



On-air control room (left) and production control room (right) at Q-107 are equipped with McCurdy SS-7600 stereo consoles, Technics turntables.

# Q-107

# A new high in stereo studios

# by Bruce Carnegie

In the summer of 1976, we received a licence to operate a maximum C-1 station

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in the Toronto vicinity.

From that point in time until late Fall 1976, we were actively engaged in a search for a studio location that would meet all the technical and "people" needs. The location we finally selected was central and easy to get at, in the Bay Tower at 2 Bloor



Q-107 staffers enjoy a panoramic view of downtown Toronto, looking south towards CN Tower where transmitter is located. Studios are on 30th floor of Bay Tower at Bloor and Yonge.

Street East, where Toronto's East-west and north-south subways intersect.

The initial planning for the tentative studio location took place between November of 1976 and February of 1977, with the physical studio construction (walls, extra windows, etc.) taking place in March of 1977. At this point in time, we had not installed a single wire anywhere in the studio or at the transmitter (CN Tower) location.

On April 4th, the electronic construction started and, by the afternoon of May 20th, CILQ was testing on air from the CN Tower—with all its main systems operational and its two major studios fully completed.

At CILQ the emphasis is on a quality sound with full stereo. To this end, we purchased two full-stereo McCurdy packages in the SS7600 Series, utilizing Technics turntables, as all our music is played from discs.

Initially, Bell lines were used between the studio and transmitter, but subsequently we completed the installation of our studio transmitter link (STL) using full composite stereo generated at the studio.

In terms of audio processing, we use the usual black boxes with an emphasis here on producing as lateral a sound as possible, keeping in mind the electronic constraints within the usual average receiver and the location at which this receiver may be operated.

Bruce Carnegie is Director of Engineering, Radio IWC Limited.

# CCBA ENGINEERING NEWSLETTER by Warren Parker

# 1978 Convention October 29-31 in Toronto

If you are reading this article at the convention, you know of the many features—such as the Digital Seminar Part Two, Ladies' Day and the panel discussion on the radio spectrum proposals for the Windsor-Quebec corridor.

If you didn't manage to make it to the convention this year, I hope to have full details and lots of pictures in the next issue of BET!

#### CONVENTION HIGHLIGHTS

# Sunday, October 29

6:15 pm-Reception & President's Dinner

#### Monday, October 30

9:15 am-Welcome by Don Thomas, CCBA president; Austin Reeve, engineering chairman; Ed Prevost, CAB chairman. 9:30 am-12 noon—Morning sessions 12:00 noon—Soundcraft Awards Luncheon

2:30 pm—Afternoon sessions 6:30 pm—Quarter Century Club dinner

#### Tuesday, October 31

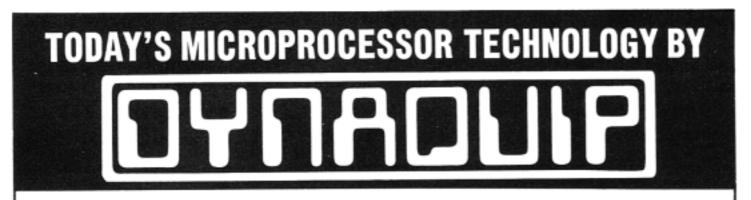
9 am-12 noon—Morning sessions
12:00 noon—Engineering Luncheon—
Gordie Tapp
2:30-3:30 pm—Afternoon session
3:45-4:45 pm—Annual meeting
6:15 pm—Reception & Awards Dinner

#### Other news:

- This fall has a big race going on in Hamilton. Both CHML and CKOC were granted 50 kw approvals and all summer long work has been progressing, hoping for early fall sign-ons. As of October 1st, CHML have had their new site on the air for test purposes, and array tuning is under way. But as BBM ratings are now on, further work has been halted. CKOC has just received their new 50 kw Continental transmitter and installation is almost complete. All array work is complete and testing and tuning should commence shortly. Hopefully the nice fall weather will last for all those field readings which both stations will be taking.
- Further to the west in Brantford, Stuart
   Bailey has been appointed Chief Engineer for CKPC AM and FM.
- If you haven't already heard, Jim Smith (of Spartronics and CKCO-TV) and Bruce Emondson have purchased Caldwell Equipment, formerly owned by CCA in New Jersey.
- George Roach reports things are quite busy in Ottawa. He's started installing a new AEL 25 kw FM transmitter for CFMO, and they have inaugurated a unique system between CFRA and CHUM. A daily 10-minute newscast is aired simultaneously on both stations, with each providing input. A complex system has been worked out in conjunction with BN Voice for the send-receive network for each station, and a tone set-up with appropriate notch filters was engineered for cueing each station.
- Congratulations to Huron Broadcasting in Sault Ste. Marie who signed on their second TV station in late September.

That's all the news for now—keep the information coming in, and hopefully next issue we'll have lots on CCBA. The address is:

Warren Parker, 610/CKTB, P.O. Box 610, St. Catharines, Ont. L2R 6X7



# EDIT CODE MASTER



Combines an SMPTE time code generator and a high speed reader in one compact, handsome package. This unit incorporates the latest microprocessor technology, with many features included such as user bit manipulation and jam sync operation. The front panel key functions are designed for maximum operator efficiency. By delegating some key functions to either generator or reader, depending on which is selected for display, we have held the number of keys to a minimum for simplicity of operation. Backlighted status indicators also eliminate ambiguity. The 80 bit code output meets or exceeds all SMPTE specifications as to format, stability, and rise and fall times.

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- Last two (frames) digits may be blanked out to help combat eye fatigue.
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- · Character generator module is available.

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#### MOBILES FOR THE EIGHTIES

The CBC Engineering Headquarters have just completed the first of a batch of New Mini Mobile Units which they have under construction at their facility in Montreal.

The new mobiles are for CBC French language television production in western Canada.

The new units are based on the GM Transmode Motor Home Unit, which is received in a stripped-down version.

Having a 440 V8-engine with front wheel drive and air suspension system, the Mobile has a very low centre of gravity giving a superb ride at all speeds. The completed unit is quite low to the ground, thereby providing easy access without the use of steps, which are always a potential hazard.

The unit is received from GM without windows, and the CBC build their own special rear doors and a swing-out window for emergency use in the driving compartment.

A military style 1.5 ton air conditioning unit, custom built to CBC specifications by Airflow of Maryland, is installed. Heating is provided by a propane furnace, with a large capacity propane tank built into the unit, and 3 kw of electrical heating for use in less severe cold weather or for back-up.

In addition to a 50-amp. 220V AC service hookup, the vehicle is provided with back-up 15 amp. 110V AC emergency supply.

Equipment comprises two RCA TK76 cameras, capable of expansion to three. The cameras are operated by a special CBC-designed-and-built remote control unit, which utilized LDK2 camera cable. This feature was provided because of the availability of this type of cable in the locations where the units will be used.

The production switcher is a Ross Video 10-input unit with effects and downstream

keyer.

The audio console is a standard Ward-Beck  $10 \times 2$ , with a  $10 \times 10$  intercomunit by McCurdy Radio.

Sync pulse generators, test signal packages and pulse distribution is by Leitch Video. Ikegami provided the color monitors and Conrac provided the ENA series monochrome monitors. Waveform monitoring is via a Tektronix 528 and 1420 package.

A BVU 200 VTR is fitted together with a BVU 100 VTR. An Arvin Echo Slide Store with a Microtime timebase corrector is also provided.

The production area consists of space for the producer, switcher, script assistant, TP and audio operator.

When fully loaded, this new CBC design Mini Mobile has a gross vehicle weight of 12,500 lbs., and cost is slightly in excess of \$400,000.

# around & about

### VANDALISM IN THE FAR NORTH

Vandalism is suspected in the destruction of the tower and equipment of CBKHT, located at a remote site in the Yukon territory.

At the site on Keno Hill, approximately 300 miles from Whitehorse and 150 miles from Dawson, is located a 100-watt TV rebroadcasting transmitter and a microwave transmitter which feeds a further rebroadcaster at Mayo. On the same site is the Telesat ground receiving station which feeds the CBC transmitter. The 100 ft. stayed lattice tower was toppled by person or persons unknown who unbolted the main bolts at the foot of the tower, causing it to collapse. The incident happened during a torrential downpour on the late afternoon of July 13th.

The tower and antennae were a total write-off. CBKHT was off the air only 3 days. Damage is estimated at between \$75-100,000.

Will the Mounties get their man? Watch this space.

#### WELCOME

As of the September/October issue, BET is being distributed to a large number of broadcasters in the United States.

I would like to welcome our new readers. I am sure that many of you are aware of your neighbor to the north and have heard, for instance, of the CBC (Canadian Broadcasting Corporation). You may not, however, have any idea of the magnitude of the CBC.

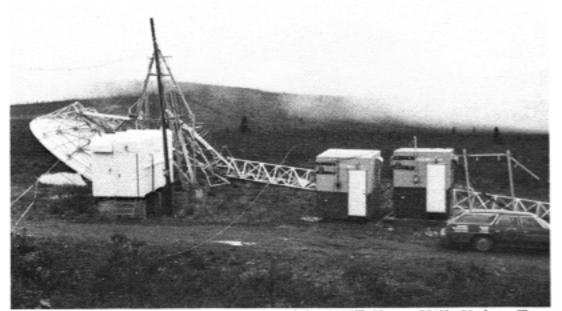
So, to acquaint our new readers with our national broadcasting organization, I though a few facts would be of interest:

• The Canadian Broadcasting Corporation delivers both radio and television programming to Canadians spread over nearly 4,000,000 square miles, with a distribution system which is large, complex and expensive. In 1977-78, the transmission cost for CBC-owned station transmissions amounted to \$71.7 million. This figure can be understood when one considers that there is more than 120,000 kilometers of microwave and landlines needed to link the

# by Maurice Evans

CBC's 840-plus radio and television stations and rebroadcasting transmitters.

- The CBC comprises 27 Television Production Centres, 40 AM/FM and 16 Stereo Production Centres. The output of these centres is relayed to hundreds more cities, towns, villages and remote areas through more than 750 rebroadcasting transmitters.
- More than 125 privately-owned affiliated stations also broadcast the CBC's English and French radio and television programs.
- The CBC Northern Service has radio stations in Whitehorse, Yellowknife, Inuvik and Frobisher Bay, as well as television and shortwave studios in Montreal. The Northern Service also has 69 rebroadcasters across the Northwest Territories and the Yukon, transmitting radio and television programs relayed to them through the ANIK satellite. The ANIK satellite is also used to feed the Main Network English and French Television programs coast-to-coast.



Twisted debris is 100-foot tower of CBKHT Keno Hill, Yukon Territory, toppled by vandalism. The remote site was back in opera-



tion after only three days off the air. (Photos by Ray Anderson, Supervising Technician, CBC Whitehorse.)

# SHORTWAVE'S GLOBAL REACH

# by George Jacobs Director of Engineering, U.S. Board for International Broadcasting

First of 2 parts. In the January/February issue, part 2 will discuss shortwave propaganda, jamming and technical problems, and broadcast satellites.

Shortwave broadcasting can be a very difficult subject to discuss with the leaders and experts of the U.S. broadcasting industry, whose main concerns are markets, ratings and profits. These terms are not normally relevant to shortwave broadcasting. And it is not easy for most Americans, living in a country with more than 13,000 broadcasting stations, to appreciate the volume and impact of international shortwave broadcasting.

Let me make it clear that I am talking about international broadcasting on the shortwave bands. Our European colleagues refer to it as external broadcasting. These are broadcasts intended to reach audiences beyond the frontiers of the country in which the transmitter is located. It is also often referred to as high frequency broadcasting.



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#### ONLY S/W IS INTERNATIONAL

In the field of human communications, shortwave radio plays an important and unique role. Technically, it is the only broadcasting medium capable of direct, universal, personal and immediate communication between the peoples of the world. AM propagation on medium and long wave is limited by groundwave coverage during the day and co-channel skywave interference during the night. Propagation limits the distance covered by FM and TV stations to more or less line-of-sight. Except for stations located near frontiers, or in the case of some exceptionally high power medium and long wave stations in the European and Asiatic areas, there is little opportunity to reach an international audience directly on AM, FM or TV.

Shortwave broadcasts, on the other hand, are reflected from an electrified region high in the earth's atmosphere, called the ionosphere. It is the ionosphere, acting much like a mirror does with light, that reflects shortwave signals so that they can cross frontiers, span oceans and bridge continents, both day and night. Shortwave is the *only* broadcasting medium with global reach!

There are eight allocated shortwave bands used for broadcasting today. These are the 49, 41, 31, 25, 19, 16, 13 and 11 meter bands.

Squeezed into these bands are 1500 shortwave broadcast transmitters, of which more than half are beaming programs to audiences beyond their own borders. I used the word "squeeze" advisedly. These bands were allocated more than 50 years ago when only a small fraction of today's stations were on the air, and no one could foresee the rapid growth of this medium.

Shortwave broadcasting has increased by leaps and bounds since the end of World War II, in almost every country in the world. It has been estimated that between two and three stations often compete for the same channel at the same time, forcing a number of countries to broadcast on channels allocated to other shortwave services.

Shortwave broadcasting is also a communication medium in which the small can reply to, or even challenge the big. Installations can be relatively inexpensive and within the means of even the most underdeveloped nations. Along with issuing currency, postage stamps and starting an airline, one of the first steps often taken by a newly independent country is the establishment of a shortwave broadcasting service to blaze its name to its neighbors and to the world.

Among some of the smaller countries with loud voices on the shortwave bands are Israel and Egypt, Cuba and Albania, the Vatican, the Philippines and Ecuador.

#### THE AUDIENCE

Who are shortwave broadcasters trying to reach? While precise figures are not available, experts estimate that there are now between 200 and 300 million radios around the world that can tune to shortwave broadcasts. Space age components make possible the manufacture of more compact, more sensitive radios than ever before, and at a price that almost anyone, anywhere can afford. On a typical day it is estimated that as many as 200 million listeners may be tuned to shortwave broadcasts.

### U.S. IN FOREFRONT

It may come as a surprise to some of you, but the world's leading country in international broadcasting is the United States, although it is often nip and tuck with the Soviet Union for this honor. Next in order behind the US and USSR are the People's Republic of China, the Federal Republic of Germany, and the United Kingdom (the BBC).

It is estimated that U. S. international broadcasts reach an audience of close to 100 million listeners on a regular basis. These broadcasts originate from the government-run Voice of America, the government-funded Radio Free Europe and Radio Liberty, the Armed Forces Radio and Television Service, and from privately owned, FCC-licensed stations.

The Voice of America, with its worldwide network of 109 transmitters, broadcasts in 36 languages. It seeks to tell America's story overseas, to promote understanding abroad for the United States, its people, culture and policies.

Radio Free Europe broadcasts to Eastern Europe in six languages and Radio Liberty to the Soviet Union in 15 languages. Both, although belonging to a single private corporation, are funded entirely by the Government. Their distinctive mission is "to encourage a constructive dialogue with the peoples of the USSR and Eastern Europe."

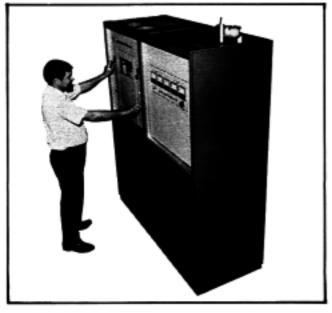
# All signs point to shortwave's continued growth and importance.

The Armed Forces Radio and Television Service, or AFRTS, recently had an interesting experience which attests to its popularity, or better yet, its overpopularity on the shortwave bands. AFRTS has been broadcasting on shortwave since World War II to keep U.S. forces overseas in touch with news and events at home. For the most part, these broadcasts are retransmissions of network news and sporting events. With the increasing number of AM, FM and TV stations being installed by AFRTS at overseas posts, many of which are now being fed directly by satellite, AFRTS planned to discontinue its shortwave service earlier this year, and announced so on the air. The announcement was followed by an avalanche of mail, telegrams and long-distant telephone calls. They came from all parts of the world, and not only from service personnel. There were protests from Ambassadors, from Americans working overseas, from high ranking officials in a score of countries and from a multitude of foreign listeners who "eavesdrop" on these broadcasts. The response was so overwhelming that AFRTS has decided to remain in the shortwave broadcasting business.

There is a tendency in this country to think of international shortwave broadcasting in terms of government broadcasting. To a large extent this is true, but the excep-

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tions are worth noting. Privately owned, FCC-licensed shortwave broadcasting has flourished in this country since the first license was issued to Walter Lemmon on October 15, 1927, for his "World Wide Broadcasting Corporation," which used the famous old call sign WIXAL. Its successor operates today as the "International Voice of Family Radio," WYFR. It uses five transmitters, located in Florida and Massachusetts, to broadcast to Europe, Africa and the Americas in six languages.

Other FCC-licensed shortwave stations on the air are the International Broadcast Station KGEI, which uses two transmitters to broadcast from California to Latin America and the Far East in six languages; World International Broadcasters, WINB, using a single transmitter for English language broadcasts to Europe, North Africa and the Middle East from its Pennsylvania location; and TransWorld Radio, using two transmitters recently installed in Guam for broadcasting to the Far East in several languages.

All of the privately owned shortwave broadcasting stations presently on the air have one thing in common: although many also carry news and other cultural and educational programs, sponsorship is almost exclusively by religious organizations.

Even Billy Graham has plans for international broadcasting on shortwave. He has been issued a construction permit by the FCC for a shortwave complex to be located in Hawaii.

Commercial broadcasting on shortwave is somewhat more popular in other areas of the world. It is relatively commonplace in Central and South America. The super large European commercial broadcasting operations of Radio Andorra, Radio Luxembourg and Radio Monte Carlo also utilize shortwave outlets to reach considerably beyond their medium wave service areas.

The time may be close at hand for a fullfledged commercial shortwave operation beamed overseas from this country, possibly to better serve the advertising requirements of multi-national organizations, and to promote our free enterprise system.

The United States is a popular target for foreign shortwave broadcasters. No fewer than 15 countries beam broadcasts in this direction for a total of 150 program hours daily. Among these are the BBC, Radio Moscow, The Voice of Israel, Radio Netherlands, the Deutsche Welle, Radio Warsaw, and even Radio Peking. A recent Gallup Poll found that 18 million Americans tune to shortwave broadcasts at least once a week.

### SHORTWAVE BOOMING

All signs continue to point to the shortwave bands as the world's arena in which international broadcasting will continue to take place, at least for the foreseeable future.

To emphasize this point, let's take a look

at what has happened just this past year:

- The BBC and the Deutsche Welle, the Voice of West Germany, opened a joint high power relay station on the Caribbean island of Antiqua for improving their reception in the Americas.
- Finland, Norway, Switzerland and Egypt brought new high power 250 kw transmitters into operation.
- Two new 500 kw transmitters went on the air in Iraq.
- The Vatican is building what it describes as "the world's largest rotatable antenna", which will be fed by a new 500 kw transmitter.
- Switzerland began the installation of two additional 250 kw shortwave transmitters, along with new multi-band, multi-directional antenna systems.
- South Africa began the installation of three 500 kw transmitters.
- Brazil has under construction a new station with nine 250 kw transmitters.
- Libya is reported to have purchased six new 500 kw transmitters.
- And to top it off, the newly-founded Radio Yugoslavia plans the world's first 1500 kw "superpower" shortwave transmitter.

In the United States, President Carter, following a wide-ranging review which confirmed that existing U.S. shortwave broadcasting facilities were inadequate, submitted a request to Congress that immediate funds be provided for the purchase of 16 new 250 kw transmitters to enable the Voice of America, Radio Free Europe and Radio Liberty to meet their minimum requirements for broadcasts to Europe, and also to provide funds for an additional twelve 250 kw transmitters to bolster VOA broadcasting to Asia and Africa.

Congress authorized and appropriated funds in 1978 for 16 of these transmitters, and the remainder are expected to be funded in the next fiscal year.

Shortwave broadcasting is very much alive and still growing, despite its more than 50 years. The shortwave bands are bursting at the seams, with 1500 transmitters, located in just about every country of the world, each vying for its share of the nearly 200 million listeners who tune these bands daily.

Shortwave broadcasting is the only broadcasting medium with global reach, and all signs point to its continued growth and importance for international broadcasting in the foreseeable future, and at least through the remainder of this century.

George Jacobs, director of engineering of the U.S. Board for International Broadcasting, Washington, D.C., served with the Voice of America for 27 years prior to joining the BIB. The foregoing article is an edited version of a talk given at the engineering conference luncheon of the 1978 convention of the National Association of Broadcasters. It was predictable, in view of Bill McGregor's high rank in the world of broadcasting as a pioneer, an innovator, a leader. As he escorted me into his office, his secretary told him there was a call from Ottawa. I would like to bet, I bethought myself, that it's either Pierre Camu (CRTC Chairman) or Ernie Steele (CAB President). It was Steele. "Wants me to serve on the Copyright Committee," said Bill after he hung up, "and that's a tough one."

But then, Bill has always taken on the tough ones; always been on the front lines of solving broadcasting's problems, working on and in its development and growth.

The 56-year-old president of Central Ontario Television Limited, Kitchener, was born in Toronto and educated in that city and in London, Ontario. He got as far as the University of Toronto (Engineering), but left to accept an offer from CFRB as an operator in 1944. He was there until 1950 and learned a lot from his superiors, particularly Harry Sedgwick, who taught him the intrinsic value of high standards. "That's one lesson I've never forgotten," the silver-haired McGregor said with that charming grin of his.

From 'RB to CKFH as Chief Engineer, and then adding the role of TV instructor for the CBC, helping get staff together for the introduction of television into Canadian homes in 1952.

Bill came to Central Ontario Television late in 1953 as Operations Manager of CKCO-TV. He went up through the ranks as General Manager, Vice-Presidnet and GM and, since 1972, has been President and Director. He is also Chairman of the Board of CTV Television Network Limited. (It will be heartening to the many engineers who read BET that not all station presidents come from sales, accounting, the outside business world, or programming.)

Some more testimonial to the stature of William Duncan "Bill" McGregor: he was chosen CCBA Broadcaster of the Year in 1971; awarded a Canada Medal in 1972 and awarded the Howard Caine Memorial Award by the CAB in 1977. He is a past president of the CCBA and the CAB.

And in Kitchener, where everyone seems to know and respect him (a fact that became apparent when he took us to lunch at his golf club), he has held several frontrank roles. Consider: Past President and Director of the Kitchener Chamber of Commerce; Chairman of the Kitchener Urban Renewal Committee; Director, Kitchener-Conestoga Rotary Club; Director, Kitchener-Waterloo Oktoberfest Inc.; and Director, Steering Committee of Participaction, Waterloo Region. Kitchener obviously recognizes a gem when it sees one.

Physically fit at 5'11", 170 pounds, the blue-eyed energetic McGregor combines a busy vocation and avocation (golf, flying) with a happy marriage to the former Ellen McDonald. Wed 28 years, they have one daughter, Kelly.



# THE PHIL STONE REPORT

I wondered, with all his expertise and with due respect to Kitchener, why he hadn't remained in a major market like Toronto. "We've been very active here in Kitchener. We started with CKCO-TV, added CKKW, and then on to FM with CFCA-FM. The challenge of this market has allowed for almost a continual development and expansion, both of the operations with which we've been associated and ourselves."

As a man who has been with and worked with the CAB for so many years, we asked how he reacted to people such as Pierre Camu and Ernie Steele heading up the Association despite the fact that they had not come from broadcasting backgrounds. "I think the very good reason for not having a broadcaster is the difficulty of getting top

in 15 on the whole board. To have an effective voice, you would have to have several broadcasters. Even then, you'd only have a consensus because", he said with a chuckle, "they'd never agree. There's no group of broadcasters in the country, any two of us, who agree."

Is McGregor opposed to the conglomerates that are absorbing stations? "I think in part it becomes inevitable. If you think in terms of even a medium-sized station, there's a tremendous amount of time that has to be devoted to dealing with applications, with public involvement, with minority groups and governments at all levels. They've begun to outnumber us, and with broadcasting's high visibility, the demands are even greater than for other businesses. I think this fact alone provides a

# AN INTERVIEW WITH BILL McGREGOR The engineer who heads Central Ontario Television

broadcasters because of the challenge that exists in their business activities as opposed to association work. In it, you have to get a great part of your jollies from accomplishments that come slowly and in little bits. Working directly in the broadcast business, your efforts produce visible results every day. In the work of the Association, results are deffered by factors beyond your control and so job satisfaction is hard to come by. At the CAB, the question becomes: 'Do we look for a broadcaster who can fit in association work, or a lobbyist who can fit into broadcasting?''

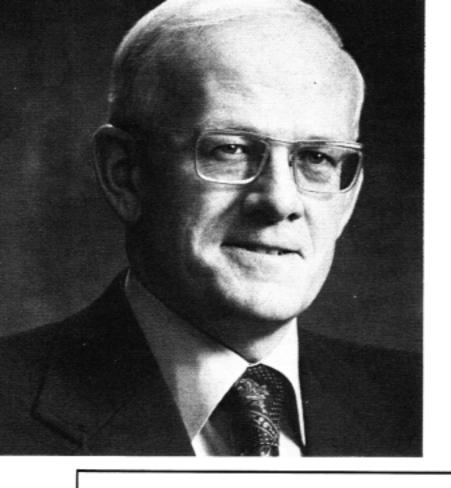
Taking the same question to the CRTC—should it have a private broadcaster on the full-time Commission? Bill feels that you have to think of it as more than just one man. "To make it work with broadcasters in it, you'd have to put in more than one broadcaster. One man would have an influence of only one in five on the executive committee, and only one

real pressure for consolidation into a larger organization that can afford people who do nothing but fulfill these demands on the station's time."

And how does he stand on the CRTC's increasing talk about broader regulations? "I think we're seeing an attempt in Canada to remold broadcasting into a system which is privately operated but programmed according to narrow, government-imposed specifications, and the two are not compatible. Indeed, if you look at Australia as an example, they've tried to do it and gradually have been backing off it. In the United States they've never made an attempt at it. In Japan, the tendency is to give a great deal of freedom to the private broadcasting organizations. I think we are going to see Canada follow the other countries with major private broadcasting systems and offer a stimulating free-to-dare regulatory climate. Not immediately, but hopefully in the five-year future.

Bill McGregor (left) with John Evans, then owner of CFTJ Cambridge, officiated when CKKW and CFTJ switched frequencies.





"The FM regulations have been a disappointment in their application and the results. FM broadcasters are in a straitjacket which minimizes their ability to respond to changes in audience taste. The results have been a disappointment to Harry Boyle and, perhaps, to the late Doug McGowan. Doug was the enthusiastic proponent of most of the principles that went into the FM regulations, although it's probably wrong to point to him as the sole author. Others, including Sjef Frenken, who picked up McGowan's work, contributed to the regulations and must find the results disappointing.

"The regulations responded to a demand for FM licences in metropolitan centres by throwing open all centres for licences. It was expected the country would absorb them easily. The economic demands of the promises of performance on the new stations, even given less difficult terms than existing stations, still have brought great problems, and a significant easing of the load has occurred."

McGregor is, of course, aware that Dr. Camu has already expressed displeasure with the present TV regulations. "He became very conscious of their inadequacies when he was at the CAB and he's given notice that he wants suggestions for revision. Above that, the Commission shares a concern with other Ottawa agencies over the advance of technology. I'm talking about direct-to-home satellite broadcasting, increased use of communications satellites, glass fibre transmission of 40 channels (or 140, if you wish), video disc, and video cassette-all kinds of technological developments, including Pay TV and super stations, that we are facing today. When you go around Ottawa, you are impressed with the number of people who say to you: 'You guys with your transmitters are all finished. It's all over. TV and radio are all going to be wired to the home.'

"We heard the term 'Wired World' in 1965. It is almost 1980 and we're still some distance from a Wired World. I recall a meeting with Pierre Juneau, Harry Boyle and the executive committees of the CRTC and CAB when I was on the board of the Association. We were talking of future developments, particularly cable TV, and Commission staff suggested the belief that, based on projections of their current growth rates, it would be only five years till Canada would be completely wired. I said that in ten years there wouldn't be more than half the homes connected to cable TV services. Twelve years later, it is less than 55% nationally. It is going to be a long time before it is total. One reason is the high cost of rural connections and the unwillingness of urban subscribers to pay higher rates to permit rural service at reasonable charges (as they are already doing for their hydro and Bell services.) An example of this problem is Northwestern Ontario, a major concern of the Ontario Department of Transportation and Communications. There is no way those communities can be wired at the going subscriber rate."

Speaking of Ontario, how does he feel about the stated desire of some provinces to participate in the allotment and governing of cable licences? "There were a number of occasions for discussion with John Rhodes when he was Minister; there haven't been as many with Jim Snow. Based on those talks and other consultations with their department, I don't honestly think Ontario is trying to get into the act. Rather, they are proceeding from an honest concern. People who live in the north feel hard done by when they see or hear of 20-channel cable in the south while they have one modest-quality signal which offers a choice of On or Off. They feel they

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are the forgotten ones, and they are telling the government they feel closest to. The province must respond and, to do so, feels it must have a hand on the control levers. As a broadcaster, though, I see the resolution of this one as terribly important, since there can't be a reallocation of control responsibilities without a complete-re-work on the regulatory structure, both for cable and for broadcasting (radio and TV)."

We talked next about program substitution, about the Canadians on the border who watch U.S. stations to the audience loss of the Canadian outlet. "Well," said McGregor, "this seems one means of redressing the loss of audience because of the effect of Canadian regulatory policy on the ability of Canadian stations to battle in the free-wheeling competition with cable-carried U.S. stations. I'm involved in a CAB committee which is in liaison with the Canadian Cable Television Association and its president, Michael Hind-Smith. One of the sticky questions we've discussed with Michael is that of program substitution in CATV systems with under ten thousand subscribers. My own view had been that this wasn't a major concern to broadcasters in this part of the country; however, I was brought up short by a couple of broadcasters from other provinces who were very, very vigorous in saying: 'Look, in our situation it is terribly important that there not be this cut-off at ten thousand. We need program substitution; we need it very badly.''

What Bill McGregor feels is that there has to be a hard look for a means to the development of a domestic program industry in Canada, particularly television. He doesn't think the present percentage requirement has been effective. "I don't think it has worked in terms of the development of an industry. I was in Ottawa recently to see a special that CJOH put together and which is to be aired this fall. It involved 30 to 40 people from their staff; it gave an opportunity to a French-Canadian ballet group; there was a new choreographer whom I haven't seen used in television in this country, and they had an orchestra of over 20 pieces. All of these people were used and that show, I'm sure, had a budget in excess of one hundred thousand dollars. My argument originally in 1970-71 (and I suppose I'm persistent, if nothing else) was that a 'tonnage' approach doesn't work, that it tends to take the same pound of butter and spread it very thinly across a hell of a lot of slices of bread. It's quantity against quality, and you have a situation where your budget will only stretch so far. The answer is that each element must become less expensive if you're going to have many hours. The proposal I have put forward and still propose is that, instead of using a quantitative hour measure, there be a dollar measure and that we be free to put it into top-flight programs. Remember, each of the broadcasters in this country must file with the CRTC an audited financial statement which breaks out

expenditures in various classifications. My suggestion is to take two-thirds as a nice, arbitrary measure: make the regulation state that two-thirds of the dollars spent on programming be devoted to domestic programming. Better one good special a year, like the CJOH program, than ten Mickey Mouse things."

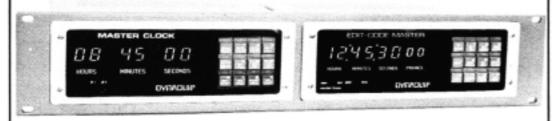
It is Bill's feeling that this kind of action would bring greater success with the viewer than inexpensive quiz or "recipe" shows. It would make Canadian artists and programs more competitive, domestically and internationally.

Having come through the ranks of both radio and TV, where does McGregor's heart really lie? "I find myself very ambivalent. Radio, with the ability to use your imagination, to be a scene-setter, a Theatre of the Mind, has so many advantages; but there is also a great deal of fun in going out with a camera and capturing the reality of an event. I guess I'm like a man who has two wives and who loves them both."

That takes a big heart, and Bill McGregor has it. But then, Bill McGregor is a big man in many ways—big in leadership; big in intellect; big in foresight and perspective, and so nicely big in human relations.

Phil Stone, well-known writer and broadcaster, is director of the Radio Broadcasting course at Humber College, Rexdale, Ontario. The Phil Stone Report will appear regularly in future issues of BROADCAST EQUIPMENT TODAY.





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# NEWFOUNDLAND

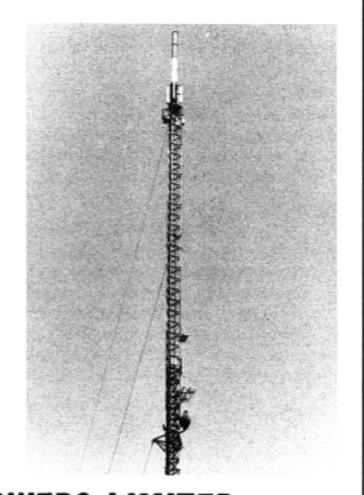
Location	Call	kHz	Power (Day/Night)	Address	Telephone	Telex
Baie Verte	CKIM	1240	1,000 D/500 N	Box 520, Grenfell Heights	(709) 489-2192	
Bonavista Bay	CBGY	750	10,000 DA-2	rebroadcaster of CBG Gander	, , , , , , , , , , , , , , , , , , , ,	
Clarenville	CKV0	710	10,000 DA-1	see VOCM St. John's		
Corner Brook	CBY	990	10,000	Box 610, A2H 6G1; 162 Premier Dr.	(709) 634-3141	016-44222
	CFCB	570	1,000	Box 2020, A2H 6H5	(709) 634-3111	
Gander	CBG	1450	1,000 D/500 N	Box 369, 98 Sullivan Ave. A1V 1W7	(709) 256-4311	016-43537
	CFYQ	1350	1,000	see CIYQ Grand Falls	, ,	
	CKGA	730	1,000 DA-1	see CKCM Grand Falls		
Goose Bay	CFLN	1230	1,000	Box 4000	(709) 896-2968	
Grand Bank	CKYQ	610	10,000 DA-2	Box 189	(709) 832-2650	016-4950
Grand Falls	CBT	540	10,000	Box 218, High St. & Mill Rd. A2A 2J7	(709) 489-2101	016-4258
	CIYQ	680	10,000 DA-2	Box 458	(709) 489-6601	016-4237
	CKCM	620	10,000 DA-1	Box 620	(709) 489-2192	
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Marystown	CBNM	740	10,000 DA-N	rebroadcaster of CBN St. John's		
	CHCM	560	10,000 D/5,000 N/DA-N	Box 560, Ville Marie Dr.	(709) 279-2560	
Musgravetown	CHYQ	670	10,000 DA-2	see CJYQ St. John's		
Port au Choix	CFNW	790	1,000 DA-1	see CFCB Corner Brook		
Port Aux Basques	CFGN	1230	250	Box 984	(709) 695-2183	
St. Anthony	CBNA	600	10,000 DA-2	rebroadcaster of CBY Corner Brook		
St. John's	CBN	640	10,000	Box 12010, Stn. A, A1B 3T8	(709) 753-1300	016-4590
	CJYQ	930	50,000 D/25,000 N/DA-2	Box 6180, A1C 5X8	(709) 753-4040	016-4946
	VOAR	1230	100	106 Freshwater Road	(709) 579-2582	
	VOCM	590	10,000 DA-N	Box 8-590, Stn. A, A1B 3P5	(709) 726-5590	016-4944
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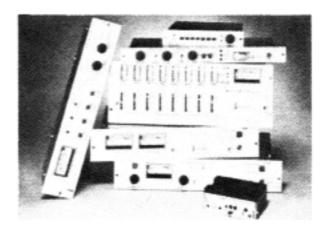
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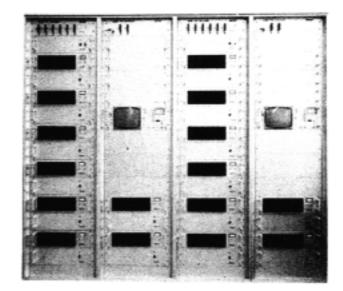
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Port Hawkesbury	CIGO	1410	10,000 DA-2	Box 1410	(902) 625-1220	
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St-Jerome	CJEN	900	1,000 DA-1	CP 900, J7Z 5V9	(514) 436-5590	
St-Jovite	CKSJ	1400	1,000 D/250 N	see CKML Mont Laurier		
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Sherbrooke	CHLT	630	10,000 D/5,000 N/DA-2	25 Bryant, J1J 3E5	(819) 563-6363	
	CJRS	1510	50,000 D/10,000 N/DA-2	2655 King St. W.	(819) 567-8951	
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Verdun	CKVL	850	50,000 D/10,000 N/DA-2	211 Gordon Ave., H4G 2R2	(514) 766-2311	055-60602
Victoriaville	CFDA	1380	10,000 DA-2	CP 490, G6P 6T3	(819) 752-5545	
Ville Degelis	CFVD	1370	1,000 DA-1		, ,	
Ville Marie	CKVM	710	10,000 D/1,000 N/DA-N	62 rue Ste-Anne, JOZ 3W0	(819) 629-2710	

# **ONTARIO**

Ajax	CH00	1390	10,000 DA-2	97 McMaster Ave., L1S 2E6	(416) 683-4131	
Armstrong	CFAO	1450	50	c/o Base Commander, CFB Armstrong		
Bancroft	CJNH	1240	1,000 D/250 N	Box 730, Bridge St. E.	(613) 332-1423	
Barrie	CKBB	950	10,000 D/2,500 N/DA-2	Box 950, L4M 4Y6	(705) 726-9500	
Belleville	CJBQ	800	10,000 DA-2	Box 488, K8N 1L5; 45 Bridge St. E.	(613) 968-5555	
Blind River	CJNR	730	1,000 DA-N	Box 1120	(705) 356-2209	
Brampton	CHIC	790	5,000 DA-2	2 Ellen St., L6B 1J6	(416) 451-3110	
Brantford	CKPC	1380	10,000 DA-2	571 West St., N3T 5P8	(519) 753-2664	
Brockville	CFJR	1450	1,000 DA-D	Box 66, K6V 5V9; 601 Stewart Blvd.	(613) 345-1666	
Cambridge	CFTJ	960	1,000 DA-2	46 Main St., N1R 1V4	(519) 621-7510	
Chatham	CFC0	630	10,000 D/1,000 N/DA-2	Box 630, N7M 5K9	(519) 352-3000	
Cobourg-Pt.Hope	CHUC	1450	1,000 DA-2	Box 520, K9A 4L3	(416) 372-5401	
Collingwood	CKCB	1400	1,000 D/250 N	Box 339	(705) 445-2011	
Cornwall	CFIX	1170	10,000 DA-D	1308 Pitt St.	(613) 932-3356	
	CJSS	1220	1,000 DA-2	Box 969, 237 Water St. East	(613) 932-5180	
Dryden	CKDR	900	1,000 D/250 N	Box 580	(807) 223-2355	07-591524

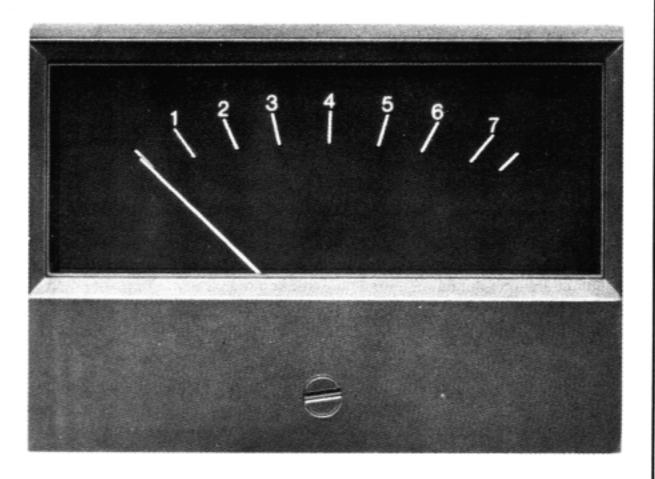
# Goodbye VU. Hello PPM.

VU meters did quite a creditable job. In their time! But let's face it, technology has passed them by.

Knowledgeable engineers today insist on the fast attack and slow decay time of the PPM (Peak Program Meter). Its ability to display accurately peak and average levels has introduced an entirely new standard of efficiency to audio monitoring and control functions.

That's why leading broadcasters and recording studios now specify PPMs exclusively.

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Electro & Optical Systems Limited, 3015 Kennedy Road, Scarborough, Ontario, M1V 1E7. Tel: (416) 291-4492. Telex: 065-25431.

# AM RADIO STATIONS—Ontario (cont.)

AM NADIO	SIAI	IUN	3—Unitario (co	1111.		
Elliott Lake	CKNR	1340	1,000 D/250 N	15 Charles Walk, P5A 2A2	(705) 848-3608	
Espanola	CKNS	930	10,000 DA-N	Box 1910, POP 1C0	(705) 869-4930	
Fort Frances	CFOB	800	1,000 D/500 N	Box 800, P9A 3N1	(807) 274-5341	07-594549
Guelph	CJOY	1460	10,000 D/5,000 N/DA-2	Box 217; 75 Speedvale Ave. E. N1E 1M3	(519) 824-7000	
Hamilton	CHML	900	50,000 DA-2	848 Main St. East, L8M 1M1	(416) 549-2411	
	CJJD	1280	10,000 DA-2	2 King St. West, L8P 1A1	(416) 526-1280	
	CKOC	1150	50,000 DA-2	Box 1150, L8N 3P5	(416) 545-5885	061-8660
Hawkesbury	CHPR	1110	250	151 Main St.	(613) 632-4128	
Hearst	CFLH	1340	1,000 D/250 N	same as CFCL Timmins	(705) 700 4404	
Huntsville	CFBK	630	1,000 DA-N	Box 820, 15 Main St. E., POA 1K0	(705) 780-4461	
Kapuskasing	CFLK	1230	100	same as CFCL Timmins	(705) 225 2270	
W	CKAP	580	10,000 D/1,000 N/DA-N	24 Byng Ave., P5N 1X5	(705) 335-2379	00 502540
Kenora	CJRL	1220	1,000	Box 2490, P9N 3X8	(807) 468-3181	09-592549
Kingston	CFRC	1490	100	Carruthers Hall, K7L 3N6	(613) 547-6677 (613) 544-1380	
	CKLC	1380	10,000 DA-2	Box 1380, 99 Brock St., K7L 4Y5 170 Queen St., K7K 1B2	(613) 544-2340	066-3256
Kirkland Lake	CKWS CJKL	960 560	10,000 D/5,000 N/DA-2 5,000 DA-N	Box 430, 6 Hudson Bay Ave.	(705) 567-3366	000-0200
Kitchener	CHYM	570	10,000 D/5,000 N/DA-1	305 King St. W., N2G 4E4	(519) 743-2611	
Kitononoi	CKKW	1090	10,000 DA-2	864 King St. W., N2G 1E8	(519) 578-1090	069-55432
Leamington	CHYR	710	10,000 D-DA	Box 70, N8H 3W1	(519) 326-6171	064-77762
20umgton	0	730	500 N-DA	50x 70, 11011 0111	(010) 020 011 1	
Lindsay	CKLY	910	10,000 D/5,000 N/DA-2	249 Kent St. W., K9V 2Z3	(705) 324-9103	
London	CFPL	980	10,000 D/5,000 N/DA-2	Box 2580, N6A 4H3	(519) 438-8391	024-7502
-	CJBK	1290	10,000 DA-2	Box 1290, Term. A, N6A 5A2	(519) 686-2525	
	CKSL	1410	10,000 DA-2	Box 5172, N6A 4E4	(519) 432-4181	
Midland	CKMP	1230	1,000 D/250 N	490 Dominion St.	(705) 526-2268	
Mississauga	CJMR	1190	10,000 D-DA	Box 1190, Port Credit Postal Stn.	(416) 279-1190	
Moosonee	CHMO	1450	50	Box 400, POL 1Y0	(705) 336-2953	
New Liskeard	CJTT	1230	1,000 D/250 N	Box 1058, P0J 1P0	(705) 647-7334	
Newmarket	CKAN	1480	10,000 DA-2	(on-air early 1979)		
Niagara Falls	CJRN	710	5,000 D/2,500 N/DA-2	Box 710, L2E 6X7	(416) 356-6710	
North Bay	CFCH	600	10,000 D/5,000 N/DA-2	Box 3000	(705) 474-2000	027-76193
Oakville	CHWO	1250	10,000 D/5,000 N/DA-2	490 Wyecroft Rd., L6K 2H1	(416) 845-2821	
Orillia	CFOR	1570	10,000 D/5,000 N/DA-N	Box 550, 241 West St. N.	(705) 326-3511	06-875600
Oshawa	CKLB	1350	10,000 D/5,000 N/DA-2	360 King St. W., L1J 2K2	(416) 723-3415	050 4000
Ottawa	CBO	920	50,000 DA-2	Box 3220, Stn. C, K1Y 1E4	(613) 725-3511	053-4260
	CBOF	1250	50,000 DA-2	CP 3220, Succursale C, K1Y 1E4	(613) 725-3511	053-4820
	CFG0	1440	50,000 DA-1	88 Argyle Ave., K2P 1B4	(613) 238-6500	053-3773
	CFRA CJRC	580 1150	50,000 D/10,000 N/DA-2		(613) 233-6241 (613) 237-7100	053-4333
	CKOY	1310	50,000 D/5,000 N/DA-2 50,000 DA-2	681 Chemin Belfast, L1G 0Z4 Box 6305, Stn. J., K2A 3X7	(613) 722-6501	
Owen Sound	CFOS	560	5,000 D/2,500 N/DA-2	270-9th St. E.	(519) 276-2030	
Parry Sound	CFBQ	1340	250	24-A William St.	(705) 746-2163	
Pembroke	CHOV	1350	1,000 DA-1	Box 100, 179 Pembroke St. E., K8A 3J6	(613) 735-6807	053-34515
Peterborough	CHEX	980	10,000 D/5,000 N/DA-2	Box 659, K9J 6Z9	(705) 742-0451	06-962810
rotorougn	CKPT	1420	10,000 D/5,000 N/DA-2	Box 177, 340 George St. N., K9J 6Y8	(705) 742-8844	00 002010
Port Elgin	CFPS	1490	1,000 D/250 N	rebroadcaster of CFOS Owen Sound	(100) 1 12 00 11	
Renfrew	CKOB	1400	1,000 D/250 N	Box 96	(613) 432-6428	
Richmond Hill	CFGM	1320	50,000 DA-2	10254 Yonge St., L4C 3B7	(416) 961-1320	
St. Catharines	CHSC	1220	10,000 DA-2	Box 1220, 36 Queenston St., L2R 7C7	(416) 682-6691	
	CKTB	610	10,000 D/5,000 N/DA-1	Box 610, L2R 6X7	(416) 684-1174	
St. Thomas	CHLO	1570	10,000 DA-2	133 Curtis St., N5P 3T8	(519) 631-3910	
Sarnia	CHOK	1070	10,000 DA-2	Box 1070, N7T 7K5	(519) 336-1070	
	CKJD	1110	10,000 D/1,000 N/DA-2	546 N. Christina St., N7T 5W6	(519) 336-1110	064-76248
Sault Ste. Marie	CFYN	1050	10,000 D/2,500 N/DA-N	Box 1050, 254 Queen St. E.	(705) 942-1050	
	CKCY	920	10,000 D/5,000 N/DA-2	Box 920, 119 East St.	(705) 254-7111	
Simcoe	CHNR	1600	10,000 DA-2	Box 1600, 39 Kent St. N., N3Y 4K8	(519) 426-7700	
Smiths Falls	CJET	630	10,000 DA-2	Box 630, K7A 4T4	(613) 283-4630	
Stratford	CJCS	1240	500 D/250 N	Box 904, 180 Ontario St., N5A 6W3	(519) 271-2450	067 7242
Sudbury	CFBR	900	10,000 D/1,000 N/DA-2	Box 700, Stn. B., P3E 4R9	(705) 674-6401	067-7343
	CHNO	550	10,000 DA-2	Box 700, P3E 4R9	(705) 674-6401	067-7343
Thunder Dev	CKS0	790	50,000 DA-2	Box 400, P3E 4P7	(705) 674-0711 (807) 622-5811	067-7584 073-4369
Thunder Bay	CBQ	800	10,000 D/5,000 N/DA-1	213 Myles St. E., P7C 1J5		073-4309
	CFPA CKPR	1230 580	1,000 D/250 N 5,000 D/1,000 N	Box 2747, P7B 5G2	(807) 344-2404 (807) 344-3526	073-4521
Tillsonburg	CKOT	1510	10,000 DA-D	87 N. Hill St., P7A 5V6 Box 10, N4G 4H3	(519) 842-4281	0/3-4321
Tillsonburg - Timmins	CFCL	620	10,000 DA-D 10,000 D/5,000 N/DA-2	Box 620, P4N 7G3	(705) 264-4211	027-81539
	CKGB	680	10,000 D/5,000 N/DA-2	Box 1046, P4N 7H8	(705) 264-4211	067-81566
Toronto	CBL	740	50,000 DA-2	Box 500, Terminal A, M5W 1E6	(416) 926-3311	062-17796
. 510110	CFRB	1010	50,000 DA-2	2 St. Clair Ave. W., M5V 1L6	(416) 942-5711	302-17730
	3.7.3		-	-		00 00440
	CFTR	680	25,000 DA-2	25 Adelaide St. E., 11th floor, M5C 1H3	(416) 864-2000	06-23113

	ont.)			A	M RADIO STA	TIONS
	CHUM	1050	50,000 DA-2	1331 Yonge St., M4T 1Y1	(416) 925-6666	06-22063
	CJBC	860	50,000	Box 500, Terminal A, M5W 1E6	(416) 925-3311	062-17796
	CKEY	590	10,000 DA-2	1 Yonge St., M5E 1G1	(416) 361-1281	06-23456
	CKFH	1430	50,000 DA-2	1 Grenville St., M4Y 1A2	(416) 923-0921	
renton	CJTN	1270	1,000	Box 386, 74 Dundas St. W.	(613) 392-1237	
Nawa	CJWA	1240	1,000 D/250 N	Box 1220, 73 Broadway Ave., POS 1K0	(705) 856-2328	
Welland	CHOW	1470	10,000 D/2,500 N/DA-2	Regional Rd. 23, L3B 3N5	(416) 732-4433	
Windsor	CBE	1550	10,000 DA-1	267 Pelissier St., N9A 4K4	(519) 254-5116	064-77622
	CBEF	540	2,500 D/5,000 N/DA-1	267 rue Pelissier, N9A 4K4	(519) 254-5116	064-77622
	CKLW	800	50,000 DA-2	1640 Quellette Ave., N8X 1L1	(519) 258-8888	
	CKWW	580	500 DA-1	1150 Ouellette Ave., N9A 1E2	(519) 252-5751	064-77640
Wingham	CKNX	920	10,000 D/1,000 N/DA-2	Carling Terrace, Wingham, NOG 2W0	(519) 357-1310	029-5461
Woodstock	CKDK	1340	1,000 D/250 N	Box 100, N4S 7W7; 290 Dundas St.	(519) 539-7451	064-74136
MANITO						
Altona	CFAM	950	10,000 DA-2	Box 950	(204) 324-6464	07-57600
Boissevain	CJRB	1220	10,000 DA-2	Box 950, Altona	(204) 534-6000	07-57600
Brandon	CKLQ	1570	10,000 DA-N	Box 490, R7A 5Z4	(204) 725-1570	
Ob 1 ***	CKX	1150	50,000 D/10,000 N/DA-2	2940 Victoria Ave., R7A 6A5	(204) 728-1150	07-50271
Churchill	CHFC	1230	250	Box 640, R0B 0E0	(204) 856-2611	076-6653
Cross Lake	CFNC	1490	25	c/o Native Communications Inc.		
Dauphin	CKDM	730	10,000 D/5,000 N/DA-N	27-3rd Ave. NE., R7N 2V5	(204) 638-3230	
Flin Flon	CFAR	590	10,000 D/1,000 N/DA-D	Box 430, R8A 1N3	(204) 687-3469	
Neepawa	(new)	1400	100			
Portage LaPrairie	CFRY	920	10,000 DA-2	1500 Saskatchewan Ave. W., R1N 0N6	(204) 857-5111	07-57559
St. Boniface	CKSB	1050	10,000 DA-N	CP 160, Winnipeg, R3C 2H1	(204) 247-4843	
Steinbach	CHSM	1250	10,000 DA-2	see CFAM Altona		
The Pas	CJAR	1240	1,000 D/500 N	Box 2683, 328 Fischer Ave.	(204) 623-5307	
Thompson	CHTM	610	1,000	201 Hayes Rd.	(204) 778-7361	
Virden	(new)	1490	250		-	
Winnipeg	CBW	990	50,000	Box 160, 541 Portage Ave., R3C 2H1	(204) 775-8351	075-7780
	CFRW	1290	10,000 DA-2	432 Main St., R3B 2Z7	(204) 957-0000	07-55135
	CJOB	680	50,000 D/25,000 N/DA-N	930 Portage Ave., R3G 0P8	(204) 786-2471	
	CKJS	810	10,000 DA-1	191 Lombard Ave., R3B 0X1	(204) 947-6641	
	CKRC	630	10,000 DA-2	Box 9700, R3C 3E5	(204) 942-2231	07-57885
	CKY	580	50,000 DA-2	Polo Park, R3G 0L7	(204) 755-0371	07-57745
SASKA	ГСНІ	EW.	AN			
F-4		1280	10,000 DA-2	Box 365, 1134 5th St., S4A 2A4	(306) 634-7224	
Estevan	CJSL			see CBC (CBK) Regina		
Estevan Gravelbourg	CJSL CFRG	690	5,000 DA-N	occ obc (obit) riogina		
Gravelbourg			5,000 DA-N 1,000 D/250 N	Centre St.	(306) 236-6494	074-2512
Gravelbourg Meadow Lake	CFRG	690				074-2512
Gravelbourg Meadow Lake Melfort	CFRG CJNS	690 1240	1,000 D/250 N	Centre St. Box 1420	(306) 752-2587	
Gravelbourg Meadow Lake Melfort Moose Jaw	CFRG CJNS CJVR	690 1240 1420	1,000 D/250 N 10,000 DA-N 10,000 DA-N	Centre St. Box 1420 116 Main N., S6H 3J7	(306) 752-2587 (306) 692-6464	071-2911
Gravelbourg Meadow Lake Melfort Moose Jaw North Battleford	CFRG CJNS CJVR CHAB	690 1240 1420 800 1050	1,000 D/250 N 10,000 DA-N 10,000 DA-N 10,000 DA-N	Centre St. Box 1420 116 Main N., S6H 3J7 Box 1460, S9A 2Z5	(306) 752-2587 (306) 692-6464 (306) 445-2477	071-29112 074-2512
Gravelbourg Meadow Lake Melfort Moose Jaw North Battleford Prince Albert	CFRG CJNS CJVR CHAB CJNB CKBI	690 1240 1420 800 1050 900	1,000 D/250 N 10,000 DA-N 10,000 DA-N 10,000 DA-N 10,000 DA-N	Centre St. Box 1420 116 Main N., S6H 3J7 Box 1460, S9A 2Z5 22-10 St. E.	(306) 752-2587 (306) 692-6464 (306) 445-2477 (306) 763-7421	071-2911: 074-2512 07-42913:
Gravelbourg Meadow Lake Melfort Moose Jaw North Battleford Prince Albert	CFRG CJNS CJVR CHAB CJNB CKBI CBK	690 1240 1420 800 1050 900 540	1,000 D/250 N 10,000 DA-N 10,000 DA-N 10,000 DA-N 10,000 DA-N 50,000	Centre St. Box 1420 116 Main N., S6H 3J7 Box 1460, S9A 2Z5 22-10 St. E. 1840 McIntyre St., S4P 2R1	(306) 752-2587 (306) 692-6464 (306) 445-2477 (306) 763-7421 (306) 523-6641	071-2911 074-2512 07-42913 071-2289
Gravelbourg Meadow Lake Melfort Moose Jaw North Battleford Prince Albert	CFRG CJNS CJVR CHAB CJNB CKBI CBK CJME	690 1240 1420 800 1050 900 540 1300	1,000 D/250 N 10,000 DA-N 10,000 DA-N 10,000 DA-N 10,000 DA-N 50,000 10,000 DA-2	Centre St. Box 1420 116 Main N., S6H 3J7 Box 1460, S9A 2Z5 22-10 St. E. 1840 McIntyre St., S4P 2R1 Box 1300, S4P 3B9	(306) 752-2587 (306) 692-6464 (306) 445-2477 (306) 763-7421 (306) 523-6641 (306) 569-1300	071-29112 074-2512 07-42913 071-2289 071-2693
Gravelbourg Meadow Lake Melfort Moose Jaw North Battleford Prince Albert	CFRG CJNS CJVR CHAB CJNB CKBI CBK CJME CKCK	690 1240 1420 800 1050 900 540 1300 620	1,000 D/250 N 10,000 DA-N 10,000 DA-N 10,000 DA-N 10,000 DA-N 50,000 10,000 DA-2 10,000 DA-2	Centre St. Box 1420 116 Main N., S6H 3J7 Box 1460, S9A 2Z5 22-10 St. E. 1840 McIntyre St., S4P 2R1 Box 1300, S4P 3B9 Box 6200, S4P 3H7	(306) 752-2587 (306) 692-6464 (306) 445-2477 (306) 763-7421 (306) 523-6641 (306) 569-1300 (306) 522-8591	071-2911 074-2512 07-42913 071-2289 071-2693 071-2433
Gravelbourg Meadow Lake Melfort Moose Jaw North Battleford Prince Albert Regina	CFRG CJNS CJVR CHAB CJNB CKBI CBK CJME CKCK CKRM	690 1240 1420 800 1050 900 540 1300 620 980	1,000 D/250 N 10,000 DA-N 10,000 DA-N 10,000 DA-N 10,000 DA-N 50,000 10,000 DA-2 10,000 DA-2 10,000 D/5,000 N/DA-2	Centre St. Box 1420 116 Main N., S6H 3J7 Box 1460, S9A 2Z5 22-10 St. E. 1840 McIntyre St., S4P 2R1 Box 1300, S4P 3B9 Box 6200, S4P 3H7 Box 9800, S4P 3J4; 2060 Halifax St.	(306) 752-2587 (306) 692-6464 (306) 445-2477 (306) 763-7421 (306) 523-6641 (306) 569-1300 (306) 522-8591 (306) 523-5661	071-2911: 074-2512: 07-42913: 071-2289 071-2693 071-2433
Gravelbourg Meadow Lake Melfort Moose Jaw North Battleford Prince Albert Regina	CFRG CJNS CJVR CHAB CJNB CKBI CBK CJME CKCK CKRM CKKR	690 1240 1420 800 1050 900 540 1300 620 980 1330	1,000 D/250 N 10,000 DA-N 10,000 DA-N 10,000 DA-N 10,000 DA-N 50,000 10,000 DA-2 10,000 DA-2 10,000 D/5,000 N/DA-2 10,000 DA-1	Centre St. Box 1420 116 Main N., S6H 3J7 Box 1460, S9A 2Z5 22-10 St. E. 1840 McIntyre St., S4P 2R1 Box 1300, S4P 3B9 Box 6200, S4P 3H7 Box 9800, S4P 3J4; 2060 Halifax St. Box 490, S0L 2V0	(306) 752-2587 (306) 692-6464 (306) 445-2477 (306) 763-7421 (306) 523-6641 (306) 569-1300 (306) 522-8591	071-2911: 074-2512: 07-42913: 071-2289 071-2693 071-2433
Gravelbourg Meadow Lake Melfort Moose Jaw North Battleford Prince Albert Regina	CFRG CJNS CJVR CHAB CJNB CKBI CBK CJME CKCK CKRM CKKR	690 1240 1420 800 1050 900 540 1300 620 980 1330 860	1,000 D/250 N 10,000 DA-N 10,000 DA-N 10,000 DA-N 10,000 DA-N 50,000 10,000 DA-2 10,000 DA-2 10,000 DA-2 10,000 DA-1 10,000 DA-2	Centre St. Box 1420 116 Main N., S6H 3J7 Box 1460, S9A 2Z5 22-10 St. E. 1840 McIntyre St., S4P 2R1 Box 1300, S4P 3B9 Box 6200, S4P 3H7 Box 9800, S4P 3J4; 2060 Halifax St. Box 490, S0L 2V0 see CBC (CBK) Regina	(306) 752-2587 (306) 692-6464 (306) 445-2477 (306) 763-7421 (306) 523-6641 (306) 569-1300 (306) 522-8591 (306) 523-5661 (306) 882-2686	071-2911: 074-2512: 07-42913: 071-2289 071-2693 071-2433 071-2710
Gravelbourg Meadow Lake Melfort Moose Jaw North Battleford Prince Albert Regina	CFRG CJNS CJVR CHAB CJNB CKBI CBK CJME CKCK CKRM CKKR CFNS CFQC	690 1240 1420 800 1050 900 540 1300 620 980 1330 860 600	1,000 D/250 N 10,000 DA-N 10,000 DA-N 10,000 DA-N 10,000 DA-N 50,000 10,000 DA-2 10,000 DA-2 10,000 DA-1 10,000 DA-2 10,000 DA-1 10,000 DA-2 10,000 DA-2	Centre St. Box 1420 116 Main N., S6H 3J7 Box 1460, S9A 2Z5 22-10 St. E. 1840 McIntyre St., S4P 2R1 Box 1300, S4P 3B9 Box 6200, S4P 3H7 Box 9800, S4P 3J4; 2060 Halifax St. Box 490, S0L 2V0 see CBC (CBK) Regina 216-1st Ave. N., S7K 3W3	(306) 752-2587 (306) 692-6464 (306) 445-2477 (306) 763-7421 (306) 523-6641 (306) 569-1300 (306) 522-8591 (306) 523-5661 (306) 882-2686	071-2911: 074-2512: 07-42913: 071-2289 071-2693 071-2433 071-2710
Gravelbourg Meadow Lake Melfort Moose Jaw North Battleford Prince Albert Regina	CFRG CJNS CJVR CHAB CJNB CKBI CBK CJME CKCK CKRM CKKR CFNS CFQC CJWW	690 1240 1420 800 1050 900 540 1300 620 980 1330 860 600 1370	1,000 D/250 N 10,000 DA-N 10,000 DA-N 10,000 DA-N 10,000 DA-N 50,000 10,000 DA-2 10,000 DA-2 10,000 DA-1 10,000 DA-2 10,000 DA-2 10,000 DA-2 10,000 DA-2 10,000 DA-2	Centre St. Box 1420 116 Main N., S6H 3J7 Box 1460, S9A 2Z5 22-10 St. E. 1840 McIntyre St., S4P 2R1 Box 1300, S4P 3B9 Box 6200, S4P 3H7 Box 9800, S4P 3J4; 2060 Halifax St. Box 490, S0L 2V0 see CBC (CBK) Regina 216-1st Ave. N., S7K 3W3 1426 Alexandra Ave., S7K 3B9	(306) 752-2587 (306) 692-6464 (306) 445-2477 (306) 763-7421 (306) 523-6641 (306) 569-1300 (306) 522-8591 (306) 523-5661 (306) 882-2686 (306) 665-8600 (306) 244-1975	071-29112 074-2512 07-429132 071-2289 071-2693 071-2433 071-2710
Gravelbourg Meadow Lake Melfort Moose Jaw North Battleford Prince Albert Regina  Rosetown Saskatoon	CFRG CJNS CJVR CHAB CJNB CKBI CBK CJME CKCK CKRM CKCK CKRM CKKR CFNS CFQC CJWW CKOM	690 1240 1420 800 1050 900 540 1300 620 980 1330 860 600 1370 1250	1,000 D/250 N 10,000 DA-N 10,000 DA-N 10,000 DA-N 10,000 DA-N 50,000 10,000 DA-2 10,000 DA-2 10,000 DA-1 10,000 DA-2 10,000 DA-2 10,000 DA-2 10,000 DA-2 10,000 DA-2 10,000 DA-2	Centre St. Box 1420 116 Main N., S6H 3J7 Box 1460, S9A 2Z5 22-10 St. E. 1840 McIntyre St., S4P 2R1 Box 1300, S4P 3B9 Box 6200, S4P 3H7 Box 9800, S4P 3J4; 2060 Halifax St. Box 490, S0L 2V0 see CBC (CBK) Regina 216-1st Ave. N., S7K 3W3 1426 Alexandra Ave., S7K 3B9 3333-8th St. E., Sub P.O. 37, S7H 0W3	(306) 752-2587 (306) 692-6464 (306) 445-2477 (306) 763-7421 (306) 523-6641 (306) 569-1300 (306) 522-8591 (306) 523-5661 (306) 882-2686 (306) 665-8600 (306) 244-1975 (306) 374-3690	071-2911: 074-2512: 07-42913: 071-2289 071-2693 071-2433 071-2710
Gravelbourg Meadow Lake Melfort Moose Jaw North Battleford Prince Albert Regina  Rosetown Saskatoon	CFRG CJNS CJVR CHAB CJNB CKBI CBK CJME CKCK CKRM CKKR CFNS CFQC CJWW CKOM CJSN	690 1240 1420 800 1050 900 540 1300 620 980 1330 860 600 1370 1250 1490	1,000 D/250 N 10,000 DA-N 10,000 DA-N 10,000 DA-N 10,000 DA-N 50,000 10,000 DA-2 10,000 DA-2 10,000 DA-1 10,000 DA-2 10,000 DA-2 10,000 DA-2 10,000 DA-2 10,000 DA-2 10,000 DA-2 10,000 DA-N 1,000 D/250 N	Centre St. Box 1420 116 Main N., S6H 3J7 Box 1460, S9A 2Z5 22-10 St. E. 1840 McIntyre St., S4P 2R1 Box 1300, S4P 3B9 Box 6200, S4P 3H7 Box 9800, S4P 3J4; 2060 Halifax St. Box 490, S0L 2V0 see CBC (CBK) Regina 216-1st Ave. N., S7K 3W3 1426 Alexandra Ave., S7K 3B9 3333-8th St. E., Sub P.O. 37, S7H 0W3 see CKSW Swift Current	(306) 752-2587 (306) 692-6464 (306) 445-2477 (306) 763-7421 (306) 523-6641 (306) 569-1300 (306) 522-8591 (306) 523-5661 (306) 882-2686 (306) 882-2686 (306) 244-1975 (306) 374-3690 (306) 297-2671	071-29112 074-25123 07-429133 071-2289 071-2693 071-2433 071-2710
Gravelbourg Meadow Lake Melfort Moose Jaw North Battleford Prince Albert Regina  Rosetown Saskatoon  Shaunavon Swift Current	CFRG CJNS CJVR CHAB CJNB CKBI CBK CJME CKCK CKRM CKKR CFNS CFQC CJWW CKOM CJSN CKSW	690 1240 1420 800 1050 900 540 1300 620 980 1330 860 600 1370 1250 1490 570	1,000 D/250 N 10,000 DA-N 10,000 DA-N 10,000 DA-N 50,000 10,000 DA-2 10,000 DA-2 10,000 DA-2 10,000 DA-1 10,000 DA-2 10,000 DA-2 10,000 DA-2 10,000 DA-2 10,000 DA-2 10,000 DA-2 10,000 DA-N 1,000 DA-2	Centre St. Box 1420 116 Main N., S6H 3J7 Box 1460, S9A 2Z5 22-10 St. E. 1840 McIntyre St., S4P 2R1 Box 1300, S4P 3B9 Box 6200, S4P 3H7 Box 9800, S4P 3J4; 2060 Halifax St. Box 490, S0L 2V0 see CBC (CBK) Regina 216-1st Ave. N., S7K 3W3 1426 Alexandra Ave., S7K 3B9 3333-8th St. E., Sub P.O. 37, S7H 0W3 see CKSW Swift Current Box 370, S9H 3W2	(306) 752-2587 (306) 692-6464 (306) 445-2477 (306) 763-7421 (306) 523-6641 (306) 569-1300 (306) 522-8591 (306) 523-5661 (306) 882-2686 (306) 882-2686 (306) 244-1975 (306) 374-3690 (306) 297-2671 (306) 773-4605	071-29112 074-25123 07-429133 071-2289 071-2693 071-2433 071-2710
Gravelbourg Meadow Lake Melfort Moose Jaw North Battleford Prince Albert Regina  Rosetown Saskatoon  Shaunavon Swift Current Weyburn	CFRG CJNS CJVR CHAB CJNB CKBI CBK CJME CKCK CKRM CKKR CFNS CFQC CJWW CKOM CJSN CKSW CFSL	690 1240 1420 800 1050 900 540 1300 620 980 1330 860 600 1370 1250 1490 570 1190	1,000 D/250 N 10,000 DA-N 10,000 DA-N 10,000 DA-N 10,000 DA-N 50,000 10,000 DA-2 10,000 DA-2 10,000 DA-1 10,000 DA-2	Centre St. Box 1420 116 Main N., S6H 3J7 Box 1460, S9A 2Z5 22-10 St. E. 1840 McIntyre St., S4P 2R1 Box 1300, S4P 3B9 Box 6200, S4P 3H7 Box 9800, S4P 3J4; 2060 Halifax St. Box 490, S0L 2V0 see CBC (CBK) Regina 216-1st Ave. N., S7K 3W3 1426 Alexandra Ave., S7K 3B9 3333-8th St. E., Sub P.O. 37, S7H 0W3 see CKSW Swift Current Box 370, S9H 3W2 Box 340, 305 Souris Ave., S4H 2K2	(306) 752-2587 (306) 692-6464 (306) 445-2477 (306) 763-7421 (306) 523-6641 (306) 569-1300 (306) 522-8591 (306) 523-5661 (306) 882-2686 (306) 882-2686 (306) 244-1975 (306) 374-3690 (306) 297-2671 (306) 773-4605 (306) 842-4666	071-29112 074-25123 07-429133 071-2289 071-2693 071-2433 071-2710 074-2228
Gravelbourg Meadow Lake Melfort Moose Jaw North Battleford Prince Albert Regina  Rosetown Saskatoon  Shaunavon Swift Current Weyburn Yorkton	CFRG CJNS CJVR CHAB CJNB CKBI CBK CJME CKCK CKRM CKKR CFNS CFQC CJWW CKOM CJSN CKSW CFSL CJGX	690 1240 1420 800 1050 900 540 1300 620 980 1330 860 600 1370 1250 1490 570	1,000 D/250 N 10,000 DA-N 10,000 DA-N 10,000 DA-N 50,000 10,000 DA-2 10,000 DA-2 10,000 DA-2 10,000 DA-1 10,000 DA-2 10,000 DA-2 10,000 DA-2 10,000 DA-2 10,000 DA-2 10,000 DA-2 10,000 DA-N 1,000 DA-2	Centre St. Box 1420 116 Main N., S6H 3J7 Box 1460, S9A 2Z5 22-10 St. E. 1840 McIntyre St., S4P 2R1 Box 1300, S4P 3B9 Box 6200, S4P 3H7 Box 9800, S4P 3J4; 2060 Halifax St. Box 490, S0L 2V0 see CBC (CBK) Regina 216-1st Ave. N., S7K 3W3 1426 Alexandra Ave., S7K 3B9 3333-8th St. E., Sub P.O. 37, S7H 0W3 see CKSW Swift Current Box 370, S9H 3W2	(306) 752-2587 (306) 692-6464 (306) 445-2477 (306) 763-7421 (306) 523-6641 (306) 569-1300 (306) 522-8591 (306) 523-5661 (306) 882-2686 (306) 882-2686 (306) 244-1975 (306) 374-3690 (306) 297-2671 (306) 773-4605	074-25127 074-25127 074-25127 07-429132 071-2289 071-2693 071-2433 071-2710 074-2228
Gravelbourg Meadow Lake Melfort Moose Jaw North Battleford Prince Albert Regina  Rosetown Saskatoon  Shaunavon Swift Current Weyburn Yorkton	CFRG CJNS CJVR CHAB CJNB CKBI CBK CJME CKCK CKRM CKKR CFNS CFQC CJWW CKOM CJSN CKSW CFSL CJGX	690 1240 1420 800 1050 900 540 1300 620 980 1330 860 600 1370 1250 1490 570 1190	1,000 D/250 N 10,000 DA-N 10,000 DA-N 10,000 DA-N 10,000 DA-N 50,000 10,000 DA-2 10,000 DA-2 10,000 DA-1 10,000 DA-2	Centre St. Box 1420 116 Main N., S6H 3J7 Box 1460, S9A 2Z5 22-10 St. E. 1840 McIntyre St., S4P 2R1 Box 1300, S4P 3B9 Box 6200, S4P 3H7 Box 9800, S4P 3J4; 2060 Halifax St. Box 490, S0L 2V0 see CBC (CBK) Regina 216-1st Ave. N., S7K 3W3 1426 Alexandra Ave., S7K 3B9 3333-8th St. E., Sub P.O. 37, S7H 0W3 see CKSW Swift Current Box 370, S9H 3W2 Box 340, 305 Souris Ave., S4H 2K2	(306) 752-2587 (306) 692-6464 (306) 445-2477 (306) 763-7421 (306) 523-6641 (306) 569-1300 (306) 522-8591 (306) 523-5661 (306) 882-2686 (306) 882-2686 (306) 244-1975 (306) 374-3690 (306) 297-2671 (306) 773-4605 (306) 842-4666	071-29112 074-25123 07-429133 071-2289 071-2693 071-2433 071-2710 074-2228
Gravelbourg Meadow Lake Melfort Moose Jaw North Battleford Prince Albert Regina  Rosetown Saskatoon  Shaunavon Swift Current Weyburn Yorkton  ALBER	CFRG CJNS CJVR CHAB CJNB CKBI CBK CJME CKCK CKRM CKKR CFNS CFQC CJWW CKOM CJSN CKSW CFSL CJGX	690 1240 1420 800 1050 900 540 1300 620 980 1330 860 600 1370 1250 1490 570 1190	1,000 D/250 N 10,000 DA-N 10,000 DA-N 10,000 DA-N 10,000 DA-N 50,000 10,000 DA-2 10,000 DA-2 10,000 DA-1 10,000 DA-2	Centre St. Box 1420 116 Main N., S6H 3J7 Box 1460, S9A 2Z5 22-10 St. E. 1840 McIntyre St., S4P 2R1 Box 1300, S4P 3B9 Box 6200, S4P 3H7 Box 9800, S4P 3J4; 2060 Halifax St. Box 490, S0L 2V0 see CBC (CBK) Regina 216-1st Ave. N., S7K 3W3 1426 Alexandra Ave., S7K 3B9 3333-8th St. E., Sub P.O. 37, S7H 0W3 see CKSW Swift Current Box 370, S9H 3W2 Box 340, 305 Souris Ave., S4H 2K2	(306) 752-2587 (306) 692-6464 (306) 445-2477 (306) 763-7421 (306) 523-6641 (306) 569-1300 (306) 522-8591 (306) 523-5661 (306) 882-2686 (306) 882-2686 (306) 244-1975 (306) 374-3690 (306) 297-2671 (306) 773-4605 (306) 842-4666	071-29112 074-25123 07-429133 071-2289 071-2693 071-2433 071-2710 074-2228
Gravelbourg Meadow Lake Melfort Moose Jaw North Battleford Prince Albert Regina  Rosetown Saskatoon  Shaunavon Swift Current Weyburn Yorkton  ALBERT  Blairmore	CFRG CJNS CJVR CHAB CJNB CKBI CBK CJME CKCK CKRM CKKR CFNS CFQC CJWW CKOM CJSN CKSW CFSL CJGX	690 1240 1420 800 1050 900 540 1300 620 980 1330 860 600 1370 1250 1490 570 1190 940	1,000 D/250 N 10,000 DA-N 10,000 DA-N 10,000 DA-N 10,000 DA-N 50,000 10,000 DA-2 10,000 DA-2 10,000 DA-2 10,000 DA-1 10,000 DA-2 10,000 DA-2 10,000 DA-2 10,000 DA-2 10,000 DA-2 10,000 DA-2 10,000 DA-N 1,000 D/250 N 10,000 DA-2 10,000 DA-2 10,000 DA-2	Centre St.  Box 1420  116 Main N., S6H 3J7  Box 1460, S9A 2Z5  22-10 St. E.  1840 McIntyre St., S4P 2R1  Box 1300, S4P 3B9  Box 6200, S4P 3H7  Box 9800, S4P 3J4; 2060 Halifax St.  Box 490, S0L 2V0  see CBC (CBK) Regina  216-1st Ave. N., S7K 3W3  1426 Alexandra Ave., S7K 3B9  3333-8th St. E., Sub P.O. 37, S7H 0W3  see CKSW Swift Current  Box 370, S9H 3W2  Box 340, 305 Souris Ave., S4H 2K2  Box 9400, S3N 1G2	(306) 752-2587 (306) 692-6464 (306) 445-2477 (306) 763-7421 (306) 523-6641 (306) 569-1300 (306) 522-8591 (306) 523-5661 (306) 882-2686 (306) 882-2686 (306) 244-1975 (306) 374-3690 (306) 297-2671 (306) 773-4605 (306) 773-4605 (306) 782-2256	071-29113 074-25123 07-429133 071-2289 071-2693 071-2433 071-2710 074-2228 071-21163 071-21163
Gravelbourg Meadow Lake Melfort Moose Jaw North Battleford Prince Albert Regina  Rosetown Saskatoon  Shaunavon Swift Current Weyburn Yorkton  ALBERT  Blairmore Brooks	CFRG CJNS CJVR CHAB CJNB CKBI CKCK CKRM CKCK CKRM CKKR CFNS CFQC CJWW CKOM CJSN CKSW CFSL CJGX CJPR	690 1240 1420 800 1050 900 540 1300 620 980 1330 860 600 1370 1250 1490 570 1190 940	1,000 D/250 N 10,000 DA-N 10,000 DA-N 10,000 DA-N 10,000 DA-N 50,000 10,000 DA-2 10,000 DA-2 10,000 DA-1 10,000 DA-2 10,000 DA-2 10,000 DA-2 10,000 DA-2 10,000 DA-2 10,000 DA-2 10,000 DA-N 1,000 D/250 N 10,000 DA-N 1,000 DA-N 1,000 DA-N 1,000 DA-N	Centre St.  Box 1420  116 Main N., S6H 3J7  Box 1460, S9A 2Z5  22-10 St. E.  1840 McIntyre St., S4P 2R1  Box 1300, S4P 3B9  Box 6200, S4P 3H7  Box 9800, S4P 3J4; 2060 Halifax St.  Box 490, S0L 2V0  see CBC (CBK) Regina  216-1st Ave. N., S7K 3W3  1426 Alexandra Ave., S7K 3B9  3333-8th St. E., Sub P.O. 37, S7H 0W3  see CKSW Swift Current  Box 370, S9H 3W2  Box 340, 305 Souris Ave., S4H 2K2  Box 9400, S3N 1G2	(306) 752-2587 (306) 692-6464 (306) 445-2477 (306) 763-7421 (306) 523-6641 (306) 569-1300 (306) 522-8591 (306) 523-5661 (306) 882-2686 (306) 882-2686 (306) 244-1975 (306) 374-3690 (306) 297-2671 (306) 773-4605 (306) 773-4605 (306) 782-2256	071-2911: 074-2512: 07-42913: 071-2289: 071-2693: 071-2433: 071-2710: 074-2228: 071-2116: 074-2151:
Gravelbourg Meadow Lake Melfort Moose Jaw North Battleford Prince Albert Regina  Rosetown Saskatoon  Shaunavon Swift Current Weyburn Yorkton  ALBERT  Blairmore Brooks	CFRG CJNS CJVR CHAB CJNB CKBI CKCK CKRM CKCK CKRM CKKR CFNS CFQC CJWW CKOM CJSN CKSW CFSL CJGX  CJPR CKBR	690 1240 1420 800 1050 900 540 1300 620 980 1330 860 600 1370 1250 1490 570 1190 940	1,000 D/250 N 10,000 DA-N 10,000 DA-N 10,000 DA-N 10,000 DA-N 50,000 10,000 DA-2 10,000 DA-2 10,000 DA-2 10,000 DA-1 10,000 DA-2 10,000 DA-2 10,000 DA-2 10,000 DA-2 10,000 DA-2 10,000 DA-N 1,000 D/250 N 10,000 DA-N 1,000 DA-N 1,000 DA-N 1,000 D/5,000 N/DA-N 10,000 DA-N	Centre St.  Box 1420  116 Main N., S6H 3J7  Box 1460, S9A 2Z5  22-10 St. E.  1840 McIntyre St., S4P 2R1  Box 1300, S4P 3B9  Box 6200, S4P 3H7  Box 9800, S4P 3J4; 2060 Halifax St.  Box 490, S0L 2V0  see CBC (CBK) Regina  216-1st Ave. N., S7K 3W3  1426 Alexandra Ave., S7K 3B9  3333-8th St. E., Sub P.O. 37, S7H 0W3  see CKSW Swift Current  Box 370, S9H 3W2  Box 340, 305 Souris Ave., S4H 2K2  Box 9400, S3N 1G2	(306) 752-2587 (306) 692-6464 (306) 445-2477 (306) 763-7421 (306) 523-6641 (306) 569-1300 (306) 522-8591 (306) 523-5661 (306) 882-2686 (306) 882-2686 (306) 244-1975 (306) 374-3690 (306) 297-2671 (306) 773-4605 (306) 773-4605 (306) 782-2256	071-2911 074-2512 07-42913 071-2289 071-2693 071-2433 071-2710 074-2228 071-2116 071-2116 074-21513
Gravelbourg Meadow Lake Melfort Moose Jaw North Battleford Prince Albert Regina  Rosetown Saskatoon  Shaunavon Swift Current Weyburn Yorkton  ALBERT  Blairmore Brooks	CFRG CJNS CJVR CHAB CJNB CKBI CBK CJME CKCK CKRM CKKR CFNS CFQC CJWW CKOM CJSN CKSW CFSL CJGX  CJPR CKBR CBR	690 1240 1420 800 1050 900 540 1300 620 980 1330 860 600 1370 1250 1490 570 1190 940	1,000 D/250 N 10,000 DA-N 10,000 DA-N 10,000 DA-N 10,000 DA-N 50,000 10,000 DA-2 10,000 DA-2 10,000 DA-2 10,000 DA-1 10,000 DA-2 10,000 DA-2 10,000 DA-2 10,000 DA-2 10,000 DA-2 10,000 DA-2 10,000 DA-N 1,000 D/250 N 10,000 DA-N 1,000 DA-N	Centre St. Box 1420 116 Main N., S6H 3J7 Box 1460, S9A 2Z5 22-10 St. E. 1840 McIntyre St., S4P 2R1 Box 1300, S4P 3B9 Box 6200, S4P 3H7 Box 9800, S4P 3J4; 2060 Halifax St. Box 490, S0L 2V0 see CBC (CBK) Regina 216-1st Ave. N., S7K 3W3 1426 Alexandra Ave., S7K 3B9 3333-8th St. E., Sub P.O. 37, S7H 0W3 see CKSW Swift Current Box 370, S9H 3W2 Box 340, 305 Souris Ave., S4H 2K2 Box 9400, S3N 1G2  Box 780 Box 780 Box 780 Box 780 Box 2640, 1724 Westmount Blvd., T2P 2M7 1301-17th Ave., SW., T2T 0C5	(306) 752-2587 (306) 692-6464 (306) 445-2477 (306) 763-7421 (306) 523-6641 (306) 569-1300 (306) 522-8591 (306) 523-5661 (306) 882-2686 (306) 882-2686 (306) 244-1975 (306) 374-3690 (306) 297-2671 (306) 773-4605 (306) 773-4605 (306) 842-4666 (306) 782-2256	071-2911 074-2512 07-42913 071-2289 071-2693 071-2433 071-2710 074-2228 071-2116 071-2116 074-21513
Gravelbourg Meadow Lake Melfort Moose Jaw North Battleford Prince Albert Regina  Rosetown Saskatoon  Shaunavon Swift Current Weyburn Yorkton  ALBERT  Blairmore Brooks	CFRG CJNS CJVR CHAB CJNB CKBI CBK CJME CKCK CKRM CKKR CFNS CFQC CJWW CKOM CJSN CKSW CFSL CJGX  CJPR CKBR CFAC CFCN	690 1240 1420 800 1050 900 540 1300 620 980 1330 860 600 1370 1250 1490 570 1190 940	1,000 D/250 N 10,000 DA-N 10,000 DA-N 10,000 DA-N 10,000 DA-N 50,000 10,000 DA-2 10,000 DA-2 10,000 DA-2 10,000 DA-1 10,000 DA-2 10,000 DA-2 10,000 DA-2 10,000 DA-2 10,000 DA-2 10,000 DA-N 1,000 D/250 N 10,000 DA-N 1,000 DA-N 1,000 DA-N 1,000 DA-N 50,000 DA-N 50,000 DA-N 50,000 DA-N 50,000 DA-N	Centre St. Box 1420 116 Main N., S6H 3J7 Box 1460, S9A 2Z5 22-10 St. E. 1840 McIntyre St., S4P 2R1 Box 1300, S4P 3B9 Box 6200, S4P 3H7 Box 9800, S4P 3J4; 2060 Halifax St. Box 490, S0L 2V0 see CBC (CBK) Regina 216-1st Ave. N., S7K 3W3 1426 Alexandra Ave., S7K 3B9 3333-8th St. E., Sub P.O. 37, S7H 0W3 see CKSW Swift Current Box 370, S9H 3W2 Box 340, 305 Souris Ave., S4H 2K2 Box 9400, S3N 1G2  Box 780 Box 780 Box 780 Box 2640, 1724 Westmount Blvd., T2P 2M7 1301-17th Ave., SW., T2T 0C5 Broadcast House; Box 7060, Stn. E., T3C 31	(306) 752-2587 (306) 692-6464 (306) 445-2477 (306) 763-7421 (306) 523-6641 (306) 569-1300 (306) 522-8591 (306) 523-5661 (306) 882-2686 (306) 882-2686 (306) 244-1975 (306) 374-3690 (306) 297-2671 (306) 773-4605 (306) 773-4605 (306) 782-2256 (403) 782-2256	071-2911: 074-2512 07-42913: 071-2289 071-2693 071-2433 071-2710 074-2228 071-2116: 074-2151: 074-2151:
Gravelbourg Meadow Lake Melfort Moose Jaw North Battleford Prince Albert Regina  Rosetown Saskatoon  Shaunavon Swift Current	CFRG CJNS CJVR CHAB CJNB CKBI CKCK CKRM CKKR CFNS CFQC CJWW CKOM CJSN CKSW CFSL CJGX  CJGX  CJPR CKBR CFAC CFCN CHQR	690 1240 1420 800 1050 900 540 1300 620 980 1330 860 600 1370 1250 1490 570 1190 940	1,000 D/250 N 10,000 DA-N 10,000 DA-N 10,000 DA-N 10,000 DA-N 50,000 10,000 DA-2 10,000 DA-N 1,000 D/250 N 10,000 DA-N 1,000 DA-N 1,000 DA-N 1,000 DA-N 50,000 DA-N 50,000 DA-N 50,000 DA-N 50,000 DA-N 50,000 DA-2	Centre St. Box 1420 116 Main N., S6H 3J7 Box 1460, S9A 2Z5 22-10 St. E. 1840 McIntyre St., S4P 2R1 Box 1300, S4P 3B9 Box 6200, S4P 3H7 Box 9800, S4P 3J4; 2060 Halifax St. Box 490, S0L 2V0 see CBC (CBK) Regina 216-1st Ave. N., S7K 3W3 1426 Alexandra Ave., S7K 3B9 3333-8th St. E., Sub P.O. 37, S7H 0W3 see CKSW Swift Current Box 370, S9H 3W2 Box 340, 305 Souris Ave., S4H 2K2 Box 9400, S3N 1G2  Box 780 Box 780 Box 780 Box 2640, 1724 Westmount Blvd., T2P 2M7 1301-17th Ave., SW., T2T 0C5 Broadcast House; Box 7060, Stn. E., T3C 3L 830 9th Ave., SW., T2P 1L7	(306) 752-2587 (306) 692-6464 (306) 445-2477 (306) 763-7421 (306) 523-6641 (306) 569-1300 (306) 522-8591 (306) 523-5661 (306) 882-2686 (306) 882-2686 (306) 244-1975 (306) 374-3690 (306) 297-2671 (306) 773-4605 (306) 773-4605 (306) 782-2256 (403) 782-2256 (403) 362-3418 (403) 283-8361 (403) 244-9311 (403) 246-7111 (403) 263-5522	071-29113 074-25123 07-429133 071-2289 071-2693 071-2433 071-2710 074-2228 071-21163 071-21163 074-21513
Gravelbourg Meadow Lake Melfort Moose Jaw North Battleford Prince Albert Regina  Rosetown Saskatoon  Shaunavon Swift Current Weyburn Yorkton  ALBERT  Blairmore Brooks	CFRG CJNS CJVR CHAB CJNB CKBI CKCK CKRM CKCKR CFNS CFQC CJWW CKSW CFSL CJGX  CKBR CFAC CFCN CKBR CFAC CFCN CKRM	690 1240 1420 800 1050 900 540 1300 620 980 1330 860 600 1370 1250 1490 570 1190 940 1490 1340 1010 960 1060 810 1140	1,000 D/250 N 10,000 DA-N 10,000 DA-N 10,000 DA-N 10,000 DA-N 50,000 10,000 DA-2 10,000 DA-N 1,000 D/250 N 10,000 DA-N 10,000 DA-N 10,000 DA-N 10,000 DA-N 50,000 DA-N 50,000 DA-N 50,000 DA-N 50,000 DA-N 50,000 DA-2 50,000 DA-2 50,000 DA-2	Centre St.  Box 1420  116 Main N., S6H 3J7  Box 1460, S9A 2Z5  22-10 St. E.  1840 McIntyre St., S4P 2R1  Box 1300, S4P 3B9  Box 6200, S4P 3H7  Box 9800, S4P 3J4; 2060 Halifax St.  Box 490, S0L 2V0  see CBC (CBK) Regina  216-1st Ave. N., S7K 3W3  1426 Alexandra Ave., S7K 3B9  3333-8th St. E., Sub P.O. 37, S7H 0W3  see CKSW Swift Current  Box 370, S9H 3W2  Box 340, 305 Souris Ave., S4H 2K2  Box 9400, S3N 1G2  Box 780  Box 780  Box 780  Box 780  Box 2640, 1724 Westmount Blvd., T2P 2M7  1301-17th Ave., SW., T2T 0C5  Broadcast House; Box 7060, Stn. E., T3C 31  830 9th Ave., SW., T2P 1L7  Box 1140, T2P 2M7	(306) 752-2587 (306) 692-6464 (306) 445-2477 (306) 763-7421 (306) 523-6641 (306) 569-1300 (306) 522-8591 (306) 523-5661 (306) 882-2686 (306) 882-2686 (306) 244-1975 (306) 374-3690 (306) 297-2671 (306) 773-4605 (306) 773-4605 (306) 842-4666 (306) 782-2256 (403) 362-3418 (403) 283-8361 (403) 283-8361 (403) 244-9311 -9 (403) 246-7111 (403) 263-5522 (403) 264-8000	071-29112 074-25123 07-429133 071-2289 071-2693 071-2433 071-2710 074-2228 071-21163 071-21163 074-21513 038-21633 038-21633
Gravelbourg Meadow Lake Melfort Moose Jaw North Battleford Prince Albert Regina  Rosetown Saskatoon  Shaunavon Swift Current Weyburn Yorkton  ALBERT  Blairmore Brooks Calgary	CFRG CJNS CJVR CHAB CJNB CKBI CKCK CKRM CKKR CFNS CFQC CJWW CKOM CJSN CKSW CFSL CJGX  CJGX  CJPR CKBR CFAC CFCN CHQR	690 1240 1420 800 1050 900 540 1300 620 980 1330 860 600 1370 1250 1490 570 1190 940	1,000 D/250 N 10,000 DA-N 10,000 DA-N 10,000 DA-N 10,000 DA-N 50,000 10,000 DA-2 10,000 DA-N 1,000 D/250 N 10,000 DA-N 1,000 DA-N 1,000 DA-N 1,000 DA-N 50,000 DA-N 50,000 DA-N 50,000 DA-N 50,000 DA-N 50,000 DA-2	Centre St. Box 1420 116 Main N., S6H 3J7 Box 1460, S9A 2Z5 22-10 St. E. 1840 McIntyre St., S4P 2R1 Box 1300, S4P 3B9 Box 6200, S4P 3H7 Box 9800, S4P 3J4; 2060 Halifax St. Box 490, S0L 2V0 see CBC (CBK) Regina 216-1st Ave. N., S7K 3W3 1426 Alexandra Ave., S7K 3B9 3333-8th St. E., Sub P.O. 37, S7H 0W3 see CKSW Swift Current Box 370, S9H 3W2 Box 340, 305 Souris Ave., S4H 2K2 Box 9400, S3N 1G2  Box 780 Box 780 Box 780 Box 2640, 1724 Westmount Blvd., T2P 2M7 1301-17th Ave., SW., T2T 0C5 Broadcast House; Box 7060, Stn. E., T3C 3L 830 9th Ave., SW., T2P 1L7	(306) 752-2587 (306) 692-6464 (306) 445-2477 (306) 763-7421 (306) 523-6641 (306) 569-1300 (306) 522-8591 (306) 523-5661 (306) 882-2686 (306) 882-2686 (306) 244-1975 (306) 374-3690 (306) 297-2671 (306) 773-4605 (306) 773-4605 (306) 782-2256 (403) 782-2256 (403) 362-3418 (403) 283-8361 (403) 244-9311 (403) 246-7111 (403) 263-5522	071-29113 074-25123 07-429133 071-2289 071-2693 071-2433 071-2710 074-2228 071-21163 071-21163 074-21513

# Alberta (cont.)

Drumheller	CJDV	910	10,000 DA-2	Box 1480, T0J 0Y0	(403) 823-3384	03-84226
Edmonton	CBX	740	50,000 DA-2	Box 555, 8861-75th St., T4J 2P4	(403) 469-2321	0372-287
	CFRN	1260	50,000 DA-N	18520 Stony Plain Rd., R5P 4C2	(403) 484-3311	037-2257
	CHED	630	50,000 DA-2	10006-107 St., T5J 1J3	(403) 424-2111	037-2904
	CHFA	680	10,000 DA-1	8830-85th St., Box 555, T5J 2P4	(403) 465-0911	037-2287
	CHQT	1110	50,000 DA-N	10143-103 St. T4J 0X8	(403) 423-4930	037-2229
	CJCA	930	50,000	10230-108th St., T5J 2X3	(403) 423-4930	037-2229
	CKUA	580	10,000 DA-2	10526 Jasper Ave., T5J 1Z7	(403) 428-7595	037-3948
Edson	CJRY	970	10,000 DA-1	Box 1450, T0E 0P0	(403) 723-4461	
Fort McMurray	CJOK	1230	1,000 D/500 N	205, 10011 Franklin Ave., T9H 2K7	(403) 743-2246	037-41856
Grande Cache	CKYR-1		50	rebroadcaster of CJYR Edson		
Grand Prairie	CFGP	1050	10,000 DA-1	10008-103 Ave., T8V 1B8	(403) 532-1050	036-7232
Hinton	CIYR	1230	50	rebroadcaster of CJYR Edson		
Jasper	CKYR	1450	100	rebroadcaster of CJYR Edson		
High River	CHRB	1280	10,000 DA-2	Box 1280, TOL 1B0	(403) 652-3331	03-822840
Lethbridge	CHEC	1090	5,000 DA-2	Box 1090, 401 Mayor Magrath Dr. T1J 4A3	(403) 329-4144	038-49154
l laudada da	CJOC	1220	10,000 D/5,000 N/DA-N	Box 820, T1J 3Z9; 1015-3rd Ave. S.	(403) 327-3161	03-84930
Lloydminster	CKSA	1080	10,000 DA-N	Bdcst. Center, 5026-50th St., S9V 0Z1	(403) 875-3321	037-32511
Medicine Hat	CHAT	1270	10,000 DA-N	Box 1270, T1A 7H5; 520-1st SE.	(403) 526-2821	03-848124
Peace River	CJMH	1460	10,000 DA-N	same as CHAT (rebroadcasts CBR Calgary)	(400) 604 0505	007 54500
	CKYL	610	10,000 DA-N	Box 1150, T0H 2X0	(403) 624-2535	037-51526
Red Deer	CKGY	1170	10,000 D/5,000 N/DA-2	Box 339, T4N 5E9	(403) 343-1170	02 02446
St Albort	CKRD	850	10,000 D/1,000 N/DA-N	Box 5555, 5409 Gaetz Ave., T4N 5H6	(403) 347-6681	03-83116
St. Albert St. Paul	(uew)	1070	10,000 DA-1	Pay 010 T04 240	(400) 645 4405	007 44504
	CIOK	1310	10,000 DA-N	Box 910, T0A 3A0	(403) 645-4425	037-41521
Stettler Taber	CHOA CKTA	1400 1570	1,000 D/250 N 10,000 D/5,000 N/DA-N	Box 2199, T0K 2G0	(403) 223-4455	038-49154
Westlock	CFOK	1370		-	. ,	
Wetaskiwin	CJOI	1440	10,000 DA-N 10,000 DA-N	Box 1800, TOG 2L0	(403) 342-4421	037-41856
Whitecourt	CFYR	1400	50	5008-50th Ave., T9A 0S4	(403) 352-6006	
				rebroadcaster CJYR Edson		
BRITISH	CO	LUI	MBIA			
Abbotsford	CFVR	850	10,000 DA-2	2722 Allwood St., Clearbrook P.O. V2T 3R8	(604) 859-5277	04-3651510
Burns Lake	CFLD	1400	1,000 D/250 N	Box 600, V0J 1E0	(604) 692-3414	047-7119
Campbell River	CFWB	1490	1,000 D/250 N	117-1180 Ironwood St.	(604) 287-7106	
Castegar	CKQR	1230	1,000 D/250 N/DA-D	601-A Columbia Ave., V1N 1G9	(604) 365-7225	
Chilliwack	CHWK ·	1270	10,000 DA-N	Box 386, V2P 6J7	(604) 795-5711	04-361510
Clearwater	CHNL-1	1400	1,000 D/250 N	rebroadcaster of CHNL Kamloops		
Courtenay	CFCP	1440	1,000 DA-N	1595 Cliffe Ave., V9N 2K6	(604) 334-2421	
Cranbrook	CKEK	570	10,000 D/1,000 N/DA-1	28-8th Ave. S., V1C 2K3	(604) 426-2224	041-45230
Creston	CFKC	1340	250	Box 310, V0B 1G0	(604) 428-5385	041-4138
Dawson Creek	CJDC	1350	1,000	901-102nd Ave., V1G 2B6	(604) 782-3341	036-77127
Duncan	CKAY	1500	5,000 D/1,000 N/DA-2	160 Jubilee St., V9L 1W7	(604) 746-4115	
Fernie	CFEK	1240	1,000 D/500 N/DA-1	Box 1170, 441-2 Ave.	(604) 423-4449	
Fort Nelson	CFNL	590	250	Box 880	(604) 774-2525	036-73138
Fort St. John	CKNL	560	1,000 DA-N	Box 6310, V1J 4H8	(604) 875-6634	036-75116
Golden	CKGR	1400	1,000 D/250 N	see CKXR Salmon Arm		
Grand Forks	CKGF	1340	1,000°D/250 N	Box 1570, 128 N.E. 11th St.	(604) 442-8221	041-597
Holberg	CFHG	1490	20	c/o Base Commander, CFB Holberg (San Josef)		
Hope	CKGO	1240	1,000 D/250 N	Box 1600, V0X 1L0, 407 Wallace St.	(604) 869-9313	043-61510
Kamloops	CFJC	550	10,000 D/5,000 N/DA-2	460 Pemberton Terrace, V2C 1T5	(604) 372-3322	048-8148
Voloure	CHNL	610	50,000 D/5,000 N/DA-2	Box 610, V2C 5L9; 611 Lansdowne St.	(604) 372-2292	048-8233
Kelowna	CKIQ	1150	10,000 D/1,000 N/DA-N	2419 Hwy. 97 N., V1X 4J2	(604) 860-8600	048-5240
Kitimot	CKOV	630	5,000 D/1,000 N	Box 100, V1Y 7N3	(604) 762-3331	048-5131
Kitimat	CKTK	1230	1,000/250 N	315 Federal Bldg. V8C 1T6	(604) 632-2103	047-85529
Langley Mackenzie	CAMA	1240	10,000 DA-2	20590 Fraser Highway, V3A 4G2	(604) 523-5341	047 0640
Mackenzie Marritt	CKMK	1240	1,000 D/250 N	Box 222	(604) 997-3400	047-8613
Merritt Nanaima	CULL	1230	1,000 D/250 N	Box 1630 V0K 2B0	(604) 378-4288	048-760
Nanaimo Nelson	CHUB	1570	10,000 DA-2	Box 1570, V9R 5N3	(604) 753-4341 (604) 352-7277	
New Westminster	CKNW	1390 980	1,000 DA-1 50,000 DA-1	Box 250, V1L 5P9; 533 Baker St. 815 McBride Plaza, V3L 2C1	(604) 352-7277 (604) 522-2711	
Oliver		1490	•	OTO MICETIALA, VOL 201	(004) 322-2111	
Dilver Dsoyoos	(new) CKOO	1240	1,000 D/250 N 1,000 D/250 N	Roy 530 V/N 1V/N	(604) 405-6200	
Parksville/Qualicum	CHPQ	1370	1,000 D/250 N 1,000 DA-1	Box 539, VON 1V0	(604) 495-6200 (604) 248-6177	
Penticton	CKOK	800	1,000 DA-1 10,000 D/500 N	Box 1370, VOR 2S0	(604) 492-2800	049-99450
Port Alberni	CJAV	1240		33 Carmi Ave., V2A 3G4	, ,	048-88150
Port Alberni Powell River	CHQB		1,000 D/250 N	2970-3rd Ave., V9Y 7N4 6816 Courtenay St., V8A 1Y1	(604) 723-2455 (604) 485-4207	
Prince George	CJCI	1280 620	1,000 DA-1 10,000 DA-N	6816 Courtenay St., V8A 1X1 Box 758, V2L 4T4; 1940-3rd Ave.	(604) 485-4207 (604) 564-2524	047-8883
inice decige	CKPG	550	10,000 DA-N 10,000 DA-N	1220 6th Ave., V2L 3M8	(604) 564-2524	047-8698
Prince Rupert	CFPR	860	10,000 DA-N 10,000 DA-1	346 Stiles Pl., Box 99, V8J 3P4	(604) 624-2161	047-89130
, into itaport	CHTK	560	1,000 D/250 N	300 Second Ave. W., V8J 1G6	(604) 624-2161	0-1-03130
	OHIL	300	1,000 D/200 N	JUU JEUUNU AVE. W., VOJ 100	(004) 024-9111	

346 Stiles PI., Box 99, V8J 3P4 300 Second Ave. W., V8J 1G6

(604) 624-9111

CHTK

560

1,000 D/250 N

<b>British Col</b>	umbia	1 (CO	nt.)		AM RADIO ST	ATIONS
Princeton	CINL-1	1400	1,000 D/250 N	Box 1400, V0X 1W0	(604) 295-6991	048-88215
Quesnel	CKCQ	920	10,000 D/1,000 N/DA-N	160 Front St., V2J 2K1	(604) 992-6202	047-82537
Revelstoke	CKCR	1340	1,000 D/250 N	Box 69, V0E 2S0	(604) 837-2149	048-87542
Salmon Arm	CKXR	580	10,000 D/1,000 N/DA-N	Box 69, V0E 2T0	(604) 832-2161	048-89526
Smithers	CFBV	1230	1,000 D/250 N	Box 335, V0J 2N0; 1139 Queen St.	(604) 847-2521	047-83132
Summerland	CKSP	1450	1,000 D/250 N	Box 1170, V0H 1Z0	(604) 494-7956	048-88150
Terrace	CFTK	590	1,000 DA-1	4625 Lazelle Ave., V8G 1S4	(604) 635-6316	047-85529
Trail	CJAT	610	10,000 D/1,000 N/DA-D	1300 Cedar Ave., V1R 4C2	(604) 368-5511	041-4435
Vancouver	CBU	690	50,000 DA-1	Box 4600, V6B 4A2; 700 Hamilton St.	(604) 665-8000	04-51207
	CFUN	1410	50,000 DA-2	1900 W. 4th Ave. V6J 1M6	(604) 731-9222	045-08830
	CHQM	1320	50,000 DA-2	1134 Burrard St., V6Z 1Y8	(604) 682-3141	04-51110
	CJOR	600	10,000 DA-1	840 Howe St., V6Z 1N6	(604) 669-6060	04-51550
	CJVB	1470	50,000 DA-2	814 Richards St., V6B 3A7	(604) 688-9931	
	CKLG	730	50,000 DA-2	1006 Richards St., V6B 1S8	(604) 681-7511	04-53278
	CKWX	1130	50,000 DA-1	1275 Burrard St., V5Z 1Z8	(604) 684-5131	04-51197
Vanderhoof	CIVH	1340	1,000 D/250 N	Box 1370, V0J 3A0	(604) 567-4914	047-8667
Vernon	CJIB	940	10,000 DA-N	3313-32nd Ave., V1T 2M7	(604) 545-2141	048-85271
	CKAL	1050	10,000 D/1,000 N/DA-N	Box 1086, V1T 6N2		
Victoria	CFAX	1070	10,000 DA-1	620 View St., V8W 1J6	(604) 386-2441	
	CJVI	900	10,000 DA-1	817 Fort St., V8W 1H6	(604) 382-8221	049-7111
	CKDA	1220	50,000 DA-1	Box 967, V8W 2S5	(604) 384-9311	049-7260
Williams Lake	CKWL	570	1,000 DA-2	see CKCQ Quesnel		
100 Mile House	CKBX	1240	1,000 D/250 N	see CKCQ Quesnel		
NORTH	WES	TT	ERRITORII	ES		
Fort Good Hope	CBQE	920	40	see CBC (CFYK) Yellowknife		
Frobisher Bay	CFFB	1210	250	Box 490, X0A 0H0	(819) 970-5353	063-15520
Inuvik	CHAK	860	1,000	Mackenzie Rd., Bag No 8, X0E 0T0	(403) 979-4411	034-44510
Rankin Inlet	CBQR	1160	40	see CBC (CFYK) Yellowknife		
Tuktoyaktuk	CFCT	600	1,000	Box 120, X0E 1C0	(403) 977-2277	
Yellowknife	CFYK	1340	1,000	Box 160, X0E 1H0	(403) 783-3464	034-45591
<b>YUKON</b>						
Whitehorse	CFWH	570	1,000	3101-3rd Ave., Y1A 1E6	(403) 677-6261	036-8247
711110110100	CKRW	610	1,000	203-4103 4th Ave., Y1A 1H6	(403) 667-4247	036-8392

NEUMANN EDITALL PANASONIC DBX BGW POLYLINE REVOX 3M PULTEC ALLISON KOSS SPOTMASTER STL STANTON TECHNICS EVENTIDE DOLBY AKG AMCRON FIDELIPAC HH AMBER BEYER SENNHEISER ESE STUDER UHER NAGRA B&W AURATONE GAUSS JBL HARRISON AUDITRONICS UREI AMPEX CHILTON EV TELEX EMT



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# directions

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

# **HEARINGS**

# OCT. 17—THUNDER BAY

Thirty applications for new television and cable TV operations in northern Ontario were scheduled for the October 17 hearing at the Airlane Hotel in Thunder Bay.

The hearing was also to consider the general problem of improving broadcast services in remote communities.

David Brough, whose unlicensed operations triggered the hearing, has applied for low power TV transmitters in 25 locations. He is opposed in 17 of these locations by Northern Lights Entertainment Ltd., Kimberley, B.C., "on behalf of an association or community corporation to be formed". Both applicants would use videotaped programming.

Low power CTV affiliates are proposed for eight communities by North Western TV Inc., Dryden, with competing applications from Norcom Telecommunications Ltd., Kenora, in seven of the same locations.

OECA videotapes would be broadcast on similar stations proposed for Caramat, Ear Falls, Nakina, Sioux Lookout and Wawa.

Other applications for low power TV outlets using videotape delayed programming include Ignace, Longlac, Pickle Lake and South Bay.

New cable TV systems were proposed by both Norcom and Norwont Ltd., Dryden, at Ear Falls, Ignace and Red Lake. Norwont has also applied for Sioux Lookout. J. S. Emmans of Geraldton applied for Longlac, proposing ANIK satellite reception of CJOH-TV Ottawa, CHOT-TV Hull, and three Detroit stations.

Applications by existing cable TV systems for expanded services included proposals to receive the Christian Broadcast Network and WTCG-TV Atlanta via the RCA Satcom satellite.

# OCT. 24—VANCOUVER

### AM, FM, PROPOSED FOR LOWER MIDLAND

Two surprise AM applications for the Vancouver area shared the spotlight with the expected FM bids, at a hearing slated for the Four Seasons Hotel, October 24.

Michael J. Dickinson, representing a

company to be incorporated, seeks twin 2500-watt outlets at Richmond (940 kHz) and Delta (1600 kHz). The Delta transmitter would serve as a rebroadcaster, except for 10 minutes per day of local origination.

The second AM application is by Gulf Broadcasting Inc. for 10 kw on 1260 kHz, also at Richmond.

(The CRTC has withdrawn the above AM applications after being advised by DOC of unresolved technical matters.)

Other AM bids: CFCP Courtenay for a station at Port Hardy, B.C., 1,000 watts day/250 night, on 1240 kHz; and CJVB Vancouver for a power increase to 50 kw day and night.

Competition for the Vancouver FM frequency of 93.7 MHz includes CHUM Western Ltd. (CFUN), CKWX, CJOR—all for 52 kw—and Ralph Jacobson of Calgary (100 kw). At Langley, B.C., Ernest Mykyte, owner of CJJC, proposes FM on 94.5 (100 kw).

#### Other FM applications:

- British Columbia Institute of Technology (F. L. Sanderson, representing a society to be incorporated), for 965 watts on 107.9 MHz.
- CKPG Prince George, for 3.5 kw on 101.3.
- Twin Cities Radio, Kamloops, for rebroadcasters of CFFM-FM at Quesnel (220 w on 98.9), Salmon Arm (80 w on 92.1) and Vernon (169 w on 100.9).
- CBC, for 90-watt rebroadcasters at Port Clements and Queen Charlotte, 720 watts on 103.5 at Dawson Creek and a power increase for CBKQ-FM Dawson Creek to 1.1 kw on 89.7 MHz.
- Low power rebroadcasters are also sought by local organizations at Kitselas, Falkland, Cedarvale, Dorreen, Kitwanga and Kitwancool, B.C.

The CBC also plans a French language TV rebroadcaster at Dawson Creek, 470 watts on channel 33, and a low power English rebroadcaster on channel 13 at Harrison Hot Springs. In cable TV, Vancouver Cablevision seeks approval for a Pay TV service to hotels; and proposed ownership transfers would affect Western Cablevision, Surrey (45% to Premier Cablevision); C-CTV, Courtenay-Comox (100% to R. D. Ellis, on behalf of Comox Valley Cablevision, a company to be incorporated); and West Coast Cablevision, Burnaby (83% to John McKay).

# NOV. 7—QUEBEC CITY

#### TVA RENEWAL, NEW RADIO STATIONS, HEAD AGENDA

A public hearing to begin November 7 at the Loews Le Concorde Hotel, Place Montcalm, Quebec City, will review progress by the TVA Television network.

First licensed in 1971, TVA now has 13 licensed affiliates and serves most of Quebec. The CRTC wants coverage extended to Mont-Laurier, Pontiac, Gaspé, The Bay of Chaleur aréa and northeastern New Brunswick. Also to be discussed are programming policies and the potential of satellite distribution for the second French network.

Radio applications include:

- Jonquière—Jacques Sebag, for 1000 watts day/250 night on 1340 kHz.
- Mont-Joli—87180 Canada Ltée, for 1,000 watts on 960 kHz.
- Gaspé—CHNC New Carlisle, for a 5 kw rebroadcaster on 1150 kHz.
- Quebec City—Leopold Fournier (83 kw on 93.3 MHz); Pierre Lavasseur (100 kw on 94.5); Michel Noel (60 kw on 93.3); and Telemedia's CKCV (100 kw on 107.5).
- Trois-Riviers—Paul Lacoursière (37.6 kw on 102.3) and Legerbourg Inc. (11 kw on 102.3).
- Chicoutimi—Paul-J. Audette (24.5 kw on 96.7) and Liliane Marcil (25.6 kw on 96.7).
- Sherbrooke—CITE-FM-1, for a 50-watt rebroadcaster on 96.1 MHz.

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# NEW ADDRESS FOR CRTC VANCOUVER

The CRTC western regional office is now 666-2111.

located at Suite 1130, 701 West Georgia St., Vancouver, B.C. V7Y 1E4. The telephone number remains unchanged, (604) 666-2111.

# NOV. 21—OTTAWA

#### NEW AM'S PLANNED FOR N. ONTARIO

Half a dozen applications for new radio stations in northern Ontario are scheduled for a hearing at the Government Conference Centre, Ottawa, commencing November 21.

- J. Conrad Lavigne, owner of Frenchlanguage CFCL Timmins and the Englishlanguage Mid-Canada TV group, seeks English AMs at Timmins (10 kw on 630 kHz), Sudbury (10 kw on 620) and North Bay (10 kw on 730).
- Cambrian Broadcasting, owners of CKSO Sudbury and a group of CTV affiliates in northeastern Ontario, propose stations at Timmins (10 kw day/5 kw night on 1450) and North Bay (10 kw on 730).
- Kapuskasing Broadcasting also proposes a station at Timmins (1,000 watts day/250 night on 1240) to rebroadcast CKAP.
- Sudbury Broadcasting (CFBR and CHNO) seeks an FM outlet, 100 kw on 105.3 MHz.

### Other applications:

- Warner A. Bischoff, representing a company to be incorporated, for an FM station at Brockville, Ont., 50 kw on 103.7.
- CBC, for a French FM rebroadcaster at St. John's, Nfld., 45.6 kw on 105.9.
- George H. Grant, representing a company to be incorporated, to acquire CKLB and CKQS-FM Oshawa, Ont.

### DEC. 7—EDMONTON

An additional public hearing has been scheduled for Edmonton, Alberta, to commence December 7 at the Hotel MacDonald, 100 St. and Jasper Ave. The deadline for interventions is November 17.

FM applications for Edmonton will be a major item on the agenda, with bids reported to have been filed by a dozen applicants including CHUM Ltd. (both AM and FM), Moffat Communications (CHED), CFCN Calgary, CFCW Camrose, CHQT Edmonton, and various groups organized by Dr. Morley Bleviss, Roger Charest, Harvey Glatt (CHEZ-FM Ottawa) and Tommy Banks, Ralph Jacobsen of Calgary, Musicradio (which includes Doug Cunningham, formerly of CING-FM Burlington, Ont.), Robert McCord and Robert Whyte.

#### SCHEDULE OF HEARINGS

Other hearings scheduled are:

Nov. 28—Hull, Que. Auberge de la Chaudière

Dec. 5—Saskatoon, Sask. Holiday Inn, 99-22nd. St. E.

Dec. 5—Winnipeg, Man. Winnipeg Inn, 2 Lombard Pl.

Sheraton Centre, 123 Queen W. Jan. 16/79—London, Ont.

Jan. 16/79—Toronto, Ont.

Holiday Inn, 300 King St. March 6/79—Hull, Que. Auberge de la Chaudière



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# **DECISIONS**

#### AM BIDS DENIED

Two applications for new AM stations have been denied by the CRTC.

At Spaniard's Bay-Harbour Grace, Nfld., Colonial Broadcasting's request for a 10 kw station on 850 kHz was rejected on the grounds that it would compete with stations in St. John's, where two new FM stations have been licensed. The CRTC recommended that a low power station be considered to provide local service to the area.

At Amqui, Quebec, a proposal by J-H Guénette for 5 kw on 1220 kHz was also denied. Half of the station's programming would have rebroadcast CHRM Matane. The CRTC ruled that the area could not support an independent station and suggested that a low power rebroadcaster, with a local studio, would best meet the needs of the community.

Also denied was a transfer of control of Goose Lake Broadcasting (CKKR) Rosetown, Sask.

#### Approvals included:

- CKFG Grand Forks, B.C.—transfer from Okanagan Radio to Boundary Broadcasting Ltd.
- CKWX/CKFX Vancouver, B.C., and CFGP Grande Prairie, Alta.—change of transmitter site.

### FM Decisions

Rebroadcasters have been licensed to the CBC at Grande Prairie, Alta. (5 kw on 90.5 and 100 kw on 102.5), at Fort McMurray, Alta. (20.2 kw on 99.3 and 101.5) and at Red Lake, Ont. (100 watts on 90.5 MHz); and to Club Social La Grande at Camp LG-1, Quebec (10 watts on 100.7).

Three FM stations will decrease power slightly: CBUF-FM Vancouver (46 kw, with change of antenna site); CBOF-7-FM Brockville, Ont. (2.5 kw, with increased antenna height); and CFTI-FM Timmins (16.67 kw, with increased antenna height).

Denials have been handed to three stations which sought changes in their promise of performance. The CRTC accuses Moffat Communications (CHFM-FM Calgary and CITI-FM Winnipeg) and CHRC Ltée (CHOI-FM Quebec) of violating conditions of licence by implementing substantial changes in programming without approval. The stations were directed to comply with the authorized promise of performance within 30 days.

An application by CHOZ-FM St. John's, Nfld., to reduce country and increase rock music was approved. Pending approval are format changes by CFQM-FM Moncton (from MOR to country) and CFBC-FM Saint John, N.B. (from easy listening to MOR).

# directions

#### Television

CBC-TV rebroadcasters have been approved, as follows:

Location	Channel	Watts
Mt. McDonald, B.C. (Eng	g.) 59	10
Sooke, B.C. (Eng.)	3	10
Grande Prairie, Alta. (Fr.)	19	3,300
Willow Bunch, Sask. (Fr.	) 21	9,000
Manouane, Que. (Fr.)	5	10
Weymont, Que. (Fr.)	6	10
Obedjiwan, Que. (Fr.)	10	10
Lamaline, Nfld. (Eng.)	18	6,420
Lawn, Nfld. (Eng.)	6	10

Also approved are a power increase to 15 kw on channel 28 for the proposed CBC-TV station at Temiscaming, Que., and a change from channel 6 to 2 for CBNT-32 Port Blandford, Nfld. Pending approval is a power increase for CBC station CJBR-TV-1 Edmundston, N.B., to 8.5 kw.

Privately-owned low power rebroadcasters approved include ch. 12 at Camp LG-1, Que. (Club Social La Grande) and channels 10 and 13 at Armstrong, Ont. (D & L Estates).

Pending approval are power decreases for CIVO-TV Hull (Radio-Quebec) to 715.3 kw and CHOT-TV Hull to 275.1 kw.

# Cable Television

- The CRTC has received an application for cable service in the Dorion-Vaudreuil area of Quebec. Other potential applicants were to notify the commission of their plans by October 16.
- A new system has been licensed for Montmagny, Que., to Jacques Gauthier,

on behalf of a company to be incorporated. A competing application by Communivision Montmagny Inc. was denied.

 A proposal by Chamcook Communications Ltd. to add two U.S. FM stations and WABI-TV Bangor, Maine, on a shared basis with the Calais PBS station has been denied.

Further cable approvals:

- New facilities for L & C Cablevision,
   Ladysmith, B.C., which is to be rebuilt
   and interconnected with the system in
   nearby Duncan.
- Extension of service area of Tele-Cable Boucherville to include Varennes, Que.
- Transfer of ownership of the systems at East Broughton and Tring Jonction, Que., to LMN Ltée.
- Continued distribution of CBLFT Toronto on phase-lock for another year on systems in the Hamilton area and Richmond Hill, Ont.

# QCTV BIG WINNER IN ALBERTA

QCTV has been licensed to provide cable service to 22 communities in Alberta. They are:

South	hern	Al	berta
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Cardston	Claresholm
Ft. MacLeod	Granum
High River	Okotoks
Raymond	

Central Alberta

Bowden Didsbury
Drumheller Innisfail
Lacombe Olds
Pnoka Stettler

Northeastern Alberta

Lloydminster Vegreville Vermilion

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Other licences granted were:

Bow Island —Taber Cable TV Ltd.

Strathmore —Ted Marietta

Cochrane —Calgary Cable TV

Airdrie —Calgary Cable TV

Bonnyville —Northern Cablevision

Peace River —Northern Cablevision

The decisions follow a public hearing in Calgary at which 19 applicants presented 83 applications for 35 communities.

The CRTC favored QCTV as a result of its commitments to provide a reliable, high quality service, to develop local and regional production, to supply five broadcast quality color mobile units and to establish audio studios in each town. QCTV also undertook to set up community programming committees and employ qualified program directors in the operation of its community channels.

The Commission noted that expansion of cable service to many smaller Alberta towns has been made economically viable by the assistance of the Alberta government. Through its crown corporation, Alberta Government Telephones, the province subsidizes the cost of the microwave network which will distribute distant signals from KMC Properties' Mount Kelly head-end.

#### RULING ON DROPS IN MANITOBA

The CRTC has approved the request of three Manitoba licensees that they be required to own and operate only the inside wiring of subscriber service drops. The outside wiring will be owned by the provincial Manitoba Telephone System (MTS), "provided that the licensee is permitted full access to the subscriber service drop for purposes of maintenance".

The issue had prevented the licensees from reaching the necessary agreements with MTS to begin operations.

The three companies—Westman Media Co-operative Ltd., Portage Community Cablevision Ltd., and Interlake Cable TV Ltd.—were also allowed a further two years before they must participate in ownership of the Tolstoi, Man., head-end. In the interim, U.S. signals received at Tolstoi will be relayed via MTS.

The CRTC says the ruling on drops should not be seen as a precedent for Manitoba or elsewhere. The decision calls for continued CRTC jurisdiction over programming and for provisions in any agreements with MTS for cable operators to continue to provide all customer services and have a voice in the design of cable facilities.