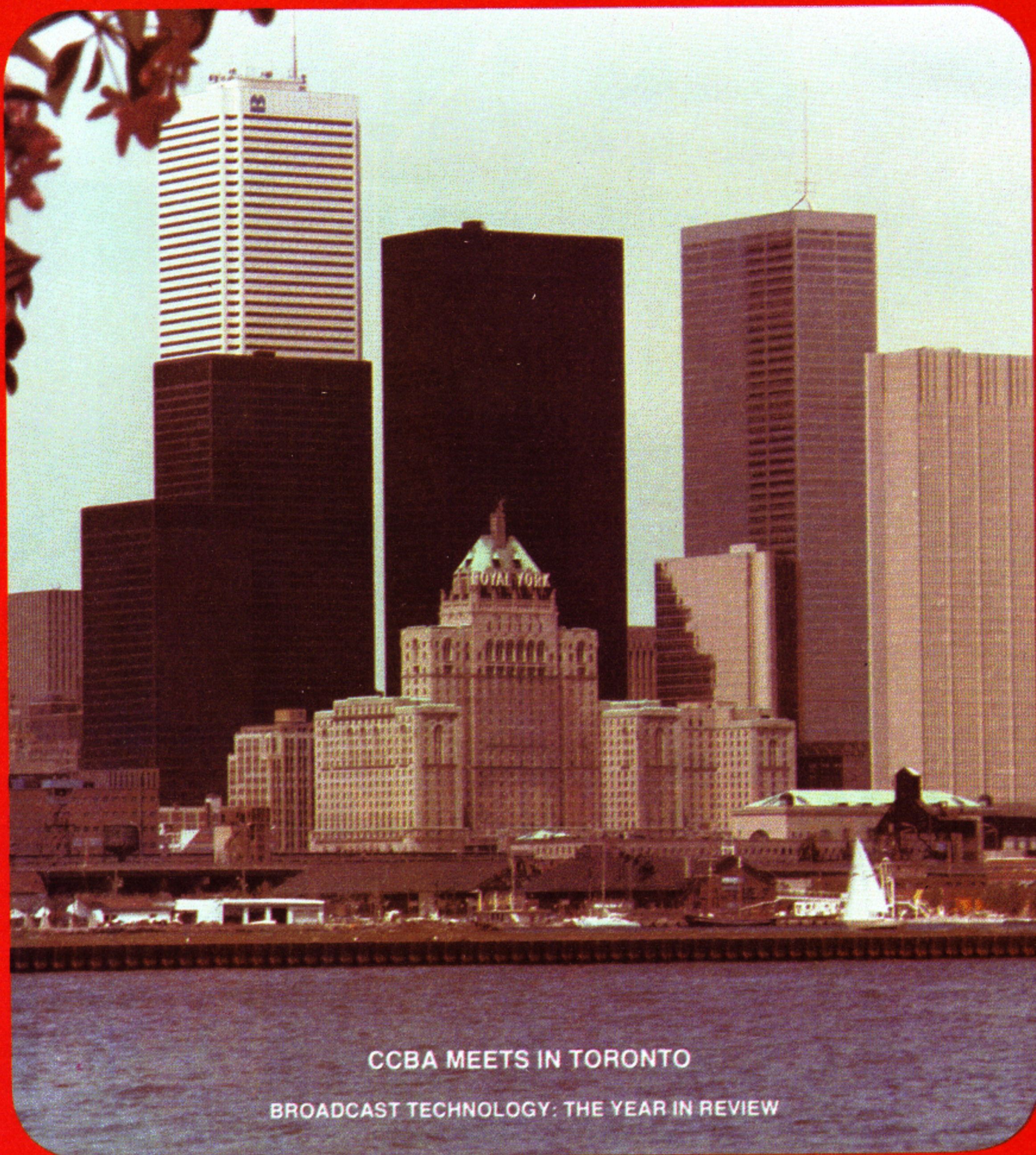


BROADCAST TECHNOLOGY

NOV/DEC 1979



CCBA MEETS IN TORONTO

BROADCAST TECHNOLOGY: THE YEAR IN REVIEW



current

A DIAMOND ANNIVERSARY

Radio broadcasting is 60 years old this fall.

It was in 1919 that XWA—now CFCF—began broadcasting in Montreal. The first in Canada, and probably the first anywhere. Canadians were enthusiastic about the new medium right from the beginning—within four years there were 30 stations across the country.

Sixty years of radio seems like something to celebrate. What an opportunity for the broadcasting industry to put on a Canadian all-star show on both radio and television—originating, of course, from CFCF! But the occasion has gone all but unnoticed.

Reminds us of something Harry Boyle said in a talk at the CAB convention earlier this year:

“The fact is that broadcasters are not very good at tooting their own horns. They’ll devote tremendous energy to persuading advertisers and agencies that they’re a good buy, but somehow they devote too little energy in their own behalf with the public.”

All too true, unfortunately—however, let’s take this opportunity to wish the “senior service” a happy anniversary.

It’s been a great 60 years!

PIERRE CAMU LEAVES CRTC

It scarcely seems that two years have passed since Dr. Pierre Camu was appointed chairman of the Canadian Radio-Television and Telecommunications Commission.

The move was welcomed by broadcasters, who knew Dr. Camu as a hard-working, efficient organizer during the four previous years, when he served as president of the Canadian Association of Broadcasters—a post which gave him a thorough appreciation of the workings of the broadcasting industry.

In cutting short his seven-year term to only two, Dr. Camu has had relatively little opportunity to place his stamp on the CRTC. The Commission has had to cope with an increasing workload, in which broadcasting is just one aspect of a complex communications scene, dominated by new technologies and telecommunications policy issues. Perhaps these problems, along with the election of a new government in Ottawa, were factors in Dr. Camu’s resignation, which took effect October 14th.

As we go to press, appointments have not yet been announced for either chairman or two other vacancies on the CRTC executive. Observers believe that the Conservative government will seize the opportunity to put in its own people—perhaps giving quite a new complexion to the Commission. The choices for the CRTC posts will also be considered an indicator as to how the Clark government will handle future appointments in the civil service.

In any event, broadcasters have benefitted from Dr. Camu’s six-year association with the industry, and we

wish him well on his return to the shipping industry as president of March Shipping Ltd.

TAX LAW IS WORKING—BUT SO IS LOBBY’S BACKLASH

Canada’s controversial tax law to discourage advertisers from buying time on U.S. border TV stations is taking its toll. A study by the Department of Communications reveals that the flow of ad dollars has been reduced from \$21.5 million (US) in 1975 to \$6.5 million in 1978.

CAB president Ernie Steele welcomes the study as proof that the law is having both cultural and financial benefits. The repatriated revenue has made a number of independent Canadian stations economically viable.

The law is not discriminatory, in CAB’s view. It removes unfair competition by U.S. stations, which, unlike their Canadian counterparts, have no obligations to meet in serving their viewers on this side of the border. Also, it does not apply to Canadian advertisers whose messages are directed to U.S. viewers.

However, Canada has not been too successful in convincing the U.S. government that our cause is a just one. Retaliatory measures to discourage U.S. citizens from travelling in Canada have probably cost this country many times \$15 million a year.

What may not be fully appreciated here is that U.S. broadcasters maintain an organization called the Television and Radio Political Action Committee. TARPAC describes itself as “a bi-partisan committee which gives financial aid to candidates for the U.S. Senate and House of Representatives”.

Apparently, this powerful lobby has persuaded U.S. legislators that the wilderness to the north has no business acting like an independent nation.

DIRECT-TO-HOME SATELLITE TEST

Canada has become the first country to install earth stations in private homes to test a direct broadcast satellite service.

The test began September 25th, using 100 earth stations with 1.2 and 1.8 metre dish antennas. SED Ltd. of Saskatoon manufactured the units, with Electrohome and Andrew Antenna major subcontractors. Cost of each is about \$3,600 plus \$200 for installation—however DOC expects mass production will eventually bring the cost down to about \$500 per unit.

In addition to private homes, the test includes community centres and cable TV systems, which will receive programming from Anik B.

There’s more on Satellite developments in this issue, page 16—part of the feature *BROADCAST TECHNOLOGY: THE YEAR IN REVIEW*.

Doug Loney

Technitopics

by Sandy Day



DOC COMMITMENTS

Following review of comments filed with the Department, they have now backed off to a degree from extracting the standard commitment from existing stations and including it on the TC & OC. What will evolve appears to be a procedure whereby DOC will refer on the TC & OC to conditions in the letter of transmittal, and in this letter, any previous commitments or any concerns with current interference problems will be reiterated. This letter will in turn refer to a new rule under Broadcast Procedure 1 in which the various interpretations regarding non-valid complaints for existing stations will be detailed. The Technical Advisory Committee will help develop the new rule.

Those stations who have found the standard commitment added to their TC & OC issued this year will receive a letter of clarification which points out that that particular clause does not apply to the TC & OC and that a new certificate will be issued after altered procedures are instituted.

It remains to be seen what will be in the new procedural rule, but you can bet your boots that we will be doing our best for you.

WHITHER AM RADIO?

Doug Allen's DOC/broadcaster panel at CCBA should have a good review of where we stand as Canada goes into the next round of the Regional AM negotiations. Our proposals will have been submitted by then, based on previous international discussions, consultation with the industry, responses to an August 18th Gazette notice, the outcome of a special meeting of the Technical Advisory Committee, and of course, the best thinking of DOC itself.

One of our greatest concerns will be whether we can retain our present ability to occupy up to 40 kHz of bandwidth, thus providing a reasonable fidelity and quality to our audiences. The present thinking of many Region 2 administrations is to limit bandwidth to 10 kHz which could mean only a 5 kHz audio response from the transmitter, depending on interpretation of the definitions.

Before the end of November, Canada will have to take a firm position on 9 kHz channeling and on AM Stereo, and studies, discussions and arguments will probably continue to the last moment. In January, the final meeting of the preparatory group will be held, with the official technical conference starting on March 10, 1980. The final conference which will then plan the actual assignments will be held in November 1981.

The CAB Technical Committee has reviewed carefully the present draft technical standards prepared by the COM/CITEL working group of experts and has filed with

DOC our concerns. In general, we have attempted to retain, insofar as possible, our current operating environment under NARBA, while still retaining our option for AM Stereo. We also pointed out several instances in the proposed standards where political rather than technical considerations could affect our options, and suggested changes which would preclude such action.

OFF TO THE WARC

In the good old days, when we took off to fight for king (yes, king!) and country, we all got "embarkation leave". With the present pace of activities, such luxuries are not included, leaving us slightly slap-happy as we depart, in this case with a song along the lines of "The Minstrel Boy".

"Our Sandy Day to the WARC has gone
With all preparations behind him.
A ton of documents he has carried on
And with wife Doreen to mind him".

So again I will miss you all at CCBA—sorry about that—but Peter Cahn will be attempting to fill you in for me. One hopeful note is that the Geneva authorities have been convinced to release us in time for Doug and Jacquie's Christmas bash. Hope I can make it!

ANOTHER FIRST IN NAB—CAB RELATIONS

Not only will NAB and CAB executive committee have met again (at Val David Sept 21st), but the NAB Engineering Advisory Committee and the CAB Technical Committee have planned a joint meeting in Washington January 16th, preceded the day before by our individual meetings. There is much we can learn from our American counterparts and we have a great number of interests in common, especially with the Region 2 AM conference, 9 kHz and AM Stereo decisions now on the front burner. We also have a keen interest in the NAB engineering activities on standards for receiver performance, on teletext, and on television blanking widths. This joint meeting will be a first, and we anticipate great benefits from the experience. Thank you, George Bartlett!

Sandy Day is engineering consultant for the Canadian Association of Broadcasters. Readers' comments or questions may be addressed c/o BET or to CAB, Box 627, Station B, Ottawa K1P 5S2; or telephone (613) 233-6359.

BROADCAST BEAT

Have you heard? . . .

Bob Durant, former news director at CHFI-FM, is now with CKFH Toronto . . . **Larry Heywood**, vice-president, Creative, at the Radio Bureau of Canada, had some tough surgery and has been convalescing at home. In the room next to Larry at Wellesley Hospital was veteran broadcaster **John "Mr. Canada" Fisher**, who also underwent surgery . . . **Dini Petty** of CITY-TV Toronto has been gathering research data on incest, asking people who have had incestuous experiences to send her details . . . **Dick Shatto**, former *Argo* star and the team's general manager for some time, is back living in the States. Dick tried out unsuccessfully as color commentator for the TV coverage of the Tampa Bay *Buccaneers*—he had done color for the CBC-TV coverage of CFL action when in Canada . . . **Brian Linehan**, one of the most ubiquitous people in broadcasting, has added a daily commentary on CFRB Toronto . . . **Jack Kent Cooke**, having sold all of his holdings, with the exception of his interest in the Washington Redskins, moved to Middleton, West Virginia, from California, to be closer to the Skins' home ground . . . **Doug Davis**, for 15 years vice-president and general manager of KVOS-TV (B.C.) Ltd., on the west coast, is now president . . . **Jim Fleming**, long-time broadcaster and for some years now a Member of Parliament, handles communications for the federal Liberal Party . . . The *Toronto Star* has named **Ron Base** as its daily TV columnist. He's a bright, young (30) writer, with good insight and articulation . . . CKFH Toronto has three young people who all get the "I know your father" routine: they are **Rob Cowan**, an announcer a son of top commercial voice **Bernard "Bunny" Cowan**; **Chris Layton**, son of wrestler **Lord Athol Layton**, who does coverage of wrestling on TV; and **Glen Stone**, son of this writer. Chris and Glen are both with the station's news department . . . This is the period when the fall BBM survey will be made known. More and more, "The Book" is becoming a powerful influence on the future of stations and their staffs. It's always either delight or despair! . . . We'll be reviewing the highlights of the 1979 CCBA meetings in the next issue of BROADCAST TECHNOLOGY. Don't touch that dial!



NAB's Chris Payne takes the microphone during 1979 Dallas convention.

AM-FM RECEIVERS: QUALITY vs COST

Engineering meetings are not noted for excitement. However, among the numerous interesting and well-attended sessions at this year's NAB in Dallas, Texas, at least two subjects brought tempers to the boiling point.

The most boisterous session saw representatives of the receiver manufacturing industry attempting to justify the poor quality of many of the radios on the market.

The dialogue was frequently interrupted by an overflow audience of irate engineers, who roundly booed moderator Norm Parker of Motorola, Inc., when he suggested that "a 2 kHz bandwidth receiver is a matter between the manufacturer who makes it and the public who want to buy it".

The audience regained its sense of humor when NAB's Chris Payne intervened to tell them: "I warned these guys (the panel) that you'd come in with rocks in your pockets: please don't throw them." Payne went on to say that professionals think everyone should listen in hi-fi—"that's not necessarily what they want to buy".

Other points made during the discussion:

- 40 million cheap (under \$20) portable receivers with 2 kHz bandwidth are sold annually. Tuners capable of 10 kHz bandwidth would triple the cost.
- Processing by many AM stations may compensate for rolloff in cheap receivers, but degrades sound on better quality receivers.
- Continued improvement in car radios is tied to the development of semiconductors, which made FM reception in moving vehicles practical. Integrated circuits now make AM Stereo possible, and the prospect of AMS has revived interest in AM fidelity generally.

9 kHz SPACING: "TO BE OR NOT TO BE?"

A very emotional topic for AM broadcasters is the prospect of reduced spacing from the present 10 kHz to 9 kHz for all stations in Region II (North and South America).

In Canada, where there are only a handful of daytime stations and stations tend to have higher power and more complex directional antennas, broadcasters don't even want to think about 9 kHz spacing.

But in the United States, about half the AM stations—2300 of them—are daytime only, and these operators see reduced spacing as a means of opening up additional frequencies, permitting them to operate full-time. Their spokesman is Ray Livesay, who owns a station in Mattoon, Illinois, and is president of the Daytime Broadcasters Association.

Livesay points out that the present 107 channels from 540 to 1600 kHz could be increased by 14 new channels, using 9 kHz spacing from 530 to 1610 kHz. In this redistribution, 11 channels would remain the same, and the maximum move would be 4 kHz. Most stations would move only 2 or 3 kHz, requiring little work and expense for non-directional antennas, and the basic characteristics for directional arrays would be unchanged. Daytimers would move from the 60 clear channels and 41 Class III channels to occupy the 14 new frequen-

cies, which would be local Class IV channels. (There are only six Class IV frequencies at present—1230, 1240, 1340, 1400, 1450 and 1490.)

According to Livesay, two-thirds of the daytimers are in communities without full-time AM service, and 9 kHz spacing would enable them to give full service to a population of 46 million people. U.S. stations switched frequencies on March 29, 1941, he recalls, adding: "It's time for another revision."

Opponents of any change to 9 kHz argue that:

- Expansion of the AM band, if approved by WARC, will permit many daytime stations to go full-time.
- Because signals travel farther at nighttime, there, will always be room, and demand for, daytime stations.
- Accommodating directional antennas to 9 kHz spacing could present serious difficulties.
- 530 and 1610 kHz are to be used for highway information.
- 9 kHz spacing would cause increased interference on receivers.

The current WARC discussions in Geneva will decide only what frequencies are to be used for AM broadcasting. Then it will be up to the Region II Conference to decide what changes, if any, will be applied in North and South America.

BROADCAST TECHNOLOGY THE YEAR IN REVIEW

DIGITAL VTRs—"5 YEARS IN THE FUTURE"?

Members of an NAB panel discussing the development of digital video recorders agreed that they were probably "five years in the future".

One participant, Marcel Auclair of CBC, Montreal, commented that digital techniques are already in use and further developments will bring consistent quality: "digital video recorders will be much easier to operate and maintain". He called for practical standards to keep costs down: "the CBC has 225 video recorders and we don't want 'orphans'".

Presenting a European viewpoint, Hans Groll of Bosch-Fernseh, Darmstadt, Germany, also forecast that digital recording would produce better quality and should be no more expensive. Compatibility, he said, is essential between digital-analog and PAL-SECAM—adding that the 50-cycle and 60-cycle (NTSC) worlds "will never come together". Production houses, with closed circuit systems,

could be using digital recording much sooner than broadcast operations.

Arch Luther of RCA, Camden, N.J., warned that digital will be more expensive at first. Designers, he said, want to include diagnostic features for easy maintenance, while producing high quality.

Commenting that "we're not ready to chuck out our analog machines yet," Ed Herlihy of Golden West Broadcasters, Los Angeles, said that a 5 to 7 year cycle would be needed to change format. Faced with constant replacement of equipment, broadcasters would be looking for a "breakthrough" in price—as well as quality.

Other comments during the session included predictions of improved sound quality, lower costs as a result of more compact electronics, and a dramatic reduction in tape consumption with the advent of digital video recording.

BROADCAST TECHNOLOGY THE YEAR IN REVIEW

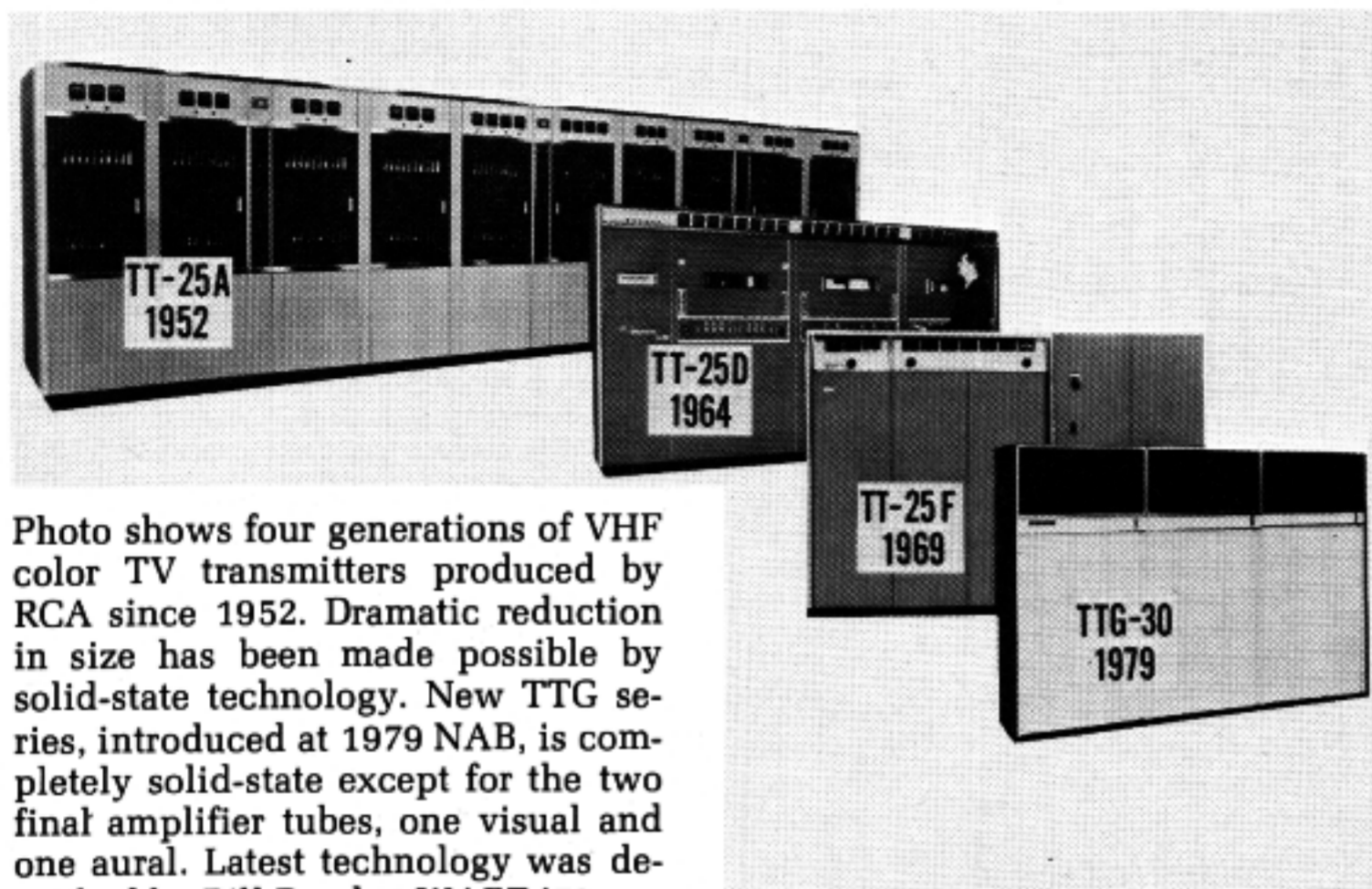


Photo shows four generations of VHF color TV transmitters produced by RCA since 1952. Dramatic reduction in size has been made possible by solid-state technology. New TTG series, introduced at 1979 NAB, is completely solid-state except for the two final amplifier tubes, one visual and one aural. Latest technology was described by Bill Boyd at WABE '79.

CBC: 99% Coverage

Participation by the Canadian Broadcasting Corporation is always a valuable aspect of Canada's two annual conferences for broadcast engineers.

At WABE '79, Dave Garforth of CBC gave a presentation on the Accelerated Coverage Plan (ACP), including a video tape on engineering of ACP projects.

Launched in 1973, ACP's objective is to provide both radio and television services, in English and/or French, wherever there are communities of at least 500 people. Originally a 5-year plan, it is now expected to be completed in 1981, and will have extended service to between 800-900,000 people scattered in remote areas of Canada.

With over 600 projects involved, it was desirable to establish uniformity wherever possible. Stock items are kept on hand, such as standard 12' x 10' buildings, racks designed for pre-wiring, towers in standard heights (100', 140', 200', etc.), with removable 20' cantilevers and all-channel antennas. Garforth described it as almost "one-stop shopping" for the Corporation's engineers.

Equipment was purchased in quantity at first, but this was found to create inventory control problems and was discontinued.

Other problems to be solved included the acquisition of land (12 to 18 months lead time was found to be necessary); the development of a computer program to cope with the increasing difficulties of frequency coordination; and the use of helicopters for many installations in British Columbia and Newfoundland. Ghosting is always a hazard in mountainous areas, and such sites must be chosen very carefully.

Community access to local transmitters is often a requirement in the north, where numerous native Eskimo or Indian dialects are spoken.

In its 15 years of building rebroadcasters, the CBC has found that signals can be relayed about six times with acceptable picture quality.

As of 1979, ACP has now passed the half-way mark in its quest to cover the last two percent of Canada's population.

DATES ANNOUNCED FOR 1980 WABE

Albert Koenderink of CFQC Saskatoon, general chairman of the Western Association of Broadcast Engineers, has announced that the 1980 convention will be held May 6-8, at the Paliser Hotel in Calgary, Alberta.

The Calgary committee for WABE's 30th annual convention includes:

- Host chairman—John Bruins, CJAY-FM
- Accommodations chairman—Richard Coleman, CFCN
- Exhibits chairman—Ron Joevenazzo, CFAC-TV Lethbridge
- Papers chairman—Bob Werre, CHAT-TV Medicine Hat
- Conference chairman—Bob MacDonald, CJOC Lethbridge
- Ad Hoc member—Helmut Franscher, CKXL

Secretary treasurer is Dean Cross of CKCK Regina.

The national convention of the Canadian Association of Broadcasters is scheduled to take place the previous week, April 27-29, at the Calgary Convention Centre and Four Seasons Hotel, Calgary.

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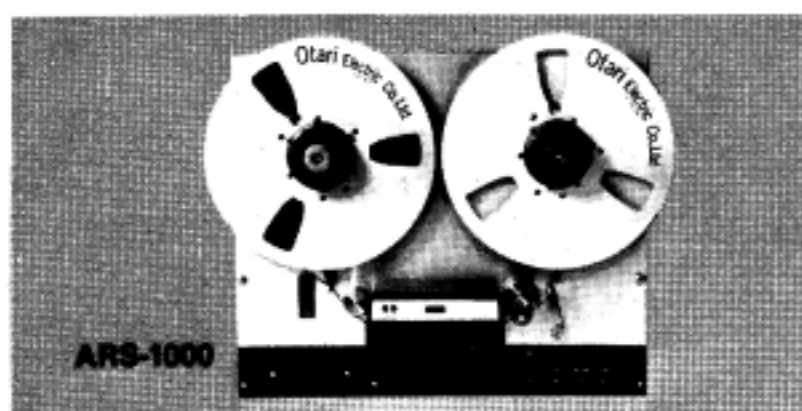
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34 NOVEMBER/DECEMBER 1979

in the news

TELIDON TESTED ACROSS ATLANTIC

An "electronic newspaper" from Canada was delivered in Geneva during the September 20-26 *Telecom '79* show—courtesy of *Telidon*. Visitors to the Canadian exhibit were able to retrieve data stored in the computer of the Communications Research Centre in Ottawa, via a dedicated two-way trans-Atlantic telephone circuit. Information included latest news from Broadcast News/Nouvelles Tele-Radio in both English and French. Visitors to the Geneva exhibit—in which 21 Canadian organizations participated—used a telephone to call up the computer, then selected the pages of data desired. DOC describes *Teledon* as the world's most technologically advanced videotex system.

AND AT HOME . . .

Bell Canada and DOC are cooperating in a \$10 million field trial of *Telidon* technology—one of the largest videotex tests yet conducted. About 1,000 terminals will be installed in the Toronto area, offering up to 100,000 pages of data to users. Bell, which has been experimenting with its own *Vista* videotex system, will now make use of the more advanced *Telidon* technology. Employing a standard color TV, a key pad or keyboard, and a small adapter, it will connect the subscriber's television set to an ordinary telephone line, accessing a wide range of information. Subscribers will eventually use the system to shop and reserve plane tickets. The first terminals will be installed in September, 1980, and the test will continue throughout most of 1981.

RADIO FOR CJOH-TV?

CJOH-TV Ottawa, owned by Standard Broadcasting, has applied for an AM radio station for the capital region. Standard describes the station, which would have a power of 50 kw day/10 kw night, as "strikingly different" from any now serving Ottawa. It would appeal to a varied adult audience. As BT goes to press, no date is set for a hearing, and the frequency remains confidential.

NEW A-V SHOW HELD

Audio Visual '79, billed as the International Audio Visual and Video Show and Conference, made its debut at the Toronto Sheraton Centre, September 24-26. The conference offered discussion on the role of audio visual in such areas as corporate communications, employee training and motivation, and in schools. It is sponsored by NAVAC, the Nation A-V Association of Canada.

NOV. 30 CJXX AIR-DATE

November 30th is the target date for CJXX, the new radio station in Grande Prairie, Alberta. CJXX will operate on 1430 kHz with 10 kw power, and Frank Valentini is general manager.

BBM AUDIENCE METER

BBM Bureau of Measurement, Canada's broadcast research organization, is experimenting with in-home meters to track TV viewing. CHCH-TV Hamilton and the Global Television network are cooperating in the test by transmitting a source identification code on line 20 of the vertical interval. This activates the meter, which stores a record of programming viewed, for retrieval on demand over ordinary telephone lines. CRTC and DOC have approved testing through to the end of 1979, but have not yet made a decision on future availability of line 20 for this purpose. Meanwhile, BBM is working on a further modification to provide data on *who* is actually viewing each program, in meter-equipped homes.

AAB REORGANIZES

The usual convention of the Atlantic Association of Broadcasters was replaced with a business meeting held on October 1st. Broadcasters from Canada's four eastern provinces were slated to pick a new president to succeed Neil MacMullen, who resigned after his recent purchase of the Evangeline group of radio stations. AAB has also suffered from loss of members and dissension over its marketing division, which was discontinued a year ago.

MICROWAVE SPECTRUM

DOC is undertaking a major review of radio spectrum utilization policies. Included is the 1 to 10 Gigahertz range, where most of Canada's present microwave systems operate. The review will place special emphasis on "fixed" radio services. A discussion paper, "The Utilization of Radio Spectrum in the Range .890 to 10.68 GHz" is available from distribution clerk, Information Branch, DOC headquarters, 300 Slater Street, Ottawa, K1A 0C8, telephone (613) 995-8185, or from regional offices of the department in Moncton, Montreal, Toronto, Winnipeg and Vancouver. Comments should be submitted by December 21, 1979, to the Director-General, National Telecommunications Branch, Department of Communications, 300 Slater Street, Ottawa, K1A 0C8. The objective is to identify new demands and better accommodate all services using this part of the spectrum.

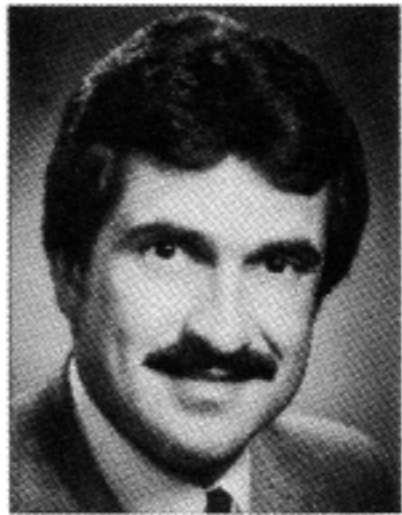
appointments



Taylor



Negoro



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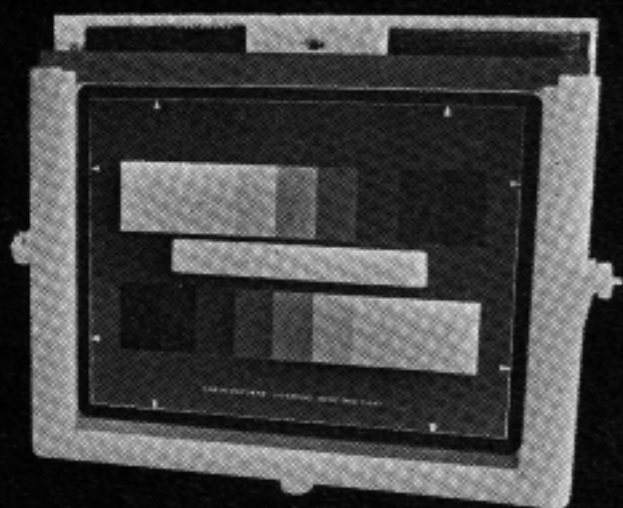


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• **Andrew Antenna** has named **Mike Taylor** marketing manager, located at Whitby, Ontario. Mike returns to Canada after four years at Andrew in Scotland, where he was also marketing manager.

• **BCTV**, Vancouver, has appointed **Tak Negoro** assistant vice-president, engineering, effective October 1st. One of Canada's best-known consulting engineers, Tak was with Hoyles, Niblock in both Vancouver and Montreal for the past 15 years.

• Promotions at **BSR (Canada) Ltd.**, Toronto, include **Donald Henderson** as president and c.e.o., and **Rob McKibbin** as sales and product manager for professional products, including Otari, Keith Monks, DBX and Unisync.

• **Ray Carnovale** has been named a vice-president of **CFTO-TV** Toronto.

• Now general manager of **CJOR** Radio in Vancouver is **Neil Soper**, formerly assistant g.m.

• **Michel Eric** has left Telecom Regs, DOC, to join **CP Telecommunications** in Montreal.

• Recent appointments at the **Department of Communications** include **Roger Kaye**, former director of a task force on new services, as director of communications systems research & development; **Bob Jones**, promoted to director of national spectrum and radio systems policy, and **Denis Guay**, formerly with the international branch, as director of regulatory affairs for broadcasting and social policy. At DOC Vancouver, **Herbert Sinclair** has retired after 27 years of government service.

• **Global, TV**, Toronto, has appointed **Dave Mintz**, former president of KVOS-TV Bellingham, as president of the Global Television network, and **Don MacPherson**, former v.p. and g.m. of CBC's English Services Divi-

sion in Toronto, as president of Global Productions.

• **Stan Larke** is co-ordinator of the Radio Broadcasting program at **Humber College**, Rexdale, Ontario. A 30-year veteran of radio, Larke was most recently general manager of CKGB/CFTI-FM Timmins, Ont. (See BT, September/October, page 24, for an interview with Stan by his predecessor at Humber, Phil Stone.)

• Four senior appointments have been made at **US JVC Corp.**—**Kurt Murai** becomes g.m., Hi-Fi division; **Harry Elias**, v.p., Home Entertainment division is also v.p., Hi-Fi; **Everett "Sparky" Wren** moves from v.p., Hi-Fi, to v.p., market planning; and **Richard Quinlan**, national training manager of VHS products, is also national field sales manager for Home Entertainment products.

• At **Matsushita Electric of Canada Ltd.**, **Lew Shoskes** is president and **Tak Urabe** vice-president. Shoskes, who joined Panasonic in the U.S. in 1963 and opened the Canadian operation in 1967, was previously v.p.; Urabe had been g.m.

• Recent appointments at **Scientific-Atlanta's** satellite communications division in the U.S. include **Patrick C. Bohana** to market development for video earth stations; **Anthony J. Casteldy** to northeast sales manager; **M. L. Durham** to marketing of earth stations and ground communications equipment; and **David Speed** to digital communications marketing manager.

• **Claude Durand**, formerly engineer responsible for broadcasting, DOC Montreal, is now with **Transport Canada**.

• **Michael Reichmann**, formerly with Panasonic, has joined **The Video House**, Toronto, where he will develop the broadcast, cable TV and industrial TV market, particularly for Panasonic equipment.

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New Facilities at CFBC Saint John, N.B.

We're always happy to hear from the Maritimes. Gordie Miller of CFBC writes: "Although we keep rather quiet, big things are happening here, too. Here is a picture of our recently installed production area. In September, our new 8650 arrived for our AM control room. Our news room is also being modified to provide two completely separate operation areas. All this, along with the installation of our 50 kw site two years ago, has kept us fairly busy during the last few years." Thanks, Gord. Keep that news from "down east" coming!

Convention '79 is here, and while there is a good chance you are glancing over this as the convention is going on, I won't remind you again of the Management for Engineers seminar, or the Ladies' Day program, or the informative papers on hand.

However, as some of us on the executive are stepping aside this year, I would like to mention the names of those who have guided CCBA Engineering through the past year:

- Past president—**Gene Hinz**, engineering manager, CFCO Chatham
- President—**Austin Reeve**, Vice-president of engineering, CJOH-TV Ottawa
- Vice-president—**Joe McIntyre**, maintenance supervisor, CKCO-TV Kitchener
- Secretary-treasurer—**Larry Cameron**, chief engineer, CKWS, CKWS-TV & CFMK-FM Kingston
- Exhibits chairman—**Bill Onn**, vice-president, engineering, CKEY Toronto
- Papers chairman—**Paul Hunter**, vice-president, engineering, CHIN AM-FM Toronto
- Publicity chairman—**Warren Parker**, director of engineering, CKTB/CJQR-FM St. Catharines

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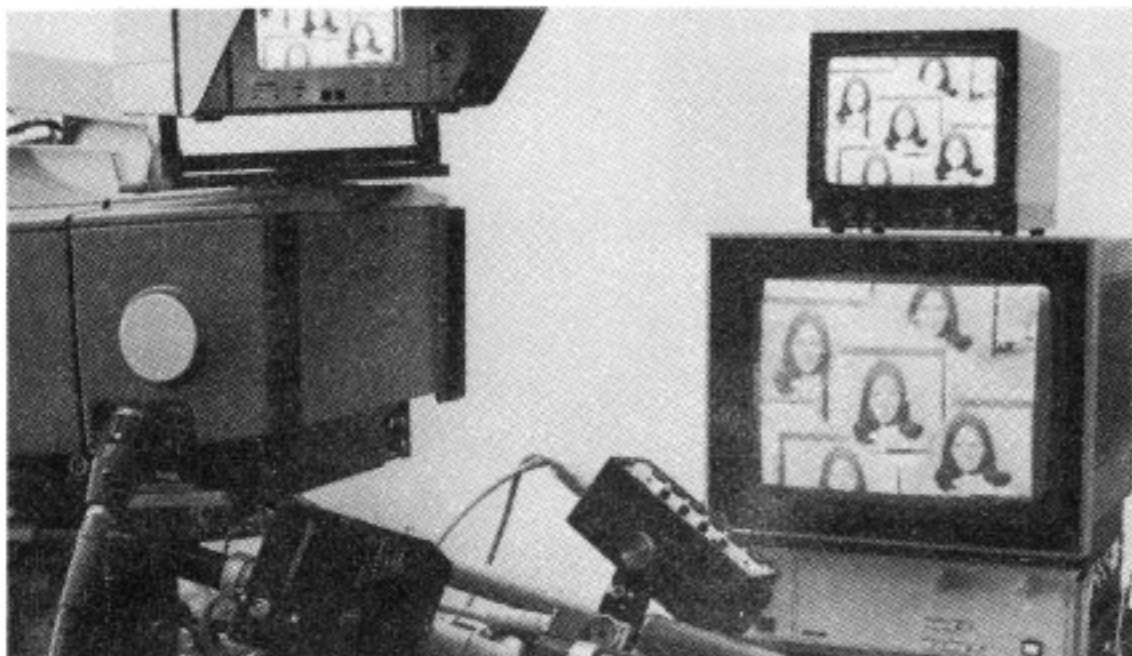
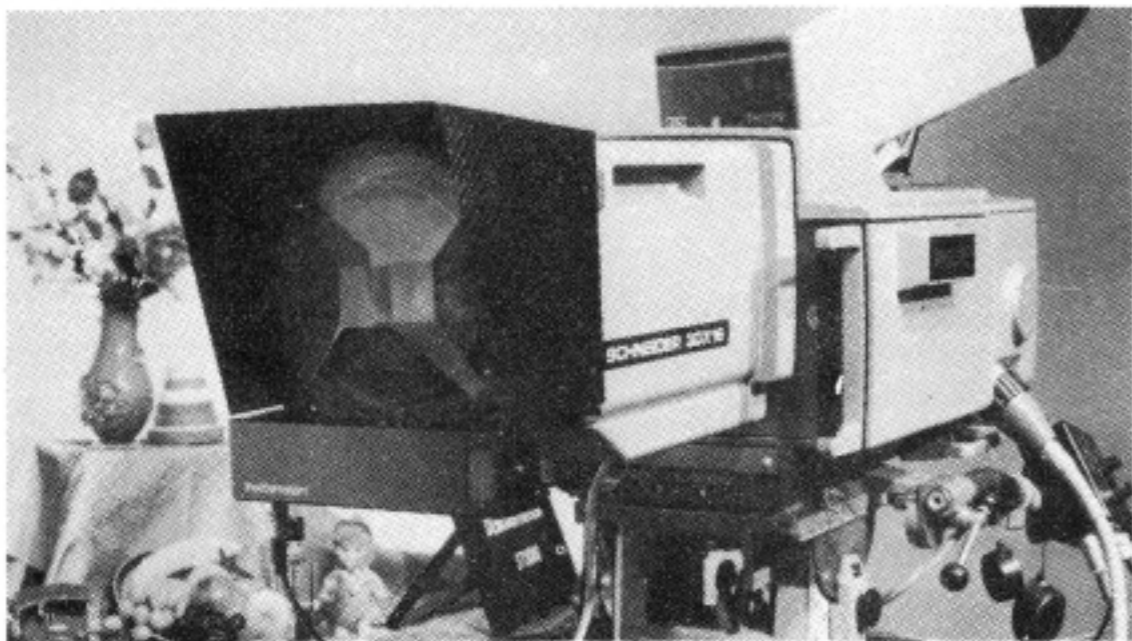
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MSC newsletter



Special effects filters

A variety of special optical effects, such as rotating multiple imaging, are now possible with a series of filters available from MSC Electronics.

Filters presently available include a four facet pyramid, a six facet pyramid, a four point star, a six point star and an eight point star, with more to come.

Manufactured by Porta-prompt Limited, these filters have a clear diameter of 190 mm and are suitable for mounting on the majority of zoom lenses in current use.

The direction and speed controls are mounted in a unit which may be fitted to the pan bar of the camera.

Circle 133 on reply card

CFOK opts for Sintronic

Chief Engineer Ken Harris of CFOK in Westlock, Alberta, has joined the growing list of Canadian stations who have purchased a Sintronic transmitter.

The CFOK unit is a Sintronic Model SI-A-1S fully solid state

1000 watt AM broadcast transmitter.

Quality 1 kW to 50 kW AM transmitters and 1 kW to 55 kW FM transmitters by Sintronic are available in Canada exclusively from MSC Electronics Ltd

Circle 134 on reply card

MP TV out of sight

The TV cameras covering our MP's as they debate in the House of Commons will be much less in evidence and the lighting requirement will be reduced as a result of new equipment supplied by MSC Electronics Ltd.

When TV coverage started, just over a year ago, four cameras were equipped with remote control Model 404 pan and tilt heads by Evershed Power-Optics, and four cameras were manually operated.

Now MSC has supplied additional Model 404 heads permitting all 8 cameras to be remotely operated. Because of the reduction in space requirements, the cameras now can be concealed in locations where they do not interfere with or cause any distractions to the Members of the House.

MSC also has supplied custom built Schneider TV 12x20 lenses incorporating complete servo systems inside the lenses for remote control of zoom and focus. These lenses feature improved light gathering capabilities thus reducing the lighting requirements. The high light level previously required was a source of complaints from MP's.

The new Schneider lenses also offer greater flexibility due to a larger zoom ratio.

Automatic camera operation is controlled by a system co-ordinated by MSC Electronics and built by AVL Digital Ltd. of Toronto. Here is how the automatic controller works.

Whenever a Member is recognized by the Speaker of the House, the microphone in front of the Member is turned on. This microphone is connected to the inter-rotation and sound dist-

tribution system, the TV audio system, and to the automatic controller.

The controller selects three cameras which focus on the area associated with the microphone in use, automatically programming the camera through a series of pre-selected shots. The producer chooses shots from these three cameras or from any of the other cameras providing general coverage of the House. If required a manual override provides the producer with direct control of any of the cameras.

Circle 135 on reply card

Improved response

Broadcasters have long been plagued by poor low frequency response and with noise and hum when audio material has been transmitted over standard telephone lines. The Comrex Model LX from MSC Electronics solves these problems.

The method employed by the Model LX is quite intriguingly straight-forward. At the sending end the input audio is frequency shifted upward by 250 Hz, and is then down-shifted at the receiving end back to the original frequency.

As most low frequency deficient transmission circuits have a lower cutoff point of 300 Mz, the Model LX extends this cutoff point by 250 Hz, or down to 50 Hz.

At the receiving end any hum, noise, pops, etc., originating on the circuit are automatically down shifted by 250 Hz. These low frequency noises are then significantly attenuated by a high pass filter.

Both portable and rack mounting transmitting encoders are available.

Circle 136 on reply card

directions

A review of current policies and decisions of the Canadian Radio-Television and Telecommunications Commission.

PUBLIC HEARINGS

Schedule revised to October 2nd; those planning to attend hearings should verify details in case of last-minute changes.

- November 13— Vancouver, B.C.**
Hotel Vancouver
- November 14— Toronto, Ont.**
Harbour Castle Hotel
- November 20— Hull, Quebec**
Conference Centre
- December 3— Prince George, B.C.**
Simon Fraser Inn
- December 3— Hull, Quebec**
Conference Centre
- February 5, 1980— Montreal**
Le Meridien
- February 18— Amherst, N.S.**
Wandlyn Inn
- February 21— Halifax, N.S.**
Citadel Inn
- March 3— Medicine Hat, Alta.**
Westlander Inn
- March 6— Edmonton, Alta.**
Edmonton Plaza
- March 18— Toronto, Ont.**
Park Plaza Hotel
- May 6— Hull, Que.**
Conference Centre
- May 13— Winnipeg, Man.**
North Star Inn

OCT. 16—EDMONTON

A special hearing scheduled for the Edmonton Plaza was cancelled after the applicant, OK Radio Group Ltd. of Westlock, Alta., withdrew its bid to purchase radio station CKST St. Albert.

NOV. 13—VANCOUVER

An additional hearing has been scheduled to commence November 13 at the Hotel Vancouver, 900 West Georgia St., Vancouver, B.C.

Applications on the agenda include:

- Leslie S. Akenclose of Nanaimo, for a new cable TV system at Nanoose Bay, B.C.
- Otter Cablevision Ltd., Aldergrove, B.C., for a new cable TV system to serve parts of Langley.

- Chilliwack River Cablevision Co-operative, Sardis, B.C., for a new cable TV system to serve part of the Regional District of Fraser Cheam.

- Kaslo Television Ltd., for transfer (100%) from F. G. Gardham and L. E. Greenlaw to John W. and Marjorie D. Buchanan.

- Cariboo Broadcasters Ltd., Quesnel, B.C. (CKCQ Quesnel, CKWL Williams Lake and CKBX 100 Mile House), for transfer of indirect control to a new group of shareholders which includes CFBV Ltd. and Prince George Broadcasting Ltd.

- Sunwapta Broadcasting (CFRN) for a network of 14 AM stations to carry Edmonton Oilers hockey games.

- CFMS-FM Victoria, for a change of transmitter site to Saturna Island.

- CBC, for new TV rebroadcasters of CBUT Vancouver, at Phoenix (100 watts on channel 15), and Christina Lake and Greenwood, B.C. (both 10 watts on ch. 13).

- Nanika Cultural Society, Kemano, B.C., to acquire the CFTK-TV rebroadcaster at Kemano from Skeena Broadcasters, and to establish three new rebroadcasters at Kildala Arm (ch. 7), TV Mountain (ch. 5) and Mount Dubose (ch. 9).

- BCTV, for a hockey network between CHAN-TV Vancouver and CFAC-TV Calgary.

continued on next page

CRTC CHAIRMAN CAMU RESIGNS

Dr. Pierre Camu, who two years ago moved from the post of president of the Canadian Association of Broadcasters to become chairman of the CRTC, has resigned, effective October 14.

His resignation was closely followed by that of Jean Fortier, one of the CRTC's two vice-chairmen, leaving three vacancies on the Commission's nine-man executive—the third resulting from the retirement of Pat Pearce early this year.

Dr. Camu, who was chairman of the St. Lawrence Seaway Authority before joining CAB in 1973, joins March Shipping Ltd. in Montreal, as president.



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directions

NOV. 14—TORONTO

CABLE TV BOUNDARIES, SARNIA FM ON AGENDA

A hearing has been scheduled for Wednesday, November 14, at the Harbour Castle Hotel, Toronto.

It will consider the rationalization of boundaries for cable TV systems in Metropolitan Toronto, whereby each system's service area will better co-incide with municipal boundaries.

The plan involves the transfer of 60,000 subscribers from Rogers Cable and 5,000 from Canadian Cablesystems Ltd. to other cable operators in the area, who will pay \$175 per subscriber. If approved, the plan will go into effect August 31, 1980.

Also on the agenda is the purchase of cable systems owned by Rogers in Brampton, Leamington and Toronto. Shareholders of Canadian Cable-systems were to vote October 19th on the purchase, at a price of \$34.6 million.

Two competing FM applications for Sarnia, Ontario will be heard. Rogers Radio (CJJD) and Sarnia Broadcasters (CHOK), the latter recently purchased by Rick Richardson of CJBK London, Ont., both seek a 50 kw station on 99.9 MHz.

DECISIONS

AM Radio

NEW STATION AT AMQUI

A new AM station has been licensed to Jean-Hugues Guenette at Amqui, Quebec, 5 kw on 1220 kHz. It will receive most of its programming from CFLP Rimouski, and will be affiliated with the Télémédia network; operations are to commence in September, 1980, with about five hours daily of local programming.

A competing application by Les Communications Matane Inc. was denied.

CHNS GOES TO M-H

An application to transfer 90% of the shares of Maritime Broadcasting Co. Ltd. (CHNS, CHFX-FM and CHNX short wave, Halifax, N.S.) to Maclean-Hunter Ltd. has been approved.

M-H has undertaken to increase news staff and public affairs programming, to establish a Halifax bureau for Newsradio Ltd. at a cost of \$40,000 a year, and to operate CHFX-FM separately full-time, instead of simulcasting from midnight to 6:00 a.m. It will also spend \$10,000 a year to develop country music talent and will make these programs available to other FM stations. Four of the six directors will be local residents.

Other AM approvals

• Transfer of CFBK Huntsville and CFBQ Parry Sound, Ontario, to Joseph F. Duchesne, representing a company to be incorporated. Formerly with CJBK London, Ontario, Duchesne will live in the area and promised to further develop coverage of community activities by the two stations.

• Transfer of CKAY Duncan, B.C., to Richard J. Drew, formerly of CHML Hamilton, Ont.

• Disaffiliation from CBC of CHLT Sherbrooke, Quebec, CFTK Terrace and CKTK Kitimat, B.C. Coverage in Terrace and Kitimat is now provided by CBTH-FM and CBUK-FM, respectively.

• Daytime power increase for CHRT Pohénégamook, Que., to 1 kw.

• Establishment of a studio at Gander, Nfld., by CFYQ, a rebroadcasting station, to provide local programming on a part-time basis.

Sports networks approved:

• CFCF and three other stations, for Montreal *Expos*.

• CFCN and two other Alberta stations, for Calgary *Stampeders*.

• Addition of CHOW Welland and CKPC-FM Brantford, Ont., to Toronto *Blue Jays* network.

• Addition of CJNS Meadow Lake, to Saskatchewan *Rough Riders* network. →

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FM Radio

• A new CBC station, 94 watts on 100.9 MHz, has been approved at Thompson, Manitoba. It will rebroadcast CBW Winnipeg.

• Amended power and frequency for new CBC rebroadcasters (ex-CBAF Moncton, New Brunswick) are: 32 kw on 97.9 MHz at Neguac; 36 kw on 88.9 at Campbellton.

• A rebroadcaster of CJAY-FM Calgary has been licensed to the Bassano TV Assoc., Bassano, Alta., 8.8 watts on 106.1 MHz.

• Community access facilities have been approved for CBIH-FM Cape Dorset, N.W.T.

Television

• New CBC TV rebroadcasters have been licensed, as follows:

Location	Ch.	Watts	Feed
Chibougamau, Que.,	4	236	CBMT
Murdochville, Que.	21	10	CBMT
Fort George, Que.	12	10	E-sat.
Nouveau Comptoir, Que.	12	10	E-sat.
Mistassini Stn., Que	12	10	E-sat.
Mistassini Stn., Que.	9	10	F-sat.
Gravelbourg, Sask.	45	19,000	CBKT
Marengo, Sask.	15	12,800	CBKST
Plamondon, Alta.	4	10	CBXT
Vedder Crossing, B.C.	52	10	CBUFT
Chilliwack, B.C.	14	480	CBUFT
River Jordan, B.C.	18	20	CBUT
Miles Ridge, Y.T.	12	10	CFBF-TV

• A privately-owned rebroadcaster has

been approved for Club Social La Grande at Camp Mirage, Que., 10 watts on channel 12, to carry the French network via satellite.

Other TV approvals

• CBC—change of antenna site at CBNAT-5 Millertown, Nfld., with increased power, 83 watts on ch. 9.

• Club Social La Grande—revised facilities at Brisay Camp, from 119 w on ch. 4 to 10 w on ch. 12, and at Fontange (Laforge) Camp, Que., from 119 w on ch. 2 to 10 w on ch. 12, both with change in antenna site.

• CBC—change of transmitter site at CBKFT-6 Gravelbourg, Sask., with power reduced to 19 kw ERP.

• CJDC-TV Dawson Creek, B.C.—change of transmitter site at CJDC-TV-2 Bullhead Mtn., B.C.

Cable Television

NON-PROGRAMMING SERVICES APPROVED FOR CABLE TV

In line with its public announcement of March 26, 1979, the CRTC is approving a growing variety of "non-programming" services on cable TV systems.

The services are permitted on the conditions that they do not displace programming services; that they are not subsidized by subscribers to programming services; and that no advertising is carried.

Rogers Cable, in the Toronto and Brampton area, is adding the Reuters financial service on channel S—a "frame-grabbing" or information retrieval system. (This was described in the article on *Teletext* which appeared in the Jan./Feb, 1979, issue of BET, page 16.)

Huron Broadcasting Ltd., of Sault Ste. Marie, Ont., will test a range of services, consisting of burglar alarm, fire alarm, medic alert, home sitting, information, education, bookkeeping, meter reading, load management, street light control, traffic light control, oil delivery, connects, disconnects, system problems and system monitoring. The test will be provided to certain individual homes, apartments, public buildings and utilities on channels T9 and T10.

Closed circuit security surveillance has been approved for a number of cable systems operated by Canadian Cablesystems (in Cornwall and the Toronto areas) and Maclean-Hunter (in the Toronto area).

At the time of the March 26 announcement, the CRTC also approved the following applications:

• Ottawa Cablevision—burglar/intrusion, fire and medical alarm services.

• Grand River Cable TV, Kitchener, Ont.—diversified consumer information services and business information services.

• London (Ont.) Cable TV—a system to monitor the performance of its cable system, as well as alarm and security services for subscribers, offered as a separate package from normal programming.

The services are being approved for periods of up to two years.

Applications for such services from the province of Manitoba are awaiting the outcome of the CRTC hearing of October 2 in Hull. A hearing was forced by opposition from the provincial attorney-general and other interventions. The provincially-owned Manitoba Telephone System is also experimenting with a coaxial cable to provide similar services. (See article *Project Ida*, BT, Sept/Oct, 1979, page 30.)

Other cable TV approvals:

• Sirois Cable, Chandler, Que.—new antenna site to receive FM stations from Charlottetown, Moncton and Halifax.

• Cablevision National Ltee, Montreal, Que.—duplicate carriage of three programming channels from France permitted until March 31, 1981. National is to report every six months on its progress in making technical improvements, which will overcome the need for duplicate carriage.