

KENTVILLE'S COMPUTER

At Evangeline Broadcasting, everything is up-to-date—and in the 'bank'!

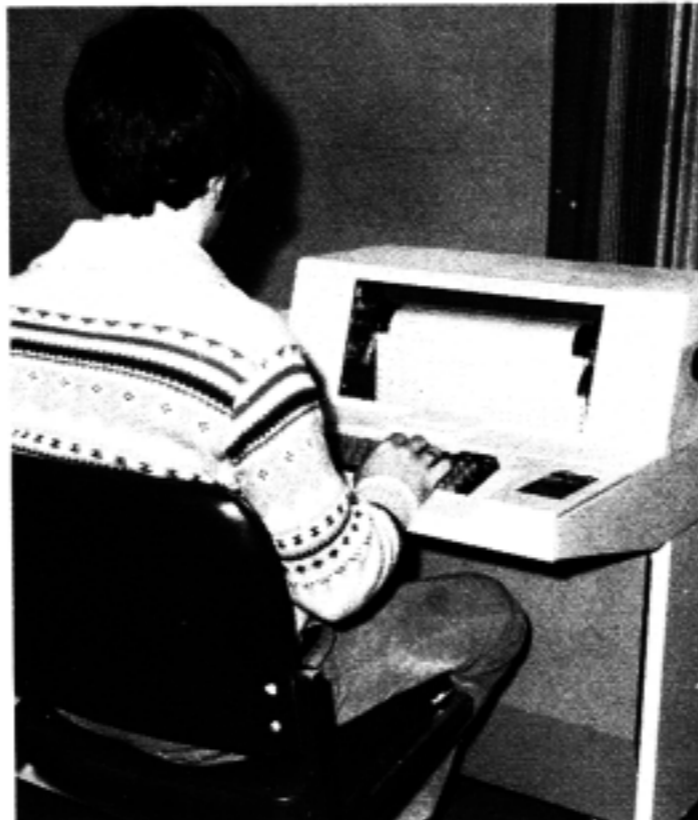
by John Porteous

The pleasant little farming community of Kentville, N.S. is an unusual place to find a radio station that's highly computerized, but the people at CKEN take their space-age way of life quite matter-of-factly.

Peter Carter and Dorothy Jones, who know all the mysterious workings of their two IBM entry stations and Central process or printer find it all quite easy to grasp. And curiously enough, they make it sound quite logical—even to the layman who can't keep his current account straight!

"Our system begins with the entry of every broadcast order into the computer," explains Peter. "This provides the basis for all the information we can later call on. For instance, our logs are then made up automatically by the printer, and at the end of the month, all billing is done simply by requesting a total for the activity on each account."

With 1898 pieces of information contained on each 'diskette', the system does a pre-log—which is checked manually—in a mere matter of minutes, while the billing



Peter Carter enters broadcast orders at keyboard of Central process/printer.

for CKEN and Evangeline's four other stations takes only three hours instead of the week it once occupied. With Dorothy's and Peter's input, the system does the work of three to five other people and does it much faster.

The final log is a masterpiece of neatness. Each spot, flash and announcement is keyed as to whether it was heard on the whole Annapolis Valley Radio network, or on any one station or combination of stations.

The computer even keeps a weather eye out for 'overloading'—a problem for every private station. If more than the legal limit of commercial minutes have been accidentally logged in a given period, the 'brain' of the system chides Peter and Dorothy with a series of asterisks that tell them in no uncertain terms that some commercials will have to be re-located.

But the computer does more at Evangeline Broadcasting than simply keep the books. Every single record and LP cut in the music library of the five stations is in the computer bank, and is keyed to artist, author, whether the selection is Canadian Content (as required by the CRTC for 30% of music played) and a 'theme' word. "This makes it easy for us to program our music to certain days," says Dorothy Jones. "If we want a selection for the first day of spring, we simply ask for the word 'spring' and the computer pulls out every piece of music with that word in the title." And there's more. If the deejays ask for a male vocalist with a Canadian-composed song for example, the computer will begin selecting at the start and will not give the same record again until *all* the selections so described have been used.

Willard Bishop, who engineered most of Evangeline's 'software' package, and who's the principal shareholder in Evangeline Broadcasting Ltd., finds he's becoming more occupied with computers than broadcasting. Already, EBC's system has caught the attention of other radio stations around the country, and as a result, Bishop spends a good deal of his time flying his own plane to centres where there's an interest in the software package. "I wouldn't say we're *selling* it," says Bishop, "all I know is, they're *buying* it!" Buyers to date include CHNS Halifax, CKBW Bridgewater, CIHI, Fredericton's new AM outlet, and CJLS, Yarmouth—along with a string of private companies including MacDonald Insurance Ltd., Kings Cable Ltd., Fundy Gypsum, and the County of Kings (N.S.) Tax Department. Another station examining the package is CJBQ Belleville-Trenton, Ont., and other inquiries are waiting for Bishop to find time to call.



Dorothy Jones inserts diskette into IBM entry station.

What does EBC have to sell that couldn't be obtained from a computer company in the first place? "The system itself, as it applies to radio stations," says Peter Carter. "It would cost a great deal more from a computer operation than we can offer it for." Included in the package sold to other stations is EBC's announcer pronunciation guide, which can be alphabetically sorted by the computer at 155 lines a minute, and is kept up-to-date from Kentville. An additional job for the machine is the printing of a staff news bulletin *Radio-gram*—which has to be one of the most up-to-the-minute employee publications in Canada, run off as it is at rapid speed for all

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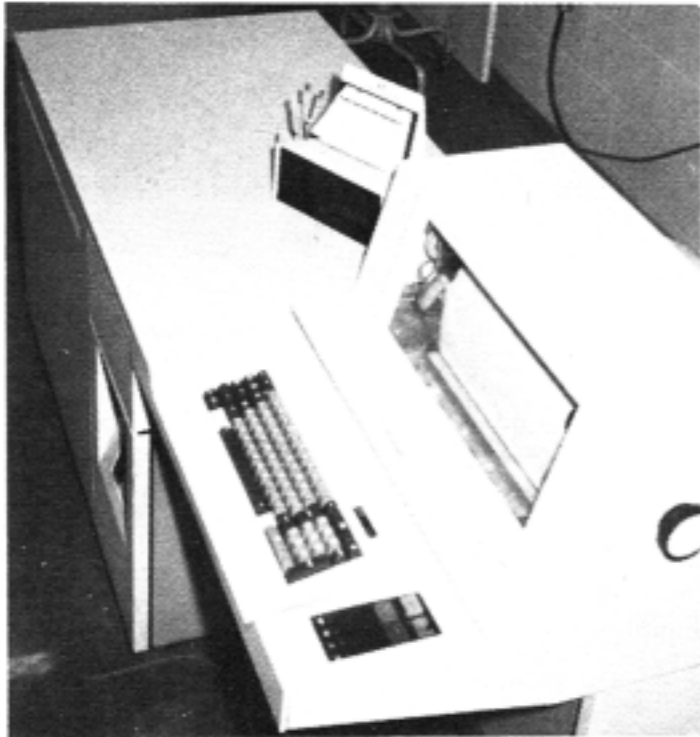
KENTVILLE'S COMPUTER

continued from page 12

35 EBC staffers. It goes without saying that the ultimate reward for EBC staffers, their payroll checks, are also made up by the marvellous machine.

An additional plus-factor is the manner in which the computer can compute the selections played by the station as they relate to the two performing rights organizations in Canada, CAPAC and PRO Canada (formerly BMI Canada). To log these, the announcer writes down only the record number—and the computer does the rest.

The Evangeline group of stations is ideal



Central process or printer of CKEN computer.

for the kind of computerized system Willard Bishop and his engineer Dave Morrison have set up. Founded originally by Avarad Bishop, Willard's late father, the little network has always had identification problems that have lent themselves to automated answers. Take the 'splits' for station identification: Annapolis Valley Radio has long used a four-track tape recorder in the main control room at Kentville to provide local i.d.'s for all four AM stations. (The FM outlet, CKWM is programmed separately from adjacent studios in Kentville.) When the announcer pushes a button, the tape 'breaks away' to four pre-recorded messages that individually identify CKEN, CKDY Digby, CKAD Middleton and CFAB Windsor.

Because EBC's sales staff can sell almost any combination of stations to local advertisers (most national business is logged on all four), the announcer must keep a sharper than usual eye on the log, and plug in 'carts' for the correct station. For this reason, all commercials must be strictly timed—otherwise the programming would sound uneven as the live feed came back over or after announcements on the individual stations. Carts with a music fill are used to buffer the periods on one station where a spot may not be programmed. Also needed, because of the complexity of the system, is an alarm device called an Audameter, which tells the on-air man if any one station has lost its program feed.



Peter Carter and Dorothy Jones correct pre-log at IBM entry station.

And how do mere humans feel about having so much of what they do programmed by two grey machines in the corner of CKEN's modern, brightly-lit offices? "Nobody seems to take any notice of them," says Peter Carter, who like most EBC staffers, finds it difficult to remember how things were before the installation of the computer. He smiles and adds, "We often wonder, too, just how other stations manage to get by without the kind of system we have here!"

John Porteous is a freelance writer and broadcaster, based in the Maritimes.

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CCBA NEWSLETTER

with Warren Parker

● CJAD Montreal, where **Ernie Mott** is chief engineer, is in the process of installing a new remote control system for its AM transmitter. The system is supplied by Uni-Tel.

● Also in Montreal, **Gale Laberge** of CKO-1470 reports he has the old CFOX studios renovated for all-news operations and things are going well. Gale is planning to get the 50 kw site underway in early summer, so that CKO can spread the news even farther!

● **Harry McRae** of CFGO Ottawa has installed a new Moseley STL and reports it is working well.

● The fellows at CKOY Ottawa are waiting to see what becomes of the change of ownership application, now before the CRTC. It would transfer control of the station to CKEY Limited, Toronto.

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January, 1978, has recorded the sudden passing of three well-known broadcast engineers:

● On Friday, January 6, **Jim Featherston** of CKPC AM-FM Brantford, Ontario, died of a heart attack just after returning home at noon hour.

● On Sunday, January 8, **Lloyd Sharkey**, assistant engineer at CJAD and CJFM Montreal, passed away suddenly.

● On Thursday, January 12, **Allan W. Marshall**, manager of the Broadcast and TV Equipment department, Canadian Marconi Co., died at St-Laurent (Montreal), Quebec.

Our condolences go out to their families, friends and fellow workers.

● Much of the activity in Northern Ontario seems to be at Sault Ste. Marie, where the new combined TV-FM site for CJIC-TV, CKCY-TV and CKCY-FM is well in hand. **Ray Rylatt** reports that the new 400-foot tower and 100-foot antenna mount has been completed by LeBlanc & Royle. A specially-built E.M.I. antenna has been designed to transmit both channels 2 and 5. The transmitter building is completed and ready for the CCA TV and FM transmitters, supplied by Caldwell Equipment. Ray hopes the FM will be on in March, with the TV stations to follow in late spring or early summer. (Sounds like Ray and Stan are building a mini CN Tower . . .)

● LeBlanc & Royle are also building the new replacement mast for CKVR-TV Barrie. **John Evans** promises to do a follow-up article on the new tower.

● **Bill Marchand** of CKLB/CKQS Oshawa tells us that problems were encountered during plans to move to a new studio location. The station had sold the present building, but ended up owning it again . . . something to do with second mortgages and such. Anyway, Bill says his new AM transmitter building is high and dry and all completed.

● Special thanks to **Ed Victor** of CHML Hamilton for passing on many news items. Ed reports progress at his new 50 kw AM site has been slowed by the weather, so he's finalizing minor equipment purchases until the weather breaks.

● Snow or no snow, **Bruce Carnegie** of CFGM Richmond Hill tells us his 1310 to 1320 kHz project is "in the bag", with work to be finished in late spring, right on schedule. A pretty fair accomplishment, considering he had to change frequency and site at CFTJ Galt, and in his spare time put studios and transmitter facilities together for CILQ-FM in Toronto.

● Over at CHYM Kitchener, **Paul Firing** has also been driving snowbound country roads, taking field strength measurements. The new 570 site is progressing well, but has also been slowed by the winter weather. I planned to take some photos of CHYM's new facility, but the day I visited the station it was a "whiteout".

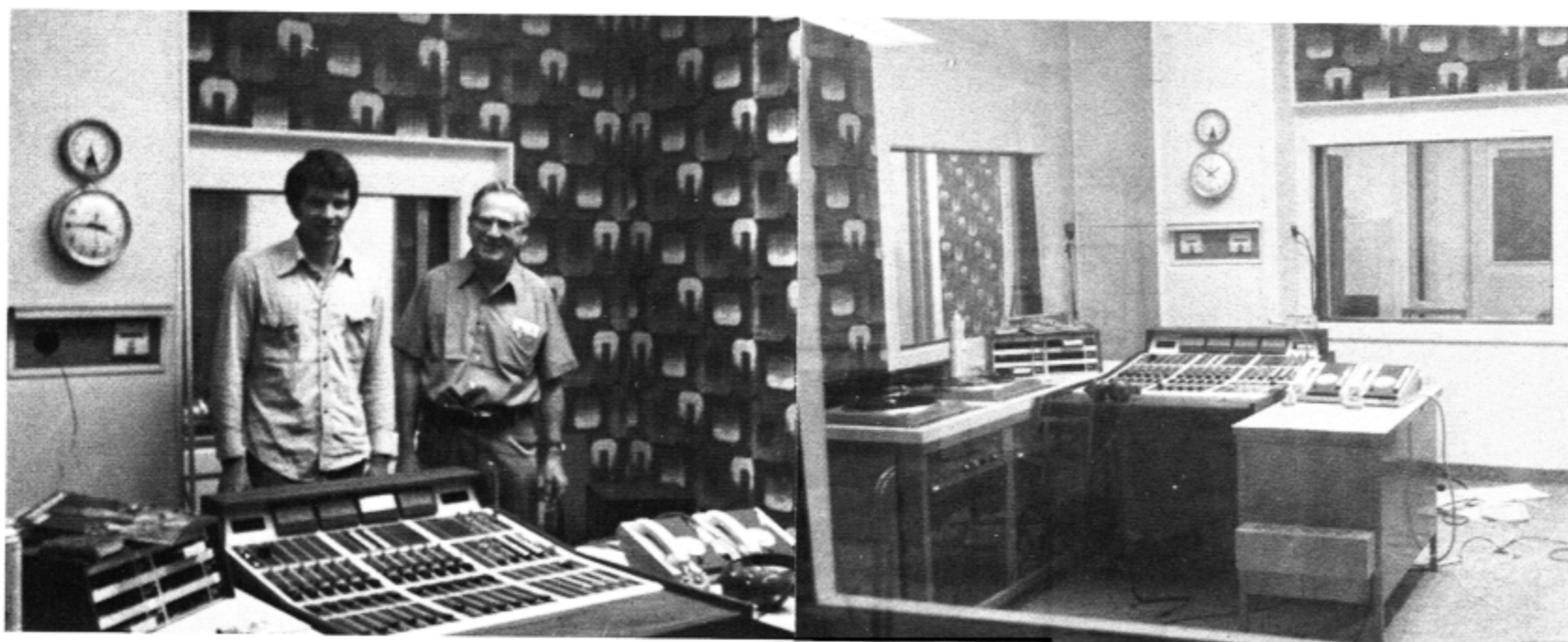
● **Larry Smith**, whose responsibilities now include CFTJ Cambridge, as well as CJOY/CKLA-FM Guelph, is kept busy these days rebuilding studios at CFTJ and doing briefs for a 50 kw installation at CJOY.

● In case you hadn't heard . . . **Burrell Hadden**, formerly of CFTR/CHFI-FM, has joined CHUM Toronto . . . **Gary Grant** is chief engineer at CHFI and **Tom Hoar** chief engineer at CFTR . . . **Paul Cavanagh** has returned to CFTR/CHFI from CKO Radio. Belated congratulations to Paul and his wife Penny, who had an addition to their family a few months ago.

● Here in the Peninsula, **Garry Hooper** has returned to CJRN Niagara Falls, where he has installed a Neve production console. **Harry Pressey**, formerly with CJRN, has moved to CKDK Woodstock.

● **Roland Brundle** of CHSC St. Catharines has just installed a semi-automation system of his own design at CHSC-FM. It utilizes five Studer tape machines and ITC cart reproducers. The operation to date has been faultless and is used as an announcer aid, with most music now on a reel-to-reel format. Equipment was supplied by McCurdy and Mesa Audio. Specially-designed 25 hertz filters were also built and supplied by Mesa and Rolly reports superb performance.

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● **Al Bennett** of CKOC spent the early winter months renovating his on-air control room. Doesn't it look nice (see pictures)! Al installed a complete stereo McCurdy 8600 series console and associated equip-

ment (turntables, cart decks), also supplied by McCurdy. The JBL monitors are from Mesa Audio.

The project of removing the old console and installing the new one in one weekend

was just too big a temptation to **Les Horton**. Although he is retired—and, as you know, one of the very few in the CAB Half Century Club—he was in all weekend, day and night, helping to complete the changeover. It must be all the coffee and doughnuts that keeps Les so active.

Al says, "All I need now is for the D.O.C. to approve AM Stereo!" Presently the studio is programming stereo but feeding mono to the transmitter. Al is also patiently waiting for spring to get his 50 kw AM site started.

● The big storm which hit much of Ontario on January 26th caused quite a few transmitting problems. Hydro failure put a number of stations off the air for varying periods, including CKOT Tillsonburg, CJBK London, CKTB St. Catharines, CHNR Simcoe and CKOC Hamilton. CHML Hamilton was on emergency power and CJD Hamilton lost part of the roof on the transmitter building. Even CFRB Toronto had intermittent problems, as the high wind forced cooling vents closed, resulting in overheating. Getting to and from transmitter sites was generally impossible during the intense storm. The CN Tower? We're told it was "deflecting" (swaying?) a mere 30 inches!

Thanks fellas for the info—those of you who reported. Those that didn't will catch me next time. Sorry if there are any errors—I'm training my telephone to spell names correctly! I would like to hear from you.

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Reradiation:

DETUNING HYDRO TOWERS

“How to live in a hostile environment—and still get out when you should.”

by Bruce Dingwall, CET

It's an indisputable fact that every AM transmitter site has at least one “strange” aspect to it—a special problem with which the engineer must live.

CJJD/1280 Hamilton, Ontario, is lucky enough to have its transmitter building and array on a site which is a quarter of a mile south of a hydro tower corridor with not one, not two, but three rows of 230 KV towers. Some of these lovely 120' high hunks of steel are right in the main lobe of our patterns. Naturally, they did very distressing things to both our day and night patterns. This article details our solution to this reradiation problem.

A bit of the history of CJJD will give some insight into the nature of the problem. In 1958, when the station was originally built as CHIQ, there were two rows of hydro towers. Review of the Canadian Marconi Proof of Performance (1960) shows that, while the towers were a problem, the radiated power of 5000 watts day and 2500 watts night was not so high that severe pattern distortions occurred. However, when work on a 10 kw night Proof of Performance was started in 1969, the severity of the reradiation problem was fully realized.

At that time, the consulting engineer, J. Gordon Elder, P. Eng., devised the detuning stubs shown, in part, in photo 1.

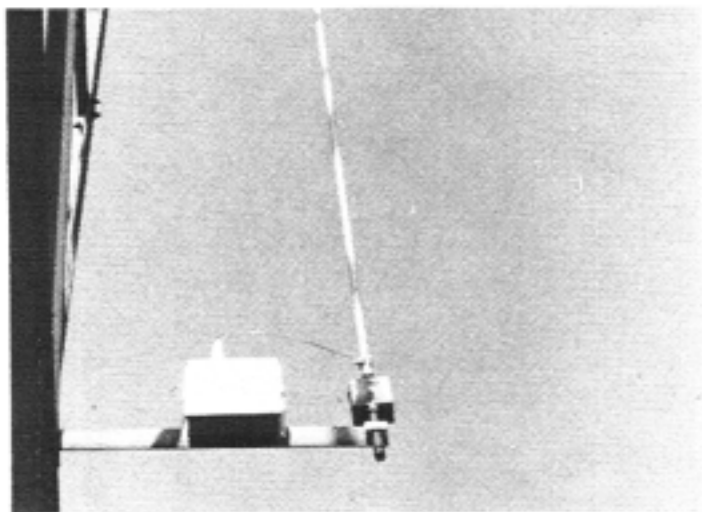


Photo 1: First version of the detuning stub with new design detuning box.

Consisting of 30 or 40 feet of rigid conduit, with a cast aluminum electrical box as part of the assembly, these stubs are grounded to the tower at the top end, and run through Teflon standoffs to the bottom.

The box, therefore, was “hot”; a quarter-inch ground pipe ran from the bottom of the box, through Teflon washers, out of the pipe, where it was joined by half-inch flexible copper pipe to a ground clamp on the tower. (This pipe had been removed before the photo was taken.) Each box contained a variable capacitor (0-300 pf) with a 0.0245" plate spacing, and a fixed mica capacitor, which was selected for each tower leg. Total values ranged from 0.0005 to 0.001 mfd.

Unfortunately, while the system worked, it had one severe problem, physically and electrically; water vapour would condense in the pipe and run down into the box. As soon as enough of this gathered on the plates of the variable cap, or around the ground pipe, the stub became ineffective. Consequently, we had to perform a half-yearly ritual of opening, cleaning, sealing and readjusting 24 of these boxes.

Photo 2 shows the proximity of the transmitter site to some of the hydro towers. Figure 1 diagrams the approximate geographical relationship of the towers and the site. The towers originally treated are numbers 4, 6, 8, 9, 11 and 12. Since coming to CJJD (then CHAM) five years ago, and becoming engaged in this maintenance, I had wondered how much effect towers 1 and 3 were having on the reradiation problem, and what were they doing to the protection we extend to the east.

As a result, when the third run of towers went in and we were faced with doing at least four new towers, I discussed my thoughts with Gordon Elder. It was decided that, indeed, it would be necessary to treat these towers as well. Carrying the discussion further, since the existing detuning

stubs were a high maintenance item, there was no argument to the suggestion that we change the boxes on them as well. As a result, the total project included six old tower and seven new tower installations, for a total of 52 detuning boxes and associated stubs.

A new style of stub was designed, which is a copy from an Elder Engineering installation at CKKW, and the parts were obtained for the job. Unfortunately, as usually happens in projects of this type, weather went against us, and delayed the installation considerably. Finally, however, the local hydro crew finished, and we started the tests.



Photo 3: Gary Alford adjusts tuning of revised stub and detuning box assembly.

The new style of stub, as shown in photo 3, employs a 35' piece of 7-11 Alumoweld (16 degrees at 1280 kHz), which is grounded at the top and passes through an insulator at the bottom, and is tied directly to the detuning box. The box, a Hammond 1414PHI series, is grounded this time, and we used the biggest variable cap in terms of plate spacing, that was practical; it is a Cardwell 0-200 pf unit, rated 4500 volts, with a 0.125" (!) plate spacing.

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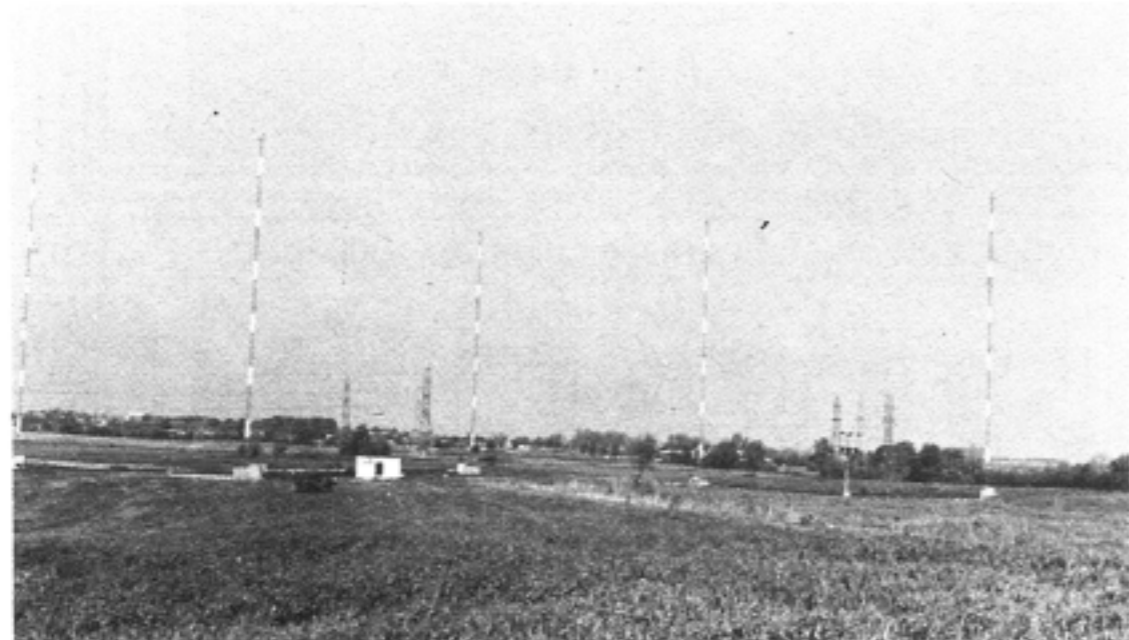


Photo 2: Three lines of hydro towers are within a quarter-mile of the CJJD array.

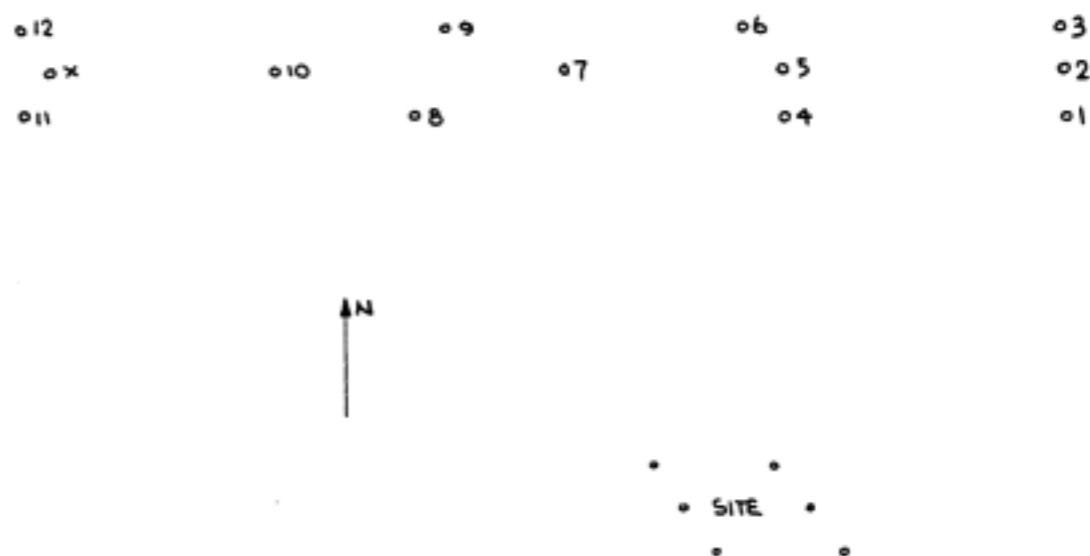


Diagram 1: Approximated physical relationship of CJJD towers and hydro towers.

DETUNING

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The theory of the detuning stubs is to create a quarter wave transmission line which is short circuited at the top, and therefore presents a high impedance across the bottom end. The circulating current in the stub has been peaked, and this minimizes the amount of RF current which is being conducted to ground through the leg. The physical length of the stub is considerably less than a quarter wavelength, and so the capacitors are used to "stretch" it. The final result is that the leg and stub combina-

tion look like a choke, and this effectively isolates the tower from ground at 1280 kHz. This will then minimize the reradiation of incident energy which was previously causing distortion of the RF field.

Photo 4 shows the interior complement of a box, with the fixed capacitors required on one of the old towers. The trick in designing the boxes was to decide on a manner of installing the fixed capacitors that would allow for flexibility in the field, should parts have to be changed. To that end, the boxes are wired with #14 TWH solid wire, which is rigid enough to actually suspend the parts. As well, in many cases some silicon seal was used to hold the parts in place.

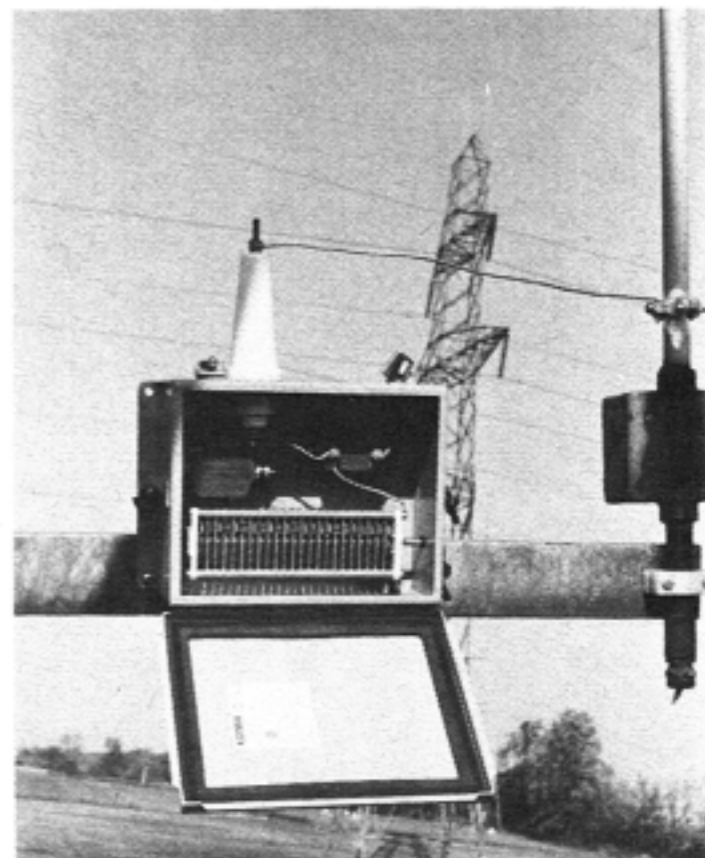


Photo 4: View of interior of CJD hydro tower detuning box.

After installation on the tower, the boxes are first rough tuned using an RF ammeter, to ensure that the values of fixed capacitors are correct. When doing this, we got some rather large surprises: would you believe currents of 5, 6, even 7 amps in the stubs? Were this not neutralized, the effects would be devastating on any pattern.

The small unit shown in photo 5 is used for the actual neutralization. When held at the base of the tower leg, as shown, it picks up the recirculating current inductively, and gives a relative indication on the meter.



Photo 5: Bruce Dingwall holds specially-designed detuning meter against base of tower leg during detuning.

In addition to the installation of the stubs, all of the skywires on towers within the 250 millivolt/meter contours of the patterns were isolated using special insulators. Using this system, we have been able to reduce the tower leg currents by 80 to 90%. This has eliminated the severe pattern distortion and energy absorption which was occurring.

Through ingenuity and planning—plus a lot of work—the consultant and the station engineer co-operated to create the conditions that allow this AM broadcast facility to operate efficiently in an electrically hostile environment.

Bruce Dingwall is chief engineer of CJD Radio, Hamilton, Ont. The writer gratefully acknowledges the participation of J. Gordon Elder, P. Eng., in the preparation of this article.

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Panasonic Technics turntable SL 1500, Serial #DA5126A081 (Shure V15 Cartridge).

DBX 157 Noise Reduction unit, Serial #1298 (2 channel).

Sony SQ Quad Encoder, SQE 2000.

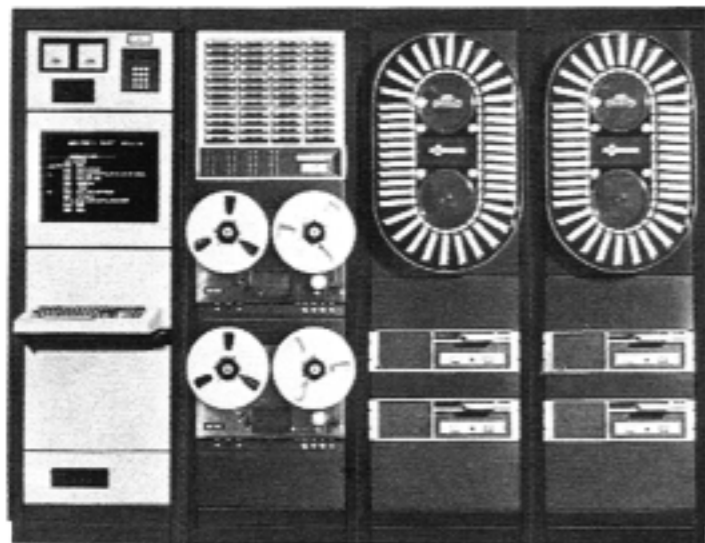
Anyone having information is asked to contact Metro Toronto Police, Ontario Provincial Police, or **Don DiNovo** and **Sharon Marcus** of Music Church, (416) 961-9906 or (519) 848-6924.

• A fire in the early morning hours of January 14 put three CBC transmitters at Kingston, Ontario, off the air and caused damage of over \$600,000. Within a week, English and French FM and French TV service had been restored, using transmitters purchased for other locations as part of the CBC's Accelerated Coverage Program. English FM was back to full 25 kw power by the end of January; however, it will be early summer before the French TV operation is returned to normal power. The tower and antennas were not damaged.

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• Tony Gifford (left), dean of Applied Arts at Ryerson Polytechnical Institute, Toronto, and Tom Pressley of Glentronix Ltd., exchange cheque and receipt for \$4,500 donation to upgrade the Ross switcher used by Ryerson's Radio and Television Arts program. The \$30,000 switcher, supplied by Glentronix two years ago, is being expanded, with additional special effects capability.

Snow-blocked roads delayed firefighters in reaching the scene of the fire, which is attributed to electrical causes. Other recent mishaps hit CBC installations in Newfoundland, where a fire gutted studios at Grand Falls and a tower at Gander was felled in a windstorm.

• The 12th annual Midwest Acoustics Conference (MAC 78) will be held Saturday, April 8th, from 9:00 to 5:30 pm at Norris Center, Northwestern University, Evanston, Illinois. Under the topic Audio Transducers, papers on microphones, phonograph cartridges, headphones and speakers will be presented by:

Benjamin Bauer—CBS Technology

Paul Milner—consultant

Robert Ramsey—Electro-Voice

Frank Karlov—Shure Bros.

Richard Campbell—Bang-Campbell Assoc.

John Gilliom—consultant

For conference information: **Wm. R. Bevan**, Shure Bros., 222 Hartrey Ave., Evanston, Ill. 60204 (312) 866-2364. Exhibits: **David S. Goldsmith**, 8359 S. Crandon Ave., Chicago, Ill. 60617 (312) 731-1388.

• Canada's pioneering satellite HERMES completed its two-year design lifetime objective in January and is now into its third year of operation. The world's most powerful communications satellite, HERMES has prepared the way for ANIK-B, to be launched late in 1978, and a new ANIK-C series, now being built by TELESAT Canada.

• AMTEC '78 is scheduled for the Regina Inn, June 18-21. The program planned by the educational media group includes discussion of TV production, computer-assisted learning and the recent experiments in teaching via the HERMES satellite. **Donald Gordon** will be keynote speaker. For information contact **Miss Brenda Stead** at SaskMedia Corp., Regina, or **G. S. Jackson**, director of AV Services, University of Regina, S4S 0A2.

• As of September 30, 1977, the number of broadcast stations in the United States had reached 4,508 AM; 3,886 FM; and 984 TV.

• **Preston Weaver**, chief engineer for UMC Electronics—Broadcast Products division, has been appointed chairman of the NAB Tape Machine Standards Committee.

• CCA Electronics reports almost 1400 transmitters—AM, FM, TV—delivered worldwide. Recent TV sales total \$1.5 million and include a 25 kw VHF transmitter for Sault Ste. Marie, Ontario. Canadian AM sales include 1 kw transmitters for CFJR Brockville and CKOB Renfrew, Ont., while the CKO all-news network has purchased 20 kw FM transmitters for London, Vancouver, and Edmonton, plus 3 kw standbys for Vancouver and Edmonton. Most of these orders are part of systems which include TFT remote control and monitoring equipment. CCA Caldwell reports TFT products are enjoying great success in Canada, with CBC-EHQ Montreal and CHRC Quebec City among recent customers.

happenings



• Gary Van De Vliert has been appointed manager, broadcast and national accounts, western region, for Sony of Canada Ltd. He continues as regional sales manager, video products, in Vancouver.



• John W. Howells has been appointed manager, sales, for RCA broadcast equipment by RCA Limited (Canada). A native of the United Kingdom, Howells joined RCA in 1963.

• Dr. Noel Murphy, president of the Humber Valley group of stations in Newfoundland-Labrador, is a busy man these days. Newly-elected mayor of Corner Brook, he also sponsors a *Vacation Guide* for the province, and is increasing its circulation from 10,000 in 1977 to 40,000 in 1978. As president of the Atlantic Association of Broadcasters, Dr. Murphy will host this year's convention slated for September 17-19 in Corner Brook.

• Three Canadian TV stations are installing new RCA transmitting systems. CKCK-TV Regina has ordered a \$600,000 package which includes a TT-50FL transmitter (two 25 kw units combined) and a TCR-100 video tape cartridge recorder, which provides push-button playback of VTR segments such as commercials and IDs. CFQC-TV Saskatoon will replace its 24-year-old RCA transmitter with a \$500,000 system which includes an RCA OPTO switcher and two individual transmitting units (TT-35FH) combined to provide 35 kw (video) with full redundancy. CKVR-TV Barrie is also replacing an older RCA model, installing a \$400,000 system which includes a TT-25FL 25 kw transmitter and FF6AL Superturnstile antenna.

• At CFRB Toronto, Don Insley has been promoted to vice-president and general manager, while Bill Hall becomes station manager.

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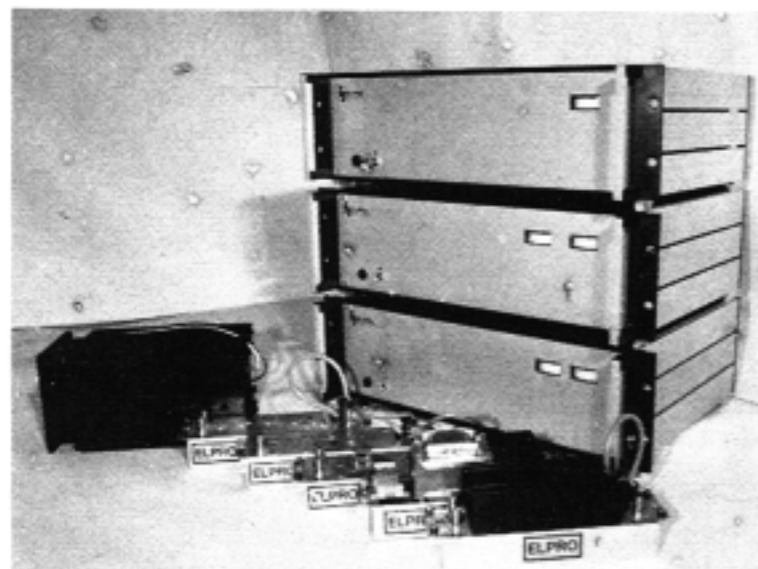


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HEARINGS

The schedule of future public hearings has been revised, as follows:

April 4—Ottawa, Ont.

Government Conference Centre

May 9—Calgary, Alta.

Sheraton—Calgary Inn
202-4th Avenue SW

June 12—Ottawa, Ont.

Government Conference Centre

KAMLOOPS—FEB. 20

NEW STATION BIDS FOR KAMLOOPS, VERNON

Among applications heard at the Kamloops hearing scheduled for February 20th were several bids for new radio stations at both Kamloops and Vernon, B.C.

The **Vernon** applications were by:

- Dennis J. Gerein, for 730 kHz, 10 kw.
- Gilway Enterprises, for 1050 kHz, 10 kw day/1 kw night.
- Interior Broadcasters Ltd. (CJIB), for 100.9 MHz, 4.8 kw.
- Sun Country Radio Ltd., for both AM and FM—1050 kHz, 10 kw day/1 kw night and 100.9 MHz, 4.7 kw.

At **Kamloops**, applications were by:

- Joseph E. Chesney, for 910 kHz, 10 kw day/1 kw night.
- The King's Men of Kamloops, also for 910 kHz, 10 kw day/1 kw night.
- NL Broadcasting Ltd. (CHNL Kamloops), for 97.5 MHz, 4.3 kw.
- CBC, for French FM, 96.5 MHz, 4.75 kw, and French TV, 1.54 kw on channel 50.

Other applications:

- NL Broadcasting, for an increase in daytime power at CHNL Kamloops to 25 kw.
- Twin Cities Radio Ltd., for a power increase for CFFM-FM Kamloops, from 3.9

to 4.3 kw.

- Four Seasons Radio Ltd., for a nighttime power increase to 10 kw for CKIQ Kelowna.
- Twin Cities Radio Ltd., for new FM outlets at Chase, (93.1 MHz, 140 watts) and Pritchard, B.C. (106.3 MHz, 19 watts) to rebroadcast CFFM-FM Kamloops.
- CBC, for FM at Aiyansh, B.C. (102.3 MHz, 278 watts) to rebroadcast CFPR Prince Rupert.
- Dinosaur Broadcasting, for an increase in nighttime power to 10 kw for CJDV Drumheller, Alta.
- Low power TV rebroadcasters were requested for Burns Lake, Fort St. James, Gold Bridge, Houston, Shalalth and Smithers, B.C.
- Grand Forks Cable Co. and Greenwood Video Ltd., both applied for a new cable system at Grand Forks, B.C., while Merritt (B.C.) Cablevision Ltd. sought to increase its service area.

VICTORIA—FEB. 21

The Victoria hearing was scheduled to deal with renewals for stations on Vancouver Island, rate increases for several cable television systems and a change in head-end location for Youbou (B.C.) Television Ltd.

The CRTC also called for a progress report on CBC-TV's new Victoria station, slated to commence operations this fall.

VANCOUVER—FEB. 23

CBC APPLICATIONS HEAD HEARING

Applications by the Canadian Broadcasting Corp. for FM and TV facilities in various western locations were prominent at the Vancouver hearing scheduled for February 23rd at the Hyatt-Regency. They included:

- Fort McMurray, Alta.—French TV, 5.8 kw on ch. 12; English FM (99.3) and French FM (101.5), both 20.2 kw; and a power increase for CBXT-6 from 33 watts to 5.8 kw.
- Brandon, Man.—French-language TV

(5.5 kw on ch. 21) and FM 21.5 kw on 99.5 MHz).

- French TV rebroadcasters in Saskatchewan at Debden (2.9 kw), St. Brieux (1.4 kw) and Zenon Park (3 kw); and a French FM rebroadcaster at Zenon Park (1.34 kw on 93.5 MHz).
- Hinton, Alta.—French-language TV (30 watts on ch. 3) and FM (85 watts on 100.7 MHz).
- Terrace, B.C.—English FM (95.3) and French FM (96.9), both 54 watts; French TV (660 watts on ch. 11).
- Kitimat, B.C.—French FM (160 watts on 105.1 MHz).
- Low-power television rebroadcasters at Bella Bella, Bella Coola, Chilliwack (E & F), Hagensborg, King Island, Ruby Creek, Saw Mill Mountain, and Vedder Crossing (E & F), B.C.
- FM rebroadcasters at Bella Coola, King Island, Ocean Falls and Saw Mill Mtn., B.C.

Other applications:

- CJOB Winnipeg, for a power increase from 10 kw day/2.5 kw night to 50 kw day/25 kw night, with a change of antenna site.
- CKWX/CKFX (shortwave) Vancouver, for a change of transmitter site.
- Skeena Broadcasters Ltd., for power increases at CFTK-TV Terrace and CFTK-TV-1 Prince Rupert, B.C.
- Old Crow (Yukon Territory) Community Club, for a low-power TV rebroadcaster.
- G. H. Shapera, for an FM rebroadcaster of CJOB Winnipeg at Limestone, Manitoba, 15 watts on 96.1 MHz.
- Western Approaches Ltd. (CKVU-TV), Vancouver, was called to report on progress towards implementing programming plans since it commenced operations in September, 1976.

ANNOUNCEMENTS

• **CRTC Decisions**, from April 1, 1976 to March 31, 1977, are available in book form. To order, send a money order for \$15 (\$18 outside of Canada), payable to the Receiver General of Canada, to Supply and Services Canada, Printing and Publishing, Ottawa, Ont. K1A 0S9. Refer to catalog number BC9-3/1977.

• **Mrs. Edythe Goodridge**, curator of the Memorial University Art Gallery in St. John's Nfld., has been appointed a part-time commissioner of the CRTC for a five-year period.

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OTTAWA—APRIL 4

CBC applications for new FM and TV facilities are also predominant at the April 4th hearing in Ottawa, as follows (*power in watts shown in brackets*):

- Blanc Sablon, Que.—102.7 and 107.1 MHz (585); channels 3 and 5 (150).
- Harrington Harbour, Que.—100.5 (200) and 95.5 (210); ch. 8 and 13, (129).
- La Tabatière, Que.—100.1 (200) and 101.5 (215); ch. 4 (78) and ch. 10 (62).
- Old Fort Bay, Que.—91.7 (42) and 95.9 (43); ch. 7 and 13 (each 10).
- Rivière St-Paul, Que.—103.1 (35) and 104.3 (36); ch. 11 (23) and 21 (89).
- St-Augustin-Saguenay, Que.—107.3 and 102.3 (17); ch. 2 and 7 (10).
- Tête-à-la-Baleine, Que.—103.5 (20), ch. 6 (10).
- La Tuque, Que.—ch. 9 (Eng.), 103 watts.
- FM rebroadcasters are also sought in Quebec at Chandler (94.7, 82 watts, Eng.), Escuminac (95.5, 200 watts, Eng.), Lac Mégantic (93.7, 4.4 kw, Fr.), New Carlisle (93.1, 76 watts, Eng.), New Richmond (107.5, 82 watts, Eng.), Percé (89.7, 84 watts, Eng.) and Port Daniel (101.5, 82 watts, Eng.).

The CBC also applied for a power increase for CBFT-2 Mont Laurier, Que., from 5.54 to 28.2 kw.

Other applications:

- Radio-Québec, for new TV stations at

Mont Laurier (9.6 kw on channel 21) and Chapeau (3.12 kw on ch. 23); together with an amendment to its educational network licence to add proposed stations at Rouyn, Lithium Mines, Chapeau and Mont-Laurier.

• The following Quebec stations applied for disaffiliation from Radio-Canada (CBC) to join the Telemédia network (CKAC Montreal):

CJAN Asbestos
CFDA Victoriaville
CKFL Lac Mégantic
CKLD Thetford Mines
CJLP Disraeli
CKTL Plessisville

• CKVT Temiscaming, Que., for a day-time power increase to 1 kw.

• Loyola of Montreal Students' Assoc., for a carrier current operation, 4 watts on 570 kHz.

• Television St-Maurice Inc., for transfer of CKTM-TV Trois-Rivières to COGECO Inc., and for a decrease in local programming.

• CING-FM Burlington, Ont., for permission to sell advertising time in Hamilton.

• CFRA Ottawa, for a 5-station network to broadcast Ottawa football games during the 1978, '79 and '80 seasons.

• Telecable St-Damien (Que.) and Centre Récréatif de Gagnon (Que.), for new cable TV systems.

• Smiths Falls (Ont.) Cablevision and Maclean-Hunter Cable TV Ltd., Thunder Bay, Ont., for increases in service area.

OTTAWA—JUNE 12

The June 12 hearing, to be held at the Government Conference Centre, 2 Rideau Street, will consider the renewal of the English and French radio and television network licences of the CBC. The deadline for receipt of interventions is May 12, 1978.

BATON AND CHUM EYE TV STATIONS

Baton Broadcasting Inc. of Toronto has agreed to purchase 54.6% control of Multiple Access Ltd., which owns CFCF AM-FM-TV in Montreal and 45% of CITY-TV Toronto, for \$9,750,000.

It is unlikely that the CRTC would permit Baton, owner of CFTO-TV Toronto, to have an interest in a second TV station in the market, and CHUM Ltd. of Toronto promptly announced plans to buy Multiple's shares in CITY, valued at about \$3 million. CHUM says it will also bid for further shares in CITY.

The proposals pose added "concentration of ownership" problems for the CRTC, as both applicants already have extensive broadcast holdings, and may force the Commission to establish a definite policy limiting such holdings.

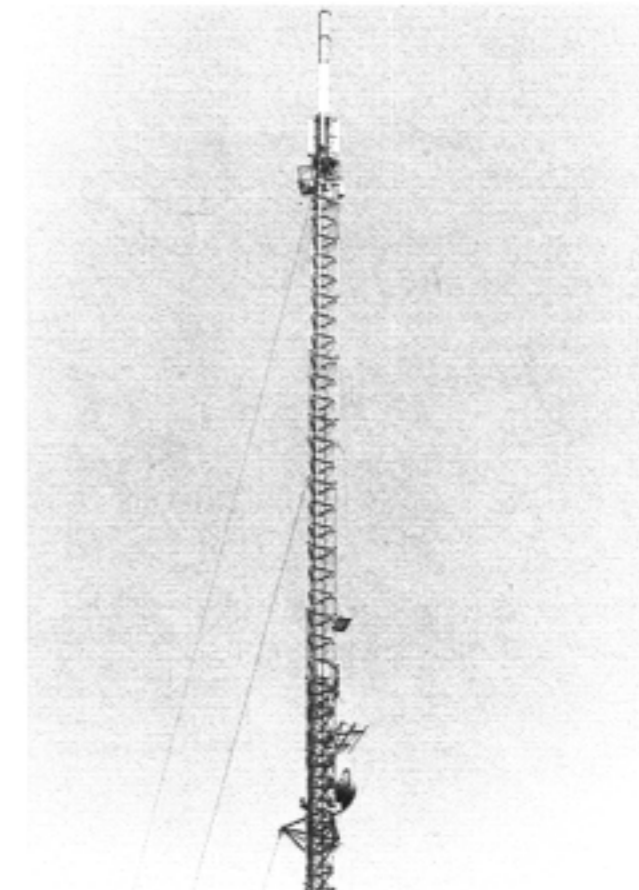
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DECISIONS

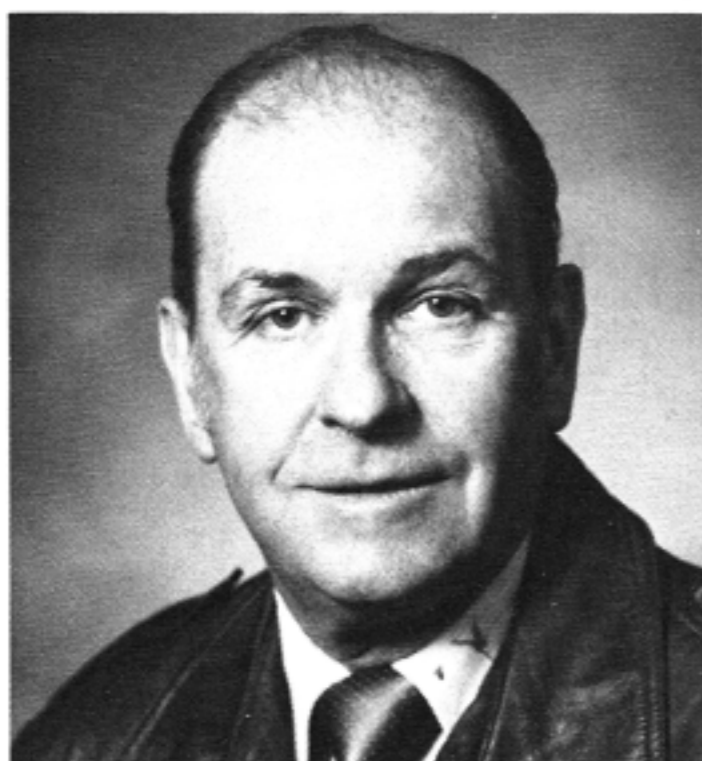
AM Radio

NEWMARKET RE-OPENED

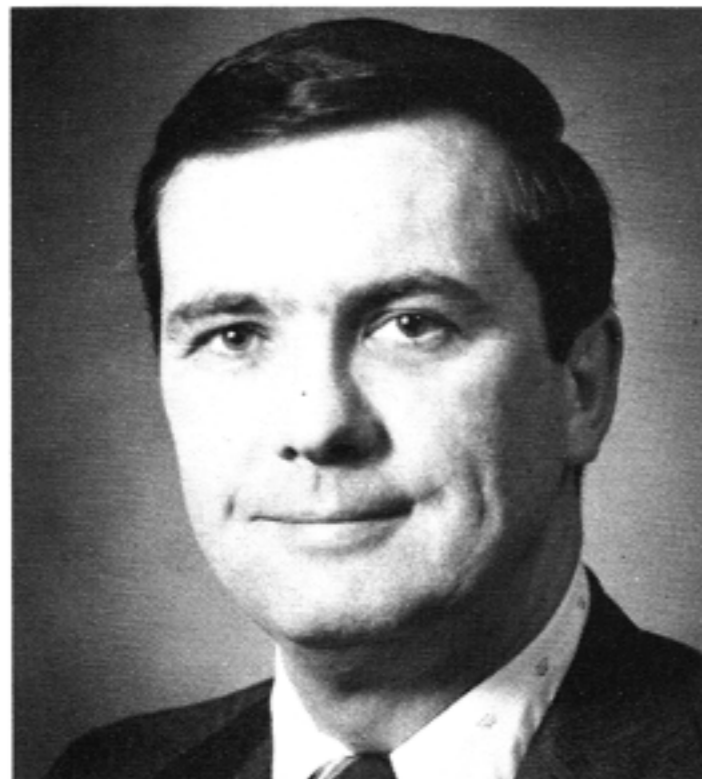
An unusual move by the CRTC has re-opened bidding for a new station at Newmarket, Ont., to DML Broadcasting, one of two unsuccessful applicants in 1975.

DML intervened last November in the application by Bradley R. Walker for a 10 kw station on 1480 kHz. On Feb. 1, the Commission announced that DML, backed by the Roman family of Denison Mines Ltd., would be allowed 15 days in which to give notice of intent to file an application.

ANNOUNCEMENT



D. E. M. (Doug) Allen, P.Eng.



E. D. (Ed) Prefontaine, P.Eng.

D. E. M. Allen, president of D.E.M. Allen & Associates Ltd., Broadcast Consulting Engineers, is pleased to announce the appointment of E. D. Prefontaine as manager of AM Broadcast Systems. Ed brings to this new position many years of experience in engineering consulting to the broadcast industry.

The two 1975 applications, by DML and a group headed by Al Bestall, were denied on the grounds that neither demonstrated a need for additional radio service in the area.

SELKIRK BID REJECTED

The application by Selkirk Holdings Ltd. to purchase three radio stations owned by IWC Communications Ltd. has been denied. The stations are CFGM Richmond Hill, CHOK Sarnia and CILQ-FM Toronto. In its ruling, the CRTC noted that Selkirk is already one of Canada's largest broadcasting companies and that the sale by IWC of CILQ-FM, which went on the air only last May, would be "premature".

Other AM decisions:

- CKXL Calgary—power increase to 50 kw, change of antenna site, approved.
- CJRS Sherbrooke—daytime power increase to 50 kw approved.
- CHCM Marystown, Nfld.—decrease in nighttime power to 5 kw approved.
- CBDU Lynn Lake, Man.—change in frequency from 860 to 1170 approved.
- Cbfd St-Fabien-de-Panet, Que.—licence revoked; replaced by FM.
- CKLY Lindsay, Ont.—pattern changes approved.
- CHED Edmonton—transfer of 55% to Moffat Communications Ltd. approved.
- The licence of CJET Smiths Falls, Ont., has been renewed to June 30, during which time the CRTC will consider an application to transfer control from J. W. Pollie Ltd. to the executor of Mr. Pollie's estate, Royal Trust Co.
- Share transfers have been approved for CHGB AM-FM La Pocatiere/CHAL St-Pamphile; CJMC Ste-Anne-des-Monts; and CHVD Dolbeau, CJMD Chibougamau and CFED Chapais, Que. The latter three stations were purchased by Placements Claude St-Arnault Inc.
- Disaffiliation from the CBC was approved for CHVD Dolbeau, CHLN Trois-Riviers, and CJAT Trail.

FM Radio

PHASE 2 OF FM POLICY

The CRTC has outlined a schedule for implementing the second phase of its FM Policy.

Phase one, from 1975 to March, 1978, saw the licensing of 26 new private FM stations, as well as the renewal of 65 existing stations under new promises of performance, as required by the FM Policy.

Renewals for all of these stations will be heard in three groups:

- 1) Licences expiring March 31, 1979; hearings commence this fall;
- 2) Licences expiring March 31, 1980; hearings commence fall, 1979;
- 3) Canada All News Radio Ltd. (CKO); hearings to be held fall, 1980.

The Commission is also ready to receive applications for new FM licences. However, applications will *not* be considered for new FM stations in localities where new FM stations were licensed in phase one. (Presumably this does not include Calgary, where the CRTC has already invited applications for another FM service.)

Tentative dates of renewal hearings for licences expiring in 1979 are:

- Halifax, N.S. (Atlantic)—Sept. 26, 1978.
- Vancouver, B.C. (Pacific)—Oct. 17, 1978.
- Quebec (Quebec region)—Nov. 7, 1978.
- Ottawa (Ontario east/north)—Nov. 21, 1978.
- Winnipeg (Prairie region)—Dec. 5, 1978.
- London (Ontario south/central)—Jan. 16, 1979.

The CRTC has **approved** the following FM applications:

- CBC, for new stations at Dolbeau, Que. (40 kw), Kenora, Ont. (38 kw) and Canal Flats, B.C. (120 watts). Changes in frequency were approved for CBKA-FM La Ronge, Sask., and four other CBC re-broadcasters in Newfoundland.
- Atlin Broadcasting Society, for re-broadcasters at Atlin, B.C., and Jakes Corner, Y.T.
- Power increases for CKCY-FM Sault Ste. Marie, Ont. (from 6.76 to 100 kw, with change of antenna site); CJC-B FM Sydney, N.S. (from 675 watts to 61 kw); and CHLG-FM-5 Duplinter, Que. (from 34 to 130 watts, with change of antenna site).

Denials were issued to CFLY-FM Kingston, Ont., which proposed to eliminate 12 hours of classical and opera music weekly, and to Randy Williams (Radio Carleton Inc.) who sought to operate CKCU-FM Ottawa (Carleton University Students' Association Inc.) on a basis of increased commercial activity.

Television

POLICY PRODUCED ON MULTILINGUAL TV

Following last September's hearing in Toronto, the CRTC has issued guidelines to govern the introduction of multilingual television in Canada.

A deadline of March 31, 1978, was set for comments on the guidelines, including response from the three applicants for a Toronto station on channel 45: Leon Kosser, Heritage Broadcasters Ltd., and Multilingual TV (Toronto) Ltd.

In its present form, the policy would require such stations to:

- devote at least 60% of their time to programs in languages other than English or French. This may not include dubbed versions of commercial U.S. programs; furthermore, the remaining 40% must not be U.S. programming.

- meet the usual Canadian content requirement of 60% overall and 50% in prime time (6 p.m. to midnight).

- meet the existing commercial limit for TV of 12 minutes per clock hour.

The Commission proposes that stations set up an advisory council to ensure equitable distribution and scheduling of programs in each language. It would not require that time be shared in direct proportion to the population of each language group.

Cable systems would be required to give priority status to such a station, which means in the Toronto area as many as 44 cable systems would have to remove a U.S. station from their basic service. While almost half of the subscribers have augmented (converter) service, the displacement of a U.S. station is certain to be a contentious issue among cable operators and their subscribers.

RADIO NORD WINS OTTAWA LICENCE

Radio Nord Inc., which owns radio and television stations in the Rouyn-Noranda area of northwestern Quebec, has been licensed to operate a TVA network affiliate on channel 40 with a power of 341.2 kw, in Ottawa-Hull. A similar application by Télé-Métropole Inc. was denied.

Local investors will be invited to purchase up to 49% of the shares of the new station, and an 8-member advisory committee is to represent the interests of French-language viewers in both Quebec and Ontario.

Meanwhile, applications were to be submitted by January 31 to provide TVA service in Radio Nord's own backyard, the Abitibi area of Quebec.

Other TV decisions:

- New CBC rebroadcasters have been approved at Mafeking, Man. (4 kw), Jean Côté, Alta., and in Newfoundland at Hawkes Bay (1.1 kw), Portland Creek (1.9 kw), Fortune and Lord's Cove.

- OECA has been given approval for a station at Sault Ste. Marie, 2.9 kw on channel 20, and for a power increase from 62 to 186.5 kw ERP (video), with change of antenna site, at CICO-TV-19 Sudbury, Ont.

- Power increases have been granted for CKRD-TV Red Deer, Alta. (from 13.2 to 56 kw, with change of antenna site) and its rebroadcaster at Coronation, Alta. (from 12.4 to 97 kw).

- CBC licences have been amended in several locations: Peace River, Alta.—power increase to 4.8 kw; channel changes at Trois-Rivières (Eng.) from 16 to 28, and at Grand Falls, N.B. (Fr.) from 2 to 12.

- At Sept-Iles, Que., the CBC is to ensure temporary facilities for the production of local programming until its new permanent broadcasting centre is completed in 1980.

- A reduction in power for CHEK-TV Victoria from 100 to 60 kw is approved.

Cable Television

CREDIT VALLEY BUYS THREE IWC SYSTEMS

Terra Communications, Mississauga, Barrie Cable TV and Orillia Cable TV—all in Ontario—have been purchased by Credit Valley Cable TV/FM Ltd. from IWC Communications.

In denying the sale of IWC's radio stations to Selkirk Holdings Ltd., the CRTC indicated it would not object to the sale of the cable systems.

NEW FACILITIES

Three new cable systems have been licensed:

- La Riviere (Man.) TV Club Inc.
- Wawa, Ont.—George E. Young, representing a company to be incorporated. A competing application by Lakeshore Community Television Ltd. was denied. The decision hinged on an effective plan to provide microwave facilities.
- Roberval, Que.—Cyrille Donaldson, representing a company to be incorporated (Televal Inc.)

A long-deferred application for Tracadie, N.B., has now been denied. Valerien Robichaud had proposed to bring in Canadian services which are now available off-air.

A licence granted in 1976 for Ste-Emilie de l'Energie, Que., has been revoked. The licensee, Fernand Rondeau, now considers a system there to be not economically viable.

Extensions of service area have been approved for:

- District 69 Cablevision Inc., Parksville and Qualicum Beach, B.C.

directions

- QCTV Ltd., Edmonton.
- Quinte Cablevision, Picton, Ont.
- Classic Communications Ltd., Richmond Hill, Ont.
- Télésag Inc., Bagotville, Que.
- Télédiffusion Ste-Adèle (Que.) Inc.

The CRTC has called for applications to provide cable TV service at Bow Island, Drayton Valley and Viking, Alberta, and at Montmagny, Quebec.

Six cable systems in the Toronto area have requested authority to receive certain stations by microwave (VHCM) from the headend operated by York Cablevision Ltd., instead of their local headends.

Other Decisions:

- In renewing cable licences in the Ottawa Valley area, the CRTC has required uniform distribution of CHRO-TV Pembroke, Ont., on channel 6, where technically feasible.
- The application by Gateway Cable Ltd. to acquire the cable system licensed to Leonard A. Martin at Port-Aux-Basques, Nfld., has been approved.

AM Radio

'OY OK FOR 'EY

CKEY Limited, a subsidiary of Maclean-Hunter, has won approval for its purchase of CKOY and CKBY-FM Ottawa.

CKOY, now 50 kw on 1310 kHz, was established in 1924, while CKBY-FM, a country music station, went on the air in 1969. It is understood that CKEY's Stu Brandy will head the Ottawa operations and that new studio facilities are a high priority in the new owners' plans.

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