



by Sandy Day

MANY QUESTIONS ON AM

Industry reaction to DOC questions gazetted June 28th will be consolidated into responses by late September and DOC will then formulate Canada's draft proposals which will be gazetted by November. With a 90-day deadline, the industry response to the draft proposals will reach DOC by February, 1981, one short month before Canada's final proposals must be forwarded to the International Telecommunications Union (I.T.U.) in Geneva.

CAB has circulated to members several reports and questionnaires in search of answers. Chief among these questions are the following:

- 9 kHz, the costs, the pros and cons, the several implementation plans, the receiver-related problems;
- the best use of clear channels;
- requirements for new stations;
- the impact of AM stereo.

A great deal of urgent activity has been involved. DOC has many investigations underway, not only the functional and administrative relating to notifications, station requirements, clear-channel action, NARBA and other treaties and notification procedures, but also technical studies on implementation plans, inter-regional interference, receiver constraints, and tasks to assist the Panel of Experts who are helping the IFRB to prepare for the second session of the Conference in November, 1981.

CAB is investigating those areas where input from broadcasters would be most useful through members, outside consultants, the Technical and Radio Policy Committees, and through liaison with others such as NAB. NAB has formed an industry task-force which is overseeing contract studies into some of the fundamental questions.

A BREAK-THROUGH IN FEDERAL COOPERATION

DOC normally coordinate their preparations for ITU Administrative Conferences through CICs (Canadian Interdepartmental Committees). For this broadcasting conference, and for others coming up within the next five years, (mobile, space, Region 2, Direct Broadcasting Satellite), DOC has adopted a new technique originally proposed to them by the CAB. Each CIC will have a Government/Industry Working Group, (G/I WG), which will permit early and continued liaison and exchange of views as Canadian proposals are developed.

DOC has stressed that these groups are open to anyone, any person or organization having an interest, provided that participants become active working members (with stress on the word "working").

The first meeting of such a group was on August 14th—an opportunity to learn what everyone is doing so as to avoid duplication of efforts. The next is scheduled for Sept. 24th.

The formation of these G/I WG's will not affect the normal DOC procedure of gazetting for general public knowledge and response, draft proposals and final proposals for ITU Conferences.

DOC, meanwhile, are continuing liaison through direct discussions with FCC, the PTC 2 COM/CITEL intersessional meetings, and with activities of the Panel of Experts. Hopefully, Canada's delegation to the second session next year will be supplied with all the ammunition they need.

FM AND UHF-TV ALLOTMENT PLANS

Except for Ontario, Canada's new saturated plans for FM allotments should be finalized by early this Fall. The Ontario provisional plan should be released by September. Similarly, the plans for all TV allotments should be finalized.

Changes to these plans in future will present quite a challenge. The existing allotments are tailored as closely as possible to Provincial aspirations, to CBC expansion and CRTC projections of future requirements.

An applicant proposing changes in the plans will have to show that such changes are compatible with, or an improvement upon, the projected needs. DOC would have to clear such changes technically, obtain international acceptance if the allotments affect bilateral agreements, and get agreement from CRTC, before the plans could be changed.

Since the allotments in these plans are saturated in most of the country, simple drop-ins will be virtually impossible to find, and consequential changes to the number or the class of allotments in the area affected will have to be made in conformity with the basic requirements. Changes are likely to be extremely difficult to achieve.

According to CRTC sources, a public airing of the CBC expansion plans is imminent. With these plans confirmed, CRTC would then be in a position to indicate the projected needs throughout the country. Without such information, and applicant for change in the plans would be almost powerless to act.

CCIR INTERIM MEETINGS

The broadcasting study groups hold interim meetings in Geneva, Sept. 29 to Oct. 17. Canada has submitted many important contributions to these meetings. Fortunately, the dates permit me to rush back in time for CCBA in Montréal. I'll see you there October 19 to 21. The CAB Technical Committee will meet there as well, on October 22nd.

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

in the news

FCC REVIEWS MAGNAVOX AM STEREO DECISION

The Federal Communications Commission in Washington has issued a "Further Notice of Proposed Rulemaking", intended to provide additional input on the choice of an AM Stereo system.

Last April 9, the FCC ruled in favor of the Magnavox system, launching a storm of controversy throughout the industry. (See *BT*, May/June/80, pages 16a, 48a). The FCC's Office of Science & Technology has now admitted that it used incomplete data in recommending Magnavox over the four other competitors. The "Further Notice" means the Commission will consider further views from interested parties as to whether AM stations should be free to install whichever of the five systems they prefer.

This so-called "marketplace" approach depends on the cost of universal decoders on the receivers, which would allow listeners to receive AM stereo from any system. Leonard Kahn, whose system has won the endorsement of NBC, claims such costs should be minimal; however, the FCC wants more information before making any new decision.

TVO TESTING ON-SITE SATELLITE UPLINK

TV Ontario is using a 4.5 meter dish at its Toronto headquarters to transmit programming to the Anik B. satellite. The experiment began June 27, with uplink equipment supplied by DOC, to test the cost and effectiveness of transmitting from a metropolitan location on the 12-14 GHz band. Previous transmissions were via the DOC uplink at Shirley Bay, Ont.

TVO has been conducting a trial of direct satellite broadcasting during the past year and hopes that continuous service will come into effect with Anik C in 1983.

ARMSTRONG MEDAL TO LEONARD R. KAHN

The Radio Club of America has awarded its Armstrong Medal to Leonard R. Kahn, founder of Kahn Communications Inc., Garden city, N.Y. A formal presentation will take place on November 21 at the Sheraton Hotel, New York City.

The award recognizes Kahn's developments in single/independent sideband, voice processing, low distortion/high efficiency modulation, diversity/time diversity communications and AM Stereo.

Inaugurated in 1935 to honor Major Edwin J. Armstrong, the inventor of the regenerative circuit, super regenerative receiver, super heterodyne receiver and FM broadcasting, the Armstrong Medal has been awarded to only 26 persons over its 45-year span.

TV CAPTIONS STUDIED

A government-industry group has been set up to study the introduction of closed captioning for the deaf on Canadian television. A subcommittee of the Canadian Videotex Consultative Committee, it includes representatives from DOC, CBC, CTV and the cable industry.

The group will look at the technologies available and their cost. Viewers wishing to receive the captions will require a special decoder. Captions are now broadcast in the U.S., while experiments only have been conducted here, by TV Ontario.

Meanwhile, the National Association of Educational Broadcasters reports that the U.S. National Captioning Institute is exploring further uses of line 21 of the vertical blanking interval. Captions for the deaf take up only 25% of line 21, and other uses suggested are captions for films, second language, infodata, sports and education. Decoders now on the market already offer two channels, should a choice of captions become available.

ABC, NBC and PBS have been transmitting closed captions since March 16, with costs running to \$2,000 per program hour.

SBE CERTIFICATION

The Society of Broadcast Engineers' fall 1980 certification exams will be given from November 17 through December 8. Applications must be received in the SBE national office by October 6. Anyone interested should write to the SBE Certification Secretary, P.O. Box 50844, Indianapolis, IN 46250 for an application and the certification booklet, which includes sample exam questions, suggested reading material and a list of SBE chapters where the exam may be taken.

PBS SUGGESTS WAYS TO SAVE UHF POWER

A report issued by the Public Broadcasting System proposes procedures to drastically improve the efficiency of UHF TV transmitters—but they could cost a station as much as \$130,000 to implement.

UHF stations in the U.S. operate at ERPs up to 5,000 kw, with power costs running to \$100,000 or more a year. While initially it would cost \$10 million to alter the 129 transmitters operating at 30 kw or more, savings of \$5 million a year in power costs could be realized.

The suggested innovations include realigning and tuning external cavity klystron tubes, installing a pulser which provides bursts of power, and lowering the ratio of aural power from 20% to 10% of visual power. The use of wave guides instead of transmission lines on antennas could also result in power savings. Conversion costs are lower (only \$400 or less) for older transmitters with external cavity klystron tubes.

Tom Keller, director of engineering development for PBS, says the techniques were developed by the PBS engineering committee in conjunction with the BBC and New Jersey consultant John Wilner.



THE PHIL STONE REPORT

CANCON CRISIS

Here a note, there a note, everywhere a note, wrote: If you are an Orwellian, that is, if you subscribe to the 1984 theory—believing that will be The Year The Walls (and, one presumes, the towers) Come Tumbling Down—then you are of one heart with Donald M. Smith. Smith, executive vice-president of BCTV in Vancouver and president of the Canadian Association of Broadcasters, spoke to a summer meeting of the Broadcast Executive Society.

Don spoke from a well-documented, peril-encrusted scenario. "All parts of our (broadcasting) system are in danger," he warned. "The public sector is in danger. Private television is in trouble. Cable is closer to real trouble than it admits. Even radio," he added, "is in danger."

The cause of it all? The impact of satellite communications technology. With it, Smith said, there is a very real possibility that the Canadian broadcasting system could collapse. Broadcasters could be forced out of business, along with cable operators, due to the possibility of widespread use of 24-channel home receivers. They could pick up specialized and general U.S. satellite transmissions—much like those already operating in isolated parts of our country.

It is Smith's stance that even with regulatory changes that might ameliorate the Canadian-content regulations, Canadian broadcasters could be limited to providing a local service on one of 24 channels viewers could receive by satellite. And, he told the radio people in the audience, the increasing reliance on cable for radio distribution could expose them to the problems the cable people face.

Don claimed that very soon—perhaps by that awesome 1984—people in Canada just won't watch Canadian broadcasts or Canadian stations anymore. That will happen, he proposed, "if Canadian broadcasters are not allowed to broadcast what Canadians want to watch." He called for a complete review and reversal of "our attitudes toward Canadian content."

RTNDA NOTEBOOK

Commitments precluded this writer attending all of the annual RTNDA national convention at Toronto's Harbour Castle Hilton Hotel. However, we saw and heard enough to rank the gathering as the best ever in our recall—which pays tribute to the highly successful job done by CKFM's John McFadyen, convention chairman, and his diligent, effective workers. The program was truly an outstanding one, so much so that the attendance reached an all-time high.

We kept rambling notes as we listened to talks and ran into old friends . . . We heard a rumor that Q107-FM will apply for FM licenses in Edmonton and Calgary . . . Bumped into *Newsradio's* Hap Parnaby in the coffee shop and I swear that man never seems to age. Looks just like he did when he was at CHUM during my years there . . . Chatted with David Rogers, the former BN man now the voice of the Canadian Bankers Association and still very much a part of RTNDA . . . Was amazed at how slim and young Premier William Davis looked, as he addressed a morning gathering of the convention. He was accompanied by Metro Toronto Chairman Paul Godfrey . . . Bumped into CFTR's Bob Holiday and CFRB's Don Johnston, both of whom helped me so much when I was running the Humber radio course . . . Also former RTNDA president, Karl Sepkowski and CKEY's Howard English . . . We truly enjoyed the talk by Professor John Crispo of the University of Toronto and author of the current book, which we recommend to you, *Mandate Canada*. He is a provocative, highly listenable speaker who also tells a good story . . . Bob Durant of CKFH and my son's boss, was very much on hand and active . . . Wally Rewegan of CHEX was there as were such BN luminaries as Barry Hamlin and Dave Shnaider . . . From the college world we saw Lundy Sanderson of B.C. and Jo Kleimyer of Sheridan . . . Ernie Steele and Gerry Acton of the CAB . . . Old friend Ward Cornell's

daughter, Susan, now a vital part of the CCTA . . . Warren Beck of CHML . . . One of our early Humber graduates, Tony Orr of CKLC . . . Dan Carr of CFOS . . . Everybody's favorite guy, Bert Canning . . . Bill Hutton of Selkirk, who introduced Jim Fleming, the former broadcaster now federal minister of multiculturalism and chairman of the communications commission . . . The beloved Charley Edwards and Don Covey . . . Learned with sorrow of the passing of Bob (CHSC) Redmond's brother Jack, and Ron (CKFH) Hewat's mother . . . Learned that Lora Higgings, who went from Brampton radio to Oshawa and then up north, was back with Bill Easter at CKAR . . . Sat at lunch with two great people on either side—former radio man Don Watson, now vice-president and public relations director of the Air Transport Association, and a most handsome and articulate young woman, Cathy Grant of CKRC Winnipeg . . . What a natural for TV! . . . Bob Hesketh was luncheon speaker and he was inspiring and interesting despite a bad attack of laryngitis which one of our one-time colleagues, Jay Jay Richards, tried to cure with ample donations of cough drops . . . Warren Michaels of Fanshawe was also at our table . . . Dick Smythe, the outgoing president of RTNDA chaired the official proceedings throughout, which included a second luncheon with Ambassador Ken Taylor as guest speaker . . . All in all, an outstanding gathering and card of events . . . And it was a pleasure to see so many charming ladies there, including Dick Sythe's wife Marni and Don Johnston's spouse, Helen . . . The final note in our pad is a cynical statement made about news commentators: A news commentator is one who arrives after a battle to shoot down the wounded . . .

Recommended: The incisive, outspoken piece by David Cravit on the August 18th edition of the *Globe and Mail's Report on Business*. Cravit is executive vice-president, Saffer, Cravit and Freeman Advertising Inc., of Toronto. The opening lead of his article

perhaps tells best the contents of this must-read: "Communications Technology may finally have outrun our ability to absorb and use it." He speaks of fibre optics, two-way TV and superstations as "an explosion of technology . . . and we have no satisfactory frame of reference with which to handle it." Strong stuff here, that also deals with the future of print media.

Recommended: Jack Miller's report in the August 23rd Toronto Star on what he calls the Canada-U.S. broadcasting "war" and which deals with the proposed revision of U.S. income tax legislation designed to turn American ad-

vertisers away from using Canadian stations. Jack says CKLW Windsor stands to lose \$3.5 million, CBET Windsor \$750,000.

Recommended: The 1980 Central Canada Broadcasters Association Conference to be held October 19-21 at Montreal's Mount Royal Hotel. Hardworking conference chairman, Bob McKeown and his colleagues promise outstanding rap and recreation.

A light note to close: Story-telling at a friend's home with radio-TV performer Paul Kligman, we got into some oldies and, as is often the case, I found

some of those listening to us hadn't heard this classic broadcasting chestnut: It is *The \$64,000 Question*. The finalist is Mrs. Saide Ginsberg. The announcer says, "O.K. Mrs. Ginsberg, you've reached the magical plateau, the \$64,000 level! Are you ready?" Mrs. Ginsberg: "Ask already!" Announcer: "Okay, for \$64,000—who was the first man?" Mrs. Ginsberg: "For a million dollars I wouldn't tell you!"

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

Did you know that **Lou Tameanko**, the new president of the Radio Bureau of Canada, once worked at CHUM? Lou attended Ryerson, then went to CHWO Oakville, and from there went to CHUM in 1959 where we first came to know him . . . Speaking of RBC, it was in their offices that a group of us judged the 1980 Central Canada Broadcasters Association Community College Awards (Radio). The judges included **Miriam Austin** of CKEY (she's an original, back from Jack Kent Cooke days); **Sheri Craig** of Marketing; **Don Sims** (not the censor and former CBC broadcaster) of Dunlop; **Mike Hanson** of CHSC; **Jim Adam**; **Lou Tameanko** and this writer (I could be neutral since Humber College wasn't entered) . . . Are you aware that A.C. Nielsen operates in 23 countries? We didn't know until we read the obituary of **A.C. Nielsen**, who died at the age of 83. He founded the international radio and television rating service in 1923 and it became the criterion of program popularity . . . One thing about listening to, or watching, news, is that it enables you to worry about things in all parts of the world . . . This writer is teaching at York University this fall—two nights a week on *Effective Speaking* . . .

As perhaps you've heard, CBC-TV won't be moving its major news package to 10 pm this year. Maybe 1981. Maybe . . . **Doug Headley** became general manager of the Pharmaceutical Division at Crombie Advertising and **Junne Hinkley**, account manager within that division . . . At last word the ubiquitous **Fred Ennis** was at CHNS Halifax, newscasting and commentating . . . BN's farm reporter in Ottawa is now **Rick Gibbons**, a local boy . . . **Garfield Chesson** returned to CKO Edmonton when **Bill Sheppard** took over the news and program desk at CKO Toronto . . . **Joe Crysdale** still doing some air work. He's on mike occasionally at CING Burlington . . . **Joan Irwin** who was the Toronto Star's TV columnist for a while and then an associate editor at TV Guide, now a consultant at CBC-TV . . . **Jan Skora**, the top engineer and regional director general for the CRTC in Saskatchewan, Manitoba and northwestern Ontario, has offices now in Winnipeg at 275 Portage Avenue . . . Write or telephone the CRTC for your free copy of *Canadian Broadcasting and Telecommunications: Past Experience, Future Options*. Write or call CRTC Information Services, Ottawa, Ontario, K1A 0N2, telephone (819) 997-0313 . . . **Keith Morrow**, whom we rubbed shoulders with in our early CBC free-lancing days, heads the development team for the new

English language network designated as CBC TV-2. It will be a prime-time network broadcasting alternative CBC programs with no commercial breaks and will be distributed on cable . . . I guess nearly every broadcaster knows and likes **Cam Ritchie**, now retired as vice-president and managing director of the Performing Rights Organization of Canada Ltd. (PRO). Cam had been with the company since 1971, back when it was called BMI. His successor is **Dr. Jan Matejcek**, who had been assistant g.m. and head of PRO's International Division . . . **Stu MacKay** announced the two news appointments to the Selkirk Communications Ltd. board of directors: **Gordon F. Henderson**, O.C., Q.C., of Ottawa and **A.D. Peter Stanley**, F.C.A., Vancouver . . . **Anne Rohmer**, co-host of Global TV's *PM Magazine*, is a daughter of **Richard Rohmer**, novelist and sometime broadcasting lawyer . . .

Visiting my son Glen, a newscaster at CKFH, recently, I noticed that the Kresge store at Carlton and Yonge, long a Toronto landmark, was closed forever. I had some special memories of that store, particularly the fact that it was in one of its windows that I did my very first remote. I was host of an interview program on CHUM called *Toronto Newsreel* sponsored by Kresge's. When television came to Canada in 1952 I realized that radio would have to get as visual as it could and suggested to my sponsors and my superiors that I do my show live from the store window. They all agreed and later I also worked out of the window of the Young & Richmond Store . . . A whole flock of radio & TV station and cable companies, due for license renewal this September, have been renewed for a further six months because the CRTC says its work load precludes the scheduled hearings . . . A Toronto columnist takes space to mention that newscaster **Tom Gibney** used to be a bingo caller in Calgary. Didn't most of us do all kinds of tasks on the way along? I remember announcing amateur fights for \$10 and stock car races for \$25. Incidentally, one of the main-bouters in an early amateur card I worked was a bull-like youngster named **George Chuvalo** . . .

Richard Brightling became vice-president at Conroy, Hallworth Advertising . . . **John Gravel** became Cockfield, Brown's man in Calgary. He's vice-president and g.m. of the agency's Alberta operations . . . Our one-time neighbour, **Gordon Kennedy**, then with the Toronto Star, is v.p., mar-

BROADCAST BEAT

keting for Premier Communications . . . Have this definition: "Advertising serves the role of the butler at a royal ball—it opens the door and announces your presence." It comes from **Robert Black**, a Rochester researcher . . . Global TV is carrying a 60-minute nightly edit of the 90-minute Johnny Carson show, another feather in the cap of Global president, **David Mintz** . . . Our weekly *Arts in Ontario* radio show, heard on some 27 stations across Ontario, moves into its sixth year. Under the sponsorship of the Ontario Arts Council, we began the program in October, 1975 . . . In his talk to the RTNDA the **Hon. Jim Fleming** quoted the George Bernard Shaw line I've always liked: "The only thing worse than not getting what you've striven for, is getting it." . . . **Evelyn Macko**, one of the brightest talents we ever trained at Humber College, left CKTB, where we first placed her, to go with CFTR . . . **Tony Reynolds** left CKFM where he had long been the copy chief. He is going into the freelance field. Successor is another veteran of the radio writing field, **Valerie Marshall**. Most recently Canadian Tire commercial writer, Valerie previously had been copy director at CFTR/CHFI . . .

Congratulations to old friend and former colleague, CFRB newsman **Peter Dickens**, and his wife Margaret. Their son Gary and his wife Judy made them grandparents for the first time—it was a boy, Peter McKay, the latter being Margaret's maiden name . . . **Clive Eastwood** and wife Jan also became first time grandparents as daughter Kathy presented husband, Peter Nicholson with a baby girl . . . Still on CFRB, **Wally Shubat**, long with the station in the sales end, left to pursue other career goals . . . **Ken Whitelock** took over from him as retail sales manager . . . Look for the Canadian Football League to seek substantial TV revenues come the 1981

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season. Contract expires at the end of the current season . . . CITY-TV made **Robert Hoyt** news director . . . CKFH hired **Doug Hall, Michael Magee and Larry Solway** to fill the talk show spot vacated by **John Gilbert** . . . One-time CHUMmer **Neil Thomas**, veteran CKWW newsman since then, went down the street to CKLW . . .

Chris Wilson, who was overnight editor at CFRB now handles the weekend air shifts and weekday reporting assignments formerly handled by **Liz Macdonald**. **Brian Worbel** took over from Chris as overnight editor-newscaster. He had covered sports for CBC and worked stations in Kingston, London and Woodstock. What I like about him is that he is a fellow Glaswegian . . . Canadian Media Corp., Toronto, was appointed as the federal government's agency of record. Canadian Media is a consortium of four ad agencies: Vickers & Benson, Ronalds-Reynolds, BCP, and Jean Provost Inc. . . . Veteran agency man **Lee Master** became vice-president, account group director at Foster Advertising's Toronto office . . . As reported by Dow Jones Service, **Robert Coen**, senior vice-president at Interpublic Group's McCann Erickson Inc., expects that 1980 advertising in U.S. national TV will rise 13.2%; national radio 15.3%; magazines, 12.3%; and newspapers 12.7% . . . The passing of CHUM Ltd.'s **Lyn Smith** at the young age of 43 was a sorrowful occasion. I had worked alongside this vibrant, talented woman for several years. Her husband, David, her family, friends and broadcasting have lost a person who gave warmth and inspiration to all around her . . .

Charles Dalfen's resignation from the role of CRTC vice-president came as no surprise to many. They felt he would leave when he was passed over as **Pierre Camu's** successor . . . In his chatty BES newsletter, **Andy McDermott** reveals that the slogan of the National Cable Television Association is "The systems that connect together, collect together" . . . **Michael Arlen**, one of America's best writers on TV has a new book out you might want to read. It's titled *Thirty Seconds* and is described as hilarious description of the making of a commercial . . .

Roy Green, who was with Newmarket Cable, became news editor at CKAN . . . Constant word in Toronto that CKO, the all news network, will sell off some of its stations or convert some of them to transmitters with one or two staffers on hand . . . CKO will not have the play-by-play of the Toronto Maple Leaf hockey team this year, for which it hired **Peter Maher** as the voice. He's gone to Calgary to become the broadcaster for the NHL Calgary Flames, the erstwhile Atlanta team . . . CKFH and the Hewpex network get the games back after a two-year absence. **Foster Hewitt** will no longer be the voice, replacement is **Ron Hewat** with **Mike Nykoluk** on color . . . At press time, **Bill Sheppard** was recovering from surgery. He joined CKO this year as news director from CKFH . . . As to the Maple Leaf hockey coverage, we understand Molson's have bought the rights and will select the stations they wish to have air the games . . .

Canada's radio industry awaits the CRTC response to the CAB's presentation of 28 recommendations on AM radio. They are designed to ensure that AM does not become over-regulated, which many say FM is now. Among the requests to the Commission are the lifting of the regs prohibiting ads in newscasts (which TV and AM can do) and commercials for investments—also for an increase in allowable advertising time from the present 1500 minutes a week to 1750 . . . We were saddened by the passing of **Winston Barron**. Win was the first moderator of *Front Page Challenge* and had come

into radio in its very early days. He had for many years been the voice of Paramount News . . . Global TV making changes in its news department. **Peter Desbarats** is gone, as is reporter **Valerie Chavossy**. New is **Gordon Martineau**, who left CITY-TV which he joined after a stint at CFTO. Martineau had also been a popular face and voice in Montreal where he starred with CFCF-TV . . .

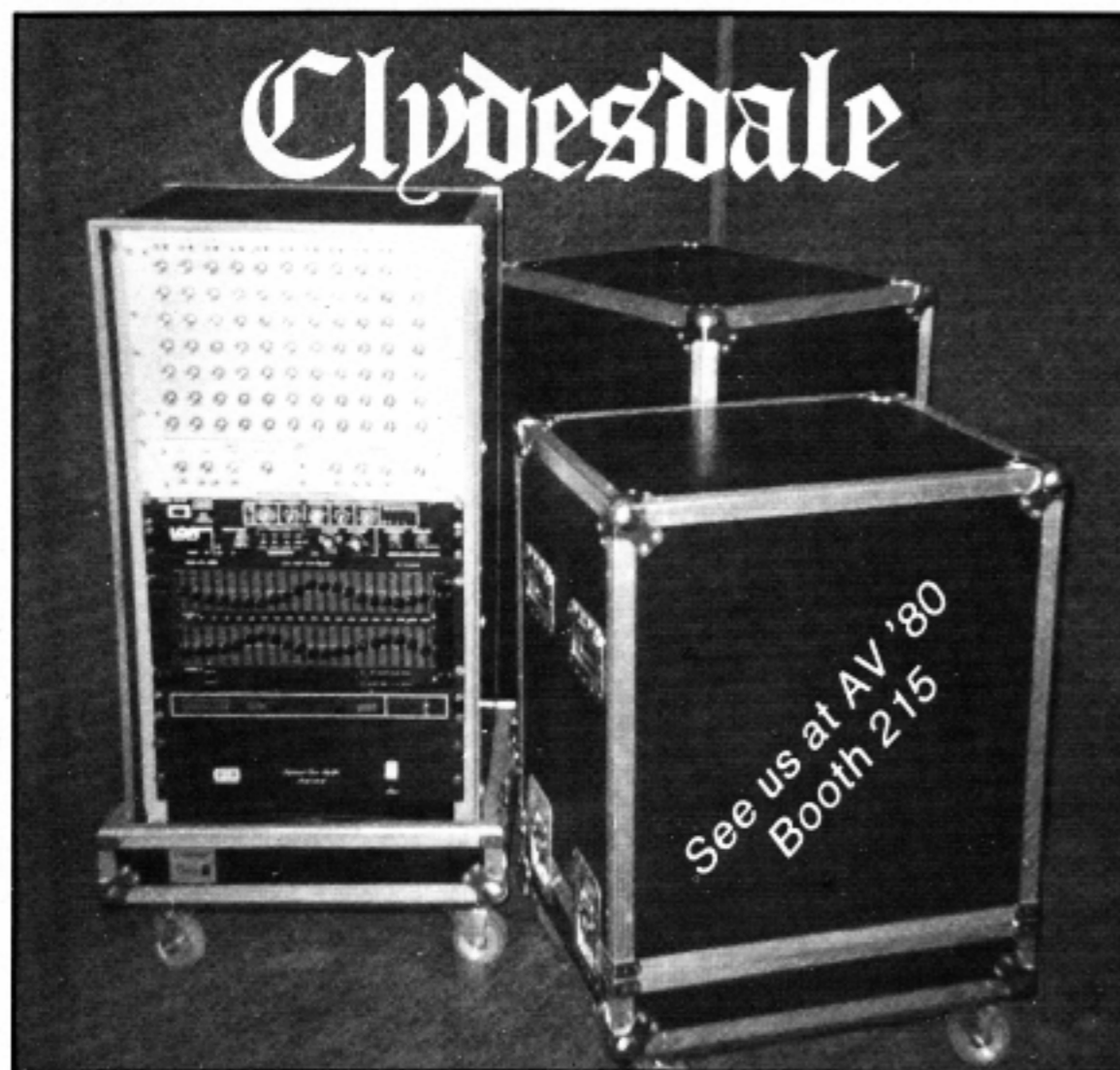
If you are interested in the extension of broadcast services to Northern and remote communities then perhaps the report of a committee on that situation will be of interest to you. Titled: *The 1980s: A Decade of Diversity—Broadcasting, Satellites and Pay-TV*, it is sold by Supply and Services Canada for \$3.95 . . . **Arnold Stinson** is working as executive director of a revived Ontario Cable Operators Association. It has over 100 members and is located at 43 Eglinton Ave. East, in Toronto, same building as the Radio Bureau . . . Date for Canada Music Day, the Broadcast Executives Society's annual tuneful presentation, is September 18th at Toronto's Sheraton Centre. Same hostelry will be the setting for the TvB's Toronto Television Day on October 30 . . . Word is that all the shares of Huron Broadcasting Ltd. were acquired by MTS International Services Inc. of Toronto, which plans to change its name to Huron Communications Inc. . . . **D.J. Crowley**, with Zenith Radio Canada Ltd. for over six years, most recently as general sales manager, was appointed vice-president, sales, Toronto . . . Am I getting old? Hell, no. Old age is always 20 years older than I am . . . The business journalist, **Raoul Engel** went back to Global where he was a key figure when the station first went on the air. The announcement was made by **Ray Heard** who succeeded **Bill Cunningham** as news director . . . Did you know that the acquisition by Canadian Cablesystems Ltd. of Premier Com-

munications gives it 17 more cable systems and 27.6% of Canada's cable homes? It will now have over one million subscribers, almost three times as many as any other Canadian cable company. That includes Maclean-Hunter and Videotron, each of whom have about 10% of the market. Videotron got up there by buying a firm larger than itself, National Cablevision of Montreal, Quebec's largest system. What is also striking about Canadian Cablesystems is that its growth will now give it over 50% of the cable homes in Metro Toronto . . .

Jane Hall, vice-president, director of marketing services/consumer affairs for Ronalds-Reynolds, was elected to the company's board of directors . . . Two Queen's University professors prepared a report for the Department of Consumer and Corporate Affairs with respect to advertising by the professions: medicine, law, dentistry, pharmacy and veterinary medicine. The professors recommend the bans on advertising by these professions be lifted, saying that the lack of advertising in some of the professional fields is one of three factors which added \$348.3 million to consumers' costs in 1970 . . . **Bruce Friesen** and **Andy Sileika** joined Foster Advertising as account supervisors in the Toronto office . . . Veteran **Ed Freeman** became Crombie Advertising account manager . . . Canadian Marconi has been turned around as an electronics manufacturer with new management stressing product development. Its GRC 103 tactical radio equipment is sold to Canadian and U.S. armed forces, as well as to other countries around the world. Interesting to note that the company employs 130 engineers . . .

George Anthony, entertainment editor of the Toronto Sun and sometime TV personality, became v.p. of Famous Players' new film development arm . . . News about two of the lads we trained at Humber: **Rick Purday** moved from New Brunswick to become a morning announcer at CHTK Prince Rupert and **Randy Moore** left CKO Ottawa to join **Stu Brandy's** staff at CKBY-FM . . . Big changes at Major Market Broadcasters; old acquaintances **Len Kennedy** and **Energy Richmond** have left and we hear Len will become a country squire. **Larry Lamb** is now v.p. and g.m. with **Bob Munro** involved in basic sales activity . . . Standard, seeking an AM licence in Ottawa, is also expanding in Europe. Standard's FM ad revenue growth for the first five months of this year tripled the 10% gain by AM . . . **David Campbell** became executive v.p. at Media Buying Services Ltd. . . . **Dan Iannuzzi**, whose multi-cultural station CFMT-TV has gone 24 hours to become the first Canadian station to never close down, has a big laugh on the cynics who believed that a mix of English language movies at the supper hour and 18 language ethnic shows could never work . . . **Dave Hodge**, voice of *Hockey Night in Canada*, has dropped his regular sportscasting role at CFRB to totally free-lance. 'RB, by the way, will have to consider re-bidding for its long-time play-by-play coverage of the Argo games after this season when the contract expires . . . A CRTC hearing to be held October 14th at Toronto's Royal York Hotel will include CKEY's application for a network to carry the John Gilbert nighttime talk show . . . and we hear **Percy Saltzman**, who became a household name as the CBLT Toronto weatherman in TV's earlier days, is returning to toss his chalk on the Global network.

Pardon the "gremlins" . . . in July/August the names of two staff members of CCTA, the Canadian Cable Television Association in Ottawa, appeared incorrectly. Of course, it should have been **Gerry Lavallée**, co-ordinator of community programming, and **George Cormack**, director of engineering!



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CCBA CONVENTION IN MONTREAL, OCT. 19-21

SOCIAL EVENTS

This year, the CCBA Awards Dinner will be moved to Sunday evening at 7:00 pm. This will give delegates the opportunity to meet and congratulate award winners after they have been announced, and will also leave the final banquet on Tuesday free for socializing. Master of ceremonies on Tuesday evening will be Bill Walker, with music provided by the "big band" sound of Stan Bankley's orchestra.

Ladies' Day

On Monday, a special program for the ladies is being planned by Gail Morrell, promotion director of CFCF-TV (and president-elect of the Broadcast Promotion Association). Details have yet to be finalized as we go to press, however Gail promises the ladies an enjoyable day of seeing some of the unique sights in and around historic Montreal, which should be at its most colorful in the autumn. And of course, there's that famous French-Canadian cuisine for all to enjoy in the city's many excellent restaurants. So register early, delegates, and be sure to register your lady, too!

* * *

There's an old saying that if you want to get something done, ask a busy person to do it. That certainly holds true for your CCBA Engineering executive, who manage to find the time and energy to produce a first-rate convention, even while they are undertaking major projects in their full-time work!

For example, past-president Austin Reeve has had a complete re-building of facilities at CJOH-TV Ottawa underway all year and expects it to be finished by the end of December. Four electronics students were hired to assist in the work during the summer. As has been reported in recent issues of BROADCAST TECHNOLOGY, president Joe McIntyre (CKCO-TV Kitchener), vice-president Larry Cameron (CKWS Kingston) and secretary-treasurer Jeff Guy (CJBK/CJBX-FM London) have all been involved in major building projects at their stations. And Bill Onn (CKEY Toronto) tells us that his BES Electronics is supplying the tuning and phasing equipment for new



Sheraton Mount Royal, one of Montreal's grand old hotels, will be scene of CCBA activities for three days in October.

10 kw DA-2 arrays at CHSC St. Catharines (9 towers) and CHOW Welland (8 towers)—both should be operational by the end of the year.

Which brings us to our final reminder: be sure to send us your news. See you in Montreal!

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

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HELLMUT H. BERGER



Hellmut H. Berger, director of engineering for Baton Broadcasting Limited and chairman of the Toronto section of the Society of Motion Picture and Television Engineers, died suddenly at his home in Agincourt, Ontario, on Friday, August 22, 1980. He had been convalescing from recent heart illness and was scheduled to undergo surgery.

Born in Germany on November 9, 1918, Hellmut was educated there and had been engaged in the design, development and construction of radar equipment, was a recording engineer for Rundfunk, and an engineer with the American Armed Forces Electronic Headquarters from 1948 to 1953.

In 1953, he emigrated to Canada, where he joined the Canadian Broadcasting Corporation in Toronto as senior technician. Here, he was a leader in working to improve the standards of television recording on kinescope and subsequently on videotape.

In 1960, he joined Taylor Video Corp. as chief engineer and was responsible for building a large videotape mobile unit, one of the first. Taylor Video was Toronto's first commercial videotape production house—the forerunner of York Television, Robert Lawrence Productions, and the present VTR Productions.

Joining CFTO-TV as chief engineer

in 1962, Hellmut was responsible for converting the station to color in 1966, and served as chairman of the CN Tower broadcasters committee. In 1972, he became director of engineering for Baton Broadcasting, the parent company of CFTO.

Long an active member of SMPTE, Hellmut was named a Fellow of the Society in 1976 and was chairman of the Toronto section at the time of his death. He also served on the CTV Network engineering committee, Canadian Telecasting Practice Committee, the CSA standards committee for television recording, the CCIR working group on TV broadcasting from satellites, the ITC TC-60 recording committee, the Ontario Association of Certified Engineering Technicians and Technologists (OACETT) and the advisory committee for the Videosystems Technician course at George Brown College, Toronto.

Hellmut was also the originator and mainstay of the "Knights of the Round Table" whose regular informal gatherings, in restaurants noted for their wine cellars, provided numerous pleasant evenings of *camaraderie* for his colleagues in the industry.

He is survived by his wife of 27 years, Wilmar, and two sisters residing in Germany. Funeral services were held in Agincourt on August 27th.

College; and "Digital Frame Store—A Universal Tool" by John Lowry of Digital Video.

Regular meetings are to be held on the second Tuesday of each month. Acting as temporary chairman of the section is Howard Wilkinson of CBC Toronto.

AES

TORONTO CHAPTER EXEC ELECTED

The executive committee of the Toronto chapter, Audio Engineering Society, has been elected as follows:

Chairman—Ron Turnpenny, Rogers Radio Broadcasting;

Vice-chairman—Brian Lowe, Studer-Revox Canada;

Secretary—Stan Maruno, McCurdy Radio Industries

Treasurer—Harry Bragg, CBS Records of Canada.

Committeeman—Ron Lynch, Octopus Audio.

Ballotting to choose the two other committeemen was underway as BROADCAST TECHNOLOGY went to press. Nominees include Wiebe Bergsma, Mel Crosby, Len Gratton, R.C. Kahnert, Doug McClement and Arthur Schubert.

NYC CONVENTION OCT. 31—NOV. 3

The 67th AES Convention will be held at the Waldorf-Astoria Hotel in New York from Friday, October 31 to Monday, November 3, with the theme "Reaching Out to the '80s".

Papers presentations will be even more extensive than usual, and will include the following subjects:

- Digital Techniques in Audio
- New Measurement Applications
- Studio Design Technology
- Development of New High-Quality Disk Recording and Manufacturing.
- Growing Awareness of the Merging of Audio and Video Technologies.

There will also be a series of workshops on timely topics such as Digital Editing, Small Studio Update, High-Speed Tape Duplication, Practical Sound Reinforcement Techniques, Practical Video for the Audio Engineer and a special workshop on Microphone Usage (originally presented at the Midwest Acoustic Conference in May).

Tours of recording studios will also be available, and the social program includes a visit to the Metropolitan Opera, sightseeing, a demonstration of antique musical instruments, and the Awards Banquet.

Some 180 technical exhibits will also be a major part of the convention.

For further information contact AES, Room 2520, 60 East 42nd Street, NY, NY 10165, (212) 661-8528/2355.

SMPTE

TORONTO SMPTE MEETINGS RESUME

The Society of Motion Picture and Television Engineers, Toronto section, scheduled its first meeting of the fall on Tuesday, September 9th, at Digital Video Systems. Two topics were on the program: "Training for Industry—Current Needs and Neglected Opportunities" by Peggy Hecht of George Brown

CP: CIRCULAR POLARIZATION FOR FM ANTENNAS

by Marvin B. Crouch, P.Eng.

Most broadcasters do not have the opportunity to study antenna design to the degree necessary to make truly comfortable decisions in selecting their FM antennas. Everyone agrees that proper patterns and Circular Polarization (CP) are desirable features for FM antennas. The question is, do we achieve them in all antennas?

Let us analyze the various types.

First, some clear definitions concerning CP will be useful.

● **Circular Polarization**—CP is a phenomenon occurring at a point in space caused by two equal fields crossing each other at right angles and arriving 90° out of phase. To the observer this results in a constant amplitude vector rotating once for each cycle of the radio carrier frequency. Note the two field vectors vary sinusoidally with time but the resultant does not.

● **Proper Vertical Pattern for CP**—A good CP vertical pattern is one that concentrates the equal energies from both polarizations on the horizon in all desired directions of radiation (azimuths). You can use one tier or one bay for this analysis because the ratio of horizontal to vertical axis radiation remains constant in any size antenna.

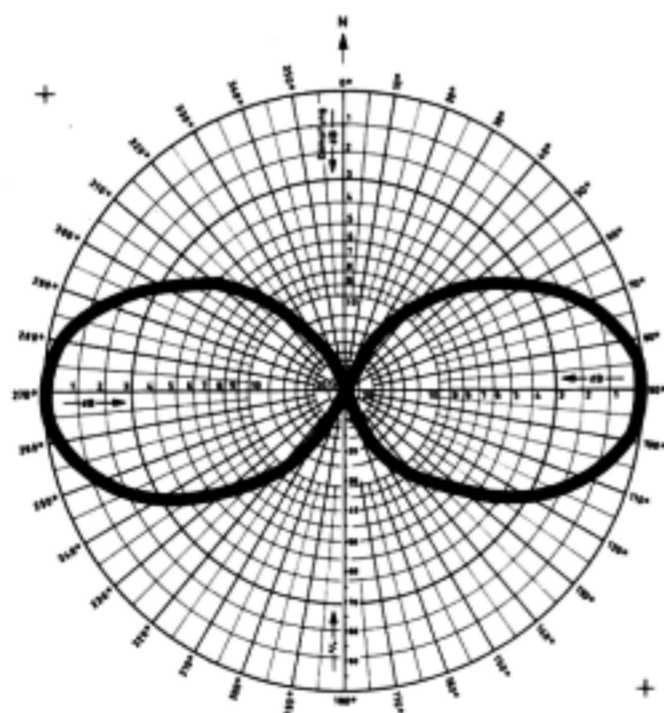


Figure 2. Ideal Single Bay Vertical Pattern for both polarizations.

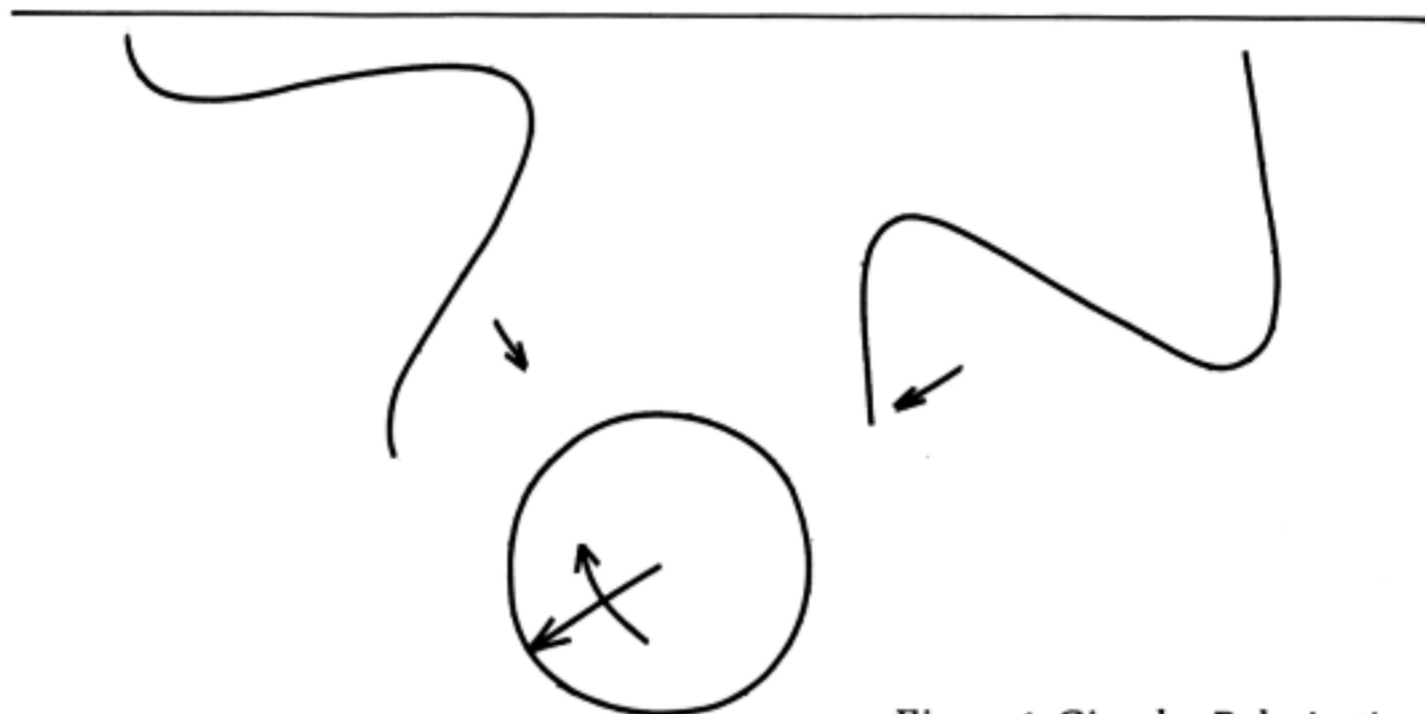


Figure 1. Circular Polarization

(Note: Convention has been to examine a vertical pattern only in one azimuth assuming all other azimuths are alike but, as we shall see later, this is not true for certain types of non-directional FM antennas and *all* azimuths must be considered to obtain the full story of the vertical pattern.)

● **Proper Horizontal Pattern**—A good horizontal CP pattern is one that apportions the total energy according to the desired azimuth pattern for both polarizations equally. Both vertical and horizontal patterns must deliver energy from both polarizations equally and maintain the 90° time difference in order to have good patterns and good circular polarization at the same time.

Antenna Design

CP is achieved by having radiating ele-

ments in a bay that is normal to the line of observation cross one another at 90° . The time difference is achieved by either feeding the crossed elements 90° out of phase or by having the crossed elements 90° spaced along the line of observation.

The vertical pattern suppression of vertical axis radiation is achieved either by reversing the sense of the two elements (180°) in the same plane or by placing the two elements one above another in different planes with the same sense spaced one half wavelength (180°). A third technique, used in crossed dipoles on a panel, is to have the directivity of the reflector screen suppress vertical axis radiation; but this is not as efficient as phasing yielding approximately 6 to 10 dB compared to typical 20 to 30 dB suppression with 180° phasing.

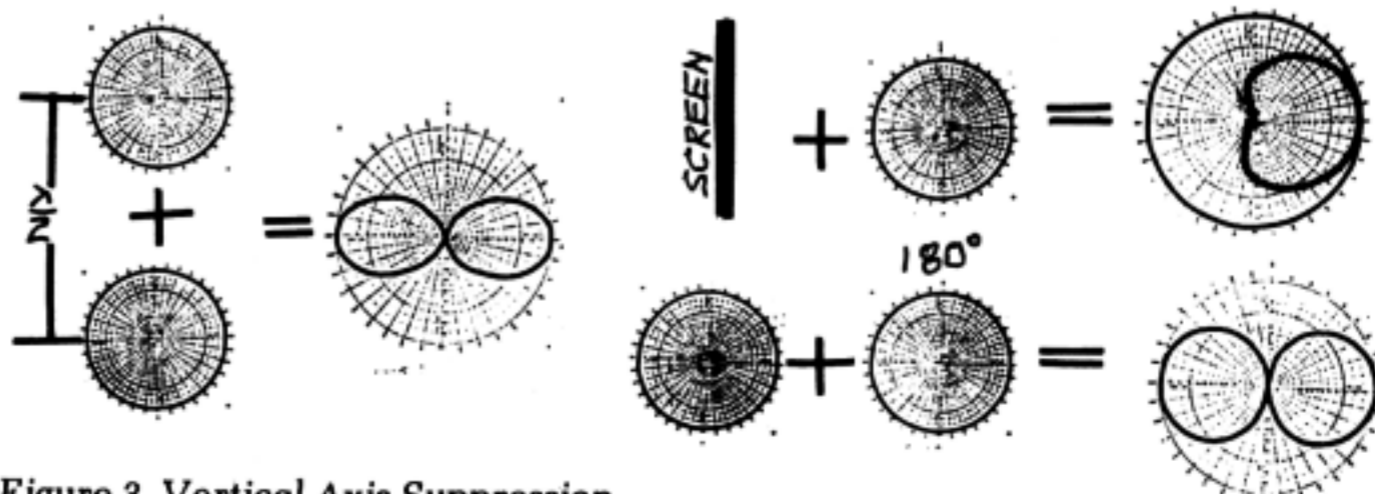


Figure 3. Vertical Axis Suppression



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- JVC CR8500 LU 3/4" Editor
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- ADDA frame synchronizers and slide storage
- Hitachi or Electrohome TVs
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- Systems Concepts Production
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- Microphones, headsets, lighting kits, etc.
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An antenna array that is supposed to radiate an omni pattern and changes its mechanical configuration appearance when viewed from different azimuths must also change its vertical pattern. That is to say, if the vertical pattern is mechanically dependent for phasing and when viewed from a different azimuth angle that mechanical spacing changes, it follows the pattern must change in that direction.

This happens in panel antennas but the mechanical appearance is restored in different azimuths by another identical panel. In other types of antennas, space separated elements of two elements make for variation in vertical pattern as you proceed around the antenna. Basically, what is needed are more combinations of elements to give the same mechanical appearance in all azimuths.

However, even though the vertical pattern is better in all azimuths of the 4-element example shown, you will note as you move from left side to right side of this antenna the direction of CP reverses, which may or may not cause receiving antenna problems with sense and with rear reflections.

A good horizontal pattern for CP concerns the problem of reflection from the tower structure. Reflections from tower elements, which are usually long and thin and therefore linearly polarized, not only disrupt CP behind the tower but also in front of

the tower. A reflection will cause a net elliptical polarization to result because of the mixture of linear (reflection) and circular (main) signals.

Axial ratio, a favourite term of suppliers, does not guarantee CP. If phase is not 90° then it is not CP. In the urban areas, because building surfaces are predominantly parallel to either the vertical component or to the horizontal component, CP is usually maintained on reflection but it can change rotational sense. The parallel polarization will reverse sense on reflection. This change of one polarization reverses the direction of apparent rotation in circular polarization. If both reverse as on a parallel surface to both polarizations the reflection's rotational sense is maintained.

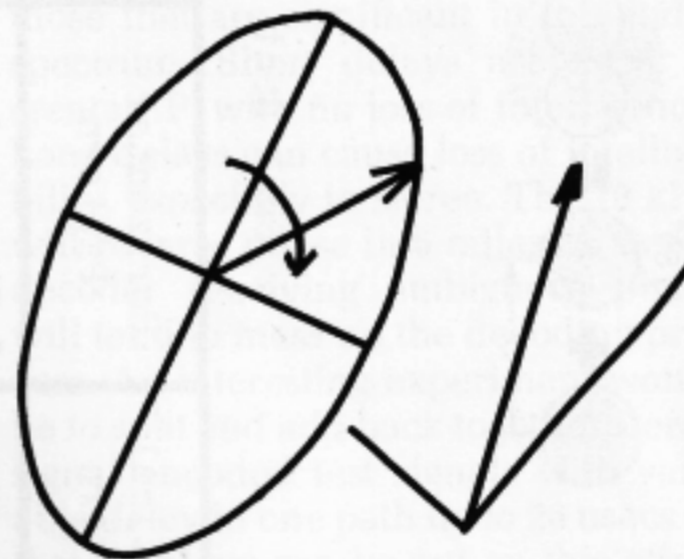


Figure 5. Axis Ratio. Two identical sets of cross polarized vectors giving same axial ratio, however, one has 90° phase difference and one does not. →

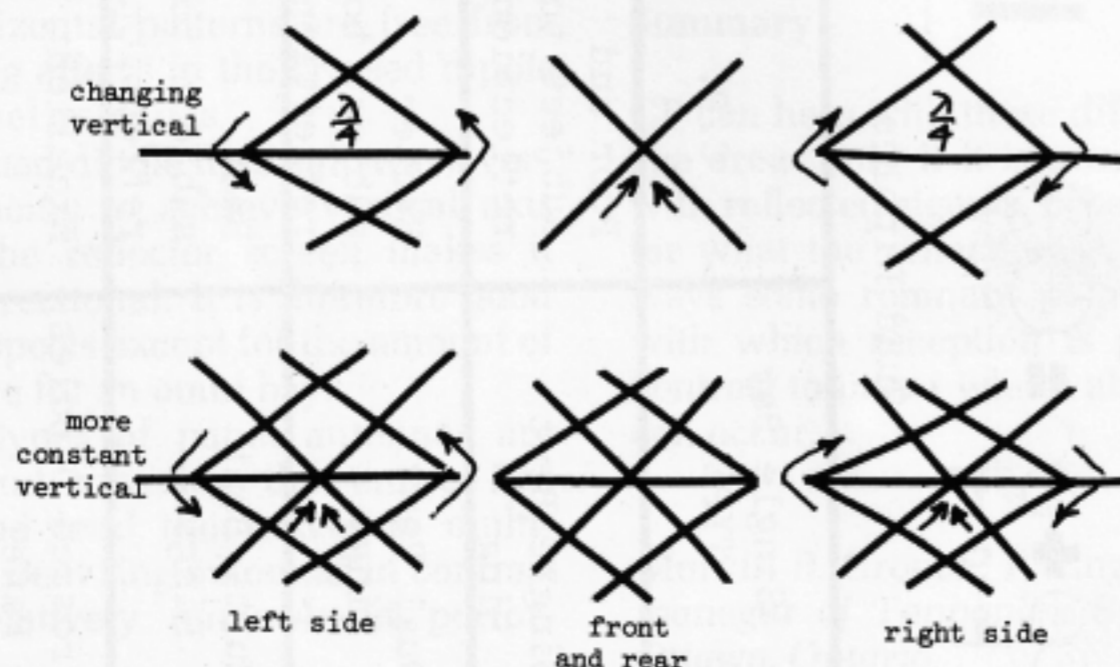
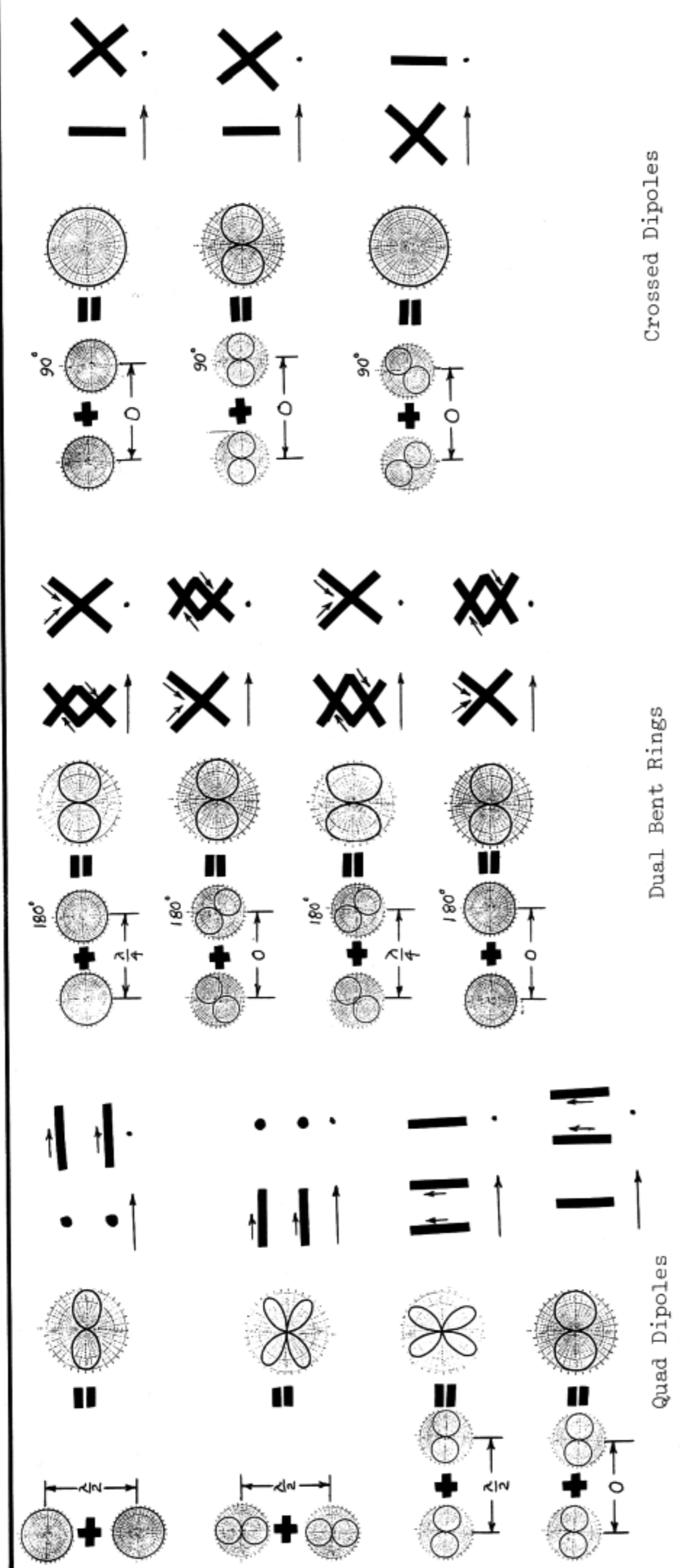


Figure 4. Mechanical Appearance with Changing Azimuth.

VERTICAL PATTERNS OF FM CP ANTENNAS

Figure 6. Summary Table.



Single Bay TYPE	C.P.	Vertical Pattern	Horizontal Pattern	COMMENTS
Single Bent Ring	Poor and subject to reflection	Poor	Influenced by mounting structure	Phase difference not equal in all azimuths. Current distribution around ring varies sinusoidally. Tower reflection influences CP and patterns.
Dual Bent Rings	Better subject to reflection	Better	Influenced by mounting structure	Phase difference and current unequal in all azimuths. Gain reduced because V.P. is 90° or more per bay in all azimuths.
Mult. Bent Rings	Best subject to reflection	Best	Influenced by mounting structure	Except for mounting reflection influence on horizontal patterns and on the circular polarization, the best of the bent rings.
Crossed Dipoles & Panel	Excellent	Depends on reflector screen	Excellent	Gain somewhat reduced because of axial radiation.
Quad Dipoles & Panel	Excellent	Excellent	Excellent	As with crossed dipoles only drawback is the amount of hardware required.

We can summarize the points of importance so far as follows:

1. CP—two equal polarizations at right angles 90° delayed in time.
2. Vertical pattern—must have means to cancel axis radiation and be constant in all azimuths.
3. Horizontal pattern—CP in all azimuths of desired radiation—equal amounts of the two polarizations.

Item 2 is important for maximum efficiency (gain). Item 3 is important for coverage: CP has maximum ability to fill shadowed areas because it can reflect off more surfaces.

Categorizing FM CP Antennas

There are in the bent ring family three types of antennas:

1. Single Element Bent Ring
2. Dual Element Bent Ring
3. Multiple Element Bent Ring

All are bent or tilted to stimulate both vertical and horizontal polarizations and to give a ring-like appearance where opposite sides will have opposite sense (180°). The dual and multiple type antennas have better ability to have reverse sense because the current is more nearly equal on all azimuths giving a better vertical in all azimuths.

CP is produced by the front and rear tilt angles crossing at 90° and by space phase of 90° from rear to front in the direction of radiation (horizon). In the case of a single element, CP is doubtful because space phase is cancelled by electrical phase.

The CP pattern is modified by the mounting structure for all types of bent ring antennas.

There are two types of panel antennas:

1. Crossed Dipoles (2)
2. Quad Dipoles (4)

The crossed dipole type must have 90° phasing to achieve CP. Therefore it cannot have 180° as well to achieve vertical axis radiation suppression. It relies on the reflector screen to direct energy away from the axis. However well it does this, it never equals phase cancellation performance. Vertical pattern and gain suffer accordingly. CP and horizontal patterns are free from mounting effects in the crossed dipole type panel antennas.

The quad dipole uses half-wave vertical spacing to achieve vertical axis nulls. The reflector screen makes it mono directional. It is therefore good in all respects except for the amount of hardware for an omni bay.

Both types of panel antennas are broadband covering the entire FM band and lend themselves to multiplexing. Bent ring antennas in contrast have relatively narrowband performances.

How CP Helps

If true CP can be delivered to a receiving area, then its unique characteristics can be beneficial to reception in difficult receiving locations.

No doubt the most challenging receiving environment is within the cement canyons of a city. Two bad situations can occur there:

1. Extreme shadowing (loss of signal)
2. Multipath Signal Cancellation

The most important effect of CP can be realized at a receiving site when reflections occur—either linear or opposite sense CP. The reflection helps item 1, but can be a problem in item 2 if the main signal is linear, because absolute nulls will occur. Not so in CP, because even with equal CP main and any polarization reflected signal, some type of polarization will remain, linear or elliptical. CP will cancel also if they are the same sense, but not when they are opposite sense—which is usually the case in reflected CP.

The biggest problem is to deliver a good CP main signal to react with the reflection. The resultant net signal will then be available at some favourable fixed polarization for that point. At another point it will change slant angle as the relative phases (time of arrival) change.

A third consideration in main and reflected FM signals is the effect of delay—not short delays, but rather those that are significant in the audio spectrum. Short delays are used to create CP, with no loss of intelligence. Long delays can cause loss of intelligibility, especially in stereo. The 19 kHz will reverse phase in 5 miles. A stereo decoder receiving ambiguous phase will tend to mess up the decoding process. An interesting experiment would be to split and add back together stereo signal encoded test signals with variable delay in one path up to 26 usecs so that numbers can be put on this effect relative to long delays. I don't know any cure for this except to move the mountains or use CP receiving antennas.

Summary

CP can help with those difficult coverage areas only if it is present to react with reflected signals, because no matter what the reflection is, there is always some remnant polarization left with which reception is possible—in contrast to linear where absolute nulls can occur.

Marvin B. Crouch, P. Eng., is general manager of Tennaplex Systems Ltd., Ottawa, Ontario.

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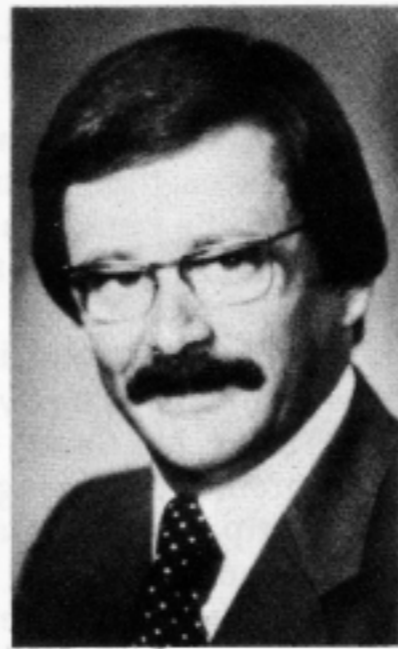
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Curran



Brown



Clark

appointments

● ADDA Corporation, Campbell, CA—**W.H. "Bill" Borman**, formerly with Memorex and Ampex, to national sales manager.

● Canadian Film Development Corp.—**André Lamy**, former chairman of the National Film Board, and most recently a vice-president of the CBC, appointed executive director.

● CRTC—a former general counsel to the Commission, **John E. Lawrence** appointed vice-chairman for a seven-year term. He replaces **Charles Dalfen** who resigned recently.

● Central Dynamics Ltd.—**Jim Morrison** to western district sales manager, based in Sherman Oaks, CA. He was formerly with KTLA, Philips and Fernseh. Also at CDL, **Gene Sudduth** has been appointed south central sales rep; his home base is Paris, Texas.

● CITY-TV Toronto—**Robert Hoyt** to

news director. Hoyt's 30-year career includes news reporting and editing, a senior civic post in Akron, Ohio, interviewing and producing for CBC-TV's *This Hour has Seven Days*, news director at KING-TV Seattle, and senior editor at the Akron Beacon-Herald and Boston Herald-American, where he was located prior to joining CITY.

● Department of Communications—**Alexander Curran** named assistant deputy minister (space program). Previously assistant v.p., technology and planning, at Northern Telecom Canada Ltd., he fills a vacancy created by the death last fall of **Dr. John Chapman**.

● Fernseh Inc.—**Dietmar Zieger** promoted to v.p., marketing and product management.

● Hitach-Denshi Ltd. (Canada)—**Douglas G. Brown** appointed general manager.

● International Video Corp.—**Carl E. Youngberg** has joined IVC as v.p., manufacturing.

● McMartin Industries, Inc.—**David Kelly** rejoins company as district sales manager for New York City and parts of northeast.

● NAB—**W. Lawrence Patrick** promoted to senior v.p., research.

● NAEB—**Clifford E. Hall, Jr.**, from National Public Radio, to new post of director of membership activities.

● NCTA—recent appointments include **Lloyd S. Komesar** as assistant director of research; **Janice C. Spector** as assistant director of public affairs, and **Gail Dosik**, promoted to new post of programming services coordinator.

● New Brunswick Broadcasting Co. Ltd. (CHSJ Radio-TV, Saint John)—**Kenneth B. Clark** named general manager; formerly with CBC Halifax, CJC-TV Sydney, N.S., and Atlantic TV (ATV) group.

● Orrox Corp.—**Jerry Fontenot** to product manager.

● Shure Brothers Inc.—Recent appointments include **William P. Finnegan**, from Quasar Company, to vice-president, marketing; **Lee Habich**, promoted to marketing communications manager; **Robert J. Mataya**, from C.G. Conn Ltd., to market planning coordinator; and **James Jay Paton**, promoted to merchandising administrative manager.

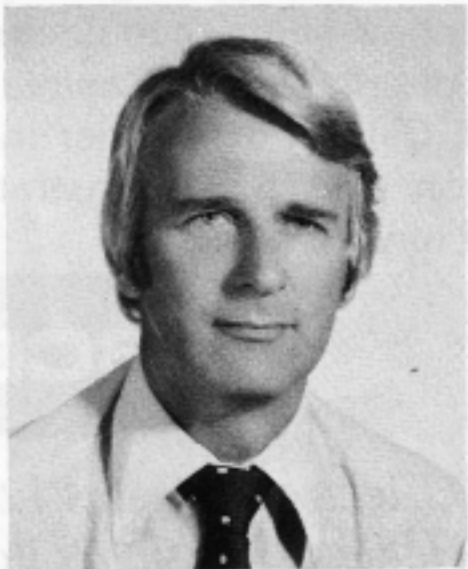
● Siecor Optical Cables Inc.—**Allen W. Dawson**, from Corning Glass Works to chairman and chief executive officer.

● Telesat Canada—**Eldon Thompson**, formerly president of The Trans Canada Telephone System and New Brunswick Telephone Co. succeeds **David Golden**, now chairman of Telesat, as president.

● Thomson—CSF Broadcast, Inc.—**Richard T. Sanford**, formerly with Conrac, appointed U.S. national sales manager; **Thomas D. Lorenzen**, formerly with Sony, appointed midwest U.S. regional manager.

● Times Fiber Communications, Inc.—recent appointments include **William M. Lynch**, from v.p. to president; **Angus MacArthur** to director of optical fiber and cable marketing; and **Robert E. Miller** to manager of fiber optics systems engineering.

● Videomagnetics, Inc.—**William A. Blockie** named v.p., marketing.



John Visser
President

ANNOUNCEMENT

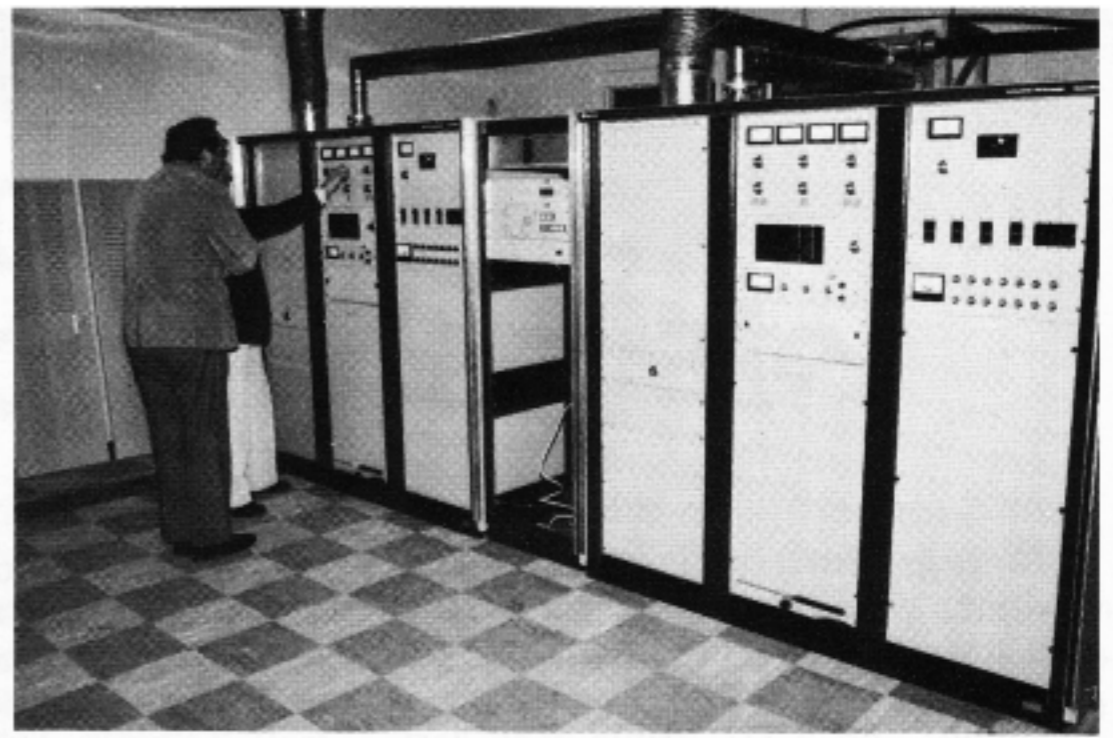
We are pleased to announce the formation of a new Broadcast Audio company. Under the logo JVE, we design and manufacture Professional Audio Equipment for the Broadcast Industry. Our product line will include DAs, switchers, small mono and stereo consoles and standard intercoms. JVE is associated with McCurdy Radio Industries and will build a complementary line of products, sold directly to the industry through McCurdy Radio.

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Receptionist Pat Anderson welcomes visitors to CKRA-CFCW complex in Edmonton.



Lyndon Olsen shows new Collins transmitter to Fred Cole of CKDA Victoria, B.C.

EDMONTON'S CKRA-FM

When the CRTC heard applications for a new Edmonton FM station in December of 1978, the eleven hopeful bidders included some of the largest broadcasting companies in the country.

The successful applicant turned out to be CFCW in Camrose, 40 miles south-east of Edmonton, a station that has grown from a small, local 250-watt operation in 1954, to today's 50,000 watts, programming a country & western format that captures a large audience in the Alberta capital.

CFCW's winning FM proposal was

for a contemporary adult album rock format. As soon as the CRTC decision was made known in April, 1979, CFCW set in motion an ambitious plan which culminated in CKRA-FM going on-air November 15, 1979, with 100,000 watts on 96.3 MHz.

Station president Hal Yerxa and his associates were determined from the beginning to make CKRA a "first-class station", and the result is a \$1.7 million facility that ranks it among the best-equipped FM stations in Canada.

CKRA's operations, along with

CFCW sales offices, occupy nearly 12,000 square feet in Letourneau Centre in south-central Edmonton. After granting of the licence, equipment was ordered during May and June of 1979, for delivery in September. CFCW chief engineer Lyndon Olsen, responsible for the technical installation, was assisted by Lyle Aumuller, a graduate of the Northern Alberta Institute of Technology, who joined CKRA in June to receive what Lyndon calls his "baptism of fire." Studio construction began immediately and continued through the summer months.



Announce turret is compact, well-equipped for news broadcasts.



Morning man Mike McCoy is seen at work in CKRA-FM master control.

There are three studio areas:

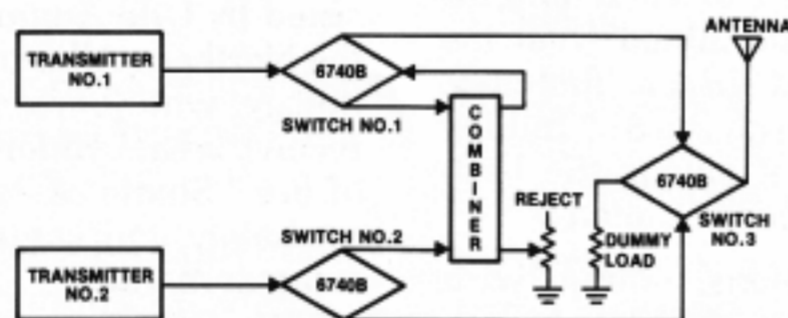
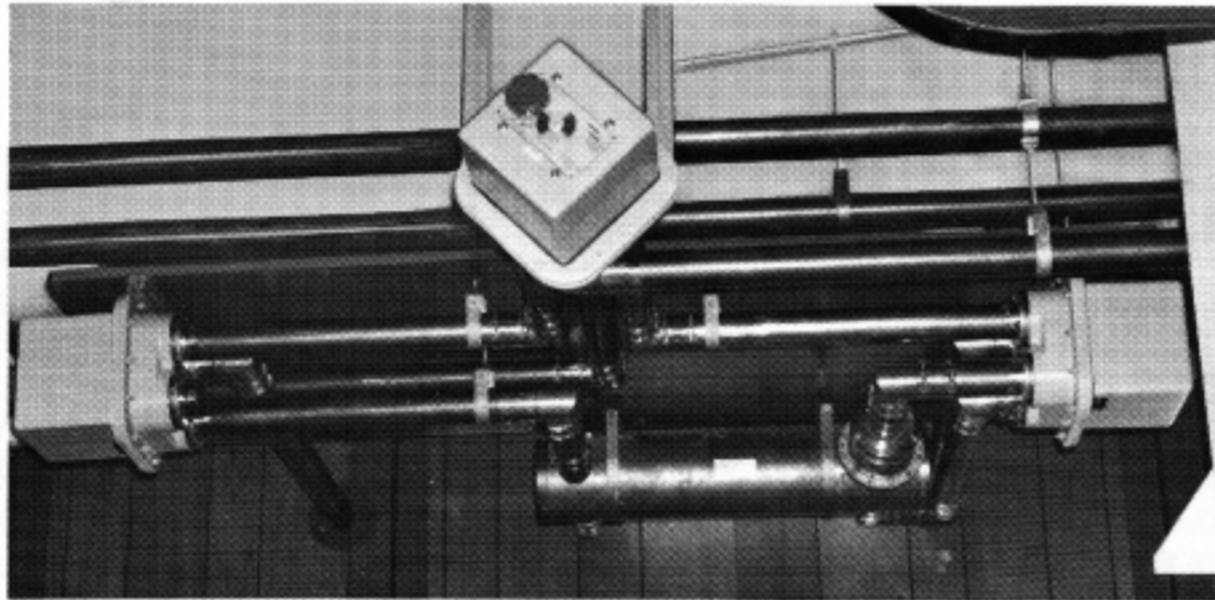
- **Master Control:** equipped with a McCurdy SS8650 console, 3 Technics SP10 turntables, 2 Studer B-67 tape machines and 2 ITC triple-deck cart machines; it has one news announce

booth with 2 microphones.

- **Production Control:** also equipped with an SS8650 console, 3 turntables and 2 cart machines (as in master control), 2 Studer A80RCs; two announce booths.

- **Recording Studio:** equipped with modified 7800 series McCurdy console, 20-in (switchable to 40) 8-out, with Technics turntables and AKG BX-10 reverb. CKRA is committed to a \$75,000 annual budget to develop musical talent, and the recording studio is being used to produce *RA Alive*—A weekly hour-long interview/music show featuring local performers—as well as live concerts. Recording facilities also include a Soundcraft series 2 24-input portable console, as well as Studer A80VU 8-track and 2-track machines. Microphones and stands, and processing gear for the recording studio, were supplied by Oakwood Audio.

WRVQ, Richmond MADE THE SWITCH . . . to Delta's 6730/6740 Series of Coaxial Transfer Switch



Three Delta Model 6740B 3-1/8-inch Coaxial Transfer Switches are used in Chief Engineer Harry Long's Parallel FM Transmitter Installation at WRVQ, Richmond, Virginia. The Delta Coaxial Transfer Switch is fully interlocked; and will switch between transmitters, antennas, or dummy loads in less than two seconds. The Transfer Switch can be operated manually, or remotely controlled using an SPDT switch or an optional control panel. Specifications for the 1-5/8- and 3-1/8-inch switches are available on request. Call or write Delta Electronics for further information.

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Standard throughout the installation are: Leitch impulse clock system; peak program meters (PPMs); Neumann microphones (U-87s in the announce booths, U-89s in the control rooms); RM85S cassette machines (one in each control room); ITC RP003 stereo cart machines (in both production and recording studios); and Revox loggers. All studios have both track lighting and valance lighting.

An interesting feature of CKRA is its newsroom, equipped with 5 work stations where reporters can prepare and record their material, including telephone information and interviews. The McCurdy installation includes Revox A-77 tape decks, ITC RP machines and SA141 switcher.

Facilities at the transmitter site near Looma, Alberta, include Collins 831G3 25 kw transmitters with transmission lines, supplied by Applied; Kathrein 8-bay panel antenna; 6-bay Dielectric standby antenna system by RCA; TFT dual remote control/STL link, and Anixter-Mark microwave dishes, supplied by MSC Electronics; and Harris audio processing, stereo generation, modulation and frequency monitoring system.

The 707-foot 2000 triangular tower was constructed by LeBlanc & Royle and can accommodate two more stations. Standby power at the transmitter site consists of a 55 kw Kohler generator supplied by Power Electric of Edmonton, and there is also a 10 kw generator at the studios. Consulting engineers for CKRA are Hoyles, Niblock and Associates of Vancouver.

Circle # 131 on Reader Service Card

HEARINGS

The CRTC has scheduled the following hearings (broadcast) from September to December:

Sept. 29—Quebec City
Holiday Inn, Ste-Foy

Oct. 14—Toronto
Royal York Hotel

Nov. 5—Moncton, N.B.
Hotel Beausejour

Nov. 25—Vancouver, B.C.
Hyatt Regency Hotel

HULL—AUGUST 25

Applications included:

- Coast Cable Vision Ltd., for a new cable TV system to serve the community of Pender Harbour, B.C.
- Central Cable Television Ltd., Amherst, N.S., to acquire Tri-Town Cable TV Ltd., serving Lunenburg, Blockhouse, Bridgewater and Mahone Bay, N.S.
- CBC, for television rebroadcasters at St. Edward/St. Louis, P.E.I., 258 watts on channel 4 (ex-CBCT), and 100 w on ch. 9 (ex-CBAFT).
- CBC, for a TV rebroadcaster at Armstrong, Ont., 10 w on ch. 10 (English network from Anik-B satellite).
- TV Nakina (Ont.), for a TV rebroadcaster, 10 w on ch. 3 (OECA from Anik-B).

- Native organizations at Port Harrison, Fort Chimo, George River and Sugluk, Quebec, for low power TV transmitters on ch. 3 to carry English, French and Inuktitut programs.
- Mutual Broadcasting 1980 (Canada) Ltd., for a corporate reorganization involving CJMS Montreal and CKMW/CFNY-FM Brampton, Ont.
- CJOB Winnipeg, for a 5-station network (Blue Bombers football games).
- CFCF Montreal, to add CKTO-FM (formerly CKCL-FM), Truro, N.S. to the Expos baseball network.
- Radio FM du Nord Ltée (CIMH-FM Sept-Iles, Que.), for transfer of shares resulting in ownership by two of three previous partners, Clement Gagnon (50.1%) and Jacques Beaulieu (49.9%).

QUEBEC CITY—SEPT. 29

Scheduled applications include:

- Radiodiffusion de l'Est Ltée, for a new AM station at Gaspé, 5 kw on 1150 kHz, which would rebroadcast programs from CHNC New Carlisle, Que., along with local originations. The same company seeks an FM station at Cap-aux-Meules, 4.3 kw on 105.5 MHz, which would also rebroadcast CHNC part-time.
- Diffusion Communautaire des Iles Inc., also for FM at Cap-aux-Meules, 6.3 kw on 92.7 MHz.
- Club Social La Grande, for FM at Camp LG3, James Bay, 950 watts on 99.5, to rebroadcast CKAC Montreal via microwave.

- CFVM Amqui, Que., for affiliation with the Télémedia network.
- Alex Daschko (obci), to acquire CFMU-FM Hamilton, now licensed to McMaster Students Union Inc.
- CBC, for TV rebroadcasters at Alma (4 kw on ch. 32, ex-CBMT), and Longue-Point-de-Mingan, Que. (98 w, ch. 6, ex-CBGAT).
- Alain Larivière, for a new cable TV system at Ste-Aurèle, Que.
- La Belle Vision Inc., for amalgamation of the system at Montmagny, Que., with those at Shawinigan and Trois-Rivières.
- Cable Satellite Network and CBC, both for TV network licences to carry the House of Commons proceedings via satellite in both English and French. The Commission will review the question of whether a network licence is required for this purpose.

APPLICATIONS CALLED

Applications have been called for broadcast facilities in the following areas:

- Gaspé, Que. and Murdochville, Que.—AM radio. Three applicants have filed for Murdochville: Radio du Golfe Inc. (CJMC Ste-Anne), Radiodiffusion de l'Est Ltée, and Diffusion Communautaire des Iles Inc.
- Iles-de-la-Madeleine, Que.—FM radio.
- Steinbach, Man.—cable TV (deadline for applications in September 30, 1980).



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DECISIONS

AM RADIO

EDMONTON AM ON 1480

A new multilingual station has been approved for Edmonton, Alberta, to operate with 10 kw on 1480 kHz. The successful applicant is Roger R. Charest, representing a company to be incorporated. A competing application (50 kw on 1480) by Ernest Mykyte was denied. It was Charest's second bid, the first having been denied last year. The new station, which is to be on-air by April, 1981, will have an advisory

council representative of the various ethnic groups in the area, and is committed to supporting local musical talent with an initial budget of \$2,400. (80-424).

MUTUAL, TELEMEDIA RAPPED

In renewing licences for the Radiomutuel and Télémedia radio networks, the CRTC rejected attempts by both to program extensive recorded music, limiting each to a maximum of three hours a week. Also rejected was their contention that a delay—even a delay of only a few seconds—changed a network program to a syndicated one, thereby making it the sole responsibil-

ity of the individual station. The Commission re-affirmed its previous decisions that the two networks exist primarily to provide improved news services that stations cannot undertake individually. It called on the 8-station Radio-mutuel group to upgrade its coverage of public affairs and special events, and again expressed concern that the 24-station Télémedia chain frequently pre-empted news during the Montreal Expos broadcast season. (Decision 80-421,422)

Other AM decisions:

- Transfer of control of CKPB Radio Ltd., Ville de la Baie, Que., to Gerald Champagne (100%) approved. Originally licensed to a group of 20 shareholders, CKPB has had many financial and administrative difficulties. In approving this application, the CRTC notes that control of the station was transferred and Mr. Champagne assumed management prior to any approval by the Commission, and warns licensees that such actions "place their licences in jeopardy". (80-426)
- Nighttime power increase to 50 kw approved for CJOB Winnipeg. (80-446)
- CKCV Quebec—power increase approved from 10 to 50 kw (day) and 5 to 50 kw (night) with change of antenna site. (80-501)
- CJOY Guelph, Ont., nighttime power increase to 10 kw approved. (80-407)
- Network of 21 AM stations for Whitecaps soccer games licensed to CJOR Vancouver (80-412)
- Network of 3 AM stations for Stampeders football games licensed to CFAC Calgary (80-413) →

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APPLICATIONS RECEIVED

- CFAC-TV-7 Lethbridge, Alta., for power increase from 96.1 to 167 kw, with change of transmitter site.
- CHWO Oakville/CJMR Mississauga, Ont., for change of antenna site.
- CBC, for power decrease to 210 w at CBRR-FM Cranbrook, B.C.
- Canadian Cablesystems, Brampton, Ont., for six-month test of an experimental package of video games called "Play Cable". Subscribers must pay an additional charge and buy a special terminal to receive the service.
- Chatham (Ont.) Cable TV, for an apartment surveillance service.
- Télémedia, for addition of six AM stations to Toronto Blue Jays baseball network.
- CKLY Lindsay, Ont., to disaffiliate from CBC; network service is now available in the area over CBCP-FM Peterboro.
- CKLA-FM Guelph, Ont., to move transmitter to CJOY AM site.
- CBC, to change channel of CBIT-4 Mabou, N.S., from 3 to 10.

- Network of 15 stations for Blue Jays baseball games licensed to CKFH Toronto (80-419)
- Network of 36 AM stations for Expos baseball licensed to CKAC Montreal (80-420)
- CFCF Inc.—CFCB Corner Brook and 9 rebroadcasters in Newfoundland added to Montreal Expos baseball network.
- CHRL Roberval, Que.—change in affiliation from Radio-Canada to Télé-média network approved. (80-461).

FM RADIO

DECISION REVERSED

The CRTC has reversed its previous "approval in principle" to deny the proposal by Ralph Jacobson (Canadian Family Radio Ltd.) for a Vancouver FM station. Following a hearing in October, 1978, the Commission said it would be prepared to issue a licence on the conditions (1) that programming be "family-oriented", with less reliance on religious programs, especially those syndicated in the U.S., and (2) that a class B frequency be used, rather than class C. Jacobson then applied for class B channel 107.9, but failed to satisfy the CRTC that the station would be "family" (rather than "religion") oriented. It is long-standing policy in Canada to not license stations to specific religious denominations, and the decision further states: "In the Commission's view a broadcasting schedule which includes paid religious programming, much of it foreign, but offers little or no free time to the religious groups in the community, is unacceptable." A minority of commissioners dissented on the grounds that the applicant was not given specific guidance as to an acceptable reduction in religious programs. Jacobson, who set up offices and studios in the Hotel Vancouver and planned to go on the air last November 1, is reported to be considering an appeal (80-423).

COMMUNITY FM OK'd

Radio Communautaire de l'Estrie Inc. has been licensed for an FM station at Sherbrooke, Quebec, 2.6 kw on 99.7 MHz. Plans are to broadcast 80 hours a week, including 20 hours of non-commercial programs produced by community groups and three hours in English. Advertising is to be limited to simple statements of sponsorship, as well as classified and informational messages, up to a maximum of six interruptions/four minutes per clock hour. The CRTC has required the licensee to increase the percentage of spoken word content above the 32% planned. (80-395).

Other FM Decisions

- CBC—decrease in power to 38.2 kw approved for CBJ-3-FM Dolbeau, Que.
- CBC—rebroadcaster approved at Hagensborg, B.C. (114 w, 88.1 MHz, ex-CBU).
- Radio Nord Inc.—change in facilities approved for CHLM-FM-1 Lithium Mines, Que., from 52 kw on 97.3 to 55.3 kw on 103.5 MHz.
- CBC—change in frequency approved for CBYC-FM Canal Flats, B.C., from 97.3 to 91.7.
- CKO-FM-2 Toronto: change in power approved to 47.3 kw. Station has been operating on 10 kw, although approved for 100 kw.

TELEVISION

CHEK JOINS CTV

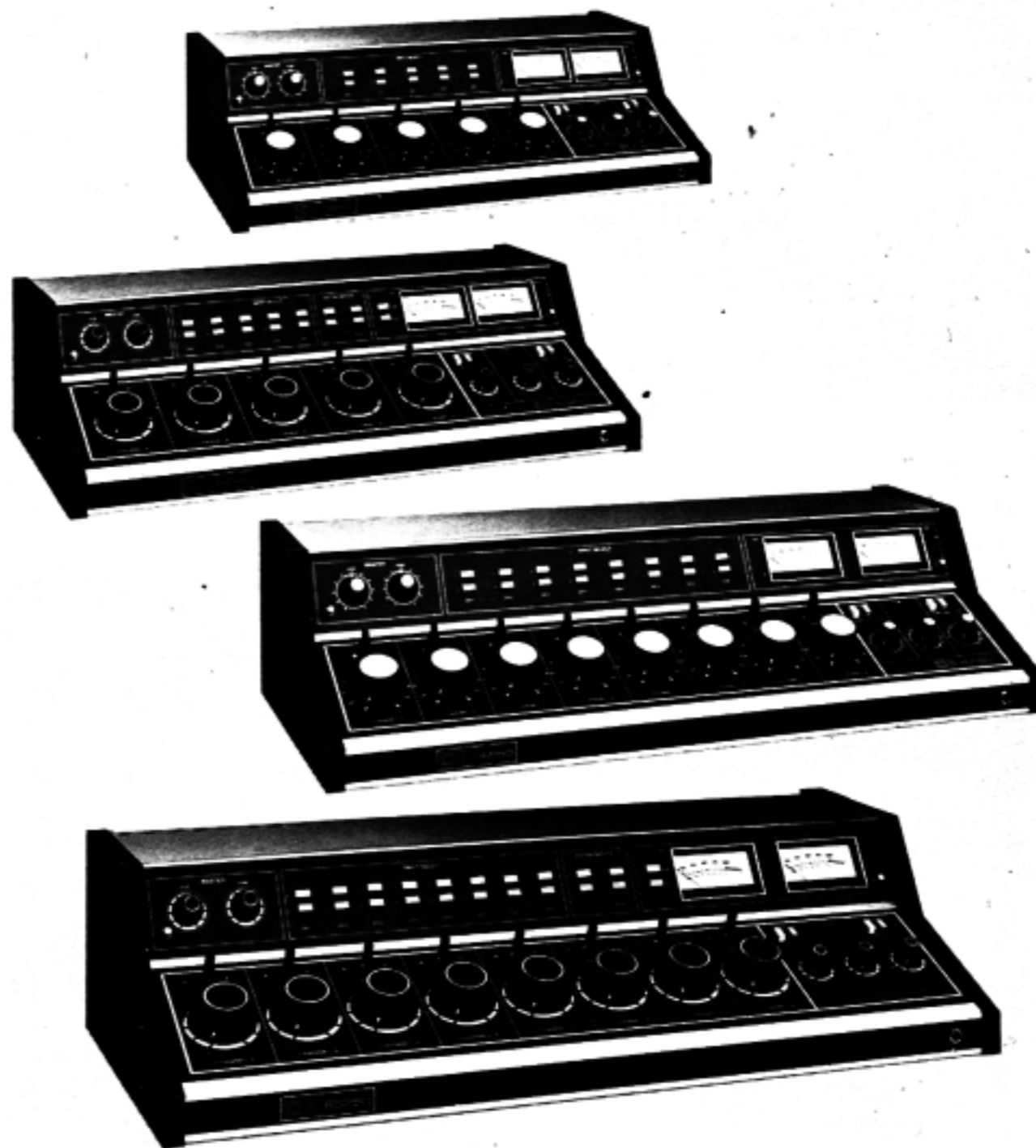
CHEK-TV Victoria, B.C., will change its affiliation from CBC to CTV effective January 5, 1981. The switch had been delayed as a result of the CBC's failure to implement its licence for channel 10 in Victoria. CBC coverage in the area is now being augmented by nine new rebroadcasters of CBUT Vancouver. In Victoria, 93% of the homes receive CBUT on cable TV and the CRTC received no interventions objecting to loss of over-the-air CBC service. (80-460).

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OK FOR ENCODED TV

Five low-power transmitters have been approved, primarily to provide CTV programming, for remote locations in Saskatchewan. The stations will broadcast encoded or "scrambled" signals, with subscribers paying \$15 monthly for a decoder. In addition to taped programs from CFQC-TV Saskatoon, there will be local programming (not scrambled), with advertising permitted. At present, no other private radio or TV stations exist in the communities, which are: Buffalo Narrows, Ile-à-la-Crosse, La Ronge, Uranium City and Eldorado. (80-517)

Other TV decisions:

- Société de Radio-Télévision du Québec—rebroadcasters approved for Quebec educational TV network at Trois-Rivières (1,188.5 kw on ch. 45), Rimouski (1,472.3 kw on ch. 22), and Sherbrooke (1,318 kw on ch. 14). (Decision 80-502)
- Five low-power TV stations have been approved for Inuit organizations in the N.W.T. They will broadcast 16 hours a week of Inuktitut and English programs from Frobisher Bay, via Anik B satellite, during the next six months. Other programming plans are to be developed when the project, known as "Inukshuk", ends. (80-505)
- OECA: power increases approved for CICO-TV-9 Thunder Bay, Ont. (32.1 kw)
CICO-TV-59 Chatham, Ont. (34.3 kw)
CICO-TV-18 London, Ont. (34.9 kw)
- Central Ontario Television Ltd., Kitchener—amalgamation with parent company, Electrohome Ltd., approved. (80-415)
- Concept Creative Communications Ltd.—Ontario network approved for

Cash for Life Lottery program. (80-418).

- CJON-TV St. John's Nfld.—Three low power rebroadcasters in Fortune Bay area approved.
- CFCN-TV-5 Lethbridge, Alta.—power increase to 57 kw, change of tx site approved. CRTC wants further power increase to improve coverage. (80-459)

- CBC rebroadcasters approved: Baie Vert, Nfld., 8.4 w, ex-CBNT
Lark Harbour, Nfld., 8.9 w, ex-CBYT
York Harbour, Nfld., 5 w, ex-CBYT
Kitimat, B.C., 10 w, ex-CBUFT
Midway, B.C., 10 w, ex-CBUT
Rock Creek, B.C., 10 w, ex-CBUT
Whistler, B.C., 107 w, ex-CBUT
- CBC—changes in antenna site approved for CBNT-32 Port Blandford, Nfld., and CBIT-16 Dingwall, N.S. Power increase approved for CBWCT-1 Atikokan, Ont., from 544 to 3,000 watts.

CABLE TELEVISION

CDN. CABLESYSTEMS WINS CONTROL OF PREMIER

The CRTC has approved the purchase of effective control (68.6%) of Premier Communications Ltd. by Canadian Cablesystems Ltd. CCL, controlled by Edward S. (Ted) Rogers of Toronto, was already Canada's largest cable TV company, with 648,000 subscribers, and Premier the second largest, with 515,000 subscribers. With the "rationalization" of cable systems in Toronto to conform with municipal boundaries, CCL will lose 51,000 subscribers, resulting in a total of 1,112,000 or 27% of all subscribers in Canada (figures as of August, 1979).

The decision (80-495) states that the commitments made by CCL represent "significant and unequivocal benefits". They include numerous research and development and production projects, such as:

- R & D amounting to \$13.5 million in the next five years (2.5% of revenues)
- market test of a new-generation addressable interactive system
- involvement of Canadian manufacturers
- support for industry efforts such as the Cable Satellite Network (CSN), Cable Telecommunications Research Institute, BCN Fiber Optics and Telidon
- study of improved transmission techniques to increase reliability and minimize distortion
- study of economically viable service to areas with low population density
- development of satellite technology for cable TV
- construction of a satellite uplink in Vancouver
- modernization of all Premier systems by 1985, at a cost of \$92 million—Vancouver, Victoria and Fraser systems to have 35 channels, two-way capability
- \$5 million fund (with Famous Players) for production of Canadian films and TV programs
- \$6 million fund (over next five years) to acquire Canadian productions
- \$1 million fund to be used largely to establish taping facilities in Ottawa and Victoria for reports by elected representatives
- \$150,000 for production of music specials in western Canada
- construction of new studios in Vancouver, Richmond and Burnaby
- mobile production unit for Coquitlam, B.C. system
- upgraded programming facilities for Keeble Cable in Toronto and Mississauga, Ont.

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