

FM in CANADA



Transmitter building located at the new CBC International Short-wave Service at Sackville, N. B. This building also houses the 50-kw. transmitter for CBA, which is Canada's regional station for the Maritimes. The CBA antenna is to the left of the building shown in the photograph, but the tower itself cannot be seen. The antenna behind the building is used exclusively for the Short-wave Service.

Highlights of the many controversial problems that confront radio broadcasters in Canada.

By DOROTHY HOLLOWAY

Station CBL, the 50-kw. regional station for Ontario. The transmitter is at Hornby, Ontario, about 25 miles from Toronto.



A BEHIND-THE-SCENES power fight is quietly shaping up over FM north of the border.

Principal contenders are Canada's ninety *private* broadcasters, already on the defensive against what they believe is a move by the Canadian government for still more control over radio, and the Canadian Broadcasting Corporation, spurred on by U.S. activity in FM and what looks like a tight frequency supply along the Great Lakes and northern New York boundaries.

While the Canadian government wants to nail down an FM policy quickly and to press for immediate negotiation with the United States for an allocation of FM channels along the border, the private licensees are playing for time.

Primarily, the private operators fear that Dominion radio authorities may force them into FM before they are ready for the change-over. At the same time they register almost 100 per-cent opposition to any Canadian Broadcasting Corporation policy which might confine *private* operations to the FM field, leaving the government in complete control of the powerful 50-kw. clear-channel and regional outlets

which provide service to the entire country.

Meanwhile, Dominion radio authorities are casting a wary eye southward at an already clearly defined U.S. policy in FM and an allocation which promises to absorb a lion's share of the border frequencies. Their goal is definitely an FM policy for Canada by the first of the year.

The whole picture—under an earlier commitment of the Canadian Broadcasting Corporation to private industry—is slated for a partial airing at a meeting called by CBC to discuss details of an FM allocation. The next step requires approval of any allocation plan by the Department of Transport, which handles the technical end of radio regulation. In any event it will be impossible for Canada to climb aboard the FM bandwagon much before year-end.

Meanwhile, however, the CBC's six-man board of governors has not been idle. A confidential policy memo, under wraps in Canada, lays down tentative policies for FM, certain to meet obstreperous opposition from Canada's private licensees.

Highlights of the CBC proposals are:

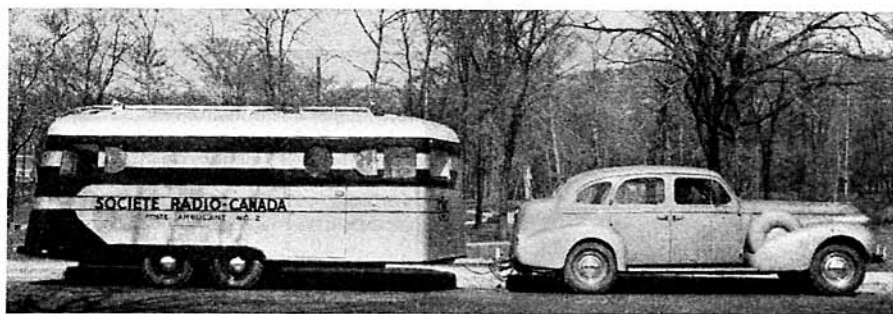
1. Canada should adopt the same band frequencies for FM as used by the United States. This is, of course, the 100 channels from 88 to 108 megacycles, of which the U.S. has earmarked 20 bands for use of non-commercial outlets.

2. Steps should be taken to protect Canadian interests in FM channels by the immediate negotiation with the U.S. for a division of channels along the border.

3. The number of FM stations permitted in a given area shall in general be limited to the commercial possibilities of the region. (The CBC has definitely taken the position that "too many FM stations would result in cheap broadcasting." The author of the proposal makes the point: "The method I suggest would justify us (the CBC) to demand reasonable service from all stations, as competition would not be as keen and chances of making reasonable profits would be better." This same policy, under the CBC proposal, would apply to standard as well as FM operations.) A formula will be worked out, defining the number of stations any one area can reasonably support.

4. However (and this proposal will be anathema to private licensees), CBC stations, because of the fact that they do not carry commercial spot announcements and local commercials and are "primarily interested" in regional coverage and network operation, may be added anywhere above the number permitted under 3, above.

5. An FM frequency would be given to any present standard station licensee provided (a) that any time after June 1, 1948, the station could be given a year's notice that it must abandon AM and operate exclusively on FM; and (b) that any FM station operating in conjunction with an AM station "must carry all and the same programs at all times except where a sustaining musical program can be produced for high-fidelity transmission by FM." (The implication here is that CBC approval will be necessary for any broadcast of non-duplicated FM programs, a more or less complete reversal of earlier FCC policy in the AM-FM programming field.)



A typical CBC mobile unit. This particular unit is located at Montreal, but similar ones are located at various CBC production points throughout the country.

6. New applicants for stations will be permitted to operate on FM provided the power and location of the station fits in the allocation plan. (In fact, the CBC member's proposal goes farther. He writes: "Generally speaking, there should be an attempt to use FM for any new application when equipment and receivers are available and widely distributed, *except where AM is essential.*" AM would be essential only where wide coverage is desired, and presumably CBC stations will fill this need under present government goals.)

7. All new FM stations must operate according to a regular schedule for a minimum period of time daily as approved by the CBC.

8. Details of allocation methods will be determined after consultation with the Department of Transport and private industry.

Some parts of Canada, like the U.S., have already reached the saturation point in the standard broadcast band. The CBC memo emphasizes that it is "almost impossible to find a frequency that can be used in southwestern Ontario even with directional arrays to shield stations operating in the U.S."

Clue to CBC thinking in FM is a statement in the memo suggesting that by a proper FM allocation, congestion would be relieved in the standard band and more clear channels could be used for high-power regional service. Private broadcasters see here a thinly veiled move by the Canadian government to confine them to a local and community service in FM, which, under the policies outlined above, would

place them in an even more subsidiary role to the dozen powerful government stations which do the coverage job. The CBC owns and operates all of Canada's 50,000-watters and its stations are generally the highest-powered on the air. In addition, the Government owns, operates, and programs both of Canada's networks, with complete sovereignty over network programs of all kinds.

Glenn Bannerman, president and general manager of the Canadian Association of Broadcasters, prototype of our own NAB, takes the firm position that "the CBC should wait at least five years, until we see what FM can do and have had some actual operating experience, before blueprinting any hard-and-fast policy. FM in its pioneer stages should be left with as few strings as possible."

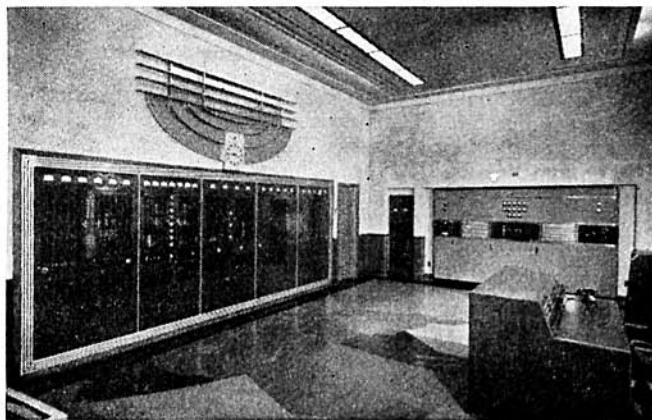
Private broadcasters "simply won't stomach" the idea of relinquishing their AM channels for FM on any arbitrary date without the benefit of practical experience in the field, Bannerman asserts.

The CAB president also points out that, outside of a CBC FM station in Montreal, there are only two privately operated experimental FM outlets—CFRB, Toronto, and CFCF, Montreal. Ironically, there are only five registered FM sets in the whole Dominion.

Bannerman adds: "I don't like the look of any plan whereby the CBC will limit private broadcasters to FM. That way, they could shut out network operation from any but government stations." Although he was not familiar

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Control room at Vercheres in the CBF transmitter building. This studio is representative of many others found in Canada.



A CBC prewar studio design. The one shown in the photograph is studio "H" located at the Montreal production center.



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states, including Missouri, Kansas, Tennessee, Indiana, and Kentucky.

N. A. MOERMAN has been appointed sales engineer of the *Potter Instrument Company*, Flushing, N. Y., designers and manufacturers of high-speed electronic counting control equipment.



For the past six and one-half years Mr. Moerman was employed at the Aberdeen Proving Grounds, Maryland, where he was responsible for the design and maintenance of various electronic measuring apparatus.

UNITED STATES TELEVISION MANUFACTURING CORPORATION has announced the unanimous re-election of Hamilton Hoge, Captain USMCR, now on terminal leave, as president. John Hoge, who acted as president during the war, remains as vice president and treasurer, as well as president of *Huber Hoge & Sons*, advertising agency.

RADIO RECEPTOR COMPANY, INC., New York, has appointed F. G. Harlow Washington and government representative. Mr. Harlow was associated for many years with *Westinghouse Electric Company* of Washington, D. C., as sales engineer.

HARRY E. HARRIS, previously sales engineer for *Bell Sound Systems, Inc.*, has been named general sales manager of the manufacturers and jobbers sales division.

Bell Sound Systems manufacture sound equipment of all types, electronic phonographs, amplifiers for electrical guitar equipment and other specialized electronic devices.

H. B. MACARTNEY, vice-president in charge of sales for *Hammarlund Manufacturing Co. Inc.*, was presented with the Hammarlund "Twenty-Year Gold Watch" by Lloyd A. Hammarlund, president. Mr. Macartney has served as purchasing agent, general manager, vice-president and general manager, and finally, vice-president in charge of all sales. The gold watch



is awarded to all employees on their twentieth anniversary with the company.

FM in Canada

(Continued from page 31)

with the nature of present CBC proposals, he declared he saw no reason why private broadcasting service to the public should be reduced at gain of the CBC outlets.

Private broadcasters generally do not object to the government's hand in radio and frankly admit that without government participation most of Canada's rural population would be left without radio service. Nor do they object to the government-imposed \$2.50 license fee on receivers or the licensing fees collected from broadcasters on a sliding-scale basis. Under the sliding-scale arrangement, a 5000-watt in Vancouver, for example, each year pays to CBC around \$4000 for its year-long permit to broadcast.

Any attempt by the CBC to tie up private operators in FM, however, will simply delay its development, according to the general opinion among private licensees. As Mr. Bannerman points out, private licensees of several of Canada's regional stations "simply cannot parallel their present coverage job in FM." And they will be reluctant to provide less, rather than more, coverage in FM.

Meanwhile, the Canadian government has given the green light to all types of radio construction and is eager to move swiftly in acting on the sixty some applications for FM stations now before it.

In any event, Canadians may use a January meeting in Washington with U.S. and Latin American representatives on extension of the North American Regional Broadcasting Agreement as springboard for an FM offensive. The NARBA, which apportions channels in the western hemisphere, expires in March 1946, although both Canada and the U.S. are willing to extend it for another year. That treaty, which now applies only to standard broadcast operations, may be enlarged to embrace FM allocations along this country's northern and southern boundaries.

U.S. engineers agree that constantly rising demand for FM frequencies in Cleveland, Toledo, Detroit, Rochester, and Buffalo may mean a tight squeeze for Canadian stations just over the line, since Canada's most congested areas adjoin these centers. However, they point out, the problem is not insuperable. Canada could, for example, use the twenty channels now spotted for use of U.S. educational FM stations in this area, or could locate its high-powered metropolitan stations on the U.S. low-powered so-called "community station" FM frequencies.

In any event, the consensus is that Canada must move and move soon, and FM will clearly highlight the direction which CBC has planned for Canadian radio in the postwar years. The Canadian system, now plainly "neither fish nor red herring," is tar-

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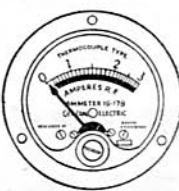


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get of attack from all three Canadian political parties, whose counterproposals run the gamut from an outright BBC monopoly to a variation of the "American system."

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QTC

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M. J. CESTONE, an ol' timer from the Gulf ports, is shipping from the West Coast and is now doing a stretch on the *Nancy Lykes* . . . Don Mealy, ex-marine opr, is with Consolidated Airlines, flying an LB 30 between 'Frisco and Honolulu . . . Les Grogan is back from Alaska fishing and on the *Richard Harding Davis*, a Liberty, but he is looking for a passenger wagon and the "good ol' days."

John Lutterman, ex-Texas Co. opr on the *SS Sea Blaney* . . . Lieut. M. A. Stiltner, former fighter pilot off the *USS Enterprise*, wants his friends to know he is in the merchant marine after he "got it" and if he can't keep 'em flying he will help to keep 'em sailing to bring the boys back home; he's on the *Dennison Victory* out of 'Frisco.

M. F. JOHNSON making his "first trip" aboard a Liberty from the West Coast . . . F. Jones is riding his "first" also—as chief on the *T. A.*

Johnston . . . T. A. Temple was in port for a few days and was assigned to the *Peter Donhue* . . . Pete Johnson is now a former radio officer—he is doing a stretch as mate, but did not report the name of his ship . . . Norman William reports he is on his "second" trip aboard the *SS John B. Floyd* . . . Geo. Meak is now chief on the *James A. Butts*. George was riding the *President Coolidge* when she hit a mine field; good luck on this one, George! . . . Harry A. Morgan, who resigned as vice president of ACA's marine division some months ago, is now with ACA's local No. 3 at 'Frisco and feeling OK once again. Harry resigned as vp due to ill health. . . . 73

Listening to the World

(Continued from page 66)

was only one way to intercept these messages—by obtaining a Hellschreiber. The BBC got one, and then more machines. Thus, they were able to monitor fully both Goebbels instructions and news. At first this was kept secret since it was not known whether the Goebbels organization knew or suspected that Britain was eavesdropping systematically on all his private conversations; or whether, though he knew it, he could do nothing about it since his own Hellschreiber setup was too valuable and elaborate to be scrapped.



The Morse Listening Room, where ordinary telegraph service signals in Morse code are intercepted and copied on the typewriters. High-speed signals are recorded and slowed down later for transcription.

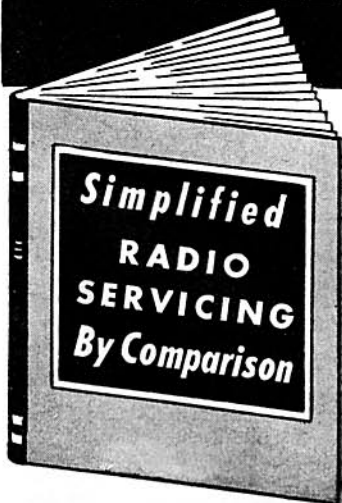
All voice broadcasts are not only heard by the individual monitors (the listeners) but simultaneously recorded on equipment very similar to that of a dictaphone, to insure that what the monitor hears can be checked. The moment a monitor has finished his listening and has made such notes as he requires for his own guidance, he goes into the Information Bureau to confess. This means that he reports every item monitored to a supervisor who knows where this information should be flashed first. This supervisor indicates the appropriate treatment of what the monitor has heard.

The military leader who said that the BBC Monitoring Service had the value for the Allied Forces of 40 divisions was not exaggerating.

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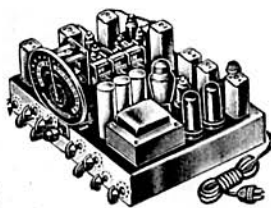
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