# New Era in Canadian Broadcasting

## Giant Hornby Transmitter Last Word In Modernity

**Tower 647 Feet High Is Hub of Station CBL's Broadcasting Equipment—Another Link In Magic Chain of "Canada Calling".**

Thirty-five miles from Toronto, in the midst of a typical rural Ontario scene of pastoral beauty stands a giant instrument of modern service. Six hundred and forty-seven feet of structural steel pierce the clouds like a slender lead pencil, painted white and orange. This is the new Canadian Broadcasting Corporation transmitter known as CBL which began operation Christmas Day. By day, the tower looms in skeleton form striking at the clouds, by night its aviation beacon cuts through the atmosphere to warn nocturnal birdmen. All around lie fields, red barns and haystacks and beyond, the million radio listeners whose sets will be tuned to this wonder instrument of the Twentieth Century.

**Lines of Transmission**

A small, compact building of modern construction in white concrete and glass brick, houses the actual transmitting equipment. The tower is 500 feet away. Between the two, runs the transmission line, carrying the power generated in the transmitter building to the tower, or radiator. The transmission lines are mounted three feet above the ground. They are encased in copper tubing, wrapped in asbestos and supported at intervals of a few feet in such a way that it may expand or contract under the changing weather conditions. Beneath the ground, radiating from the tower are nineteen miles of wire which can be described as the spokes of a wheel with the tower as its hub.

**Will Stand 120-Mile Gale**

The tower stands upon a ten foot square concrete base but the construction is not as simple as it appears. At the base of the steel tower is a steel plate, below this a porcelain cup superimposed on a steel ball all resting on the saucer shaped top of the concrete base. This resembles a ball and socket design. Running at right angles from the four corners of the ten foot square shaft, about three hundred feet from the ground are the four guys, one and three-eighth inch wire rope, specially designed and tested to hold the tower against a 120 mile gale. These guys are anchored in the ground 650 feet from their point of contact with the tower and they bear the extra weight of four insulators, each weighing 200 pounds.

At historic Vercheres, in Quebec, an identical construction is under way. These are the most powerful transmitters in Canada, and each will also serve not only the province in which it is located but neighboring provinces and states as well.

**An Intricate Network**

But how does a program, originating in the CBC studios at Toronto, get to the Hornby transmitter and into the homes of the listeners? Music, drama or comedy, lectures, news and songs, all travel the same way over specially designed telephone wires to the transmitter building where they are electrically amplified and broadcast from the tower or antenna in the form of radio frequency energy.

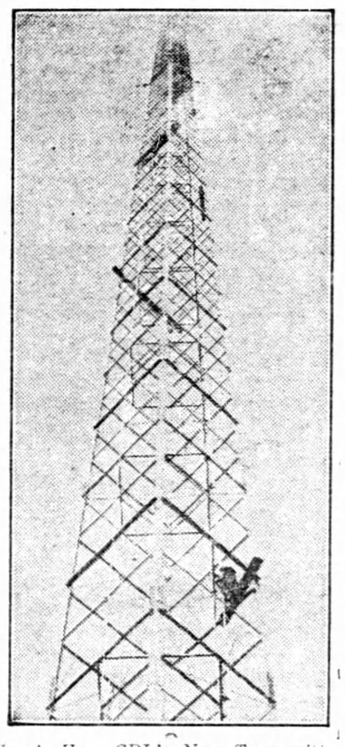
The transmitter is an intricate network of electric circuits with many miles of wire connecting its various units, but it is so compact that one technician can sit at a control console in the centre of the transmitter room, with an audience standing in the visitors' gallery, and control all operations by just pressing buttons with his fingertips.

**Last Word in Modernity**

Radio equipment is one of the marvels of the age. Canadians are soon to have an opportunity of seeing the last word in this form of modern communication. And before many more harvests are reaped from the pleasant farmlands surrounding Hornby, the Dominion will have added still other links to this magic chain, "Canada Calling," which has its imposing beginning in the two 50,000 watt stations, CBL and CBF, in Ontario and Quebec.

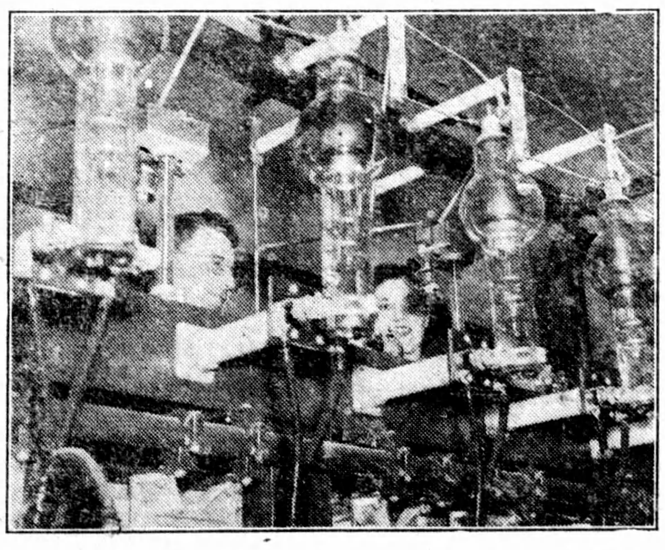
Now that the transmitter has made its formal bow on the airwaves, visitors are welcome to the new headquarters of CBL.

**Soars Upwards 647 Feet**



Here's How CBL's New Transmitter Tower Looks From the Ground

**The Tubes Cost Nearly $1,000 Apiece**



Engineer Nichols Shows a Visitor Around the New Transmitter Station at Hornby, pointing out the extra-special rectifier tubes.

## Trans-Canada Nearly Ready

**Johnson Sees Start on Air Service In West Early In 1938**

Philip G. Johnson, vice-president in charge of operations for Trans-Canada Airlines, last week said the western circuit of the Trans-Canada route might be started earlier than originally expected. He refused, however, to name any starting date.

(Hon. C. D. Howe, minister of transport recently stated the western air route of Trans-Canada Airlines would start operations by February 1.)

**Sooner Than Expected**

"We planned our program to start the western service sometime in 1938," Mr. Johnson said. "The starting date depends on too many factors—how soon pilots complete their training period and how soon our equipment is ready—to make predictions yet. But there is a good possibility that we will be able to start sooner than we expected."

In commenting on personnel Mr. Johnson said the airlines' policy has been to hire Canadian-born pilots in preference to British-born fliers. He also said only six United States experts were employed, none having permanent contracts.

"Old Faithful" geyser broke away from its 65-minute schedule on June 19, 1936, and spouted twice within 30 minutes. It then waited 92 minutes before erupting again.

## Blind Witness "Saw" Murder

**Is the Only Man Who Provided Clue to Slaying**

A slaying "witnessed" only by a blind man gave Philadelphia police last week a new angle on crime.

Detective John McEnroe said Frank Reynolds, 69, sightless former circus performer, related a tale of two men rushing silently into the Reynolds rooming house and shooting a man identified through fingerprints as Samuel Goldstein, 41.

Reynolds, who became blind 10 years ago, said he knew Goldstein as "Samuel Fuhrman" and that he "sometimes would drop in for a talk." Reynolds said he and Goldstein were sitting in the kitchen last night when the doorbell rang.

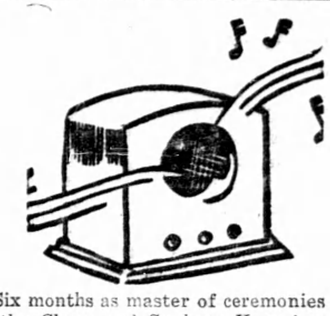
"He was going to answer for me, but I told him I would go," the blind man said.

"I turned the latch of the door and whoever was on the steps pushed right in and another man followed him."

Reynolds said he closed the door and was returning to the kitchen when he heard a shot. Then, he said, the pair elbowed him aside and fled from the house without saying a word.

Detective McEnroe said the fingerprints of Goldstein identified him as a man with a record of arrests dating back to 1910.

The dock at Southampton, England is the largest in the world and is capable of berthing eight of the world's largest vessels at the same time



## *Around The Dial*

**RADIO HEADLINERS OF THE WEEK**

Six months as master of ceremonies of the Chase and Sanborn Hour has revealed Don Ameche as the "man of a thousand voices." He has the light touch necessary to an M.C. and he runs through the gallery of characters in almost any dramatic library without difficulty. One Sunday, in the broadcast over the NBC-Red Network at 8 p.m. E.S.T., he is a growling racketeer, the next he is Henry VIII, or an Italian peanut vendor, or a French painter, or a fisherman, or a doctor. Yet they all sound different, none of them is Ameche himself. He can project himself into an almost infinite number of personalities, but his own is probably best revealed in the competent manner in which he runs the show as master of ceremonies. As a co-worker of Charlie McCarthy, he is perfectly willing to submerge himself as straight man for a ventriloquist's dummy.

**Up-to-date Farm Comment**

To our rural friends we might suggest listening to Farm Comment, broadcast every Monday, Tuesday, Wednesday and Thursday from 12:45 to 1, noon, over CRCT. The commentator, Norman Hogg, tells us that eleven prizes, totalling to one ton of feed, are offered to listeners for letters giving personal opinions of the programs and suggestions. Mr. Hogg discusses questions of general interest to farmers and gives up-to-the-minute prices and quotations.

From CKCL comes news of a mammoth Christmas party to be held over the air for the shut-ins. The broadcast will take place on Thursday, December 23rd from 2:15 until 5. On this program will be heard many of your favourites of the air. We tried to get several names for you, but apparently it is all to be a secret but definite asurance is given that it will be something worth listening to.

**Modern Symphony Orchestra**

Among the leading musical programs produced from the CBC studios will be Streamline, originating in Toronto, and heard on Thursday, December 30th, at nine p.m. Percy Faith will direct the modern symphonic orchestra in his own specially arranged selections. Dorothy Ault, popular young songstress, and the Fashionaires, a novelty trio, will be the guest artists.

Those two young sophisticates of the piano, Lou Snyder and Murray Ross, appear on the commission's first scheduled spring program. They are now heard every Thursday at 8:15 p.m. over the commission net-States. The last reports home that Reginald Stewart is negotiating with work in Canada and the Mutual Broadcasting System in the United the boys for an appearance on one of the Promenade Symphony Concerts. To give you an idea of what the boys do in their spare time, Murray has become an exceptionally fine organist, and Lou has been spending his time blowing away at a sax.

An all star Varsity show will be heard New Year's Eve over the NBC Blue-Network at nine o'clock. Undergrads from several eastern American Universities will participate to make the program a hundred per cent. Collegiate. This should prove an interesting feature. All the performers who will appear will be students, and information regarding them and what they will do is being kept quiet. We take it anything can happen, and probably will.

**Happy New Year**

And so as this will be the last column to appear in 1937, on behalf of the publishers, the advertisers, and yours sincerely, we wish you joy and happiness no end through the years to come.

# Calling all Ontario!

Twice each week day The Toronto Daily Star broadcasts news over the Canadian Broadcasting Corporation's new high-powered station CBL, Toronto.

Mornings—8 to 8:15 A.M.

Evenings—6:15 to 6:30 P.M.

—on one of the highest-powered stations in all Canada—50,000 watts—covering practically all Ontario—on an air-channel free of all interference—clear as a bell. Get your news Red Hot—news from all the world—brought to you with the immense facilities of Canada's Greatest Newspaper.

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