

THE

CANCOM

STORY

A YUKON BEGINNING



By Geoff Johnson

Cancom Founder



Rolf Hougen
June 1982

“As a northerner, I have experienced at first hand the isolation felt by so many of our citizens scattered throughout the vast reaches of this country. For those of us living in such areas, satellite technology is our communications lifeline to other Canadians. The wonderful ability of this technology, not only to link Canadians in all parts of Canada but also to eliminate inequalities in communications service available throughout Canada, is the reason I personally became involved in the satellite business.”



HERE IS THE NEWS ON A SLEIGH PULLED BY A BEAR

Satellite dishes weren't easy to come by in the Yukon in the 1970s, in the early days of mountain-hopping broadcast signals. So Rod Wheeler built his own. The manager of WHTV in Whitehorse fastened sheets of aluminum together, placed the material over a wooden frame in the flatbed of his truck, and jumped on it to create the curvature. Hooked up to some basic electrical components, the dish worked well, and WHTV was able to give its program-starved viewers a glimpse of what was readily available to big-city Canadians.

In a part of the country where winter darkness envelopes the breathtaking landscape 19 hours a day, moose outnumber the 32,000 inhabitants two to one, and southern Canada is commonly referred to as "the outside," people know all about making the best of limited facilities.

Former NHL star Neil Colville and his partner Bert Whybrew, who had been managing the local bowling alley, worked 16 hours a day, seven days a week to keep their tiny Whitehorse TV station afloat in the late 1950s. They climbed poles and strung cable and sold subscriptions, and operated the studio single handed. A piece of wood covering the camera lens was attached to a string running from the ceiling to a drawer in the news reader's desk. In the absence of a camera operator, the news reader turned on the sound, tip-toed to the desk, and opened the drawer, pulling aside the piece of wood and "turning on" the camera. "When we were finished you dropped your hand to the drawer and quietly slid it shut, dropping the wood down again," Whybrew said. "It was a real Mickey Mouse setup, but it worked."

While most of their fellow Canadians in the major population centres have long had Cadillac communications services at their fingertips, Northerners have had to struggle with the obstacles of distance, terrain and climate. In the fall of 1899 telegraph service reached the Yukon but maintenance of the line over the rough terrain in bitter cold was nearly impossible and the system seldom worked properly. To make matters worse, messages often went astray between ferry and telegraph station. Up to that point, news from the outside world was delivered by coastal ship to Skagway, Alaska; over the Chilkoot Pass by packers; down the Yukon river by paddle wheeler in summer and dog

team by winter. The printing press at the weekly Whitehorse Star was driven by a gasoline engine and the 200 copies of the paper were delivered by sleigh pulled by a bear.

In 1923 the Canadian Army Signals Corp. was sent north to experiment with wireless communications but it wasn't until the Americans moved in to build the Alaska highway during the Second World War that Whitehorse got a radio station -- a U.S. military radio station.

When the Americans left after the war the station was taken over by community volunteers under the direction of the Canadian army, and in the 1950s local broadcasts were supplemented with tapes sent north by the CBC. Two years later, a community radio station was launched in Dawson City, north of Whitehorse and at the time the capital of the Yukon. Whitehorse, incorporated as a city in 1950, steadily became the economic, administrative and political centre of the Territory and displaced Dawson as the capital in 1953.

In the absence of direct CBC service, however, the 6,000 residents of the city often found themselves listening to broadcasts in English from the Soviet Union. "The news is so slanted it's comical," the president of the Whitehorse Board of Trade, Roif Hougen, told a reporter in October 1957. "We tune in for a laugh."

As the owner of a retail store selling television sets, Hougen had a lot riding on the success of broadcasting in Whitehorse. In the mid-1950s he considered building a cable television system and went so far as to sign a contract for the right to string line from telegraph poles, but gave up the idea as too expensive.

He turned over the business to a couple of entrepreneurs, who felt sure they could make a go of it, but they found it a dispiriting venture. The studio was in room 215 of the old Whitehorse Inn, where the roof leaked so badly buckets had to be set out every time it rained or thawed. The only dry spot was in the shower stall where the film was stored.

The partnership ended tragically after two and a half years when one of the men committed suicide. That night Hougen stepped into the breach, putting himself in front of the camera to read the news for the first (and he swears) the last time. The other partner moved to Vancouver to run a TV repair business. Into the breach stepped Neil Colville and Bert Whybrew. Another former hockey pro, Jack McGill, was a silent partner.

Neither Colville nor Whybrew knew anything about broadcasting and their valiant struggles became the stuff of legend. Colville got his material for his newscasts by listening to U.S. military short wave radio. Sometimes, in his haste to get to air on time, he forgot to switch on the sound. When the realization dawned that not word of the entire newscast had been heard outside the

studio, he would pound the desk with his fist and mouth unbroadcastable remarks.

Filling air time was a constant problem. An early station log book (a school scribbler) notes that the camera was pointed out the window at the liquor store across the street for four hours, recording the comings and goings. It was not one of WHTV's most popular shows.

Shots of a golf fish bowl with soft background music carried the exotic title Rippling Rhythms.

In general, though, WHTV performed heroically and the fact was generally appreciated by its viewers. It was the first cable system in Canada to present local interviews, news, weather and sport events. None of it was accomplished easily. Moments before bowling coverage was due to start from the bowling alley directly below the studio, for example, Whybrew and Colville would unplug everything and rush downstairs carrying camera, regulator and mike. "Bowlers were so nervous in front of the camera, they couldn't throw a strike if their lives depended on it," said Bert.

Some of his interviews -- always live -- are still talked about in Whitehorse. A colorful character called Buzzsaw Jimmy Richards was asked about the famous Yukon poet Robert Service and his classic telling of the cremation of Sam McGee. "Damn liar!" Jimmy snorted. "Imagin' tellin' folks about Sam McGee bein' cremated. I knew Sam McGee well and he wasn't burnt. Imagin' teachin' lies. Damn liar."

The Sam McGee of the Robert Service poem, of course, was entirely fictitious. The name was chosen simply because it rhymed with Tennessee. Said Bert: "All I could do was sit there and hope Jimmy would eventually run down because there was no one else in the studio to turn off the camera. I just sat there and held my breath." He needn't have worried. Viewers called in all right, but only to say they loved every moment of it.

The economics of broadcasting in Whitehorse were so bad that by the early 1960s air time at WHTV had dropped from seven and a half to four hours. "It was champagne day (in 1964) when we broke even after five years of nothing," said Whybrew. "Trouble was, we couldn't afford the bottle."

The desperately needed influx of capital arrived late in 1965 when Roif Hougen re-entered the picture, buying the station with the help of several investors. The cable system still had only 400 subscribers, but The Yukon News declared: "The acquisition has 'prompted many residents to look forward to top quality TV here in the Yukon where so much is lacking in forms of entertainment."

Three studio cameras, six video machines, eight monitors and a 16 mm projector for showing

films from CBC's Toronto library were brought in to replace WHTV's antiquated equipment, much of it homebuilt. Black and white gave way to color. In the fall of 1966 the station moved to new studios on the second floor of Hougen's department store, along with his radio station CKRW. Hougen purchased two Sony two-inch video recording machines and set them up in Vancouver to tape programs off the air.

The profits were plowed back into the station. By July 1971 WHTV had three channels. By 1973 the hook up charge had dropped to \$25 and the subscription fee to \$15. Staff had grown to nearly a dozen. In the spring of 1979, the idea for a satellite network began to take shape and Hougen and his cable system manager, Rod Wheeler, set about writing his Down to Earth proposal for a unique distribution system that would solve the problems of communities like Whitehorse.

Hougen complained in those days that too many people went to the Yukon with the idea of making a fast buck and then retiring 'outside' with the proceeds. "Because of this attitude, many businesses never really get off the ground," he said at the time. "It's also an attitude that has severely retarded the economic, social and political growth of the territory. There just weren't enough Yukoners around who had faith in the country."

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The intervening period has seen great changes and an improvement in the economy. The Territory exported \$360 million in goods and services in 1996, including cold weather expertise and communications technology. Tourism draws 250,000 visitors a year. In September 1997, several Yukon organizations, including the Chamber of Commerce and Council of Yukon First Nations, got together to promote diversification through exports.

Broadcasting has played a big part in changing attitudes towards the Yukon. "The view of the North as a land of ice and snow is fast becoming time worn," says Hougen. "Winters are no longer the great dread they once were. The publicity emanating from and about the territory during the past couple of years has made people in the south more knowledgeable and more aware of the real North."



Down-To-Earth Idea From The Signal Starved North

In 1978 a study by the federal Department of Communications showed that residents of Canada's 24 largest cities could take their pick of more than a dozen television channels. By contrast, nearly one third of the rural population, about 1.8 million Canadians, were beyond the range of the transmitters and counted themselves lucky to be able to scrounge one or two fuzzy channels out of the haze. It was hardly surprising that many of them resorted to poaching American signals with illegal satellite dishes.

Nowhere was the situation more critical than in northern Canada, where the federal government was anxious to provide access to mainstream broadcasting to reinforce Canadian cultural sovereignty in the face of U.S. encroachment. Canada had already become the first nation in the world to put a commercial satellite in orbit, and the solution to the broadcasting problem seemed to lie in a Canadian commercial service using Canadian satellites to distribute Canadian signals. Not at all clear was who would do it--and how.

Businessman Rolf Hougen, owner of signal-starved WHTV in Whitehorse, the Yukon capital, was confident he had a concept that would work. In March 1979, he flew to Ottawa to present what he called his Down to Earth proposal. Signals sent to a geostationary satellite from uplinks across the country would be downlinked to cable television systems, new ones if necessary, started up by local entrepreneurs in small and remote pockets of habitation. The proposal would not interfere with the established broadcasting industry in Canada, he emphasized. As for American signals, they would come under Canadian regulatory control and would offer a cost effective package that would complement the Canadian package. "The North," Hougen declared, "has traditionally been the proving ground for new communication concepts and innovations, and again stands ready in this role."

Nothing like the service Hougen had in mind had ever been attempted on this scale, and he was applauded as a visionary. But not even the far-sighted Yukoner could have known just how severely he and his fellow founding partners and their resources would be tested before Cancom's survival, let alone its success, was assured. Their company, Canadian Satellite Communications Inc. (Cancom), would have to wrestle with daunting technological problems, bitter resistance

from some illegal dish owners and segments of the broadcasting and cable television industry, and a financial burden that would force them to dig deep and come up with \$38 million of their own money. At one stage the company came within a few weeks of running out of money, and with \$5 million of his own money on the line, Hougen would be feeling “very, very vulnerable.”

Cancom weathered the crises. But it did more than simply survive. It went on to become a one-of-a-kind success story, attracting international interest, rewarding its investors and delivering a force for cultural sovereignty and national unity in the form of broadcast services for areas of the country that were being neglected and resented it. Among its numerous remarkable achievements, Cancom:



constructed the first scrambled satellite television network in the world, featuring an ever expanding core of Canadian signals in English and French



more than tripled its original four satellite uplinks



added all five American networks (ABC, CBS, NBC, The Fox Network and PBS) to its package



made it technically and economically feasible for affiliated cable systems in featuring an ever expanding core of Canadian signals in English and French



built the most technologically sophisticated commercial master control centre in North America



converted its entire broadcast network from analog to digital technology at a L~J cost of more than \$40 million



supported aboriginal broadcasting from the outset, providing free satellite transmission for five native radio services and a free satellite uplink in Whitehorse for TVNC, the world’s first aboriginal satellite television network. Over and above its licence commitments, Cancom helped create and fund an annual communications internship program for young aboriginals.

The importance of putting satellite broadcasting within the reach of aboriginals, particularly those in the Canadian North, would be hard to overstate. Ross Charles, an Ojibway, captured the significance in a letter to a journalist on Parliament Hill soon after his appointment as Cancom’s vice president in charge of native affairs in May 1982.

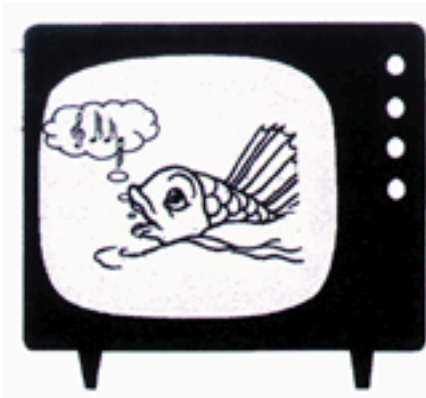
In the letter, Charles wondered if the indifference and lack of participation in the day-to-day affairs of Canada on the part of natives was due in part to being “communications poor.” How could anyone not in the mainstream of information feel a part of what was happening, he asked. Then he added: “I do not feel able to offer any instant solutions, but what I can offer to native people anywhere in Canada, through Cancom, is a window on the world by satellite.”

In a 1996 interview, Dave Porter, a Tlingit who helped found the Whitehorse native radio station now known as CHON FM, said natives’ relationship with Cancom could easily have been adversarial. “But I think because of Rolf Hougen’s influence, it did not take that direction. He worked very hard to build an understanding with the representatives in the Yukon and that relationship continues to this day.”

Porter, who joined Cancom’s board in 1996, said the degree of involvement in broadcasting by Canada’s aboriginal people today is unequalled anywhere in the world. “We got in on the ground floor. And we got in because we realize the importance of the impact that media technology has on people. We believed in it and we pushed. We brought the people together in and we got it done on largely our own initiative. I think it’s one of the greatest achievements in the evolution of the aboriginal peoples in this country. And some day it will be recognized as such.”

If Hougen’s presentation in Ottawa in the spring of 1979 was an auspicious moment in Canadian broadcasting history, it had its roots back in 1955 when he flew to the Alaskan coastal town of Ketchikan to get a first hand look at something new -- a television signal distributed by cable. Assembled from hardware salvaged from a television repair shop, the Ketchikan cable system offered the few hundred residents one black and white channel. It wasn’t much by 1997 cable standards -- the modern WHTV offers its customers 27 channels live and in color -- but Hougen knew the future when he saw it.

The economics that year persuaded him that the Yukon capital was not yet big enough to make cable distribution viable for the first Canadian television station north of 60, but there were others who wanted to try it anyway. By 1958 WHTV had strung its first cable and signed up its first customer. A local technician built the head end using a home movie projector and surplus military equipment.



A Goldfish Bowl And Background Music

At \$175 for installation and \$25 a month -- big sums in 1958 -- cable was a luxury few could afford. There were other problems. WHTV was so desperate to fill air time it was known to point its one and only camera out the window of its one-room studio on the second floor of the Whitehorse Inn to track the comings and goings at the liquor store. A show called Ripple Rhythms was nothing more than shots of a goldfish bowl accompanied by background music. Later, reel-to-reel film from the south was trucked in. Viewers were treated to Christmas parades in June. The 1957 Grey Cup, a club training film with no commentary, was shown in 1959.

In 1968 Hougen took over the struggling station and set up a system in Vancouver to record mainstream programming off the air and fly it to Whitehorse. The bill for daily air freight that sometimes weighed 200 pounds reached \$80,000 a year, but Hougen couldn't afford to allow WHTV to fail. His TV and appliance store in Whitehorse had sold more than 300 television sets.

The federal government, meanwhile, was trying to come to grips with the problem of providing access to mainstream broadcasting for the country's remote and underserved communities. A committee was set up under Real Therrien, the longest serving member of the Canadian Radio-television and Telecommunications Commission (CRTC), to come up with ideas.

When Hougen appeared before the committee with his Down to Earth proposal, he was greeted with a mixture of encouragement and skepticism. Some regulators were under the mistaken impression that remote implied only northern, and had their doubts about the scheme's economic viability. Hougen returned home and commissioned consultant Pat Carney to do an economic study and engineering review of the concept. His strategy was to offer television service aimed initially at remote and rural communities, reducing the cost as southern cable systems picked up the service. He was convinced that for Canadian viewers and listeners, satellites and broadcasting could be a marriage made in the heavens.

Carney, who was later to become a federal MP and senator, had quit her job as a business

writer with the Vancouver Sun in 1970 to start a consulting firm called Gemini North. Hougen sent her the documents he had gathered in pursuing his idea—an archival treasure chest, Carney recalls with amusement, that arrived in an Arrow shirtbox. Among the notes, memos and news clippings were letters from Ted Turner in Atlanta discussing the possibilities of downlinking his CNN signal.

Cantel Engineering Associates (it later sold the Cantel name) of Vancouver was brought in to do the preliminary engineering report. It was a difficult task. While domestic satellite services had been available in Canada since the early 1970s, this was the first time any one had attempted to use it deliver a package of broadcast signals to very small communities.

To assess market demand, Carney suggested hiring a Simon Fraser University professor and using a computer model. Hougen flatly rejected the idea. He wanted to hear from the grass roots. Mayors, reeves and community managers were to be contacted in person and asked if they were interested in satellite service.

Hougen was footing the bill for all this. In spite of the mounting costs, Carney says his calm demeanour and apparent faith in the concept never faltered. She could relate to his feelings on isolation and its link to mainstream broadcasting. “I had lived in Yellowknife where the only television was the Frontier Package four hours a day,” she recalled in a 1997 interview. “It started with Sesame Street at 8 p.m. The lack of television made you feel very isolated.” There was also a general lack of interest in what was happening in the south of the country, she added. “PWA (the airline serving the Northwest) went on strike and nobody cared. So I knew that television was a unifying force, in terms of the country.”

In September 1979, Carney produced a preliminary feasibility study whose findings echoed those of a federal government survey: about one quarter of all Canadians received inadequate television service. Within this group of about six million, nearly two million were living in isolated communities with populations as small as 500.

The report suggested the new service should start with three Canadian and three U.S. signals and then expand to a similarly balanced “eight pack”. Initially, the report added, the service should concentrate on communities of 1,000 or more (about 333 households), serving smaller communities as it became economically feasible. Communities should be encouraged to seek a more streamlined licensing system and given help in filing their licence applications with the CRTC. Carney says she emphasized that the market would not appear by itself. “I said the northern settlements particularly are not organized, you’ll have to go in and help them write their application. For a long time they didn’t. Later they did, but they lost valuable time.”



Viewer Reaction Tested In Mining Town Experiment

Hougen studied Carney's report and recognized that he could not go it alone financially. He crossed the country at least 10 times in six months, researching, promoting and discussing his concept. (The Whitehorse Star calculated that he flew 147,857 kilometres that year.) At Hougen's request, Carney approached Ray Peters, head of BCTV, about joining the venture. BCTV owned CHAN-TV (Vancouver) and CHEK-TV (Victoria), and Peters had used Carney's consulting service to test viewer reaction during experimental satellite delivery of one of his signals to the new mining town of Faro, north of Whitehorse.

Peters was aware of Hougen. He had written to him objecting to WHTV's practice of recording his signals off-air for rebroadcasting in Whitehorse, and asked for a meeting on the issue. "I explained that I didn't have the rights to the Yukon," Peters recalled in a 1996 interview.

Hougen asked a business associate living in Vancouver to represent him at the meeting. "When I advised Ray of this," Hougen recalls with a chuckle, "he said Don't send one of your flunkies, I want to see you'. So I went and he laid it on the line that this taping was not acceptable to BCTV. Subsequently, I talked to Ernie Rose who was the chief technical person in BCTV, and he explained that it was necessary from a copyright standpoint because this was very much a grey area and they had to take that position.

"But I got the impression from Ernie that they'd be quite happy if we did continue, that they were pleased to see BCTV being shown in the Yukon. So there was never an interruption. We were licenced, by the way, to do this by the CRTC, but in giving us permission to record and replay not only Canadian signals but KBOS out of Bellingham and other American signals, the CRTC made it clear that we had to get the approval of the originating stations."

Whatever his true feelings about the taping, Peters decided to give his support in principle to Hougen's venture. The latter noted at the time: "His views on satellite delivery are the same as mine re the ability to serve remote areas." The Faro experiment undoubtedly had a lot to do with it. Eighty per cent of the audience in Faro switched from U.S. to Canadian signals. Peters recalled: "(At first) I thought, what are we worrying about the boonies for, we can't make

any money there, but as soon as I ran that test in the Yukon I knew there was potential. Maybe I couldn't sell it to Proctor & Gamble, but if people would subscribe to it we were opening the door to a source of revenue that went beyond selling advertising.”

Two months after delivering its first report to Hougen, Gemini North mailed a survey to local authorities and community leaders, based on six and eight signals (regulatory factors later favoured a four-pack of Canadian signals, including a French language channel). A second mailing featuring the four-pack followed in April 1980. The results confirmed what Hougen had been saying all along, that the market was not exclusively in the North. “The market was Brampton, it was Cranbrook, it was the Fraser Valley. An incredible number of Canadians were not being adequately served by television,” says Carney.

Gemini's preliminary estimates indicated that 604 communities with 334,320 households had inadequate service, and theoretically were large enough to support a four-signal service delivered via satellite and cable. At 60 per cent market penetration, there were 200,592 potential subscribers. The four-pack required a minimum of 158,000 subscribers to cover the estimated satellite costs.

It was more complex than that, however. Service to a Newfoundland outpost where homes were clustered together might be economically viable, but what about a prairie village with a similar population scattered over a much wider area? Eventually it was decided that a minimum of 250 households was necessary in communities in the provinces. In the two territories, the minimum would be 75.

The Gemini survey certainly brought out grassroots feelings. Some examples:



“The stations we now receive are MTV and CBS whose reception leaves a lot to be desired’ -- Arnold's Cove, Newfoundland.



“Many hours have been spent by our charter members attending CRTC hearings trying to acquire alternate selections, but to no avail despite mass regional support” -- Kipling, Saskatchewan.



“Our community does indeed desire more television programming, Canadian and/or American.” -- Coppermine, NWT.



“Our community would welcome and benefit from a wider variety of television programming . . . we believe it is important to have community and native organization involvement in this type of decision making” -- Rae Band, NWT.



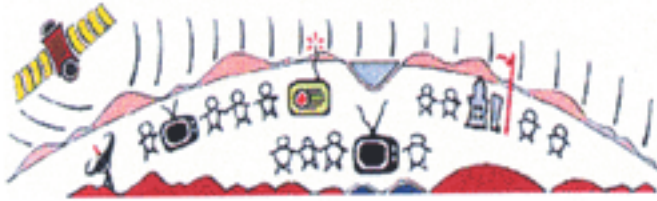
“We are aware of who your client is and also the channels he tentatively proposes to carry. We support his proposal 100 per cent” -- Fort Nelson, B.C.

In B.C., the community of 100 Mile House said it resented being referred to as rural and remote.

The survey reported a demand for a four-pack service and added: “...smaller communities have told the (CRTC) committee reviewing extended service to remote and rural Canada they want as much television as possible as fast as possible, and they are prepared to fund the local distribution systems any way imaginable.”

Northern Television Systems, which owned WHTV, was now evolving into Canadian Satellite Communications Inc. (Cancom) with the inclusion of Dr Charles Allard of Allarco Broadcasting Ltd., owner of CITV-TV in Edmonton, and Stuart Mackay of Selkirk Broadcasting Ltd., owner of CHCH-TV in Hamilton, Ont., as partners alongside Hougen and Peters. Hopes were high that Télémétropole Ltd. of Montreal, which owned of the WA network, would come on board as the representative of French Canada, but as the partners met to plan their licence application Télémétropole announced it was supporting a rival bid.

Phillippe de Gaspé Beaubien and Télémédia Communications Ltée, which owned the AM radio station CKAC in Montreal, stepped into the breach by launching a station called TCTV and using French language programming from sources such as Télémétropole, WA and Radio-Québec. Télémédia had sold its three television stations in Sherbrooke, Rimouski and Trois Rivieres, but de Gaspé Beaubien, whose family roots in Quebec stretch back to the middle of the 17th century, felt strongly that Quebec should be represented in what was clearly a national endeavour. At a November 15 meeting in Vancouver to review the CRTC application, the mood among the partners was buoyant. That night, de Gaspé Beaubien hosted a champagne dinner for them.



Partners Have The Resources And The Track records

In addition to financial backing, the partners brought with them impressive technical and programming resources. BCW had participated in the Anik B experiment in Faro. CHCH, which went on the air in Hamilton in 1954, was serving four million viewers during 19.5 hours of air time daily. Sixty per cent of its programming was Canadian, half of it produced by the station itself. CIW was selling its productions overseas and had an average audience larger than the three U.S. commercial networks (ABC, CBS and NBC) combined on Edmonton cable systems. Its general manager, Douglas Holtby, was involved with Cancom almost from the start and would later become its chairman.

In a 1997 interview, de Gaspé Beau bien said of the decision to create TCW: “We were able to position ourselves to join the group though we really did not belong there, because we did not own a television station. But we became an active member and, I think, played a significant role. It was a very demanding period. It was about the time that Harold Nickerson joined the company, so while I maneuvered the meetings involved with our company, Harold became the lead person in this thing and was involved in all the operating details. We were always looking for new ways to expand our business and to get in to the non-conventional. You don’t go into business if you think you are not going to make some money, but I could see this was going to be a long term element, not a short term gain element. It was investing for the future.”

On March 1, 1980, the Therrien Committee, in deference to Cancom’s Yukon roots, held a hearing in Whitehorse and heard Hougen outline Cancom’s proposal. “It’s well known,” he told the committee, “that there are nearly 100 unauthorized and unlicensed earth terminals scattered throughout this vast country. Nevertheless, these systems are filling a void for the residents who are inadequately served with either radio or television.”

Unlicensed earth terminals were collecting U.S. television signals, including those for pay W, and distributing them to subscribers who paid a monthly fee for a device to unscramble the signals. Hougen warned that over the next year or two, there could be more than 300 unauthorized installations unless action was taken to provide a Canadian alternative.

Briefs presented to the CRTC committee revealed there were mixed feelings about satellite television. CBC affiliates feared loss of revenues, and movie theatres worried what pay-tv might do to the box office. A Prince George broadcaster said the federal government should give Canadians what they wanted, rather than what Ottawa thought they wanted. The Canadian Broadcasting League argued it wasn't necessarily true that the North needed or wanted more television, and that if the CRTC introduced native programming regulations they would sooner or later be bumped by commercial pressures. An intervener from McGill University warned that "N will screw up northern culture/identities."

On April 14, 1980, Hougen and his partners appeared before the committee again to outline their plans in detail. When the Therrien Report was issued in July, with recommendations for reinforcing Canadian sovereignty over its airwaves, it incorporated many of their suggestions. The report was accepted by the CRTC in October of the same year.

Hougen had by now dropped his idea of distributing Canadian and U.S. signals on their respective countries' own satellites. Instead they proposed an all-Canadian package -- four Canadian signals from uplink sites in Vancouver, Edmonton, Hamilton and Montreal. Added to this would be eight radio signals -- four English, two French, and two native signals uplinked in the North.

Hougen was convinced that Cancom and Canada would be good for each other. In notes prepared for a November 1981 board meeting, he wrote: "If we have as a principal objective to serve Canada and contribute to a greater understanding between people and regions of the country, realising of course that a well run and profitable company is necessary to achieve our objectives, we will indeed have a growing, successful company commanding support from government and regulatory agencies."

In December 1980, the CRTC called for licence applications for a satellite service aimed at "remote and underserved" communities -- defined as those receiving no more than two television signals. Three other companies besides Cancom responded.

There was no model for such an application. The highly complex document was "quarterbacked" for Cancom in Toronto by lawyer Chris Johnston, who later became a partner in the Ottawa law firm of Johnston & Buchan and served as a Cancom director for more than a decade.

The lights burned late on the eve of deadline day. Staff borrowed from Selkirk Broadcasting Ltd. worked furiously to prepare the lengthy and detailed application, and Cancom's first president, Robert Short, rushed the document to Ottawa on a late night flight. (Short later rewarded staff for their Herculean efforts by transporting them in limousines to the harborfront and taking them on a cruise.) The CRTC scrutinized the application with meticulous care. The Telex sent to Whitehorse with follow-up questions was four feet long. Then, on the morning of February 10, the chairman of the CRTC, John Meisel, called the public to order and began a hearing that was to have far reach-

ing implications for the public, the cable television industry, and the satellite industry in Canada.

Canada was the first nation to put a commercial communications satellite into orbit. Now Cancom was seeking to become the first company in the world to create and manage a national satellite television service for remote and underserved communities. Despite the heavy costs and technical challenges involved, the signals would be scrambled, something never before attempted, to protect them from “signal pirates.”



Cancom's rivals for the licence had chosen technology based on Ku-band satellite transponders, which operated on 14/12 Gigahertz and produced "spot beams" of concentrated power but limited coverage. Cancom elected to go with the broader "footprint" of 6/4 Gigahertz C-band, even though it required larger dishes. C-band had the added advantage of being available immediately. Ku-band would not be ready for at least eight months.

What is widely perceived to have been a turning point in the competition for the licence came during Commissioner J.R. Robson's questioning of Rolf Hougen. "If you were given the green light by the CRTC," Robson asked, "what time frame are you looking at in terms of being operative?"

Hougen responded without hesitation: "Within 90 days."

"Ninety days?" echoed Commissioner Robson, to an audience of raised eyebrows. Laughter from Cancom's disbelieving rivals rippled through the room.

The skepticism was understandable. Cancom was proposing to send its signals to the satellite from four ground uplink stations in Vancouver, Edmonton, Brampton (Ontario) and Montreal. Satellite signal distribution was a new science requiring highly specialized equipment and engineering skills. Vancouver and Montreal had no uplink facilities whatsoever. Even pouring the giant concrete bases to support the 26-foot transmitter dishes presented a formidable challenge. CITV had a transmitter that could be used as an uplink but it was located at a remote site a 40-minute drive from Edmonton. CHCH was using a Rogers transmitter in Brampton.

But the CRTC was mindful of the spread of illegal earth stations and home satellite dishes tuned to American programming and was anxious to achieve a Canadian presence in satellite service as quickly as possible. The regulatory authority was no longer insisting on linking service to remote and underserved communities with pay TV. Hougen had argued against it, knowing that the cultural implications of pay TV would delay the start of satellite service by at least a year.

On April 14, Cancom received the news that it had been awarded the licence, valid until Sept. 30, 1985. While the CRTC was concerned about the lack of Atlantic programming, which for Cancom was not economically feasible at the time, it was impressed by the service-in-90-days commitment, and by Cancom's regional representation. It also liked the idea that many existing earth stations would be able to convert to Cancom service with only minor adjustments.

Hougen noted in his diary that evening: "Two and a half years of persistence and hard work paid off." Next morning, his phone rang at 7.15 a.m. It was the first of a barrage of calls from the media, suppliers and local people that would go on for nine hours. Not since the first telegraph service reached the Yukon in 1899 had there been such a sense of anticipation among Yukoners about the future of communications in the North. Headlines in the Whitehorse Star called the Cancom partners "Hougen's Heroes". On April 22 the board confirmed Hougen as chairman and CEO.

A month after giving Cancom the go-ahead the CRTC invited cable operators to apply for satellite service licences. By September more than 1,000 applications had poured in. Meanwhile, Cancom was racing to meet its commitment on the uplinks. The late George Young, an outstanding engineer at CITV, got the work started. John Underhill left Telesat Canada to head the Cancom engineering team assigned to perform what was little short of a technical miracle.

The Edmonton uplink presented some unusual challenges. Every time there was a power "bump" the equipment had to be reset by hand. That entailed a 40-minute drive, often in grim weather, and sometimes a climb over a locked gate. TCTV, like Vancouver, needed an uplink built from scratch. The site chosen was Télémédia's radio station CKAC, the oldest French-language radio station in Canada, at Oka, just outside Montreal. In 1982 the building also became the control centre for managing the satellite operation. "You would never have believed that it was possible to do what they did with the place in Oka," Harold Nickerson recalled in 1997. "It was cramped quarters, small. It made a real strong 'together' operation." Among those who rolled up his sleeves to help get the place ready for the signal launch was a youthful Craig Hougen, Roll's son.

At 3 p.m. on July 15, 1981, George Young reported by telephone from Edmonton: "We see all four signals." That was followed by a message from Vancouver: "All four signals strong here." At WHTV in Whitehorse, government representatives, bankers, reporters and the Hougen family watched as the signals appeared on the screens. Champagne corks popped. Against tremendous odds, Cancom had done it in 90 days. Eldon Thompson, head of Telesat Canada, which owned and operated the satellites, had, plaques struck for Robert Short and his engineers to commemorate their achievement. Under a depiction of smiling faces, the plaque declared: "They're beaming!"

Peters calls John Underhill a miracle worker. “He was the guy who made it all work. All the things we talked about and dreamed about and hoped for, John made them work. He saved our life. While the Americans were talking about encryption systems and scrambling and descrambling, John was doing it. I remember talking to some Americans about what we were doing and they said ‘You’re doing WHAT?’ We were three years ahead of them.”

In September 1981 Cancom ordered a \$12 million Orion scrambling system from Oak Industries to fend off signal pirates, making the network the first in the world to broadcast commercial television programming in a scrambled mode via satellite. The choice of Oak over much cheaper alternatives raised some eyebrows, but it was the only one in which the security codes could be changed by remote control at any time.

Meanwhile, public interest in satellite-distribution concept was growing. On November 30, 1981, Hougen appeared on the CIW open-line show Nightline in Edmonton and found himself responding to calls from as far away as Yellowknife and Goose Bay, Labrador. The following March Hougen appeared on Front Page Challenge, along with Manitoba’s New Democrat Premier Howard Pauley. Later, Pauley made a point of learning more about Cancom and became a strong supporter of what the company was trying to do.



Broadcasters Demand Licence Restrictions

In its April 29, 1980, edition, The Yukon News said Cancom's mandate "could rightly be called the single most significant decision ever handed down in the history of the federal regulatory body." But not everybody was thrilled with it. Broadcasters went before the CRTC to argue that no cable licences should be issued in communities that already had a broadcast station. Hougen called that ridiculous. "Broadcasting and communications must change to take into account the reality of satellites and the great need for more and greater diversity of programming everywhere in Canada, not just in the big cities," he said.

Peters said in the 1997 interview: "Broadcasters were opposed to (Cancom) because they thought it was going to be a threat to them, which it has never been. Large cable companies were opposed because we were getting involved with their business. We kept telling everybody that it was hard to describe what was going to happen here because it had never been done before. Every time we made decisions at the board level we were writing the text book."

Six months after Cancom was granted its licence, the National Hockey League tried to stop Wednesday night hockey games being shown in remote and underserved areas. Cancom was accused of infringing the NHL's own territorial restrictions on showing games on television. The Cancom board decided to stand firm and fight it in court if necessary. The dispute was eventually resolved without a legal showdown, but not before the curmudgeonly Leafs chief Harold Ballard had told the Toronto Sun: "If there's a signal going out of here and I find out which wire it is, there's going to be a hatchet through it, I'll tell you that."

Meanwhile, the government was clamping down on illegal dishes. The RCMP seized several and The Whitehorse Star reported the owner of two satellite dishes as saying: "I will fight this down to the bitter end. I don't intend to let anyone --(Communications Minister) Francis Fox or anyone -- tell me what to watch. This is not the Canadian way. This is what happens in Third World countries."

Distributing broadcast signals across time zones had its perils, too, as viewers reminded Cancom in no uncertain terms in the summer of 1982 when a late-night adult movie in Montreal appeared on Vancouver screens at 8 p.m. Short said at the time that he could understand how a film could be misclassified or not properly described in its

synopsis, thereby making Cancom vulnerable to this sort of mistake, but “any material that we show on any of our satellite transponders must be suitable for general broadcast in terms of content and time of scheduling.” He said staff should not hesitate to pull the switch if it happened again.

In November Cancom directors and executives gathered in Room 200 of the House of Commons to demonstrate satellite service. At precisely 4.32 p.m. television sets lit up with the four Cancom signals. The presentation lasted two hours and clearly impressed the big gathering of MPs and senators. On December 31, 1981, the first 20 community cable systems received their licences, but as Hougen noted six months later: “It is evident that we will have serious problems if the customers are not on board soon. The licensing process is dreadfully slow.”

The company had taken a substantial risk responding to what was perceived as a national priority -- establishing a legal Canadian satellite broadcast service -- but from a business standpoint it was becoming clear that the signals had been put up too soon. At \$1.25 million a year for each of the four transponders, costs were running far ahead of licensed customers.

For its part, the CRTC was swamped. “They (commissioners) hardly had time to grab a clean shirt between hearings,” Bob Short recalls. There were other problems. Small communities were having trouble raising the cash to start a cable system, and the downturn in the economy was causing potential customers in very remote areas, such as oil drilling operations, to put their satellite television plans on hold.

“We had spent all the money up front and we had virtually no customers,” Peters says. “We got a lot of lip service from the CRTC but it wasn’t getting us anywhere. •We were bogged down in the process. They were treating all of these applications in the normal slow, ponderous way. We had several meetings with the CRTC and they assured us they wanted to cooperate. They were dealing with applications on the appropriate forms but they had others written on the back of cigarette packets and everything in between. A lot of the applications did not follow the normal process.”

By September 1982 Cancom had spent \$11 million and taken in only \$550,000. De Gaspé Beaubien was worried, and so was his board, about the operating losses. Cancom felt that in small communities where an application for a licence was uncontested, the process should be streamlined. A meeting was arranged with then Communications Minister Francis Fox at de Gaspé Beaubien’s home in the Laurentians north of Montreal.

Delayed by official business, the minister finally arrived four hours late to find dinner cold and most of the guests sipping drinks -- “well and truly relaxed,” one of them recalls. Short remembers that night for another reason: de Gaspé Beaubien’s large dogs ate the expensive leather briefcase he had just brought back from Europe. Says de Gaspé Beaubien: “Everybody admired the briefcase and Bob left it on the floor in the reception area. I had these big

white dogs, good looking but stupid as hell, and one of them went in and made a big hole in the thing. When we walked out, all that was left was a wooden frame. It was so embarrassing.”

Peters takes up the story of the meeting with Fox: “Finally we had dinner and said to the minister, look, you’ve got to help us. We’re going to go out of business and we have worked very hard to get this far. You’ve got what you want and it hasn’t cost the government any money. If you want it to cost the government money, just carry on with what you’re doing. We’re not asking you for money. All we want you to do is meet with the CRTC and get these applications going. That turned it around. The applications started to be approved and it started to snowball.”

Earlier, in October, it had been announced that Short was stepping down as president. The board accepted his resignation with regret. His successor was André Bureau, from de Gaspé Beaubien’s Télémédia. Around the same time, Hougen announced that he would be relinquishing his role as chief executive officer. It was no longer practical for someone living in the North to run the day-to-day affairs of the company. Bureau would take on that responsibility, too.



New Year Dawns With Good Omen

The year 1982 had started with a good omen -- a cheque for \$187, from the cable system in the rural Quebec town of Havre St. Pierre. It was the first payment for service ever received by Cancom. But in July 1982, as the first fiscal year neared an end, the number of subscribers was 13,000 short of the projected 42,000. Nineteen cable systems representing 20,000 subscribers were awaiting licences. Meanwhile, the Cancom operations department based in Ottawa was trying to handle calls around the clock with a staff of two. In the west Cancom had only three sales representatives covering four provinces and the North.

The vice president in charge of sales, John Barnes, hit the road to sell Cancom services. In Moosonee (population 975) at the southern tip of James Bay, he returned to his motel after a day spent pitching satellite television to the local people. It was the only motel in town. "There wasn't a telephone in the room and certainly no television set, but I was told there was a common room at the end of the hall," Barnes said later. When he walked into the room and set eyes on the battered old television, he knew Cancom was on the right road. "There was a sign on the set. It said: Please Do Not Kick the Television -- There Is Only One Channel."

Cancom decided it needed to add the three U.S. commercial networks (ABC, CBS and NBC) and one non-commercial network (PBS) to its package. Since the signals were available to 90 per cent of Canadians, it was clearly unfair to deny access to the other 10 per cent living in small and remote communities. The government was reluctant to appear to be promoting the extension of American television in Canada, but in April 1983, the CRTC gave Cancom the go-ahead to distribute the three-plus- one package, plus VOXM FM radio from St. John's, Newfoundland.

One of the biggest problems Cancom had to overcome in the early years was its relationship with cable operators. "They always felt that Cancom was ripping them off, and the fact that we were losing all this money was of little consequence to them," Nickerson recalled. "They just felt that Cancom was charging them too much, and then when Cancom started to make money they felt that they were really being ripped off, having forgotten about all those prior losses."

"Back in December, 1979, Hougen had approached the CCTA about joining him in the satellite project. The CCTA invited him to speak at a board luncheon but Hougensays his ideas

were criticised and even ridiculed. On May 13, 1986, the extent to which the relationship had changed was symbolized at the Hotel Vancouver when the CCTA added Hougen to its Honour List. In his acceptance speech Hougen said: "I think the cable industry at times considered Cancom the enemy -- at other times a friend and associate. As a small cable operator myself, I always knew we were partners in progress. Today, with this presentation, I know that we have finally united in a common purpose to bring greater choice to Canadians everywhere."

André Bureau took over as president in January 1983. Despite the problems he felt the company had a better assessment of the market and there was potential for very profitable growth. An influx of new cash was becoming imperative, however, and in February the board discussed the idea of taking the company public. Debt had reached a point where the bank was insisting that the partners chip in more of their own cash. An internal document called the situation "precarious." It wasn't clear how much longer the partners would -- or could -- continue to dip into their own pockets. Hougen had more than \$5 million of his own money on the line. "If the company had failed, it would have gone a long way and maybe totally wiped me out, I don't know. But I was very vulnerable," he recalls.

Hougen held 28 per cent of Cancom's shares at the outset. "I had arranged for the initial launch but when we ran over, our friendly bankers would phone up and say we think a couple more million would be appropriate in equity. That got difficult. (But) I participated on every call." By the end of 1983, however, his holdings had dropped to four per cent as he sold shares to meet his commitments to the company. Peters bought some of Hougen's shares and became the largest shareholder and chairman.



Peters recalls: “We were running out of money and we went several times back to the shareholders to ask for more. Philippe was in shock. He was writing big cheques. We were looking for ways to raise long term money. Banks are short term money. Raising money on the public market is long term money and that’s what we were trying to do, to buy more time to build the business and get more customers on line.”

In the fall the board decided to take the company public. Four million common shares at \$5 each were to be offered on the open market, with four of the original shareholders (Hougen was the exception) guaranteeing to pick up half of them if they failed to attract buyers.

On Oct. 25, four days after the prospectus was finalised, Bureau broke the news that he had been offered the chairmanship of the CRTC. He immediately flew to Ottawa, and by 5 p.m. he called Hougen to say he had accepted the post. By 9 p.m. he was back in Toronto and enjoying a celebratory drink with the Cancom chairman. For Cancom, however, the appointment was a mixed blessing.

While the company was glad to have someone in the regulatory body who understood what Cancom was all about, Bureau had done well in very demanding circumstances and would be missed. For a replacement, Cancom turned once again to Télémédia, hiring Pierre Morrisette in November. In January Morrisette said in an internal report: “Cancom is undoubtedly one of the most formidable managerial challenges in broadcasting today,(and) one of the great opportunities in broadcasting.”

Meanwhile, the four million shares on the Toronto and Montreal stock exchanges were selling briskly. Peters says: “The money came in just in the nick of time. It was at the point where the original shareholders were close to saying no on the call (for additional investment) and we needed longer term cash. The underwriting sold out in under a week as I recall. All kinds of people were buying. A complete cross section.” Peters says the \$38 million deficit did not unnerve him. “We had built up that kind of debt because everyone expected to be paid. Telesat, the equipment suppliers and so on, they all wanted to be paid up front. You had all this very heavy capital-intensive investment up and no customers. Debt built up very quickly. I knew if we could hang on

long enough the customers would be there. I had explicit faith that it would be successful.”

The share issue closed December 29, 1983, producing the much needed cash to pay off bank debts and provide working capital. Hougen, having completed the sale of his shares, took a boat across to Vancouver Island and spent “four great days picking oysters off the beach and having oyster stew, oyster breakfasts, oyster lunches, raw oysters -- you name it. We picked up buckets of oysters on the shore at New Year’s midnight.”

It would be January 1988 before Cancom would report a profit. There would be more obstacles along the way, but the worst was over. Against the odds, Cancom was on the road to becoming an outstanding Canadian success story.

