



THE PHIL STONE REPORT

There's Selkirk, a county in Southern Scotland. There's Selkirk, the mountain range in British Columbia, and there's Selkirk, the appellation of one of Canada's largest communications firms.

"We called it Selkirk," said John Stuart (Stu) MacKay, the president of the conglomerate, "because of the mountains and the connotation they had of ruggedness and stability."

MacKay, born in the West in 1918—he hails from Saskatoon—worked his first radio where men are men and women don't complain. CKWX Vancouver, CKRM Regina, CJCA Edmonton, and CKRC Winnipeg. He did it all—on air, writing, selling. Coming East he became the head of All-Canada Radio and Television Ltd., one of the country's major sales representation firms and now part of the Selkirk group.

Selkirk is not a showy firm. It doesn't beg publicity. It doesn't shout from the rooftops. Visit its offices at Bloor and Yonge Streets in Toronto and you feel that sense of power, success and stability laced with a quiet, underplayed assurance. Stu MacKay gives his visitor from *Broadcast Technology* a list of the Selkirk enterprises, those owned outright and those in which it has interests and investments.

They range from Western Canada to Eastern Canada, from England to the United States. While we freeze up here, old friend Bill Crampton is enjoying the warmth of Fort Lauderdale, Florida, where he acts as director of programming for Selkirk's cable system. Bill is also enjoying the success of this venture. Its revenue will soon contribute to the better than \$64 million that the entire Selkirk orbit grossed in its past fiscal year.

We've listed here for you Selkirk's total subsidiaries so that there is a complete picture of its diversity of operation (see box).

You'll note if you're radio conscious, that Selkirk has no stations east of Alberta. "We'd like to have properties," said MacKay, "but thus far the CRTC hasn't agreed." Stu isn't as one-sided about radio as the large number of



Stu MacKay is president of multi-faceted Selkirk Communications

broadcasters who think only FM will make it big in the 80's. MacKay believes this decade will be equally big for AM.

There used to be a salesman whose philosophy was, "Give it the most gas when you're going down a hill. That will carry you up when the going gets tough." Selkirk seems to have that philosophy. Big as it is, Selkirk looks to future growth. In its report to shareholders—it is a public stock—Selkirk said, "We need to be well prepared for a world in change. Having originated in broadcasting, Selkirk intends to maintain this broadcasting base from which its future growth will be developed. At the same time, we are building and broadening our interests into fields of endeavour allied to broadcasting . . ." Here they talk of TOCOM Inc. of Texas, a big name in the field of design and manufacture of two-way cable TV communications, and Quality Records, long a major corporate in the disc field. Also, the firm is extending its base internationally.

Selkirk Communications Ltd.

SUBSIDIARIES

- Blairmore, Alberta—CJPR
- Calgary, Alta.—CFAC AM/TV
- Edmonton, Alta.—CJCA/CIRK-FM
- Grande Prairie, Alta.—CFGP
- Lethbridge, Alta.—CJOC/CILA-FM/CFAC-TV7
- Vernon, B.C.—CJIB
- Vancouver, B.C.—CKWX/CJAZ-FM
- Victoria, B.C.—CJVI
- Hamilton, Ont.—CHCH-TV
- All-Canada Radio & Television Limited
- Quality Records Limited
- TOCOM Canada Limited
- Selkirk Films Limited
- Selkirk Communications Limited, London, England
- Radio Sales & Marketing Limited, London, England
- Seltech Equipment Limited, Maidenhead, England
- Selcom, Inc., U.S.A.
- Meeker Television, Inc., U.S.A.
- Selkirk Communications, Inc., Florida, U.S.A.

OTHER INTERESTS

- Kelowna, B.C.—CHBC-TV (33 1/3%)
- Vancouver, B.C.—BCTV; Victoria, B.C.—CHEK-TV (41.03%)
- Ottawa Cablevision Limited (41.22%)
- Greater Winnipeg Cablevision Limited (50%)
- London Broadcasting Co. Limited, London, England (46.03%)
- Beacon Broadcasting Limited, Wolverhampton, England (30.56%)
- Radio Forth Limited, Edinburgh, Scotland (29.71%)
- Radio Victory (Portsmouth) Limited, England (15.47%)
- TOCOM, Inc., Irving, Texas (37.7%)

However, it tells its shareholders: "We shall remain as a Canadian company—strengthening our base in radio, television, and cablevision, while increasing our broadcasting services where opportunities occur." →

THE PHIL STONE REPORT

Gene Fitzgibbons, whose business card reads "E. E. Fitzgibbons, vice-president, Selkirk Communications Limited", has great faith in cable and Pay-TV and sees them as beyond seedlings that will grow in Selkirk's empire.

What both Stu MacKay and Gene Fitzgibbons feel strongly about concerns the possibility of the CRTC introducing incentive programs. They feel

consideration should be given to the payment of tax-free incentive grants to the broadcasting industry similar in concept to those prescribed by the Enterprise Development Program. This could provide the broadcasting industry with incentive grants equivalent to 50% of actual expenditures incurred in the form of salaries, wages, etc., on eligible or approved Canadian TV productions.

A TRADITION ON THE MOVE

Effective January 1st, 1980 we at RCA Limited made some changes to better serve you, our customers. Please make note of these changes for your future reference.

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Mr. J. P. (Jim) Watson,
Central Canada Field Sales Manager,
Tlx: 065-24136

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Mr. W. H. (Bill) Holroyd,
Eastern Canada Field Sales Manager

Mr. R. W. (Ron) Weaver,
Marketing Administrator, CBC Sales,
Tlx: 058-21572

RCA



Bill Jeynes heads Seltech Equipment Ltd. in U.K., which is building an international market for the products of several Canadian manufacturers of broadcast equipment.

They would also like to see accelerated depreciation for broadcasting equipment, required as a result of new technology and programming facilities, written into the Income Tax Act. And higher capital cost allowance rates (40%) for certain television transmission and production equipment to permit a more realistic rate of depreciation.

Television, radio, Selkirk News Service, motion pictures, sales representation, cable television, TOCOM, Inc., Seltech, records—one can't be sure what might be next. I'd give it to Pay-TV. Especially after having Gene Fitzgibbons tell me that he'd figure on a 94% penetration across Canada.

Low in profile, big in concept and achievement, Selkirk Communications would make a fine study for any university business course. It exemplifies Canadian fortitude, imagination, perseverance—with the enterprise to compete successfully in larger markets such as the U.S. and U.K.

Dr. William Menninger wrote: "Six essential qualities that are the key to success include sincerity, personal integrity, humility, courtesy, wisdom, charity." Add foresight and venture and you have Selkirk Communications Limited and John Stuart MacKay. ■

Phil Stone is a well-known writer, broadcaster and educator, based in Toronto. His Phil Stone Report and Broadcast Beat are regular features of BROADCAST TECHNOLOGY.

BROADCAST BEAT

by Phil Stone

Donald Ferguson is now general sales manager at CFTO Toronto and **Richard Heatherington** is sales manager . . . speaking of CFTO, we thought that for the next *Phil Stone Report* we'd like to profile the colorful **John Bassett**, always good copy, particularly to give him a chance to refute **Maggie Siggins**'s unauthorized biography, *Bassett*—which apparently has Big John very unhappy. He wrote that he was flattered by my letter but was not going to give an interview: "It has been ages since I talked to anybody in the media for publication." As for Ms. Siggins's book: ". . . it is so full of errors of fact that I simply think the best thing to do is to ignore the whole thing." (He did send best regards and good wishes, underlining my long opinion and experience, that John Bassett is one helluva guy) . . . **Glen Box**, who graduated from the Humber College Radio course and was working CKAR in Oshawa, is at CHAY in Barrie . . .

Writing the piece on Selkirk Communications for this issue of BT was particularly enjoyable since it brought me back into contact with two people I've known from 'way back—**Stu MacKay** and **Gene Fitzgibbons**. Gene's father was the legendary **J. J. Fitzgibbons**, who made Famous Players the giant that it became. He was also a power behind the founding of the Variety Club of Ontario and its school for handicapped boys, Variety Village. Largely because of him and **Conn Smythe**, I became active in Variety, culminating with the thrill of becoming a Chief Barker and then member of the International Board. Gene's brother, Jack, was also a Chief Barker and an International Executive. He ran Theatre Confections, which handled the concessions in the Famous Players theatres, and now resides in Hawaii. Gene, of course, was an early pioneer of cable and a Pay-TV experiment called *Telemeter*. He, like Stu MacKay, is a keen, far-sighted person, who can look back on a lifetime of accomplishment . . .

Good time to remember your registration for the annual CAB meeting in Calgary. Don't know if we can get out, but if you can, it certainly ought to be worthwhile . . . When **Kathleen Stokes** died in December we remembered with nostalgia her work with *The Happy Gang*. She was a warm and talented woman . . . Speaking of the **Bert Pearl** crew, did you know that the late **Herb May**'s son, **Peter May**, is news director at CFGM, Richmond Hill? . . . **Lotta Dempsey**, the famed *Star* columnist and author, who tired of doing a daily CBC-TV show about senior citizens, is working with this writer in developing two shows we hope to sell: *Meet the Inventor* for TV and *Experiences* for radio and/or TV . . . Your sports department might want to have a copy of the book on baseball narrated by **Rick Bosetti** of the *Blue Jays* and due out the day of the *Jay's* 1980 opening game, April 14. We did the collaboration . . . →

tube talk



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BROADCAST BEAT

CHUM Toronto has its 35th anniversary this year. It started in 1945 as a 1 kw day-timer . . . CKEY is even older. Opened in 1925, it comes up to 55 years in 1980 . . . **Mike Sollman** was promoted from Montreal sales manager to national s.m. at MagnaMedia . . . **Ray Kundinger** was made v.p. and g.m. of Quantum Communications. He was formerly with McConnell Advertising . . . Bully for **Ruth Pinkerton**: the communications veteran with an enviable history of achievement, became president of The Media Data Centre, wholly-owned by Intermart Inc. . . . Empress Litho Plate Ltd., a Toronto plate-making firm needed strippers, so got Raymond Lee and Associates to design and place an ad for them. It did very well; brought in 20 applications from some good people. It also brought 70 applications from ladies willing to take it all off! . . .

In our early TV days with the CBC, one of the nice people we came to know was producer **Terry Kyne**. Good to learn that he now produces *The Mike Douglas Show*. One thing about the Corporation—it sure teaches its graduates the stuff of which successes are made . . . Many a woman's libber who cries, "I will not be dictated to," works as a stenographer . . . Global TV added **Claire Hoy**, the *Toronto Sun's* Queen's Park correspondent to its news staff. Also **Raymond Heard**, the former *Montreal Star* editor who, with **Larry Shapiro**, created *The Editors*, seen on several Canadian TV stations . . . **Leo Rampen**, who created *Take 30* and *Man Alive* became the CBC's TV director for Quebec . . . Télé-Métropole moved **Gaston W. Belanger** up from v.p. & g.m. to president and general manager . . . West Coast broadcaster **Don Hamilton** was appointed chairman of the board for *Loto Canada*, a Crown corporation . . . **Michael Arpin** of the CRTC joined **Ed Prevost** at Civitas Corporation to handle government relations and corporate development. Looks like a very smart move on Prevost's part since Arpin is a truly top man . . . **David Tafler** of *Financial Times*, known to many listeners (CFRB) as a financial broadcaster, was made editor and assistant publisher . . .

If you didn't hear about it, Foster Advertising, Montreal got all Royal Bank's Canadian advertising, a juicy account of about \$7 million . . . **Randy Moffatt** took over the late **Ron Mitchell's** place on the CAB board . . . **Babs Pitt** who left CFCF to go with CTV and then the CBC was working with the Corporation as a consultant, not a staffer, at last report. Babs has bushels of talent . . . The annual Broadcast Executives Society's *Radio Day* is scheduled for March 13th at Toronto's Sheraton Centre . . . And all that building out there in Regina is the CBC's huge new 130,000 square feet facility. (Will **Russ Jackson** wind up as sports director?) . . . It's doubtful if even an insurance company would give **Dolly Parton** full coverage! . . . **Everett Elting** moved up to president and chief operating officer at Grey Advertising, which bills some \$30 million annually . . . And the women continue to advance: **Sheridan Petrunia** is now a v.p. at F. H. Hayhurst after having served so capably as account supervisor . . . Note to sports directors: racquetball has come along so fast there is now a Canadian Racquetball Association, with offices at 2780 Granville, Vancouver . . . And a final note for your calendar: Daylight Saving Time starts April 27th!

tube talk



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appointments



Mann

● Access/Alberta—**John Mann**, formerly of M.S.C., Toronto, appointed general manager, technical services.

● BSR (Canada), Toronto—**David Archambault**, formerly of Ward-Beck Systems, to professional products manager.

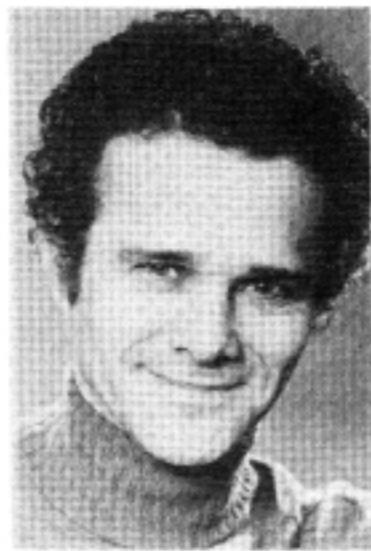
● Bushnell Communications, Ottawa—**Ross Dedman** to v.p. finance and secretary.

● CBC—**Leo Rampen** to director of TV, Quebec

● CFX Victoria, B.C.—**Bill Hazell** to



Archambault



Rampen

general sales manager; **Keith Dagg** to director of marketing.

● CFCF Montreal—**Paul Chamberland** to v.p.; **David A. Barrett** to v.p., radio.

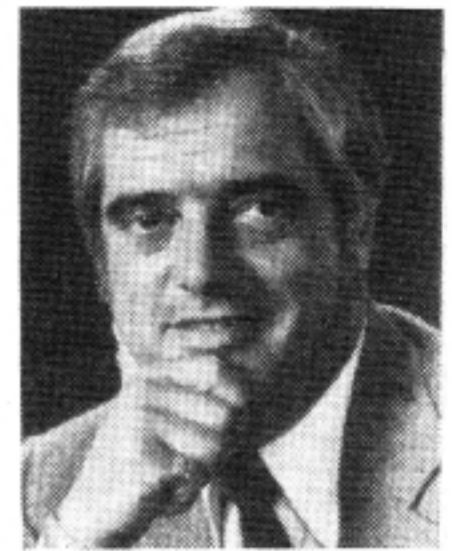
● CJOR Vancouver—**John Tarbat**, formerly of Paul Mulvihill, Toronto, to general s.m.

● CJNR Niagara Falls, Ont.—**Michael Cunningham** to sales manager.

● CKNW New Westminster, B.C.—**Ronald S. Bremner** to general manager.



Hazell



Dagg

● Civitas Corp., Montreal—**Michel Arpin**, formerly with CRTC, to director of corporate relations and development.

● CKVU-TV Vancouver—**Hayden Kennard**, formerly of CBC Toronto, appointed engineering manager.

● Comad Communications Ltd.—**Wilf Rice**, formerly with M.S.C., appointed to head new western office at 412 Oakridge Way SW, Calgary, AB T2V 1T4, (403) 238-1366, Telex: 03-82193.

● Electro-Voice, Buchanan, Mich.—**Jim Edwards** to commercial sound product manager. →



Chamberland



Barrett



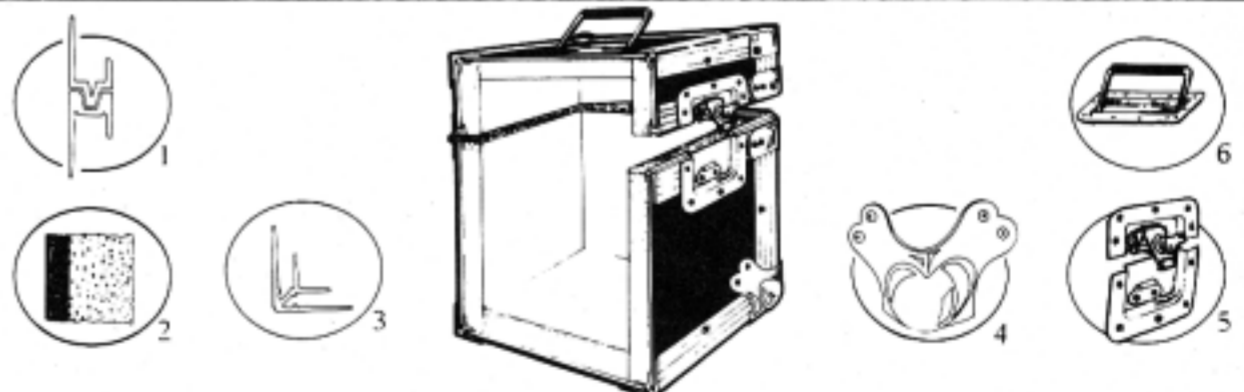
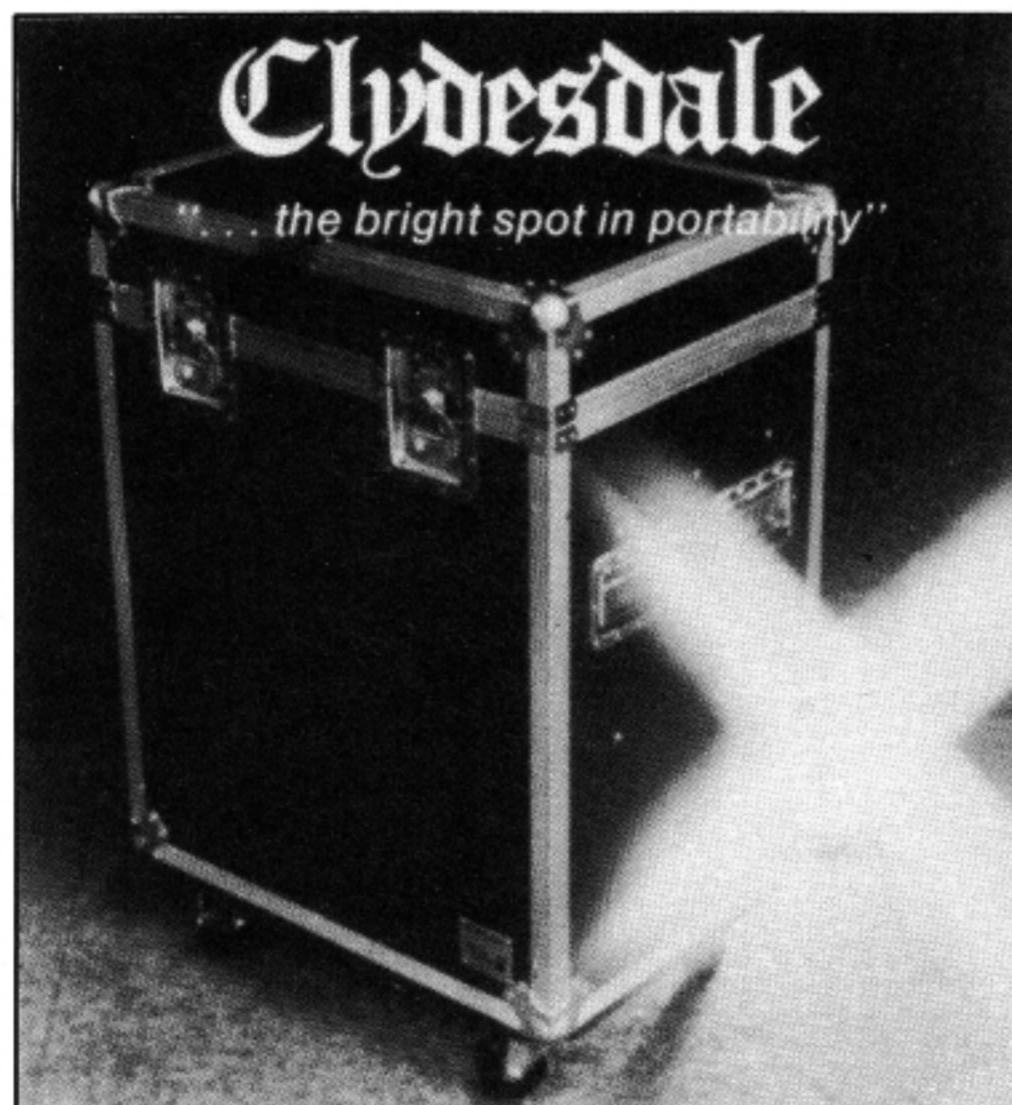
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UNDERSTANDING TV AND FM COMBINERS

by Marvin Crouch

With real estate, buildings, coax, antennas and labor all rising in cost, the combiner is about the only inflation fighter we've got left to help us save money in new TV or FM broadcasting facilities.

Nevertheless, many people are leery about filters, and rightly so, because there have been some on the market, let us say, to be kind, poorly engineered. This paper, I hope, will help you recognize good design and make use of these devices with confidence and satisfaction.

Before we get into the specific types of combiners let's discuss the component parts and pin down the desirable characteristics to look for.

The Filter (Resonator)

A filter is a transforming device. You transform up into it and down out of it. In the middle, very high voltages are experienced directly related to the Q. The source and load impedances govern the performance of the device. If the transforming ratios in and out are modified by the outside loading (impedances) the characteristics of the filter will change.

The ratio is governed by the coupling. Loose coupling gives low loss and tight coupling gives higher loss. The selectivity of a filter increases with tight coupling and the number of stages, but so do the insertion losses. These losses are in addition to the

conductivity losses, sort of "mother nature losses".

Size is an important feature for power. Because the length is related to the operating frequency, the volume consideration becomes cross sectional size. Larger cross sections mean higher Q, so the bigger the better, when talking about power. Use loose coupling to keep the losses to a minimum and to obtain as much selectivity as possible.

The number of sections governs the bandwidth. It is usual to use two sections for FM and three sections for TV. If you use more, you are fighting insertion loss, and if you use less, bandwidth.

It's impossible to use such loose coupling that the insertion loss is zero; there is always some, in addition to the conductivity losses. However, the conductivity losses can be minimized by silver plating. The coupling losses come with the demand of the problem. Close frequencies require more selectivity and therefore tighter coupling, which means more losses.

The resonating element, because of high voltage, must be well engineered to avoid air breakdown gradients (corona). Without this, strange alchemy effects can take place as airborne elements are combined into acid, which readily attacks the filter body. The idea is to combine frequencies, not chemical elements.

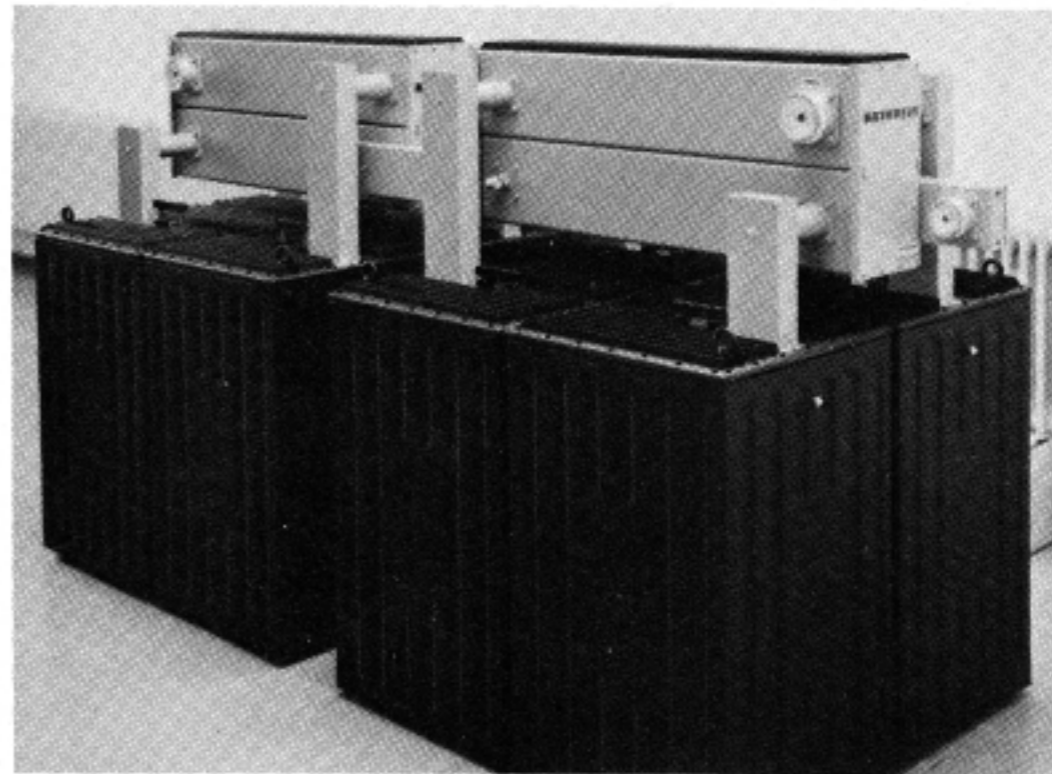
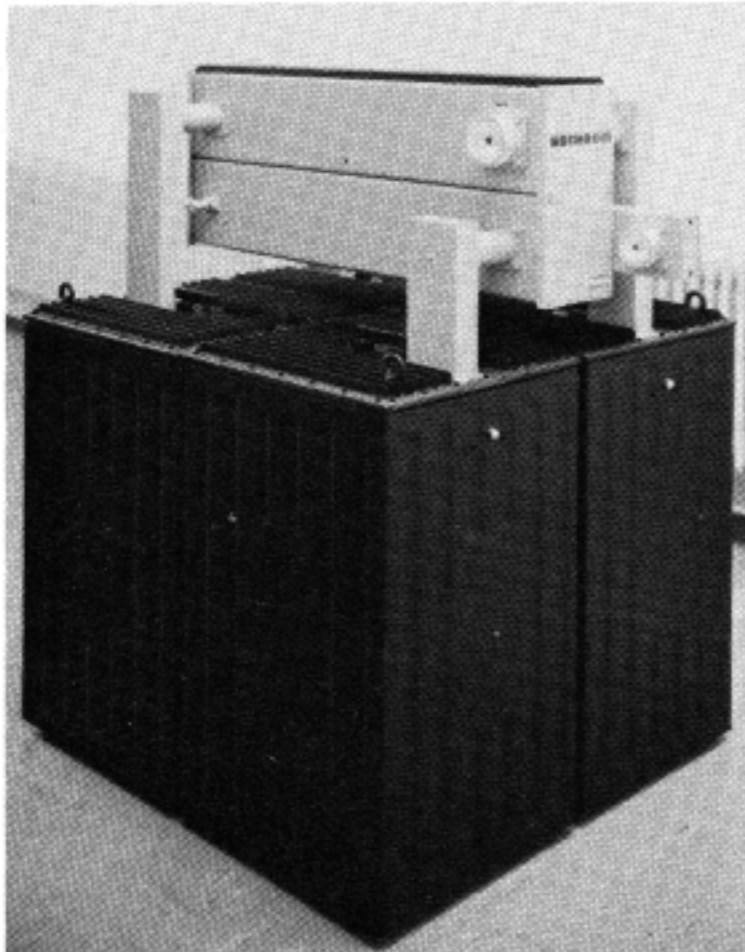
Temperature stability is of utmost

importance. The tuning control, if made of invar, does not change dimension with temperature. Always check the temperature stability specification because some losses must always exist and these become heat. A large filter (cross section) has more ability to dissipate losses than a small one. If it retunes itself, the losses increase and the end result can be severe damage, unless protective precautions have been taken. Even so, you don't want an on-off transmitter situation driving you and your audience crazy; best is a temperature-stable filter.

Summarizing filters:

1. Large size (loose coupling—less tuning loss)
2. Silver plated resonator (low conductivity loss)
3. Corona (no chemical cell)
4. Invar tuning control (frequency stable with temperature)
5. Convection cooled (no fans and mechanical reliability dependency)

Now most likely I have some readers saying, "But what if you haven't got a choice?" To answer your question, there is another technique employing filters in close frequency spacing applications, where this selectivity coupling/loss limitation of "mother nature" can still be used without causing filter operational problems. First we must talk about 3 db couplers. →



Above: example of two stage 3 db Coupler Combiner (3 × 20 kw FM).

Left: example of a 3 db Coupler Combiner with two section filters (2 × 20 kw FM).

The 3 db coupler is a marvelous device. A simple explanation is illustrated in Fig. 1.

Energy entering port number 1 couples across to port number 3. If the spacing is such that half couples across, then the other half is left to proceed to port number 2, but is delayed by 90 degrees. If the loads on port 3 and 2 are 50 ohms, then no energy returns. However, if some equal energy returns from equal distance loads, then the reflected energy arriving at port number one will be 180 degrees out of phase from port 3 and port 2 sources. Energy at port 4 will be in phase and exit into a usual reject load.

That explanation is a little oversimplified because of the splitting action of the reflected energy, but the end results are the same.

A 3 db coupler has some characteristics we need to know: loss, directivity, and power handling capability. The loss depends on the internal construction. Strip line couplers are high loss, coax couplers are less, and bar couplers are least because of dielectric materials.

Similarly, power handling depends on the dielectric losses and the size of conductors. As these are all 50 ohm environment devices, voltages never get too high, even with very high powers. The directivity of a coupler is the feature which will provide the isolation needed, in addition to that obtained with filters.

Directivity is the ratio of power at the reject load to the power at the terminated coupled port in the coupled line. In a high coupling ratio couplers used as a directional sampler for measurement, there is very little isolation from the input port to the straight thru output port. However, in a 3 db coupler you have a unique situation, where both the coupled port and the thru port are isolated together from the input port because of the balance between them if the loads are balanced. This cancellation depends on the 90 degree phase relationship of the coupled and thru ports. It is relatively broadband because when λ over four becomes less, the coupling across assumes the make up angle for maintaining the 90 degrees between, and vice-versa.

If I haven't confused you too much, now we can put these elements together and construct three different types of combiners and discuss their relative merits.

It is possible to build combiners with filters, with 3 db couplers, and with both.

The Star Point Combiner—filters alone

The star point combiner with two or more arms is good to employ when frequencies are well separated beyond 1.5 MHz because isolation is dependent only on skirt selectivity. The reason we want good isolation—aside from the fact that unwanted power could be harmful to the other transmitter—is that inter-modulation can take place and produce two new signal sources with both modulations on them. If the skirt selectivity is 20 db, then the IM will be at least triple that, down from the carrier.

Starpoints and cables up to the starpoints are all part of the impedance picture of these combiners. The filters

have to be tuned together as they are mutually dependent for proper impedance. You cannot open the starpoint without interference in the other arm.

Similarly, the load impedance and source impedances must maintain 50 ohms to maintain proper operation of the combiner.

The Stretch Line Combiner—3 db couplers alone

The stretch line combiner makes use of phase differences in the interconnection to make a cyclic filter which passes one range of frequencies on one port while rejecting the other range. For practicality, at least two empty TV channels are required to give the bandpass some flatness. The reject is sharp but wide separation will assure all frequencies are well down across the unwanted channel.

This filter is no doubt the most economical there is and requires no tuning, but it does require a broadband antenna and good hardware to be practical.

The 3 db Coupler Combiner—3 db couplers and filters

When skirt selectivity alone is not enough isolation, because of close frequency spacing, then the 3 db coupler combiner comes into the picture. Not only do we get some isolation with the filters, but we also get the directivity of the top coupler. When f_2 is not totally rejected by the f_1 filters, the energy that gets by ends up in the reject load. For instance, say the filters only gave 13 db, a factor of one twentieth of f_2 would get by. If f_2 were a 20 kw transmitter, 1 kw would get by. However it would be absorbed by the reject load, as opposed to entering the f_1 transmitter for intermod generation. This 1 kw is a loss, but not in the filters—only in the load, where it does no harm and represents only 0.25 db thruport loss.

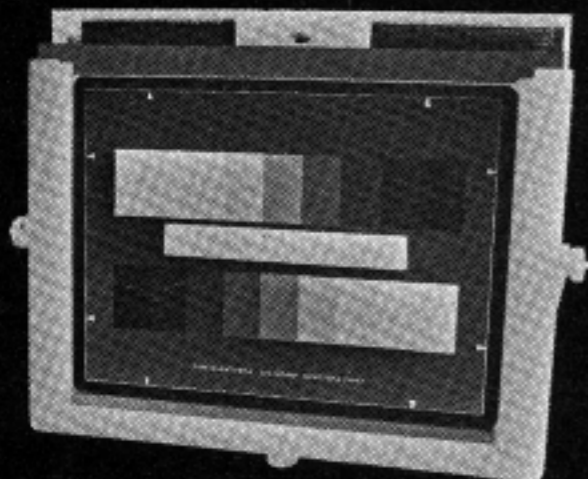
The three db coupler combiner has another big advantage in that it can be expanded almost indefinitely without bothering other sections. The f_2 port is broadband and an identical stage can be added attaching its output to the f_2 input and so on.

This combiner should be familiar to TV men who will recognize it as a Vision-Sound Diplexer. There are two types: one as shown where f_1 is sound and f_2 vision and another where the filters are band reject instead of bandpass and f_1 is vision and f_2 is sound. This latter type is called a notch diplexer and has the feature of limiting video by the notches.

Notches are not uncommon to com-

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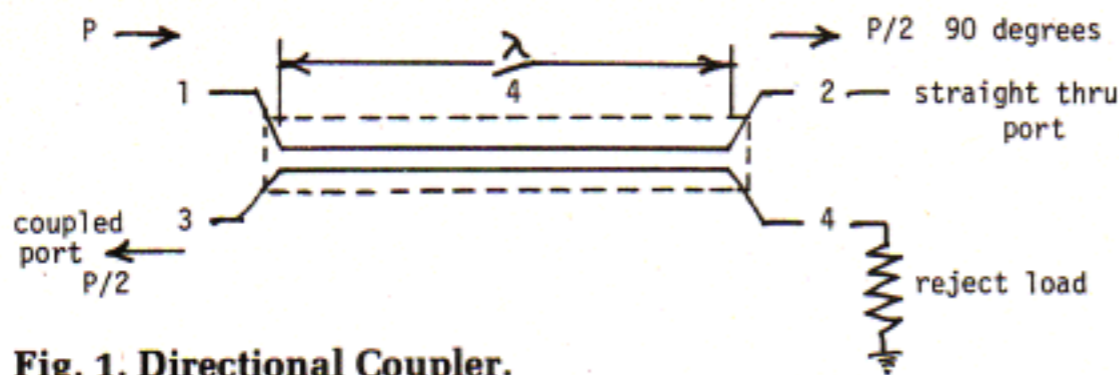
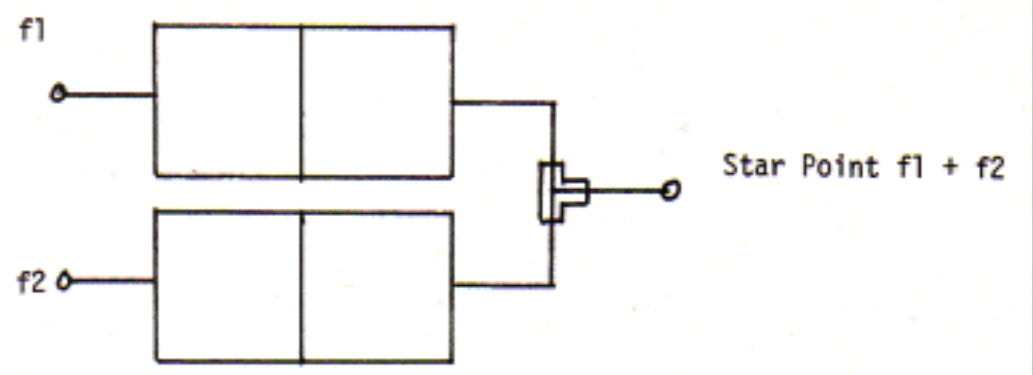
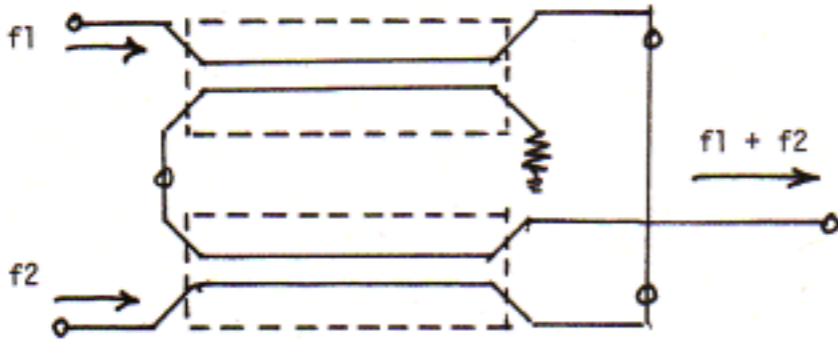


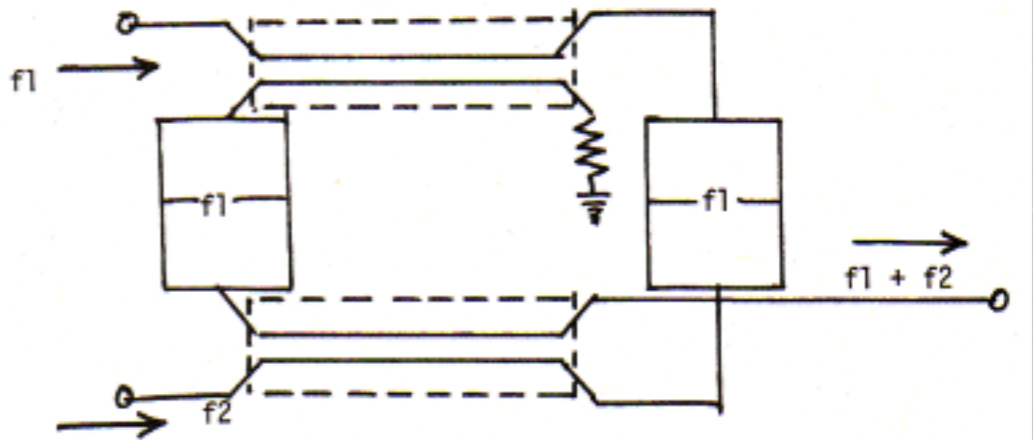
Fig. 1. Directional Coupler.



Star Point Combiner.



Stretch Line Combiner.



3 db Coupler Combiner.

biner work where some manufacturers employ them to steepen one side of a bandpass filter for extremely close frequency spacing. A word of caution is in order when this is done, because the steeper the rolloff the greater the group delay. For video and for stereo this could be a problem. It is wise to specify the group delay you

can tolerate.

In summary, one can say combiners need not be a nightmare if you are careful in your selection process. In combiners, the criterion should be highest performance—not lowest price—because you save money on the total installation through sharing facilities and having trouble free per-

formance.

Marvin Crouch, P.Eng., is a consulting engineer; readers comments and questions may be forwarded to 51 Amberwood Crescent, Ottawa, Ont. K2E 7C2, or telephone (613) 226-5828.

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BROADCAST TECHNOLOGY 41

“What about a radio station in Richmond?”

C-ISL 940



Program director Ian Alexander and station manager Michael Dickinson discuss programming schedule for new Richmond, B.C., AM station, C-ISL 940.

It's barely three years since Mike Dickinson and Ian Alexander began discussing the idea of a radio station for the southerly Vancouver suburb of Richmond, B.C. Today, their dream is about to become reality with the birth of C-ISL (pronounced "see-isle"), operating 24 hours a day, seven days a week, with 2,500 watts on 940 kHz.

Establishing a new AM station in a major market is no small achievement these days: the frequency spectrum is crowded and competition is heavy.

Dickinson and Alexander, however, know their market well. Mike sold successfully for CHQM Vancouver for five years, and also for Pacific Rim Publications, publishers of *B.C. Business*. Ian's radio career spans writing, production, on-air work, and positions as creative director, program director and consultant.

Ian's family moved to Richmond when he was six years old. He recalls the day Dickinson broached the idea of a new station: "Mike took me out for lunch and said, 'You probably think I'm crazy, but what about a radio station in Richmond?' I almost fell off my chair. What he didn't know was I grew up in Richmond—it's my home."

By the fall of 1977, both men were totally committed to the ambitious task of organizing a new radio station—and demonstrating to the Canadian Radio-Television and Telecommunications

Commission that it indeed would be viable and in the public interest. Dickinson sold his home, moved to Richmond, and immersed himself in the life of the community. Working full-time he put together South Fraser Broadcasting, of which he is majority shareholder, and prepared to go before the CRTC. Meanwhile, Alexander concentrated on programming plans.

Their application came before a public hearing held in Richmond on March 6, 1979. A competing application was filed by Gulf Broadcasting Inc. for a 10 kw station on 1260 kHz. On August 16, 1979, the CRTC ruled in favor of South Fraser on the basis of its more diverse and "realistic" programming and its high degree of community involvement: proposals included an advisory board, monthly newsletter, mobile studio, strong emphasis on local news and sports, ten hours weekly for local talent, and liaison with Douglas College in a broadcast journalism course.

The advisory board's 12 members, with Al Holender, a faculty member at Douglas College as chairman, began its work in January. Meanwhile, the first of some 20 staffers were named: David Errington, formerly with the CBC and Access/Alberta is news director; Glenn Crouter, son of CFRB Toronto morning man Wally Crouter and a Phys. Ed. major at McMaster Univer-

sity in Hamilton, Ontario, is sports director.

Two frequencies

The CRTC has made it a condition of licence that South Fraser apply for a second frequency to serve Delta/White Rock, south of Richmond. (The original application proposed a second 2.5 kw transmitter on 1600 kHz for this area).

Alexander says the "two-frequency" approach was taken initially for technical reasons. "It's impossible to tuck a signal into Richmond plus Delta/White Rock, while protecting existing stations. But we now recognize its programming value." At first, the second station will simulcast much of the Richmond programming, gradually becoming an independent entity over the period of a few years.

Consulting engineer for South Fraser is Ed Bogdanowicz of Imagining Limited, Toronto, while Stan Davis Broadcast Technical Services of Vancouver are responsible for construction and installation. C-ISL uses a 2.5 kw CCA transmitter, with 4-tower array supplied by L&R Communications Towers Ltd. Because Richmond is on an alluvial island in the mouth of the Fraser River, ground conductivity is excellent, "but the high water level has given us many headaches in terms of drainage, road construction, depth of piles needed for tower supports and anchor bases, etc."

Studio facilities include on-air and production control rooms equipped with 8-pot, dual channel BEM consoles, Russco turntables, ITC cart machines, and a variety of tape decks, including the relatively new Otari 5050B two-track for production. To facilitate C-ISL's high level of spoken word programming, there are three fully-equipped record/play positions in the newsroom, in addition to the mobile studio which will cover community events.

Program content, Alexander stresses, will be aimed at the 100,000 residents of Richmond—a self contained community incorporated in 1879 (before Vancouver). Noting that C-ISL can be heard in much of the metropolitan area, he says the objective is to keep Richmond people tuned to their local station when they travel throughout the city, rather than attempt to draw listeners from other areas. "We are confident of our ability to generate both programming and advertising from Richmond itself."

No one would suggest that C-ISL will have an easy time carving its niche in the highly competitive Vancouver market. But the odds are that, under the roar of "the big guns" of the city, two creative and ambitious young men will soon hear the sweet sounds of success—in the isles to the south.

crtc

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

FUTURE HEARINGS

On January 25, the CRTC revised its calendar of public hearings (Broadcast) as follows, for March through June, 1980. Those planning to attend hearings should verify details in case of further changes.

March 25 — Hull, Quebec
Conference Center

May 20 — Vancouver, B.C.
Sheraton Landmark

June 17 — Vancouver, B.C.
Sheraton Landmark

June 20 — Fernie, B.C.
Community Center

June 25 — Hull, Quebec
Conference Center

RECENT HEARINGS, APPLICATIONS

FEB. 5—MONTREAL

- Radio Communautaire de l'Estrie Inc — for new FM station at **Sherbrooke, Quebec**; 2,600 watts on 99.7 MHz.
- Télémedia Communications Ltée — to increase power of **CKCV Quebec** to 50 kw (from 10 kw day/5 kw night), with change of antenna site.
- **CFCF Inc.** — for radio network to carry

Montreal *Canadiens* hockey on CFCF, CKBY-FM Ottawa and CFLY-FM Kingston.

- Armstrong (Ont.) Development Corp. — for TV station, 8-watts on channel 13, to rebroadcast **OECA**.
- Marcel Schmouth (Télécâble Rive Nord Inc.) — for a new cable TV system to serve **Repentigny, Quebec**, area. Competing applications filed by National Cablevision, Montreal, and Télécâble Vidéotron Ltée, St. Hubert, who propose to serve same area by extending their existing systems.

FEB. 21—HALIFAX, N.S.

- Acadia Broadcasting Co. — for FM rebroadcasters of **CKBW Bridgewater, N.S.**, at Liverpool (3 kw on 94.5) and Shelburne (3 kw on 93.1).
- **CBC** — for FM rebroadcasters: Cheticamp, N.S. — 800w, 107.1 Truro, N.S. — 1,170w, 89.1 Yarmouth, N.S. — 38.6 kw, 92.1 Goose Bay, Nfld. — 4.5 kw, 89.5 Hampden, Nfld. — 85w, 101.5 Millertown, Nfld. — 4.2 kw, 90.1 Trepassay, Nfld. — 910w, 95.3 →

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Calgary, Alberta T2P 0Y8

- **CBC**—for TV rebroadcasters: Truro, N.S. — 5.5 kw, ch. 55 (ex-CBHT) Whycomomagh — 8.9 w, ch. 10 (ex-CBIT) Gillams, Nfld. — 8.9 w, ch. 13 (ex-CBYT) Hampden, Nfld. — 153 w, ch. 13 (ex-CBNT)
- **CBC**—for power increase at **CBHFT** (French) Halifax from 135 watts to 48.6 kw, changing from channel 13 to channel 32.
- Colchester Broadcasting — daytime power increase to 10 kw for **CKCL Truro, N.S.**
- Terrance Power — for new cable TV system to service **Enfield, N.S.** area.

FEB. 26—MONCTON, N.B.

- Rufino Landry — for a new AM station

(French) at **Moncton**, 10 kw on 1380 kHz.

• Edward J. McGrath — for a new AM station (English) at **Moncton**, 10 kw on 1400 kHz.

• Walter Patterson — for a new cable TV system at **Hampton, N.B.** A competing application by Fundy Cablevision of Saint John proposes to extend its existing system to include Hampton.

• **CBC** — for FM rebroadcasters: New Glasgow, N.S. — 1.2 kw, 88.7 (ex-CBAF)

New Glasgow, N.S. — 1.2 kw, 89.5 (ex-CBH)

Edmundston, N.B. — 22.3 kw, 100.3 (ex-CBAF)

Charlottetown — 34.8 kw, 88.1 (ex-CBAF)

• **CBC** — for a new TV rebroadcaster at New Glasgow, N.S., 6.4 kw, ch. 15 (ex-CBAFT); also for a reduction in ERP to 479 watts at CBHT-5 New Glasgow.

• Tantramar Broadcasting Ltd. — to transfer **CKDH Amherst, N.S.** (100%) from Bathurst Broadcasting to Fred W. Arenburg (75%) and W. Geoffrey de Gannes (25%).

DECISIONS

80-5: Alberta Educational Communications Corp. — new FM rebroadcaster approved at **Red Deer**, 100 kw on 101.3 MHz (ex-CKUA-FM Edmonton).

80-12: **Cariboo Broadcasters** (CKCQ, CKWL, CKBX), B.C. — transferred to CFBV Ltd., 25 other shareholders.

80-13: Nanika Cultural Society, B.C. — Three low power rebroadcasters approved (ex-CFTK-TV Terrace).

80-17: **CBC** — TV rebroadcasters approved at Mont St-Michel, 3 kw on ch. 16, and Notre-Dame-du-Laus, Que., 10 kw on ch. 10, (ex-CBFT).

80-18: **CBC** — TV rebroadcaster approved at Fort Rupert, Que., 10 watts on ch. 12 (ex-CBMT).

80-23: Fawcett Broadcasting Ltd. — FM rebroadcaster approved at **Red Lake, Ont.**, 170 w on 99.5 (ex-CKDR). 80-24: Proposed simulcasting on AM, 50 w on 1340, denied.

80-31: Rogers Cable/Canadian Cablesystems (Metro) — realignment of Toronto boundaries approved.

80-36: Western Manitoba Broadcasters — TV rebroadcaster approved at **McCreary, Man.**, 31.8 kw on ch. 11 (ex-CKX-TV).

80-37: Twin Cities Radio — daytime power increase to 25 kw approved for **CFJC Kamloops, B.C.**

PUBLIC NOTICES, ANNOUNCEMENTS

• Applications have been called for operation of a cable TV system at **Minto, N.B.** Deadline was March 3, 1980.

• The CRTC has received an application and called for further applications for an AM radio station at **Grand Falls, N.B.** Deadline was March 4, 1980.

• The **CBC** has surrendered the licences for CBXO Ocean Falls and CBRG Prince George, B.C. Both have been replaced by FM stations.

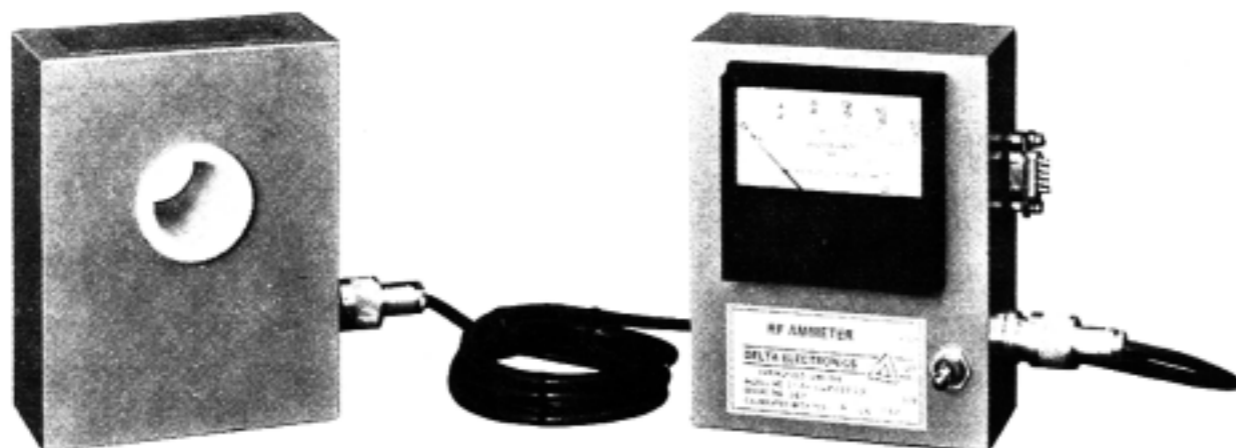
• **Lethbridge Broadcasting** has applied for new facilities for CILA-FM, 100 kw on 107.7 MHz, at a new site. CILA now operates with 32 kw on 100.9.

• **CFRY Portage la Prairie, Man.**, has withdrawn its application for a new tx site and power increase due to technical problems.

• **CJRL Roberval, Que.**, has applied for a nighttime power increase from 2.5 to 10 kw.

• **Mackenzie Media**, Yellowknife, NWT, has applied to distribute CHAN-TV Vancouver, B.C., received via satellite, on its cable system.

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FANSHAWE'S 6X-FM

After seven years of planning, 6X-FM now provides the "ultimate learning experience" for broadcasting and journalism students.

by Cameron White

In October, 1971, Fred Steinmetz, now chairman of the Communications Division of Fanshawe College, London, Ontario, sat down to a small meeting of faculty to discuss a dream: a radio station for the college.

In his days at Ryerson Polytechnical Institute in Toronto, Fred had seen the advantages of CJRT-FM, which then provided on-air training for Ryerson's broadcasting students. He realized that if Fanshawe's Communications Division were to gain a lead in the competitive world of broadcast education, a radio station could be the keystone.

Had Steinmetz known at the time that the process would take seven years, there may have been second thoughts. But in October, 1978, the dream became reality. CIXX-FM signed on at 106.9 MHz to almost overnight recognition from the community.

Known as 6X, the station is manned entirely by students. Under the terms of its licence from the CRTC, it is permitted to sign off during the summer vacation period. Each September, the students return to the college with the idea of rebuilding the station according to the talents of the available student manpower—and the dictates of 6X's Promise of Performance to the CRTC.



6X's 2.5 kw AEL transmitter is seen during installation. Station uses Optimod-FM audio processing.



Master control room was added to Fanshawe's four existing studios in Radio Broadcasting course. Equipment includes McCurdy 7550 console, Technics turntables, Studer and Ampex reel-to-reel recorders. ITC cartridge machines are used throughout the radio and journalism studios.

CIXX is staffed by 40 students of the two-year Radio Broadcasting course—plus another 30 students of Fanshawe's School of Broadcast Journalism, the first of its kind in Canada. This abundant manpower enables 6X to provide London's most comprehensive news and information format. Reporters cover a multiplicity of beats, and the station can have a news re-

porter on the scene of every major event—regardless of how many occur simultaneously.

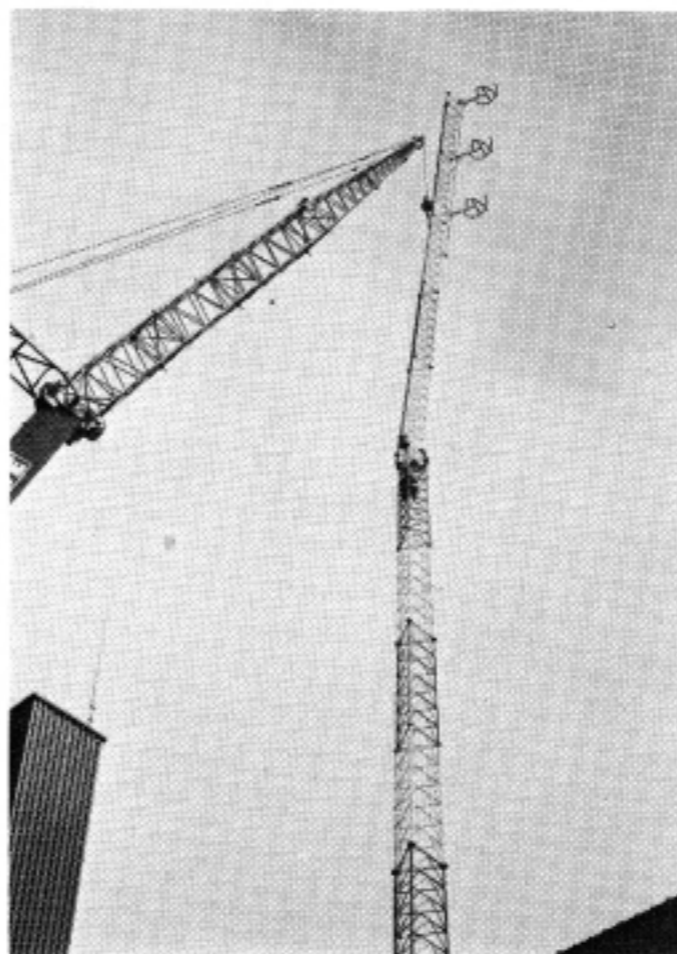
Fanshawe's news consultant, G. Warren Michaels, formerly of CKEY Toronto and CKLW-TV Windsor, Ont., notes that this practical experience has resulted in many students entering the Broadcast Journalism program from university—and even from the industry, to "fine tune" their writing, reporting and announcing skills.

Program content is monitored by Bob Collins, manager of public affairs programming, and by station manager Barry P. Sarazin. Production instructor Ray Wilmot ensures that the technical quality of all produced programs is up to industry standards, and the equipment is maintained in top running order by John Brouwer and Cam White.

Towards the end of each broadcast year, selected management students from the first year program of the Radio Broadcasting course formulate plans for the next season's schedule—confident that it will be even better than the last.

Says Fred Steinmetz: "It's the ultimate learning experience—a public forum for the development of Fanshawe's students as future radio broadcasters."

Cam White is on the staff of CIXX-FM.



Topping off the CIXX-FM tower at the main campus of Fanshawe College in London, Ontario. The three-bay Gates antenna radiates 3 kw ERP from 165 feet above average terrain.