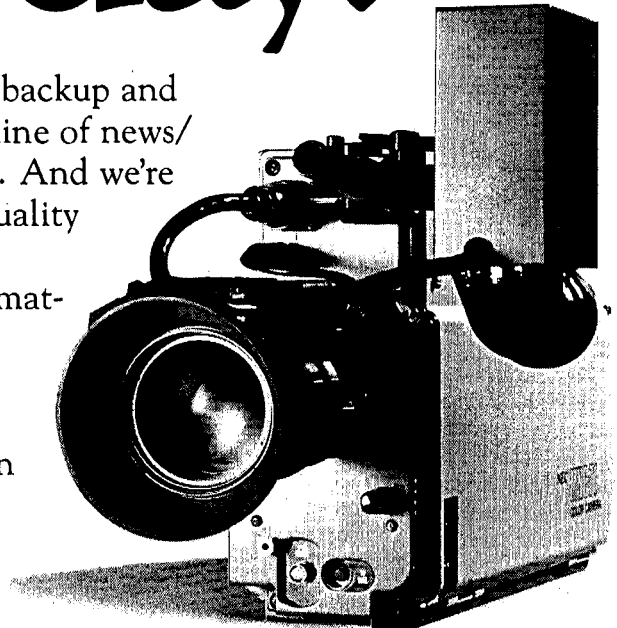
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Alan J. Powell (left), Educational Chairman; Charles E. Anderson, SMPTE Executive Vice-President; Jean Louis Vandette, Montreal/Quebec/Ottawa Section Chairman; David Carr, representative of the Rochester Section; Ken Hand, Hotel Accommodations Chairman; J. Creighton Douglas, Program Chairman; and Leonard Coleman, SMPTE Sections Vice-President.

shot for distribution, Mr. Pauls is currently examining avenues for distribution. The title is derived from the setting in which the footage was shot, that is, the Edmonton Commonwealth Games Stadium and the Montreal Olympic Stadium. In a sense, Mr. Pauls's intention is to praise the participants in the stair-climbing marathons. In addition, of course, his purpose is to point out that public stairways are, by and large, a hazard to public safety.

Roland Zavada, SMPTE, Engineering Vice-President, Eastman Kodak Co., Rochester, spoke about "Ancillary Information on Film." It could easily be said that questions on this topic were indeed the most common ones raised throughout the Conference and seemed to be on everybody's minds. Mr. Zavada provided the background to the attempts to incorporate data and time-code information into present-day film formats. In particular, he touched on the possibility of earmarking copyrighted documents and the code marking of advertising material.

#### Saturday Luncheon

At the Luncheon which followed the morning session, Leonard Coleman and Charles Anderson briefly welcomed registrants. Jean Louis Vandette, Montreal/Ottawa/Quebec Section Chairman, presented plaques of merit to Gerald G. Graham, Thomas Y. Egan, and Denis Courtney. Gerald G. Graham retired in 1975 from the National Film Board of Canada where he was the Director of Planning and Research. In addition to making important contributions to the production of documentaries, Mr. Graham has always been an active supporter of the SMPTE and the industry in general.

On receiving the award, Mr. Graham commented that he was glad to see a high level of Conference participation because it indicated to him that a new generation was at hand whose achievements would surely reach new heights.

Thomas Egan, a member of SMPTE for the past twenty years, spoke of the professionalism of the members of the Society and the tremendous fellowship and support that

it offered its members. Mr. Egan has worked for Crawley Films and the Canadian Broadcasting Corp. in various capacities related to film and television plant.

After being delayed in New York, Denis Courtney finally became airborne and landed in Montreal in time for lunch. Mr. Courtney spoke briefly of his 26-year association with the Society and its worldwide growth in stature since the early days. He added his congratulations for the fine organization of the Mini-Conference and stated that it was through strong local contributions that a vigorous SMPTE would be maintained.

Walter H. Winchell introduced the Luncheon guest speaker, award-winning producer-director Norman Campbell. Mr. Campbell, a pioneer in Canadian broadcasting, is well known for his operatic, balletic, and dramatic productions which include *Sleeping Beauty*, *Cinderella*, and the much-heralded *Anne of Green Gables*.

Mr. Campbell's contributions extend also to television in the United States. He has been a guest director over the years of programs ranging from *The Mikado*, starring Groucho Marx, to variety specials starring Bing Crosby, Andy Williams, and more recently, Diana Ross, John Davidson, and Olivia Newton-John. His U.S. engagements also included situation comedies. He directed episodes of *All in the Family* and *The Mary Tyler Moore Show*.

Twice a winner of the prestigious Emmy Award, Mr. Campbell was named to the Order of Canada in recognition of his tremendous contribution to Canadian culture and the performing arts.

Those attending the Luncheon were delighted to pick up backstage anecdotes on ballerina Karen Kain, Diana Ross, Olivia Newton-John, Groucho Marx, and Jean Stapleton. The audience was in stitches as Campbell described his long and sometimes tenuous associations with engineers and technicians. For the occasional equipment failures Campbell had experienced over the years, he had more than gotten even by torturing technical crews—having them crawl across scaffolding high above the sets and freeze on location.



Jean Louis Vandette presenting an award to Denis Courtney for his important contribution to the Section during his term as Executive Director of the Society.

Mr. Campbell stated, tongue in cheek, that his attitude had mellowed over the years as he realized that, when a TV special went off superbly, he really hadn't done it all himself. In fact, he is even ready to begin to recognize certain technical achievements such as the creation of the zoom lens.

After Mr. Campbell's speech, Robert Desrosiers, Mini-Conference Chairman, read a telegram from SMPTE President Bob Smith: "On behalf of the Officers and Governors of the Society, I would like to extend our congratulations to you and your committee, as well as to the Rochester, Toronto, and Montreal/Ottawa/Quebec Sections, for holding such a successful special Conference. I extend my personal apologies in not being able to attend due to the Society's Scientific and Cultural Tour in the People's Republic of China."

#### Saturday Afternoon Session

Janet West, Kodak Canada Inc., chaired the afternoon session with the assistance of Michel Duhamel of the Canadian Broadcasting Corp. The afternoon session got under way with the presentation of a paper by Nils Lundgren, WDR Westdeutscher Rundfunk, Cologne, W. Germany. Mr. Lundgren presented a film produced by Arriflex. The film demonstrated a new image-stabilizing system designed by Arriflex in cooperation with British Aerospace for 16mm and 35mm cameras. The system uses a series of mirrors and the stabilizer weighs only about 2.5 kg. The shortest focal length for 16mm cameras is 35mm and, for 35mm cameras, it is 75mm.

Although unable to attend, Brigitte Smadja, Director of the Film Quality Control Unit of the Télévision de France FR3, wrote a paper which was read by Jean Louis Vandette, Montreal/Ottawa/Quebec Section Chairman.

The paper dealt with the methods of measuring and testing color film intended for presentation on color television systems. Ways and means of technical measurement as proposed by an ad hoc committee of FR3 and the proposed revision of the Technical



Assistants at the Hospitality Suite provided useful information for Conference attendees.



Mini-Conference participants examining literature at one of the booths.



The Sunday morning breakfast at La Maison de Radio-Canada was hosted by the French Services Division of the C.B.C.



Registrants reading their Conference programs during one of the sessions.



A tour of La Maison de Radio-Canada took place concurrently during the Sunday morning papers session.



Simultaneous translation services were provided free of charge during the Conference.



The dais table at the Get-Together Luncheon on Sunday.



Conference participants engaged in conversation during the Luncheon on Saturday.



Mini-Conference Chairman, Robert Desrosiers, with CBC. Producer-Director, Norman Campbell, and SMPTE Executive Vice-President, Charles Anderson.



André Collette (left), Sponsorship Coordinator, with Charles E. Anderson, SMPTE Executive Vice-President, and Leonard Coleman, Sections Vice-President.

Document 3087 published by the EBU in 1968 were also part of the presentation.

Jean Louis Vandette and Keith Field, Canadian Broadcasting Corp., Montreal, spoke on "An Engineering Approach to Television Film Quality Control." They described the problems encountered in maintaining quality control across the country in the various production and broadcast centers. Also described were the modifications made on the Steffelbauer FEM 3 film emulsion tester to meet North American TV standards. The process of modification consisted of identifying the intrinsic characteristics of telecine equipment and standards in use.

The modified FEM 3 measures density and color balance according to standard Status "A" densitometry and depth of modulation directly in percentages. Granularity is expressed as a signal-to-noise ratio in decibels as it would be measured at the output of a vidicon telecine camera operating in a 4.2 MHz video bandwidth, with subcarrier removed.

John Sinclair, Motion Picture Video Corp., Toronto, demonstrated the results of transfer of reverse polarity films to tape, with post production on tape. The results were quite conclusive and illustrated the economic advantages of producing material for television on 16mm 7247 negative film and transferring the camera original negative to videotape, followed by a post production finish. Demonstrations were also given of direct video production resolution, 35mm negative transfer, and 16mm negative transfer resolution.

The last paper on Saturday was delivered by Thomas Cavanagh of the Canadian Broadcasting Corp. Mr. Cavanagh's work is the result of the realization that one of the most frequent on-air faults is VTR color saturation banding. Following an in-depth analysis of the problem, the C.B.C. decided to create its own alignment tape. Cavanagh described the pains taken to record a tape which, because the machine it was produced on had been stripped and rebuilt,

would perform at near-absolute tolerances. As a result of the adoption of the new tape, video can be exchanged between centers with virtually no machine adjustment.

#### Sunday's Program

Sunday's program began bright and early at La Maison de Radio-Canada. Breakfast was provided for registrants and spouses by the C.B.C.

While papers were being delivered, a guided tour was conducted through the vast production facilities of the French and English services of the C.B.C. in Montreal.

The Sunday Session's Chairman, Jacques Chaurette, and Co-Chairman, Michael Barlow, both of the C.B.C., began the session by introducing Kenneth P. Davies, Canadian Broadcasting Corp., Montreal. In his paper, Mr. Davies reviewed standards conversion technology and discussed the integration of a converter into a heretofore NTSC-only environment, with particular emphasis on the operational maintenance aspects. The increasing volume, coupled with availability of digital-based equipment offering the quality and flexibility needed for C.B.C. activities, gave rise to a study that led to the installation of conversion equipment in C.B.C.'s plant

Nils Lundgren presented his second paper of the Mini-Conference, this one dealing with the EBU time code. His presentation was followed by a film describing the time-code system from IRT-EBU. The time-code system has enhanced sound-sync production by enabling synchronization in applications where the clapper board cannot be used practically. Mr. Lundgren detailed the development of the time code and the very extensive and growing use of time codes in many areas around the world for use in double-system film.

The last paper of the day was given by John D. Lowry, Digital Video Systems, Willowdale, Ontario. Recent advances in high-speed microcomputer control and the dramatic reduction in memory costs have made the digital framestore a relatively in-

expensive and versatile tool for use in a broad range of television applications. These include time-base correction, synchronization, optical effects, and noise reduction. Various facets of Digital Video System's software control approach were also described.

#### Sponsors

The tremendous support of the following organizations helped to make the 1979 Montreal/Toronto/Rochester Mini-Conference possible:

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While conference registrants and their spouses couldn't really verify Mayor Jean Drapeau's claim that Montreal is the continent's most hospitable city, they were able to experience a warm and sincere welcome. They were certainly *bienvenue* everywhere. After sampling the cuisine of Montreal's many fine restaurants, many were heard to say that they would be back *bientôt* for more.

In the meantime, the Rochester Section is gearing up to beat Montreal's performance at the 1980 SMPTE Montreal/Toronto/Rochester Mini-Conference to be held in Rochester, April 19-21 1980, at the George Eastman House under the general theme of "Technological Milestones: Yesterday, Today, and Tomorrow."