



Technitopics

by Sandy Day

10 kHz . . . FOR A WHILE?

The first session of the Regional Administrative MF Broadcasting Conference is over, and with it, the technical basis for the post-NARBA period—except for one point, 9 vs 10 kHz channel separation. This decision was delayed to the second session, November 1981.

It is a tradition within the ITU that decisions be made by consensus, and official votes are called only as a last resort. Most of the infighting is done in working groups set up by committees in the hope of reaching a compromise. Opinions may be violently opposed in these groups, but usually some compromise is reached which would be acceptable, perhaps with reluctance, to all participants. These groups never hold official votes, but "opinion polls" are sometimes taken after the arguments have been debated.

After the first flurry, lined up on the side of 9 kHz were the USA, Mexico, Cuba, Nicaragua plus five Region 1 countries, four of which have minor territorial possessions (and thus valid votes) in our Region. Five others showed mild support for 9 kHz, but with qualifications such as agreeing to vote with the majority since the move to 9 kHz would have to be universal. Seven countries, led by Argentina and Canada, opted to retain 10.

It appeared at that time 9 kHz would be the result of any official vote. Such a vote would be complicated by ITU rules which disqualify from voting, but not from arguing, those countries whose credentials are not yet approved, or who are in arrears on their dues or have failed to sign or to adhere to the "Convention", the official ITU protocol last revised in 1973.

During the second week, support for 10 kHz continued to mount, dues were paid, credentials of various delegations were approved, other delegations arrived, and it appeared that any vote, if officially taken, would be a tie, or even a slight majority for 10 kHz. However, out of the blue came a suggestion from Brazil. They had expressed mild support for 9 kHz, but had pleaded for unanimity in any decision. Their suggestion was to continue study on the question, and to delay the final decision to the second session.

This procedure was quickly supported by Canada, then by many others, as the one method to find a proper consensus. The USA, initially opposed to such a compromise, finally fell into line.

Resulting from this was a resolution calling for parallel studies based on both 9 and 10 by the IFRB, aided by a panel of experts from Region 2 countries. Initially this panel would provide computer experts to assist the IFRB in assimilating our programs into its computer, then at a later stage, broadcast engineering experts to help them formulate a comparative report to the second session. One aspect of the report would be study of an alternative plan for reassigning existing stations. The only plan previously mentioned had been one whereby a new channel would be created every 90 kHz within the band, with existing stations shifting a maximum of 4 kHz. The other alternative, suggested by Canada, was to create new channels in bunches within the band at frequencies generally occupied by Class I-A stations, and leaving

the regional channels with minimum frequency shifts. Our studies had indicated that this sometimes resulted in more possibilities for new stations in frequency-congested areas, little difference in possibilities in less-congested areas, avoidance of receiver-related interference relationships, and overall costs only slightly higher than in the original reassignment scheme.

GOOD NEWS AND BAD NEWS

There is much to be said in favour of 9 kHz—substantial reduction of inter-regional interference in coastal areas, more opportunity for solving incompatibilities among existing stations, more opportunities for new assignments or for power increases for present stations. However, adjacent-channel rules would be tightened, direct costs to the industry would be involved, and a substantial period of adjustment would be needed during which protection of existing stations would suffer to various degrees.

The delay in the decision and the parallel studies finally provide us adequate time to assess the full consequences, pro and con, not only in Canada, but throughout the Region. And DOC will not be working at this in isolation for it is their intention to consult with broadcasters in determining the optimum course to follow. I think that Canadian broadcasters, given all the facts, will be in a position to support Canada's ultimate decision which will come of course from the Minister, not from the broadcasters themselves.

A visit to the dentist may be traumatic or even painful, but most of us recognize the benefits once it is over. So it may be with 9 kHz.

EFFECT OF OTHER RULE CHANGES

Many of our existing NARBA rules will be replaced. Station classes, protection calculations, maximum power allowed, elimination of channel classifications, protection at national boundaries, new skywave and groundwave curves, new conductivity maps. The list is lengthy and only some of the highlights are listed here.

● SKYWAVE PROTECTION

The South Americans bulled through 50% skywave protection of stations, rather than the 10% used under NARBA. This lost them some 6-8 dB of protection which they then tried to salvage for Class A stations by belatedly proposing a complex RSS protection rule rather than an individual station-to-contour computation.

Canada, USA and Mexico, later joined by Greenland and the French Islands of St. Pierre and Miquelon, added a note to continue 10% protection amongst each other, the net result being that we will suffer increased interference to only a slight degree, and this only from Caribbean and Central American countries.

Class B and C stations retain RSS protection to their 2.5 and 4.0 mV/m contours and Class A to their 0.5 in most of the region. However, in two areas of high noise, the Caribbean south of Cuba and the coastal countries of northern South America, higher values are used. →

TECHNITOPICS

● GROUNDWAVE PROTECTION

Class A are protected to the 0.1, Class B and C to the 0.5 mV/m contours daytime in our area. Class A is protected on adjacent channels only to the 0.5 mV/m. Protection ratios used are the same as we now have in Canada.

● BANDWIDTH OF EMISSIONS

The planning will be done on the basis of necessary bandwidth equalling the channel spacing, but wider occupied bandwidths typical of our stations will be permitted unless a station in another country is affected and objects. In this case, the offending station will have to take steps to eliminate interference.

● STATION POWER

Class A stations will be permitted a maximum 100 kW day, 50 kW night. Class B maximum is 50 kW day or night, and Class C 1 kW day or night in our zone. Class C stations in the high noise zones are permitted more power for daytime operation.

● PROTECTION AT OR BEYOND NATIONAL BOUNDARIES

No station has the right for protection beyond national boundaries, though this may be negotiated in some cases. Thus the boundary becomes the protected contour, and ratio protection of the actual signal levels at the boundary is provided.

On first adjacent channel, a new rule provides for no overlap of 2.5 mV/m contours, on second adjacent 10 mV/m, and on third adjacent, 25 mV/m contours, with appropriate ratio protection maintained along the intervening boundary.

This new rule dispenses with the priority I-A channels of

which the USA sits on 25. The 650 mile rule goes, and substantial opportunities for Canadian exploitation are thought to exist. In effect, Class I-A stations revert to NARBA I-B status.

The USA tried valiantly to retain border protection of their 25 Class I-A channels, but gained only a footnote in the last appendix of the report. This provides for protection beyond normally-protected contours for one or more existing stations (not channels) where service requirements demand such protection, subject to bi-lateral or multi-lateral agreements.

IN RETROSPECT

All things considered, Canada lost very little and gained a great deal of potential benefits in the technical rules adopted. Our delegation was skilled and well-prepared and congratulations are certainly due to our government's representatives. Among our successes was Recommendation D, a well-researched document which showed Region 2 countries the technique by which they could forestall high powered new stations, already listed in the Region 1 and 3 Plan, from creating interference on our existing stations.

Our delegation accepted me as a full working member, kept no secrets from me, let me lead the argumentation on the 9 vs 10 kHz controversy, and cooperated in every way possible in our common effort to achieve the best possible results for Canadian broadcasting. In thanking them all, I particularly want to single out Ed DuCharme, Director of WARC Activities, who was chief of our delegation. Canada has a sure winner in him.

Sandy Day is Director of Engineering Services for the Canadian Association of Broadcasters. Readers' comments or questions may be addressed c/o CAB, Box 627, Station B, Ottawa, Ontario K1P 5S2.

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BROADCAST BEAT

by Phil Stone

Have you heard? . . . **Harry Allen Jr.**, who with his brother Leslie operated CHIC and CFNY-FM Brampton, is now publisher of the trade magazine *The Beauty Book* . . . Attractive **Barbara Elliott** has moved up to vice-president/media director of Hayhurst's Toronto office . . . As noted in BT's March/April issue, **Al Dubin** moved from Warner Bros. to Global TV. He's probably one of the country's best-liked and best-known PR people . . . **Robert Richmond**, formerly manager of radio sales for Glen-Warren, succeeds Al as director of advertising and publicity for Warner; he's in charge of Canadian operations . . . **Lynn Dunlop** has advanced to Ontario promotion rep for MCA Records . . . The *Rick Bosetti Baseball Book*, on which we collaborated, was out in time for the opening of the *Blue Jays'* season. Hope you like it!

Satellites and Pay TV will be the major issues discussed at the annual Canadian Cable TV convention. Dates are May 25-29 at the Hotel Vancouver. (That's just across the water from **Mel Cooper's** trophies!) . . . **Norman Summerville** is now director of media and research at GGS . . . **Keith Polson** has moved from MacLaren ad agency to Richmond Advertising Associates, where he is senior v.p. & director of client services . . . **Patrick Scott**, one-time *Toronto Star* editor, jazz expert and CBC-TV personality, is editing *Sales & Marketing Management* and *Media Forum* magazines . . . A. C. Nielsen awarded **R. J. Marrison** with a vice-presidency in recognition of his services in the client service area . . . The radio industry is working to make good **Jim Adam's** prediction: the Radio Bureau of Canada president, checking his crystal ball, forecast that radio will increase its income this year by a hefty 13%. Every rep and time salesman is obviously hoping this astute observer of the radio scene turns out to be right. RBC will soon be losing Jim, who won many friends for the Bureau during his tenure and worked intensely to improve the fortunes of radio in Canada.

Ron Knight, the former CFGM-er, is general manager of the new AM station, CKAN, which opened Feb. 28 in Newmarket, Ontario. (More on CKAN in the CCBA Newsletter in this issue.) . . . It was a girl for *Marketing* broadcast writer **Sheri Craig** and her husband **Rob Johnson** . . . Baton Broadcasting shareholders are now getting 25 cents a share dividends semi-annually—up from 20 . . . Lovely **Pat Brodie** joined Dean & Associates as senior consultant . . . **Ross Dedman**, the financial wizard who spent some time with the CHUM Group in Toronto before joining Bushnell Communications as comptroller, is now v.p., finance and secretary at Bushnell . . . And if the beautiful blond at Benton & Bowles looks familiar, it's **Susan Kastner**, formerly creative group head at Leo Burnett, now v.p. and creative director at B&B.

After spending a year at CFMT-TV as production and operations manager, **Harvey Rogers** has joined CFTO-TV Toronto as manager of VTR post production . . . **Peter C. R. Golding** moved up to account director at Spitzer, Mills & Bates . . . **Warren Cosford**, who was program manager of CHUM-FM is handling special projects now for that station . . . **Anne Arsenault**, one-time CITY-TV personality, is director of PR for the Better Business Bureau . . . **Walter Pitman**, president of Ryerson Polytechnical Institute, will take over as executive director of the Ontario Arts Council. The OAC recently renewed our weekly *Arts in Ontario* radio show for another 12 months.

David Schatsky, who earned a big following when he was host of CBC Radio's *Metro Morning*, is now g.m. of CBC's Sudbury station . . . **Stan Kulin** and **Brian Josling** were appointed senior v.p.'s at CBS Records . . . **Bill Ott** is v.p., sales, A&M Records . . . **Jerry Goodis** moved up **Craig Hemming** to v.p. and director of client service at his new ad agency . . . **Joyce Roblee**, **Pierre Gervais** and **Jerrold Beckerman** have this in common: they are newly-appointed directors of Cockfield-Brown Inc. . . . **Ann Reeves-Brown** joined CKEY as sales rep. A former broadcaster, producer and programmer, she had at one time been on air for 'EY as a weekend music announcer as **Ann Reeves** . . . Ogilvy & Mather's managing director is **David Rutherford**; he may be remembered by some from his days with Proctor & Gamble.

Obits: We were saddened by the passing of the CBC's **Gordon Jones**, an extremely fine man whom we had come to know during our early days of freelancing at the CBC . . . Also, we note that **Peggy McCance** has died. She was the widow of **Larry McCance**, whom many of us remember with affection . . . I had the pleasure of knowing two great newsmen in my time, **Bill Drylie** and **Norman DePoe**. With Norman's recent death, both are gone now, but leave behind a set of standards for honest, factual, digging news, that should be a criterion for all young people seeking a news career . . . And the death of **Jessica Dragonette** reminded us of her golden years as a superb radio star.

Among the bright, talented and lovely women in public relations, one of our favorites is CFRB's **Betty Abrams**. She's a pleasure to talk to and to receive material from—in particular, we like her newsletter, that is crammed full of interesting items. From it, we learn that **Brian Larter**, who was in our very first class when we initiated the Radio Broadcasting course at Humber College, has become a father for the second time. Brian, who is president of The Commercial Factory, is also a freelance newscaster at 'RB. We also get the eyebrow-lifting information that newsman **Charles Doering** has this among his hobbies—he runs a knitting machine. And **Peter Henderson**, CFRB copy chief and one of our early grads at Humber, is now president of the 'RB staff committee. Interestingly, three other members were with us at Humber—v.p. **Ian Kennedy**, secretary **Dawn Schneider** and rep **Mike Flatt**. Incidentally, if you're a stamp collector, Betty Abrams is a kindred spirit.

Bill Sheppard has left CKFH, where he was news director, to join CKO . . . **Bob Durant**, former CHFI news head, who has been handling CKFH's major newscasts in the morning, along with **Howard Cooney**, took over as news director . . . Did you know that **Hon. Judy Erola**, minister of state for mines, was the first acct. exec. (time salesperson) at CHNO Sudbury? . . . **Dennis Barkman**, a hard worker on behalf of broadcast education, is chairman of the board of governors, British Columbia Institute of Technology, where many good radio-TV people are trained . . . May 15th is the deadline for submissions to the CRTC on Canadian Content . . . For your listings: ACA (Association of Canadian Advertisers) has moved to 180 Bloor St. West, #1010, Toronto, M5S 2V6; 964-3805. CARF (Canadian Advertising Research Foundation) is at same address . . . Wally's son, **Glenn Crouter**, who was one of our students at Humber, is on staff at C-ISL Richmond, B.C. . . . And **Vic Folliott**, who gave a lot of Humber Radio students their start when he was p.d. at CHNR Simcoe, is now program director of **Rick Richardson's** CJBX-FM in London, Ontario.

THE 9 kHz QUESTION

by **George Mather**
and **H. Burrell Hadden**

Editor's note: As the Regional Administrative Radio Conference (RARC) for Region II (North and South America) met in Buenos Aires, *The CHUM Report* of March 17, 1980, reviewed *The 9 kHz Question*. RARC and its outcome are discussed in *Technitopics* by Sandy Day elsewhere in this issue. The following comments, prepared by consultant George Mather and Burrell Hadden, chief engineer at CHUM AM-FM Toronto, summarize the serious problems—and dubious advantages—of 9 kHz spacing for AM.

While in theory the reduced separation would result in 12 new channels to provide a few new frequencies for the more remote areas of Canada, this will not be the allocation bonanza it is thought to be. The majority of existing stations will face a change of channel resulting in considerable expense and inconvenience. Antenna arrays will have to be retuned and in many cases there will be a degradation of service to the listeners.

The irony of the situation is that it is possible that many of the new channels may have to be utilized to resolve intolerable interference created by the reduced channel separation. It hardly appears logical to enter such a large undertaking to introduce new problems of coverage and service.

At the present time, the minimum

separation between stations in the same market is 40 kHz. Under the 9 kHz separation proposal, the separation could drop to 36 kHz in several cities. This may be a problem where station signals are strong because there could be intermodulation in the receivers and the listener would hear a combination of stations instead of one choice.

It must be borne in mind that the shift to 9 kHz is a massive undertaking. Therefore, it is unlikely that any attempt would be made to realize it all at once. It is more likely that a start would be made at one end of the dial and then progressively work through the band of frequencies.

If a separation of 36 kHz is a problem, then the conflicts will arise as the stations are shifted. For example, in Canada there will be a reduction from 40 to 36 kHz separation for the following: Windsor (CBEF and CKWW), Vancouver (CBU and CKLG), Montreal (CBF and CKAC), Edmonton (CKST and CHQT), and Sarnia (CHOK and CKJD). In the event that the 36 kHz separation is intolerable in a particular city, the problem is further complicated because one of each pair will have to abandon its position on the dial and utilize one of the newly created channels. This could take some sorting out if it is to be resolved to the satisfaction of all concerned.

No country will be in a position to proceed on its own, and there will be a need for international co-ordination. Consequently, a decision must be

made whether a new channel is allotted in Windsor or Detroit, in Toronto or Buffalo, or in Vancouver or Seattle. If you add to this the possibility that some stations may be compelled to use a new channel, the situation becomes very complex.

Furthermore, reducing the spacing makes it more difficult to improve the audio fidelity of the AM system. Improving the fidelity necessitates widening the bandwidth of the receiver. This makes the receiver more susceptible to reproducing interference in the form of a whistle from the next station along the band. Europeans are well acquainted with this annoying interference when listening to AM at night.

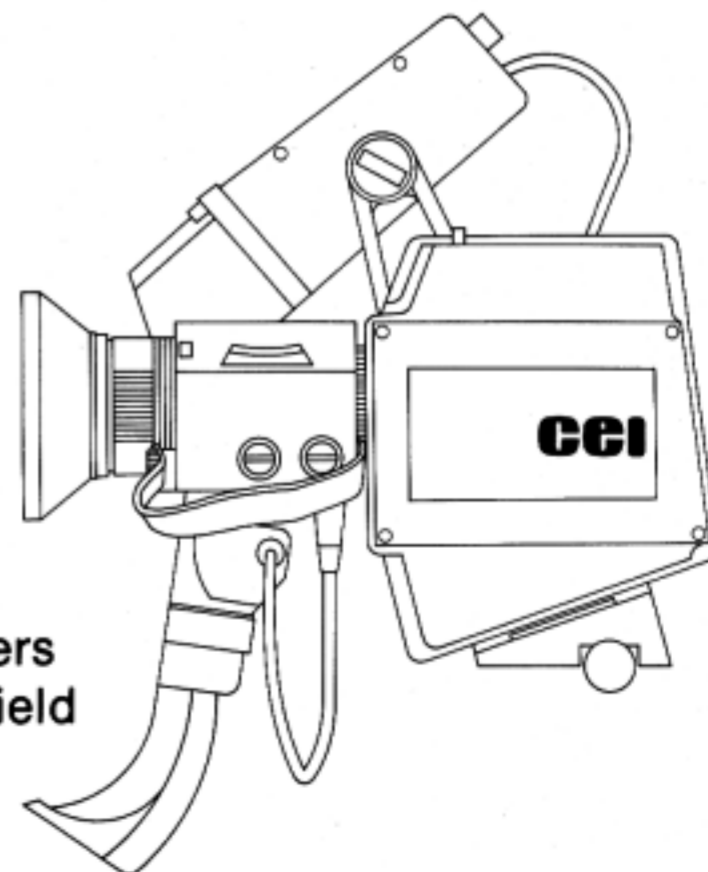
Another consideration is the proposed AM stereo system which requires a somewhat wider channel bandwidth for good stereo operation than does mono transmission. Any reduction in channel spacing will of necessity make AM stereo system design more difficult.

It is an unfortunate fact of life that Canada, as well as Mexico and Panama, will have to go along with the plan to change the frequency spacing if it is so agreed by the international planning convention.

The concept of 9 kHz separation appears to be short-sighted. While it does expand the potential for additional stations, surely the listener should not be overlooked. If additional stations are accommodated at the expense of quality of service to the listener, it appears to be a bad bargain.

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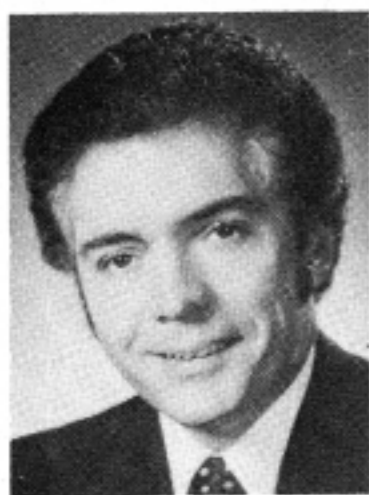
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● BCB Electronic Sales Ltd.—**David Applebaum** to sales; **Gord Palin** to manufacturing and service.

● Bushnell Communications Ltd.—**Ed Billo**, CJOH-TV Ottawa, named to board of directors.

● CFTR Toronto—**Bill Gable**, from CKLW Windsor, to program director.

● CHLO St. Thomas, Ont.—**Dick Pellow**, from CJKL Kirkland Lake, to p.d.

● CHUM Toronto—**Chuck Langdon**, from CJCH Halifax, to retail sales mgr.

● CIGO Port Hawkesbury, N.S.—**Jay Bedford** to retail s.m.

● CJCH/C-100 Halifax—**Bruce Tinkham** to sales mgr.

● CJFM Montreal—**Joseph Levy** to v.p., sales; **Greg Stewart** to v.p., programming.

● CJOR Vancouver—**Bob Mackin** to program manager.

● CKKR Rosetown, Sask.—**Jim Blundell** to general sales mgr.

● CKO Toronto—**Bill Sheppard** to news/program director.

● CKRA-FM Edmonton—**Marcel Prefontaine**, from CRTC, to operations mgr.

● CTV—**Donald A. Bruce** to mgr., western sales office, Vancouver.

● Canadian Radio-television and Telecommunications Commission (CRTC)—**Ralph Hart** to director-general, broadcast programs; **Larry Durr** to director-general, planning and development.

● Digital Video Systems—**Richard Voigt** to director of marketing, Toronto.

● Electro-Voice, Inc., Buchanan, Mich.—**Robert E. Morrill** to v.p., marketing; **M. Travis Ludwig** to marketing.

● General Wire & Cable Co. Ltd., Coburg, Ont.—**Frank S. Hayes** from g.m. to president.

● IGM Communications—**Jim Woodworth** returns to IGM as president of southeast U.S. regional office.

● JVC—**Anthony Grosboll**, from Digital Video Systems, to west coast district mgr. for US JVC professional video division.

● Marcom—**Ted Tripp** to sales mgr., radio products (US).

● Neal Ferrograph USA, Inc.—**Richard Chilvers**, from Keith Monks Audio in UK, to sales mgr., at Stamford, Conn.

● Rupert Neve Inc.—**Peter V. Horsman**, from James B. Lansing Sound, becomes regional sales mgr. in Hollywood; **Glen McCandless**, from Anderson Audio, is regional sales mgr. at new Nashville office, (615) 385-2090.

● Orrox Corp.—**Klaus Eichstadt** to director of international marketing and product development.

● Philips Electronics Ltd.—**Donald Vale** to director of newly-formed marketing support department, Toronto.

● Q Broadcasting Vancouver—**John E. Stark** becomes president as well as chairman, will manage day-to-day operations.

● Radio Bureau of Canada—**Sandra Radick**, from Standard Broadcast Sales, to marketing manager, Toronto.

● Scientific-Atlanta—**Sidney Kohn** to manager of field operations and product support, cable division; **Patricia Rooney** to advertising administrator, communications products.

● Tele-Capital Ltd.—among recent appointments to board of directors are **Conrad Lavigne** and **Pierre Duhaime**.

● Tele-Capital Unicom Ltd.—**L. Jean Bourgault**, to v.p., manager, of Montreal office.

● Television Bureau of Canada—**Shari Coote**, from CFCN-TV Calgary, to director of new co-operative advertising division, Toronto.

● Times Wire & Cable—**Jack Arbuthnott**, from Phelps Dodge, to v.p., CATV engineering.

● Toshiba Broadcast—**David Seedall**, from Video Equipment Corp., to supervisor, field engineering, at Sunnyvale, CA.



Hayes



Grosboll



Stark



Radick



Arbuthnott

PHOTO STORY

60 YEARS OF RADIO

The Canadian Association of Broadcasters and radio stations across the country are marking 60 years of broadcasting in Canada.

It was in the fall of 1919 that CFCF Montreal became the first regularly operated radio station in the world.

Other early significant events in the history of Canadian radio broadcasting:

● **December 12, 1901**—morse code messages received at Signal Hill, St. John's, Newfoundland, from Cornwall, England, in the first long distance transmission of electromagnetic signals. The experiment was undertaken by Guglielmo Marconi, "the father of

broadcasting". The Canadian government then subsidized Marconi to build a permanent "wireless" station at Table Head, Nova Scotia, for marine communication.

● **1902**—Sir Ernest Rutherford, a professor at McGill University, sent wireless messages over an eight-mile distance between Coteau, east of Montreal, and a Grand Trunk Railway train.

● **December 24, 1906**—Canadian-born Reginald A. Fessenden is believed to be the first person to transmit the human voice, a development made possible by the invention of the vacuum tube.



CFCF Montreal was the world's first radio station to operate regularly. It began in 1918 as XWA, an experimental station owned by the Marconi Company, and was formally licensed in 1919.

Originally, CFCF's service was mainly for ships navigating the St. Lawrence River and the growing number of amateur radio enthusiasts. Then, on May 20, 1920, the station originated a special program from the Chateau Laurier Hotel in Ottawa, featuring a full orchestra and soloist Dorothy Lutton. Public reaction was immediate: reception in Ottawa was extremely good and the amazed listeners included many of the nation's leaders. The demand for home receivers exploded. In Montreal, theatre audiences listened to CFCF during movie intermissions, and across Canada, thousands began searching the airwaves for radio signals with their home-made "crystal" sets.

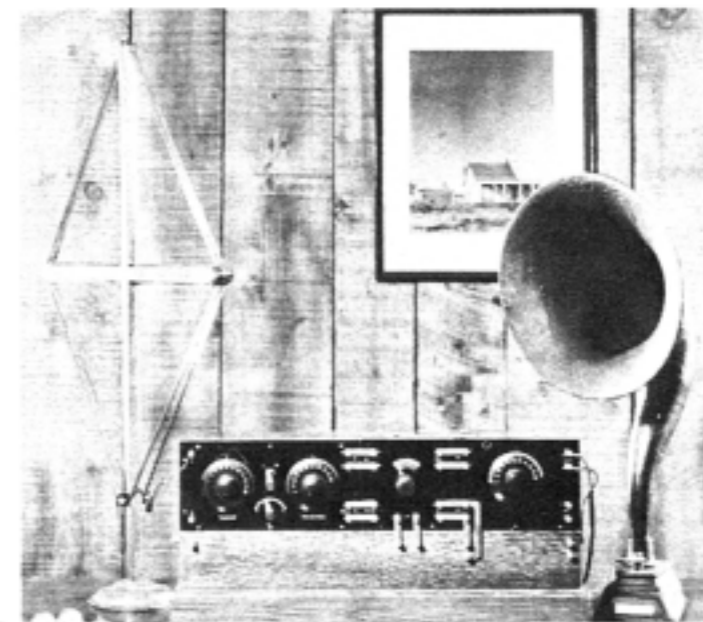
Photo shows boxing champion Jack Dempsey being interviewed in 1922 at CFCF.

● **July 1, 1927**—Canada's diamond jubilee ceremonies carried by first national network, consisting of 23 stations.

● **1930**—independent networks established: the Imperial Oil hockey network; a network for educational programs, originated from CKNC Toronto (Trans-Canada Broadcasting Co.); The Rogers Majestic network, which consisted of CFRB Toronto and 20 other stations across Canada, and which included in its programming performances by the Toronto Symphony and Hart House String Quartet; and an eastern network, with CFCF as its flagship station.



Another early Canadian station was CKAC Montreal, established in 1922 and for many years owned by the daily newspaper *La Presse*. Like CFCF, it still operates with the original call letters. As of March 31, 1922, Canada had 39 radio stations and nearly every home could receive service. This photo shows CKAC's transmitter plant in 1948.



Canada's first tube type radio was the "Model C". →



Station 9RB was the forerunner of CFRB Toronto. The "Roger's Battery-less" station was another world "first". CFRB went on to originate many popular radio programs and remains one of the nation's leading stations today.



In more modern surroundings, an old 16-inch transcription absorbs the attention of Alain Gourd of CHOT-TV Hull, CAB's vice-president for television, Lise Renaud and Pierre Nadeau of CAB, and Jacques Gagné, of the Public Archives, Ottawa. The turntable, an EMT 927, is one of only two known to exist in Canada.

As part of its observance of the 60th anniversary of radio, the Canadian Association of Broadcasters has turned over to the Public Archives hundreds of recorded and transcribed programs from the early decades of broadcasting. Jim Allard, former CAB executive vice-president spent much of 1979 identifying and cataloguing the material, which had been gathering dust in a CAB storeroom. In addition, CAB has donated two wire recorders, which pre-date the use of tape recorders, to the Museum of Science & Technology, Ottawa.

FROM DISC TO TAPE

Jim Allard, who was in charge of CAB's Ottawa office for many years and served as co-ordinator of this year's Diamond Jubilee celebrations, has been a keen observer of broadcasting almost from the beginning. He recalls how the art of recording in the broadcast industry has changed over the decades.

"In comparison with modern taping, cutting old discs was like using a chisel on stone tablets," he comments. A diamond stylus was used to cut grooves in acetate discs, and the recordings were usually referred to as "transcriptions".

Highly inflammable, the acetate residue piled in long, curling strands, could be a serious fire hazard when left lying about after a recording session. "In Edmonton, a whole broadcasting station burned down because of it," Allard relates.

Some of the old discs were recorded from the centre, tracking out to the edge. Usually, this was done on shows requiring more than one disc; the sound quality often varied considerably between the edge of the disc and its centre, so a better "match" was obtained by starting the second disc from the centre—and working outwards.

During the World War II, there were shortages of materials for discs and people made recordings on all sorts of things: aluminum, a curious kind of vinyl, steel and even glass. Some discs were merely coated cardboard—but the surfaces deteriorated so rapidly, they usually were played only once.

Discs could also be recorded with two sets of grooves on the same side, and it is said these were used by wartime intelligence agents. The specially-made discs, normal in appearance, contained hidden grooves harboring coded messages!

The Wire Recorder

The wire recorder—short-lived, and considered an oddity today—was the forerunner of modern tape recording. It made its appearance after the war, but by the late 1940s had been superseded by the more advanced technology of tape, with its convenience and portability.

CAB's Jack Struthers notes that, while disc recording is a symbol of the old days of broadcasting, it remains in use today, and is favored by many. "Every record maker and stereo music lover will swear it is still the incomparable means of retaining and listening to recorded music with the best sound fidelity."



CCBA Engineering Newsletter

by Dave Gillard

CKCO-TV EXPANDS

Central Ontario Television Ltd., Kitchener, Ontario, is expanding its AM-FM-TV facilities on King Street West at a cost of over \$1 million. Construc-

tion is well under way and expected to be completed by fall.

Additions at CKCO-TV include a new production studio, 50' x 45', dressing rooms, administration, storage and properties areas. Space will be

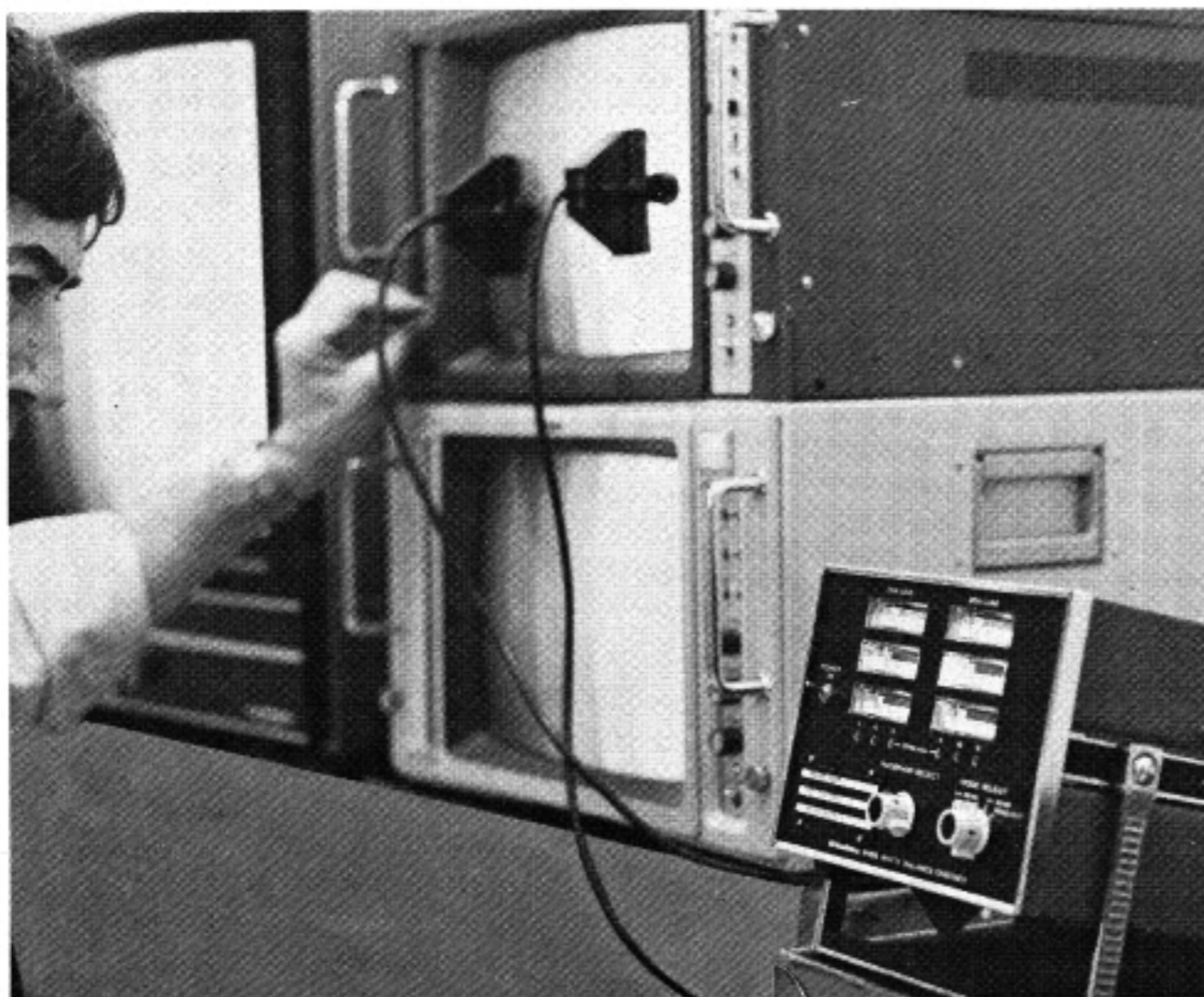
doubled for news, public affairs, sports and program offices. The TV control room is being completely revamped and five Ampex VPR-2 one-inch machines have been installed.

CKCO-TV's engineering staff have also been constructing new microwave facilities to improve the signal at the Huntsville (Muskoka area) rebroadcaster. Previously, the off-air signal from Wiarton on Georgian Bay was picked up at Rosseau and relayed to Huntsville. Now both rebroadcasters are served by the microwave network, which consists of three hops to Markdale, where the feed is split to cover the additional hop northwest to Wiarton and five hops northeast to Huntsville.

Expansion in the radio division includes new control rooms and production facilities, record library and administration and sales offices for both CKKW and CFCA-FM.

(Our thanks to CCBA engineering president **Joe McIntyre** and **Reg Sellner** of Central Ontario TV for providing the above information and architect's sketch of stations' impressive "new look".)

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Even though you can probably get by with just one 898B, once you find out the price you'll want to order half a dozen!

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SHIBASOKU 898B

CKAN NEWMARKET ON-AIR

Newmarket's new radio station, CKAN, commenced broadcasting at 6:00 am, Thursday, February 28th, 1980, from studios in the Newmarket Plaza on Davis Drive.

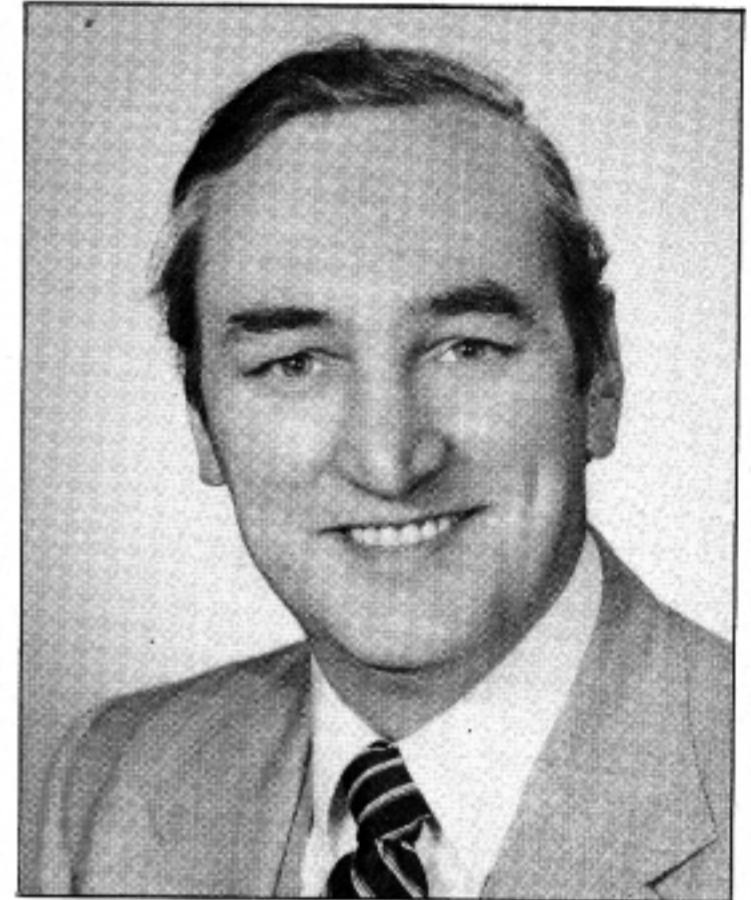
Licensed in the summer of 1978, CKAN serves the Regional Municipality of York, which extends from the northern boundary of Metropolitan Toronto to Lake Simcoe. Operating on 1480 kHz with a full-time power of 10 kw, the station requires a very critical directional antenna and finalization of this array was the chief factor in delaying CKAN's start-up beyond the projected date of September 1st, 1979. A 10.5 acre site was chosen at Oak Ridges, enabling CKAN to beam north towards Aurora, Newmarket and Bradford.

John Evans, who is now responsible for engineering at CKAN, in addition to CKBB Barrie and CKCB Collingwood, tells us that LeBlanc & Royle constructed the station's six towers, the transmitter is a Harris MW-10, phasers

Circle #52 on Reader Service Card



BRUCE EDGAR JOINS M.S.C.



David LaFrenais is pleased to announce the appointment of Bruce Edgar as Western Area Sales Manager of M.S.C. Electronics Ltd. Bruce was with CFRW/CHIQ-FM Winnipeg for the past nine years as chief engineer. He can be contacted at 847 Dale Blvd., Winnipeg, Manitoba R3R 1R4; telephone (204) 895-8380; telex 07-55734; and will be pleased to serve you with all your future requirements.

were built by **Bill Onn** and the STL is by Moseley. Equipment for the on-air and production control rooms includes McCurdy 8650 consoles with peak program meters (PPMs), Studer and Revox tape machines, ITC cart machines and Technics turntables.

CKAN's format is MOR and present staff numbers 20. Its address is P.O. Box 1480, Newmarket, Ontario L3Y 4X1, telephone (416) 898-1100.

NEW TX FOR CKAT-FM

A few years ago, the CBC built two FM rebroadcasters at North Bay to provide both French and English AM network service to the area. The stations use two AEL transmitters, equipped with McMartin exciters feeding into a wide-band Shiveley antenna.

Unfortunately, this installation had very adverse effects on CKAT-FM, at that time operating on 93.7 MHz with 5,860 watts ERP from a tower owned by the Ontario Northland Railway. Interference from the CBC installation could be heard all over the FM band, degrading reception of CKAT.

Consequently, Northern Broadcasting Limited, owners of CKAT-FM, applied to the CRTC to increase power, change frequency and re-locate the

transmitter site. This move took place in September, 1979. CKAT is now on the air at 101.9 MHz with a McMartin BF-10K 15kw transmitter supplying power to a Shiveley 10-bay antenna located on the CBC tower. The power output from CKAT-FM is now 68,000 watts ERP. Not only has the inter-modulation problem been cured, chief engineer **Wally Lennox** reports that CKAT can now be heard clearly as far away as Orillia and Sudbury.

CFRU GUELPH SIGNS ON

The University of Guelph's new station, CFRU-FM, went on the air on schedule towards the end of January, 1980. It operates on 93.3 MHz with 50 watts ERP.

All equipment for the station was supplied by Comad Communications Ltd., and includes a McMartin B-950T, two-bay Phelps Dodge antenna, McMartin audio mixers, Revox B77 tape machines and Sennheiser MD421 microphones. Also, CFRU's two Moseley TFL-280 limiters must be doing a good job—judging by listeners' comments on the "loud and clear" sound.

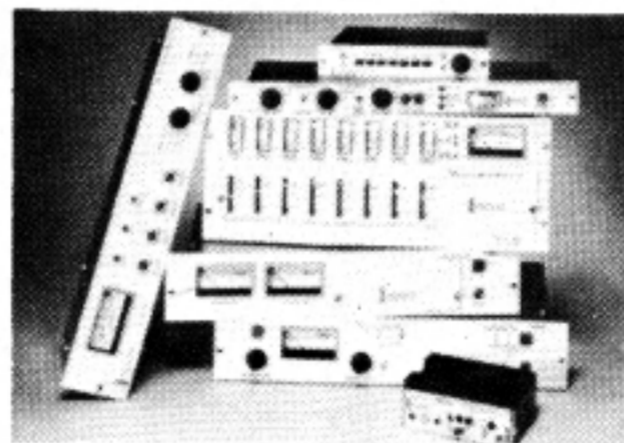
Paul Hardacre is in charge of the technical side of CFRU. →

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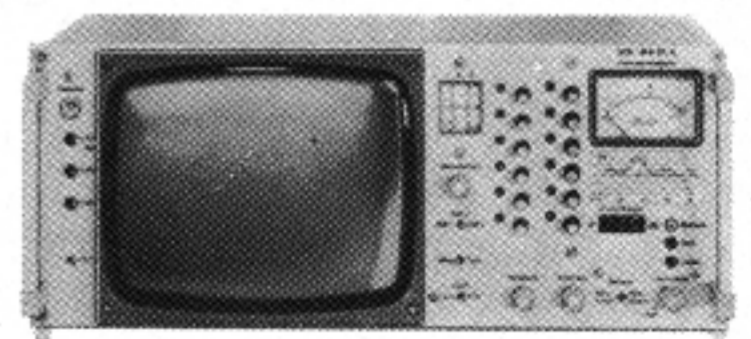
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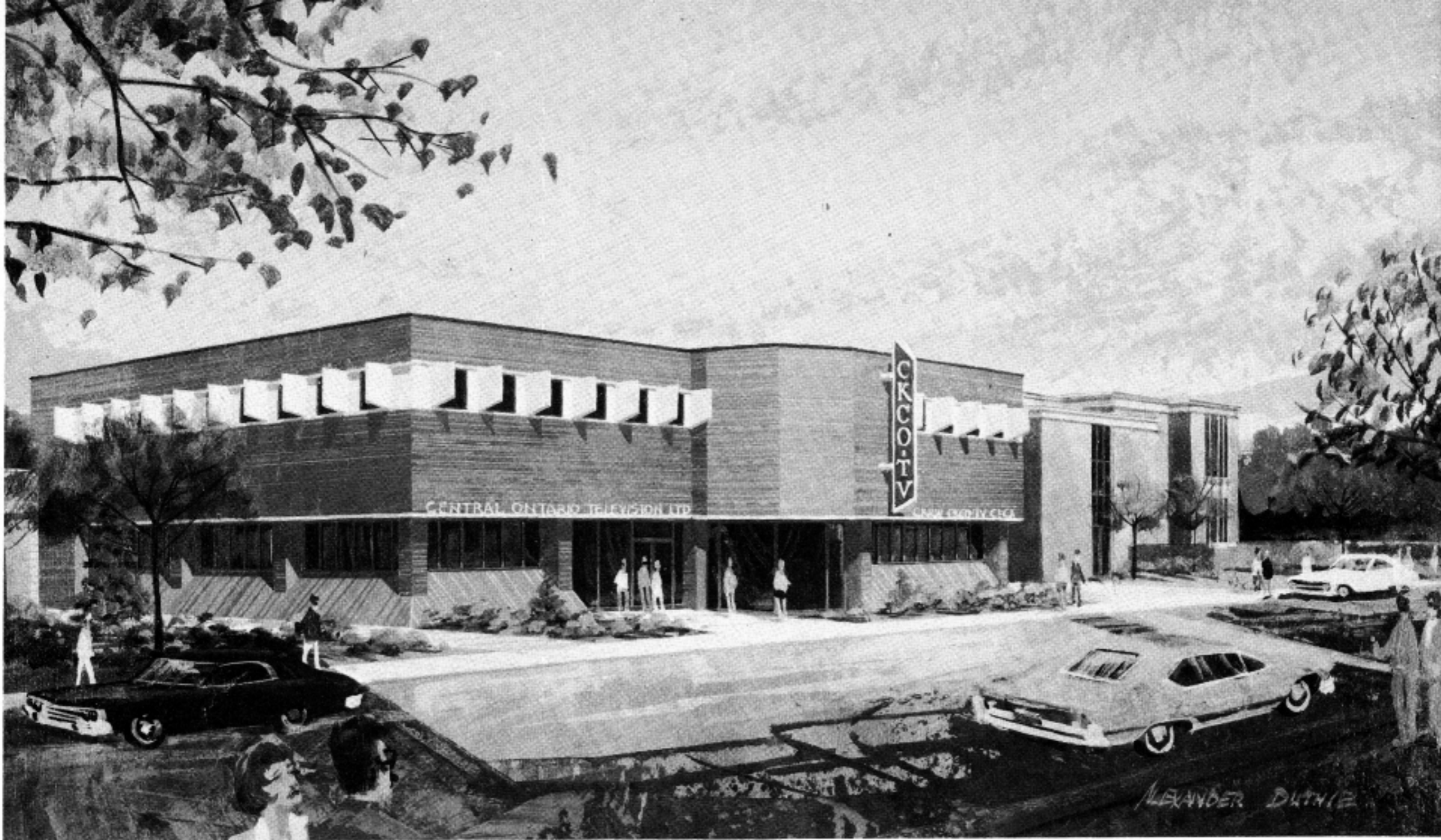
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CCBA ENGINEERING NEWSLETTER

NEW CHWO/CJMR SITE

Alex Velleman, chief engineer at CHWO Oakville/CJMR Mississauga is delighted with progress at the new transmitter site and expects the move to be completed by June 15th, well ahead of the July 1st target date.

Readers of this magazine will recall Alex's account *Co-siting CHWO/CJMR* (BET, March/April, 1976), which described how daytime station CJMR (1190) was co-sited with CHWO (1250). Then, the spectre of urban sprawl reared its ugly head, and our September/October, 1978, issue described development plans which

threatened to engulf the twin transmitter site.

Happily, the stations were able to reach a favorable settlement with the developer, who purchased the existing 12-acre site just north of the Queen Elizabeth highway at Oakville.

CHWO/CJMR then purchased a new site, which consists of 25 acres north of Highway #5. Its six 200-foot towers were completed by LeBlanc & Royle in only two months: "L&R really pushed and did an excellent job," says Alex. The towers, 40 feet higher than those at the old site provide exactly the same pattern, with only minor variations in contours.

The use of Butler buildings for the transmitter and ATU huts is "a first", according to Alex, who describes his new plant as "the nicest I've ever seen". All ATU equipment is being refurbished, and the phasers will be located in the transmitter building, providing a controlled environment and facilitating faster tune-up.

Three transmitters will be housed in the 24' x 36' transmitter building: the present two AM-10,000D CCAs, plus a new 10 kw CCA standby. The new unit offers some useful features, such as the capability to tune up and adjust at 1 kw, and 5/10 kw cutback. It can operate on either 1190 or 1250 kHz, and may be activated from the studios in the event of failure of either of the main transmitters. It is also planned to have pushbutton control for pattern changes. STL equipment is by Moseley Associates.

Ventilation of the tx building is designed to keep building dust away from the transmitters, with outside air being drawn in under the floor and out through roof ducts.

A final touch: the six-inch PVC piping which carries co-axial cable underground at the site has been made "rod-ent proof". Alex would like to avoid any repetition of the groundhog attack that once put the stations off the air for three hours. →

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1980 executive of Central Canada Broadcasters Association, engineering section is seen at inaugural meeting. From left: Dave Gillard, CFOS, publicity; Bill Onn, CKEY, exhibits; Trevor Joyce, CHIN, papers; Joe McIntyre, CKCO-TV, president; Larry Cameron, CKWS, vice-president; Jeff Guy, CJBK, secretary-treasurer.

40 YEARS FOR CFOS

Owen Sound's CFOS marked its 40th anniversary on March 1st, 1980.

The station was organized by the Fleming family, owners of the daily *Sun-Times*, and its manager from 1940 to 1949 was **Ralph Snelgrove**, who went on to found CKBB and CKVR-TV in Barrie, Ontario. Also among the original staff of seven was **Bill Hawkins**, who succeeded Ralph Snelgrove as manager, and has been president of CFOS since 1969.

Originally 100 watts on 1400, the station increased power to 250 watts in 1941, then to 1,000 watts on 1470 kHz in 1947. A further frequency change, to 560, took place in 1958, and power was increased to 2,500 watts in 1977. A satellite station, CFPS Port Elgin went on the air June 21st, 1978, operating on 1490 kHz with 1,000 watts.

CFOS now employs 30 full-time and five part-time staff, plus 10 district news correspondents.

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SAFETY COMMITTEE

Readers will recall that the CCBA Engineering Section formed a Safety Committee last year. Warren Parker of CKTB/CJOR-FM St. Catharines is the driving force behind this committee, which had an exhibit at the 1979 convention in Toronto.

Warren reports that the committee has decided to align itself with the Industrial Accident Prevention Association.

IAPA will assist CCBA to reach some of its objectives—such as determining safe working conditions, safety standards, promoting health and safety practices, training services, safety promotional materials and an award program. The task is an immense one, and CCBA will join many other industries which are co-operating in IAPA to work more effectively. As interest grows within the broadcasting industry, we can become an Accident Prevention Association under the umbrella of IAPA.

Here are some "Safety Tips" offered by the committee for work at transmitter sites:

- Work at transmitter sites with someone else, especially when working inside interlock cabinets. If you cannot have someone with you, make sure someone knows where you are.
- Have some means of communication at your transmitter site: telephone, two way radio or CB.
- Post telephone numbers for fire, ambulance and hospital, with details of shortest routes to the site.
- Install a "local control" or "kill switch" that disables the remote control so that a studio operator cannot reset the transmitter while you are working in it.
- Know your transmitter, especially what voltages remain after pulling the main breaker.
- Don't use aluminum ladders to get on AM towers.
- Large Pyrenol filter capacitors will build up a charge in high RF fields—short terminals with a piece of wire.
- Install deadbolt type locks on your transmitter building doors for added security to ensure that the doors don't shut while you are outside and your belongings and means of communication are inside.
- Keep a set of battery booster cables at your site. They are perfect for shorting at towers while working ATU components or tower lighting. They are also very handy for getting your car started from the generator battery.

- Make sure co-ax feed lines or phasor straps don't protrude or dangle so they can come in contact with you.
- Make sure, when turning off breakers to service transmitters, that the generator doesn't start automatically and the transmitter comes back on.
- Only CO-2 or dry chemical fire extinguishers should be used at transmitter sites.
- Transmitter sites are not general storage areas. Keep props, remote

- booths and old files elsewhere.
- Keep your gas tank topped up in winter months. It lessens condensation and the extra weight certainly helps when you get stuck.
- Some modern transmitters, although interlocked, don't have high voltage shorting switches when doors are opened.
- A serious burn can occur when an ATU hut doorknob touches a hot coil when the door is opened.

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BROADCAST TECHNOLOGY 47



It's always interesting to see the "face behind the voice": these smiling young ladies are with Bell Canada, where they take all the orders for radio and television remote lines for Ontario. From left to right: Susan Harden, Mary Logue and Joanne Michell. (As background may suggest, photo was taken by CCBA Engineering's new publicity chairman—Dave Gillard of CFOS.

Here and there . . .

• **Larry Keats**, formerly chief engineer at CFTJ in Cambridge (Galt) is now with **Rob Meuser** at CKOC Hamilton.

• February 29th happens only every four years so CKEY Toronto's morning show celebrated the day by broadcasting from the *Disney World* studios in Florida. Routing from Orlando was by

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5 kHz land line to Atlanta, where two voice channels were hopped via Nashville, Chicago and Buffalo. All news, weather and other items of interest were sent from CKEY over CRT screens. Handling the stunt from the Florida end were morning host **Keith Rich**, newsman **Bob Payne** and engineer **Dave Craig**. (Ed. note: I still think they were putting us on. Has **Bob Rice** ever led us down the wrong road before?)

• CKNX-TV Wingham will install a new GE Model TTC 16,000 FH 16 kw (visual) transmitter in the fall of 1980. It replaces a 25 year old RCA unit which will be retired to standby status. Chief engineer **Scott Reid** reports that replacement of the STL unit is also underway, and that a 300 square foot addition to the transmitter building is being built. The new transmitter provides a slight increase in power, extending CKNX's contours radius by about three miles.

Out thanks to **David Strachan** of Comad Communications for the items on CKAT-FM North Bay and CFRU-FM Guelph, and to all those who passed along their news for this issue of the Newsletter.

Dave Gillard is publicity chairman for the CCBA Engineering section, and technical director for CFOS Owen Sound and CFPS Port Elgin. Information for the Newsletter should be addressed c/o CFOS, 270-9th Street East, Owen Sound, Ontario N4K 1N7; or telephone (519) 376-2030.

NAEB/OECA SEMINARS

The Ontario Educational Communications Authority (TV Ontario) will collaborate with the Public Telecommunications Institute in presenting three seminars to be held in Toronto in May.

They are:

- The Program Decision-making Process, (May 21-23, non-member fee \$310).
- Producing Film for TV (May 21-23, \$310).
- Formative Evaluation of Television Projects: Look Before You Leap! (May 22, \$150).

Further information may be obtained from the National Association of Educational Broadcasters, 1346 Connecticut Ave. NW, Suite 1101, Washington, D.C. 20036; telephone (202) 785-1100.

Highlights of hearings and decisions by the Canadian Radio Television and Telecommunications Commission, Ottawa. Included are significant new or amended facilities, both broadcast and cable.

DECISIONS

80-46: Wawa (Ont.) Cablevision renewed; to be operational by June 30, 1980.

80-48: Power increase approved for CHAT-TV Medicine Hat, Alta., from 5.7 to 30 kw, with change of tx site.

80-49: Change of frequency (to 850) for CFYQ Gander, Nfld., denied; power increase on present frequency (1350) recommended by CRTC.

80-50-51: **New AM stations** approved at Harbour Grace, Nfld. One, 1,000 watts day/500 watts night, on 970 kHz, will receive programming part-time from CJYQ St. John's. The other, 5 kw on 850 kHz, is owned by Colonial Broadcasting and will rebroadcast VOXM St. John's from midnight to 6:00 am. In licensing two competing stations for the area, the CRTC states that it has taken into consideration the strong position of CJYQ and VOXM, and expects them to subsidize the new stations, if necessary.

80-54: Security services approved, for experimental term, on Greater Winnipeg Cablevision Ltd.

80-56: Power increase approved for CBFT-1 Mt-Tremblant, Que., from 600 to 1,600 watts.

80-66: Miramichi Cable Ltd. purchase of

cable TV system at Canadian Forces Base, Chatham, N.B., approved.

80-69: New cable system licensed to Chilliwack River (B.C.) Cablevision Co-Operative.

80-70: New cable system licensed to Leslie S. Akenlose, at Nanoose Bay, B.C.

80-93: CBC FM rebroadcaster approved at Leamington, Ont., 1 kw on 103.1 MHz (ex-CBEF Windsor).

80-99-100: CBC FM rebroadcasters approved at Sault Ste. Marie, Ont., 46 kw on 89.5 MHz (ex-CBCS-FM Sudbury); and 1.7 kw on 88.1 MHz (ex-CBON-FM Sudbury).

80-101: Rate increases approved for Kingston (Ont.) Cable TV Ltd. CRTC rejects argument of intervention by Canadian Broadcasting League that Commission does not have power to regulate cable television rates.

80-114-5-6: CBC TV rebroadcasters approved at Christina Lake (10 w on ch. 13); Greenwood (10 w, ch. 13); and Phoenix, B.C. (100 w, ch. 15); all ex-CBUT Vancouver.

80-121: CBC FM rebroadcasters approved at Mistassini Station, Que., 77 watts on 100.7 and 101.5 MHz (ex-northern service, Montreal, via satellite).

80-123: Power increase approved for CILA-FM Lethbridge, Alta., from 32 kw on 100.9 to 100 kw on 107.7 MHz.

FUTURE HEARINGS

May 6—Montreal, Que.
Sheraton Mount Royal

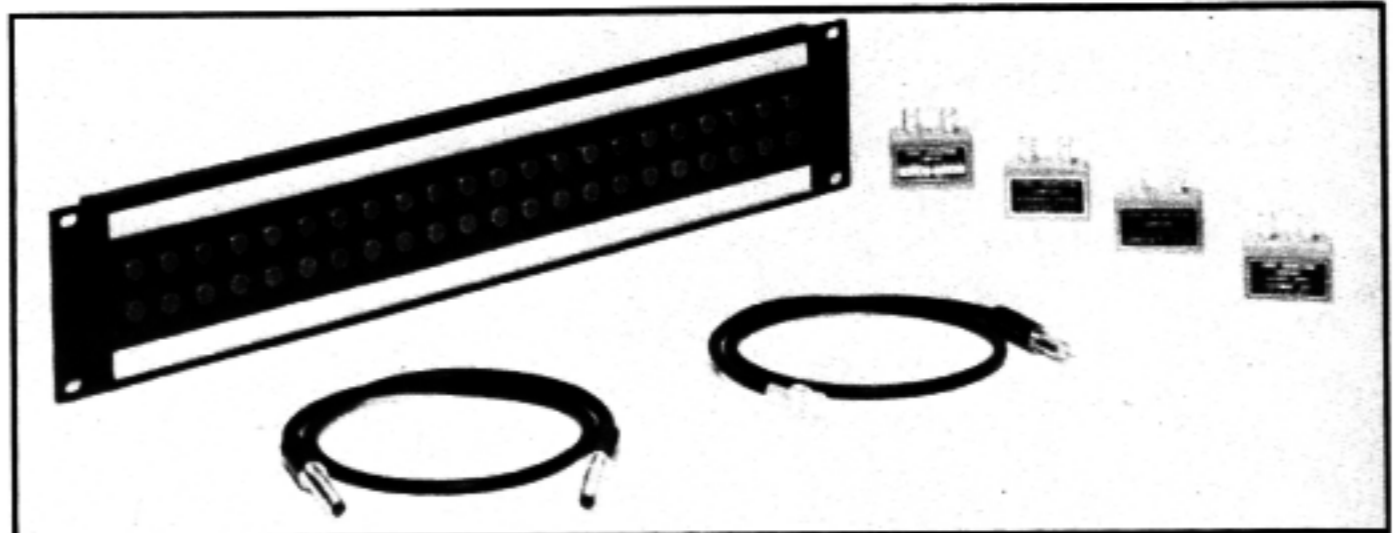
May 20—Vancouver, B.C.
Sheraton Landmark

June 17—Vancouver, B.C.
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June 20—Fernie, B.C.
Community Center

June 25—Hull, Quebec
Conference Center

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jack which provides normal-thru connection without the use of patch cords or looping plugs. Patch cords may be inserted to break the normal-thru signal path and program cross connections. Sources that are patched out are automatically terminated within the jacks. Test probes may be used to enter the jack to sample the signal without interruption of the live circuit. Dynatech Coaxial Patching/Switching Systems are covered by a lifetime guarantee.

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NEWFOUNDLAND TELEVISION

80-128: In renewing the CBC's Television licenses for Newfoundland, the CRTC directed the CBC to cease carrying local advertising within 12 months. It is expected that this will provide increased revenues for Newfoundland Broadcasting (CJON-TV) to support the extension of CTV service to less populated areas of the province.

80-129: Renewal of CJON-TV St. John's, CJWN Corner Brook, CJCJ-TV Grand Falls, CJGN-TV Gander and their rebroadcasters. The licensee, Newfoundland Broadcasting, proposed a five-year plan which would provide new transmitters for CJON, CJWN and CJCJ, a new studio-office building in St. John's, and upgraded production facilities in both St. John's and Corner Brook. Service would also be extended to locations in the northern peninsula of Newfoundland and in Labrador. The CRTC proposed sharing of CBC facilities to facilitate the extension of service.

80-130: Cable TV licence of A. J. Gale Ltd. for Baie Verte, Nfld., renewed for short term, (one year), during which time system is to be rebuilt and extended to entire community.

80-131-2-3: Applications by CBC and Newfoundland Broadcasting to improve

service in St. John's denied. CJON-TV requested a power increase for its 5-watt rebroadcaster on channel 2, to 4,200 watts on ch. 4. The CBC sought both English and French rebroadcasters (60 w on ch. 12, 83 w on ch. 4). In its decision, the CRTC told the applicants to investigate the joint use of facilities, an antenna "farm" or other technical improvements, to find a comprehensive solution to local reception problems in the St. John's area.

80-136: Cablodistribution Dionne Inc. purchase of system serving St-Philippe-Neri and Mt-Carmel, Que., and interconnection with Chouinard TV Ltée, approved.

80-138: Change of antenna site approved for CKRT-TV rebroadcaster at Degelis, Que.

80-142: Special programming services approved on 13 systems of Canadian Cablesystems Ltd. in Southern Ontario. The services include proceedings of federal parliament and Ontario legislature, children's programming, French instruction, music "specials" and channels for replay of programs originated by CITY-TV, CFMT-TV and TVO.

80-143: Changes approved in promise of performance by CFCM-TV Quebec City; will place it among "top five" in Canada in terms of local production.

80-145: Extension of service to parts of Langley, B.C., approved for Western Cablevision Ltd. Competing application by Otter Cablevision Ltd. denied. Area is to be wired within one year.

80-147: Rationalization of Toronto cable boundaries approved.

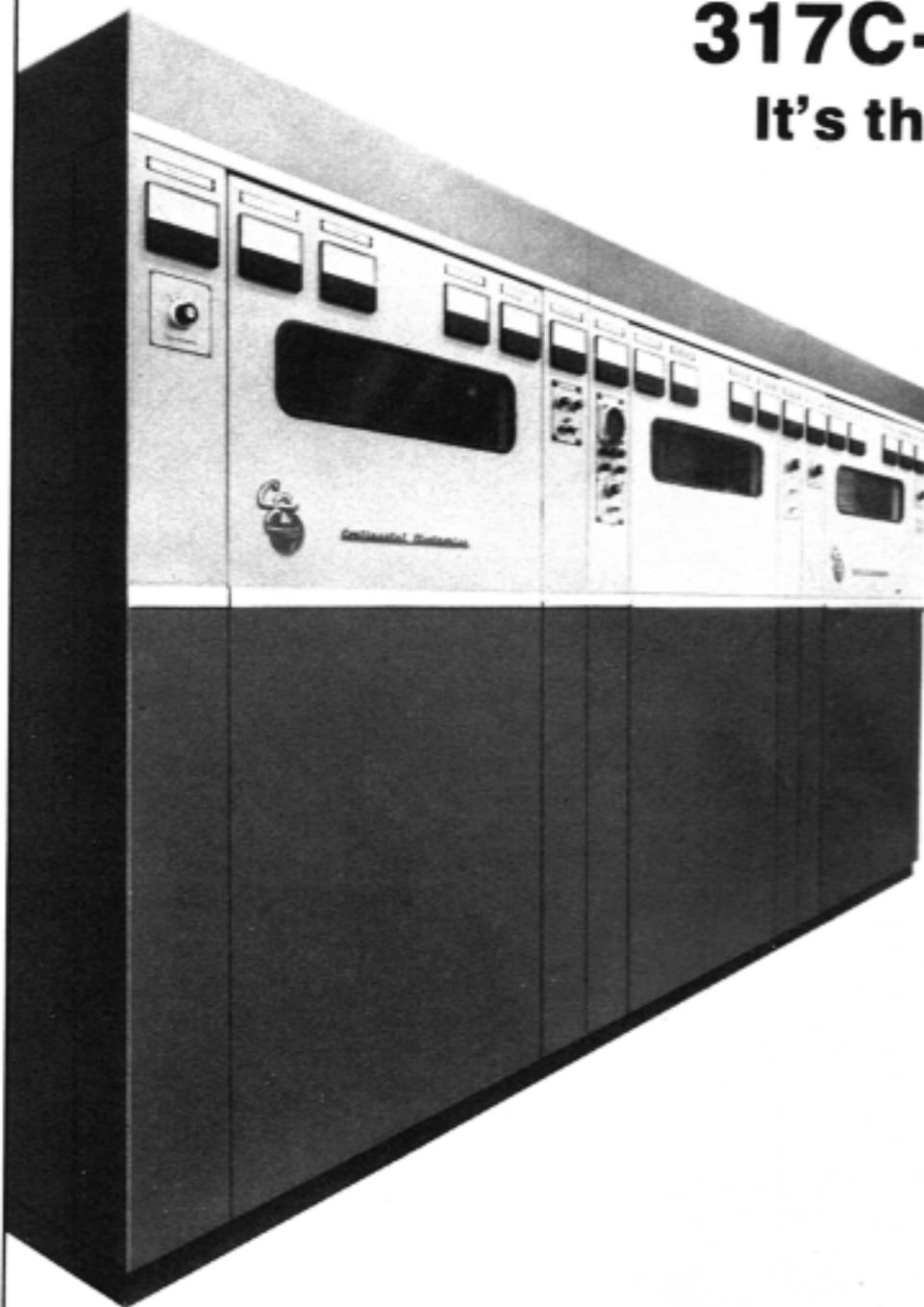
80-152: Approval granted to transfer all shares of J. Conrad Lavigne Ltd., Ottawa Valley Television Ltd., and Cambrian Broadcasting Ltd., to Northern Cable Services Ltd., on behalf of a company to be incorporated. The new company will own both CBC-TV and CTV affiliates based in Sudbury, Timmins and North Bay, as well as CHRO-TV Pembroke, Ont. Existing rebroadcasters in three locations are to be purchased by the CBC as a first step towards providing full CBC network service to northern Ontario. At the Dec. 4, 1979, hearing, the purchaser spoke of its "long-term goal of achieving full independent status" for CHRO-TV as a station in Ottawa, where it has a studio; the decision, however, discourages any change in CHRO's status.

80-153: Approval of purchase of CKSO/CIGM-FM Sudbury by W. B. Plaunt, on behalf of a company to be incorporated, consisting of the previous owners of Cambrian Broadcasting.

→

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80-155: Approval of purchase by 93238 Canada Inc., a company indirectly controlled by Philippe de Gaspé Beaubien, of CJCS Ltd., Stratford, Midland-Penetang Broadcasting (CKMP), Northern Ontario Broadcasting (CFCH/CKAT-FM), Orillia Broadcasting (CFOR), and Timmins Broadcasting (CKGB/CFTI-FM), Keith Campbell is president of the company, which will upgrade news service on the stations and make use of a Telemedia mobile unit to record local talent.

80-156: Approval of purchase of Oxford Broadcasting Ltd. (CKDK) Woodstock, Ont., by Gordon V. Marratto. Technical facilities are to be substantially improved over the next three years.

80-157: New cable TV systems approved for 5440 Cable Ltd. at Fort St. John, Charlie Lake-Taylor, Dawson Creek-Pouce Coupé, Chetwynd and Mackenzie, B.C. Competing applications by Ron East, Peace River Systems, Northern Lights Broadcasting, Fort St. John Cablevision, Morgan Anderson, CJDC Ltd., and Donald Pearson were denied.

80-158: Partial rate increase approved for Fraser Cablevision Ltd., Coquitlam, B.C. Licensee is required to take "immediate steps to overcome technical deficiencies". The CRTC also states that the parent company, Premier Cablevision, is im-

posing "undue interest expense" on Fraser, and that current capital expenditures should have been met before Fraser's 1976-78 retained earnings of \$1.2 million were paid out as dividends to Premier shareholders.

80-159: CBC FM rebroadcasters approved at Geraldton (6.4 kw on 93.7) and Manitouwadge (143 w on 96.9), ex-CBON-FM Sudbury, Ont.

80-160: Sudbury Cable given approval to combine English and French community programming on one channel, until augmented channel service operational.

80-163: Nighttime power increase from 2.5 to 10 kw approved for CHRL Roberval, Que.

80-165: Renewal of licences of Radio Nord Inc.; licensee commended on recent progress, including new plant and modernization of technical facilities serving northwestern Quebec.

80-167: Power increase and change of tx site approved for CBV-6-FM La Malbaie, Que.

80-171: Change of antenna site approved for CBHT-7 and CBHFT-6 Digby, N.S.

80-185: CBC FM rebroadcaster, 100 kw on 95.9, approved at Sydney, N.S. (ex-CBAF Moncton), with SCMO to transmit CBI signal to new Bay St. Lawrence station.

80-186-7-8: CBC FM Rebroadcasters approved at Mulgrave, N.S. (93.4 kw on 106.7, ex-CBH and 93.4 kw on 107.5, ex-CBAF); and at Bay St. Lawrence, N.S. (85 w on 90.1, ex-CBI).

80-189: CBC FM rebroadcasters approved at Boiestown (836 w on 90.9) and Doaktown, N.B. (86 w on 96.5), both ex-CBZ Fredericton.

80-190: CBC FM rebroadcaster approved at Swan Hills, Alta., 88 w on 91.5, ex-CBX Edmonton.

80-191: CBC TV rebroadcaster approved at Rose-Blanche, Nfld., 103 w on ch. 9, ex-CBYT-TV Corner Brook.

TELEMEDIA BIDS FOR TORONTO'S CKFH

Telemedia Communications has offered to purchase CKFH Toronto, subject to CRTC approval. Owned by Foster Hewitt, pioneer hockey broadcaster, CKFH was established in 1951 and now operates on 1430 kHz with 50 kw.

Telemedia interests include a number of stations in Quebec (CKAC Montreal, CHLT group in Sherbrooke, others), a radio network and a rep house, Opex. Earlier this year, the company purchased seven Ontario stations (see decision #80-155, above).



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8 COMMUNITY FMs OK'd FOR QUEBEC

80-192-97: Approval has been given for eight new community FM stations in the province of Quebec, as follows:

Location	Watts	MHz
Ft. Coulonge	3,000	101.7
Chapeau	150	93.5
Rapides-des-Joachims	35	94.3
Rimouski	2,080	104.5
Senneterre	50	89.9
Maniwaki	2,877	95.7
Chateauguay	50	102.9
Fermont	50	103.1

They are in addition to 10 previously-licensed community stations in Quebec, reflecting the support provided for this type of broadcasting by the Community Media Service of the provincial Department of Communications.

Departing from the usual restrictions on advertising on community stations, the CRTC has permitted as much as 10 minutes per clock hour of conventional advertising on several of the new stations.

PUBLIC NOTICES, ANNOUNCEMENTS

- The cable TV licence for Stayner-Wasaga Beach, Ont. (Stanley O. Nixon) has been revoked. Granted in 1975, it has never been implemented.
- The licence for CBWK Terrace, B.C., has been surrendered by the CBC. Service is now provided by CBUF-FM-3.
- Applications for new radio stations have been received for Gaspé and Murdochville, Quebec (AM) and Iles-de-la-Madeleine (FM).
- An application has been received for a new cable TV system to serve the Seaton community, Town of Pickering, Ont. A deadline of May 27 was set for competing applications.
- The licence for CBUVT Victoria has been surrendered by the CBC. Licensed Nov. 2, 1976, for channel 10, the station never went on the air. Although transmitting facilities were installed, the CBC lacked funds for studio facilities, and the CRTC refused to allow the station to operate merely as a rebroadcaster as it would have failed to meet program commitments made prior to licensing.
- An application has been received to provide cable service to the Township of Toronto Gore, northwest of Toronto. The deadline for competing applications is June 13.

CRTC ACCEPTING FM APPLICATIONS

Except for Canada's three most populous areas, the CRTC is again accepting applications for new private FM stations.

Filing of such applications was suspended for nearly a year to allow time to reassess the allotment plan for FM frequencies. This reassessment was prompted by the CBC's long range forecast of its requirements, and was undertaken by the Department of Communications. DOC's study indicates that future

needs can be met in most parts of the country and the CRTC is now receiving applications, which should be filed on or before July 31, 1980. Hearings will be announced in the fall.

The exceptions, where a shortage of frequencies exists, are:

- Southern Ontario
- Montreal area
- Vancouver-Victoria

For further delineation of these areas, contact the secretary general, CRTC, Ottawa, Ont. K1A 0N2, or telephone (819) 997-1027 or 1108.

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