HEINL RADIO BUSINESS LETTER

INSURANCE BUILDING

WASHINGTON, ODLOGISTING Company, Inc.

ISSUED TWICE A WEEK AND CONTAINING THE LATEST INFORMATION REGARDING THE RUBINGS OF THE FEDERAL RADIO COMMISSION, RADIO LEGISLATION, DEPARTMENT OF COMMERCE REGULATIONS, CHANGES IN WAVELENGTH, CALL LETTERS AND POWER, PATENTS, EXPORTS, FEDERAL TRADE COMMISSION RULINGS AND OTHER MATTERS OF INTEREST TO BROADCASTERS AND MANUFACTURERS. :: :: CONFIDENTIAL—NOT FOR PUBLICATION. :: ::

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G. W. JOHNSTONE

No. 620

CHANGE OF ADDRESS: The new address of the HEINL NEWS SER-VICE is 2400 California Street, N.W., Washington, D. C. All Communications should be addressed there instead of Insurance Building, as formerly. - R.D.H.



NEW WLW MAY BE HEARD ALL OVER THE WORLD

No official notice has been taken of the assertion that the new 500,000 watt transmitter of WLW at Cincinnati is to be a part of the government's plan to provide itself with a means of communicating with the entire country in time of war or other great emergencies. Nevertheless the report has served to focus attention on the gigantic new station which is now about half completed.

There is supposed to be a 500,000 watt station in Russia, the power of which is discounted in certain quarters, but aside from that-if the Russian station really exists—WLW at Cincinnati would be the most powerful in the world.

Another story in Washington is that WLW might be used by the government if necessary to quiet the unrest among the Iowa farmers. Even with its present 50,000 watts, WLW is one of the most universally heard stations in the country. Cocated inland, it seems to be situated in territory providing a natural sounding-board. It is said to be among the very few stations which can be heard with any degree of regularity on both the Atlantic and Pacific coasts.

When the new 500,000 watt transmitter is completed next Fall it is expected to provide an area coverage of about 25 times that of the present 50,000 watt transmitter. According to Powel Crosley, Jr., the new transmitter will provide for an area of coverage 25 times that of the present facilities.

Its reliable service range might be increased to a giant circle 5000 miles across. However, it is predicted that under favorable conditions the great station may be picked up virtually anywhere in the world.

The license to use 500,000 watts has been granted by the Federal Radio Commission on an experimental basis but if no interference results, WLW may be permitted to use it regularly. The cost of the installation will be close to half a million dollars. The antenna tower will be 831 feet - 300 feet higher than the Washington Monument.

A departure from the traditional antenna in design, the new tower is of the "vertical radiator" type and will increase the signal strength of the present VLW 50,000-watt transmitter by approximately fifty per cent. Differing radically from the old type antenna which stretches parallel with the earth between two supportint towers, this new tower in itself will serve as the antenna.

Entirely insulated from the earth, the tower rests on a seemingly fragile hollow porcelain base with walls but one inch and a half in thickness. A total stress load of more than 450 tons will rest on this base.

The possibility of having a 500,000 watt broadcasting station regularly in the United States in the near future brings back recollections of an early radio conference in Washington. Mr. Crosley himself may have been present. Mr. Hoover, then Secretary of Commerce in charge of the country's rapidly growing radio system, presided. David Sarnoff, if memory is correct, who was there representing the Radio Corporation of America, proposed a 50,000-watt experimental super-power station.

It was at a morning session and such a hue and cry was raised that the "Four Horsemen" - the Radio Corporation, the General Electric, Westinghouse and A. T. & T. were going to monopolize and ruin broadcasting with "super-power" stations that the mane afternoon Secretary Hoover gave out a reassuring report to the Associated Press, explaining that the move was purely experimental. He added that the interests of the listeners would be adequately safeguarded.

Today there are very nearly twenty of these 50,000-watt stations but WLW, having been granted an experimental permit for 500,000 watts and every other station bound to follow suit, it would appear that as yet the surface of high power for long-wave broadcasting has hardly been scratched.

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MARINE AND NAVY BANDS ALLOWED TO BROADCAST AGAIN

As a result of the order of Secretary of the Navy Swanson, restoring the Marine and Navy Bands to the networks, schedules are being arranged for their early re-appearance. Although Secretary Swanson's order did not stipulate the number of broadcasts, it was thought they would not be as frequent as in the past but would be limited, for the time being at least, to the "Patriotic Hours", which he suggests.

This would include a restoration of the "Shut-in Hour" of the Marine Band, the cancellation of which probably brought in more protest than any of the other concerts. The program was inaugurated over a year ago by Capt. Taylor Branson and the mail received by him in response to his efforts soon began pouring in from all parts of the country.

It became one of the most popular features on the networks and it is believed the pleas of the patients in hospitals or otherwise shut—in had a great deal to do with Secretary Swanson's decision to remove the ban.

The Secretary's order follows:

"Since the elimination of Navy and Marine Band radio broadcasts, there have been such strong and nationwide protests from societies, schools, hospitals, institutions and private individuals who had been enjoying the high quality of this music, that I feel, in the interests of these people, especially the invalids, the broadcasting should be resumed.

"The Navy and Marine Bands are therefore authorized to participate in regular concert broadcasts, which will be considered especially for the benefit of those confined in the government and civil hospitals and institutions, and will be considered the government's share in the amusement of the inmates. The broadcasting will be called 'Patriotic Hours'.

"In accordance with the recommendations contained in the above reference, the existing order preventing the Navy and Marine Bands from broadcasting is hereby rescinded."

Following complaints from the musicians union which contended that the Marine and Navy Bands offered unfair competition with them, former Secretary of the Navy Adams ordered the bands off the networks. This was just before the close of the Hoover administration. They have been heard over the radio only two or three times - on official occasions, such as the White House Easter Egg Rolling, since. In the meantime the Army Band has been allowed to broadcast regularly.

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CANADIAN BROADCASTING PLAN OUTLINED

When the national radio broadcasting system of Canada is developed along the lines proposed by the radio broadcasting committee of the House of Commons last year and authorized by act of parliament it will consist of:

1. A chain of high-power national stations across Canada owned and operated for the people by the Canadian Radio Broadcasting Commission.

- 2. Secondary stations wherever they are needed for the complete distribution of a national radio broadcasting service and for community and other purposes, these secondary stations to be owned and operated either by the Commission or by private interests as may be determined.
- Transcontinental communication lines connecting all stations, these lines to be under the control of the Commission by lease arrangement during broadcasting hours;
- 4. A broadcasting service designed to meet the requirements and tastes of the Canadian people and including, in addition to Canadian programs of all classes, programs secured from Great Britain, the United States and other countries.

These principal features of the national broadcasting system were determined upon by parliament when it was decided last year to nationalize radio broadcasting in Canada. But parliament decided that the setting up of this system should cost the national treasury nothing, that all expenditure involved, capital as well as operating, should be financed out of the money of radio listeners and from such revenues as accrued to the Commission from the rental of broadcasting time on its system for commercial broadcasting. The Commission, of course, will not be in a position to earn these commercial revenues until its system is at least partly set up and it must make its start on the money available from the license fees of radio listeners.

As under the Act this money from licenses is paid into the national treasury and has to be appropriated to the Commission by parliament, the Commission cannot commence the creation of the national system until the money is voted. It can only furnish a limited number of national programs to private broadcasting stations.

In advance of the establishment of high-power stations of its own, the Commission will, as soon as it completes arrangements for the use of transcontinental transmission wires, provide a regular daily broadcasting service for the use of privately-owned commercial stations. The establishment of its own high-power stations will be carried out as money is available, and it is planned to make a start in those parts of the country now suffering most from inadequate radio service.

It was at the instance of the radio broadcasting committee of the House of Commons last year that the Canadian government, through the Canadian legation at Washington, effected an arrangement with the United States government whereby Canada obtained the necessary additional broadcasting channels for the creation of the proposed national system. Under this arrangement, Canada obtained four additional clear high-power channels, giving this country nine such channels.

Prior to this arrangement with the United States, Canada had five clear channels for unlimited power, one shared channel for power limited to 4 k.w., and eleven shared channels for power limited to 500 watts. Under the agreement, Canada has nine clear channels without power limitation, four shared channels with power limited to 1 k.w., three shared channels with power limited to 500 watts, and twenty shared channels with power limited to 100 watts.

The committee also dealt with the allottment of these channels in all the areas throughout Canada, seeking such allottment as would conduce to good radio reception conditions, with the reduction of interference as much as possible. It was on the basis of the allottment of channels or frequencies determined upon by the committee that the arrangement for additional channels was made with the United States. The committee's allottment, as used in the negotiations with the United States, was as follows:

British Columbia, 1100 kilocycles; Alberta, 1030 kc.; Saskatchewan, 540 kc.; Manitoba, 910 kc.; Port Arthur area, 780 kc.; Northern Ontario, 960 kc.; Western Ontario, 840 kc.; Toronto area (50 kw.), 690 kc.; Toronto area (500 watts), 1120 kc.; Ottawa, 880 kc.; Montreal area (50 kw), 730 kc.; Montreal area (1 kw), 600 kc.; Quebec, 930 kc.; Nova Scotia, 1050 kc.; New Brunswick, 1030 kc.; and Prince Edward Island, 630 kc.

These are in virtually all cases the channels or frequencies assigned to Canadian stations some days ago by the Radio Commission. The Commission was responsible for giving effect to the decision of the committee and the arrangement with the United States.

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WCFL COVERS BASEBALL WITH ULTRA-SHORT WAVE TRANSMITTER

WCFL, Chicago Federation of Labor station, carried intimate interviews with players, team managers and customers direct from the Cubs diamond on the opening day of baseball by the latest addition to WCFL's transmitter family, a 4.5 meter transmitter mounted on a roller coaster wagon.

Walking around the park and broadcasting from any desired point was made possible by this new development in radio, which carries its own battery supply and has a power of only six-tenths of a watt.

A receiver in the press coop picked up the transmissions and transferred them to the line to the studio. In this way it was not necessary for WCFL to rent telephone company lines to various parts of the park the way other Chicago stations do to cover opening events.

Complete mobility of the apparatus allowed moving around with the flag raising parade and broadcasting the description from the spot and not from a booth a half a mile away, as is done without such equipment.

Since this accomplishment the same transmitter in its roller coaster wagon cruised north from Navy Pier to the Drake Hotel south to Ohio street, west to Wabash, south to Randolph and then North to Ohio and Navy Pier on Michigan Avenue, Chicago. With the transmitter tied behind the car of Chief Engineer Maynard Marquardt, a constant stream of talking was kept up by two announcers. Every word was heard by two test receivers, one at Navy Pier and the other at the Furniture Mart. This transmission was not rebroadcast over WCFL but was merely for testing its possibilities.

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"It is a fact that such part as I took in the organization of the Radio Corporation of America was undertaken as a part of my duty as an officer of the General Electric Company and my activity in the Radio Corporation of America from then until now has been justified because, up until the recent distribution of shares, the General Electric Company has always been the largest stockholder of the Radio Corporation of America. Under such circumstances, it seems not only logical but my plain duty to remain with the General Electric Company and to resign from the Radio Corporation of America.

"Had the separation of the General Electric Company from the Radio Corporation of America been a voluntary act on its part, the problem presented to me would have been more difficult of decision.

"I must add, however, that one could not have taken such a large part in the organization of the Radio Corporation of America and in its subsequent activities as I have done without feeling great personal satisfaction in its accomplishments and great admiration for its officers, directors and the many people who compose its organization. My leaving it is the greatest wrench in my affectionate relationships, in satisfaction of things done, and in hopes and ambitions of things to be done, which has ever occurred in my business life. Having said this, it is unnecessary for me to add that the welfare of the Radio Corporation of America will be of deep interest to me always and that its continued success, of which I feel so certain, will be one of the greatest satisfactions of my life."

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NEW RADIO WAVES DISCOVERED

Discovery of mysterious radio waves which appear to come from the centre of the Milky Way galaxy was announced by the Bell Telephone Laboratories. The discovery was made during research studies on static by Karl G. Jansky of the radio research department at Holmdel, N.J., and was described by him in a paper delivered before the International Scientific Radio Union in Washington.

The galactic radio waves, Mr. Jansky said, differ from the cosmic rays and also from the phenomenon of cosmic radiation, described recently before the American Philosophical Society.

Unlike the cosmic ray, which comes from all directions in space, does not vary with either the time of day or the time of the year, and may be either a photon or an electron, the galactic waves, Mr. Jansky pointed out, seem to come from a definite source in space, vary in intensity with the time of day and time of the year, and are distinctly electro-magnetic waves that can be picked up by a radio set.

The galactic radio waves, the announcement says, are short waves, 14.6 meters, at a frequency of about 20,000,000 cycles a second. The intensity of these waves is very low, so that a delicate apparatus is required for their detection.

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DECISIONS OF THE FEDERAL RADIO COMMISSION

Applications Granted

KGIR, KGIR Inc., Butte, Mont., granted CP to install new eqpt. and increase day power from 500 w. to 1 kw.; WSBC, WSBC, Inc., Chicago, Ill., granted mod. of lic. to change specified hours of operation to as follows: 6 to 8:30 a.m.; 10 to 11 a.m.; 2 to 3:30 p.m.; and 8 to 10 p.m. and 11 to 12 p.m.; WCRW, Clinton R. White, Chicago, Ill., granted mod. of lic. to change specified hrs. of operation to as follows: 11 a.m. to 2 p.m.; 5 to 7 p.m., 12 midnight to 1 a.m.; KRE, First Congregational Church of Berkeley, Berkeley, Calif., granted special temp. auth. to operate from 9:30 a.m. to 12 noon, PST, May 30.

Applications Granted - Other Than Broadcasting

WSDF, Aeronautical Radio, Inc., Louisville, Ky., granted CP to install W.E. Co. Vt. 8 Aircraft transmitter; add freq. 3127.5 and decrease power from 400 to 50 w.; WPFP, City of Clarksburg, Clarksburg, W. Va., granted CP to extend commencement date of CP to May 21 and completion date to Aug. 21, 1933; KGCX, United Air Lines, Inc. NC-13301, granted consent To vol. assign. of lic. to Boeing Air Transport, Inc.; KEQ, RCA Communications, Inc., Kahuku, T.H., granted license authorizing secondary use of normal telg. transm. No. 29 to the frequency 7370 kc.at Kahuku, T.H. for tel. transmission to San Francisco and Manila; KIO and KRO, same, transm. Nos. 28 and 29; KHQ, same, transm. No. 29; KKH, same, grated license auth. secondary use of normal tel. No. 50 for telegraph transmission to Tokio, Manila, Suva and San Francisco;

W2XBY, Bell Tel. Labs., Inc. - NC-952-V and W10XAD, NC-417-H, granted renewal of spec. exp. license; freq. 3415, 5592.5, 5642.5 kc., 50 w.; KGZM, City of El Paso, El Paso, Tex., granted ren. of police license, freq. 2414 kc. 100 w.; WMDZ, City of Indianapolis, Ind., Police Dept., granted ren. of police license, freq. 2442 kc. 300 w.; KFZT, E. F. McDonald, Jr. aboard the Yacht "Mizpah", granted auth. to operate radio eqpt. aboard Yacht "Mizpah", freq. 2442 kc., 300 w.

Set For Hearing

WOBU, WOBU, Inc., Charleston, W.Va., mod. of lic. to increase night power from 250 to 500 w.

Miscellaneous

WIS, The So. Car. Broadcasting Co., Columbia, S.C., denied spec. auth. to operate with addl. 500 w. nighttime experimentally (now licensed 500 w. night, 1 kw. day on 1010 kc.); W2XCI, J. J. Lamb, Wilburtha, West Trenton, N.J. CP for gen. exp. service heretofore granted, was re-

tired to closed file, because of applicants' failure to complete construction in allotted time, and requested no extension.

Oral Argument Granted

Ex. Rep. No. 467 - KGIX - J. M. Heaton, Las Vegas, Nevada, application for renewal of license to operate on 1420 kc., 100 w., spec. hrs. to change location of station and to make changes in eqpt., to be heard before the Commission en banc on May 31, 1933, at 10 a.m. Examiner R. H. Hyde on March 23 recommended denial of application.

Action On Examiners' Reports

Ex. Rep. No. 469 - New - W. E. Dobbins & Maurine G. Coleman, d/b as Coleman-Dobbins Co., Atlanta, Ga., denied application for new station to operate on 890 kc., 250 w. night, 500 w. LS, facilities of WGST, Atlanta, sustaining Examiner Elmer W. Pratt; WGST, Georgia School of Technology, Atlanta, Ga., granted application for renewal of lic. to operate on 890 kc., 250 w. night, 500 w. LS, sustaining Examiner Pratt.

Ex. Rep. No. 474 - W2BTM - Benjamin C. Rosset, New York City, denied application for renewal of Amateur station license as in cases of default, sustaining Examiner R.H. Hyde.

Ratification of Acts Of Commissioners

WMBO, Inc., Auburn, N.Y., granted spec. temp. auth. to extend program test period for thirty days; Action taken April 29.

Action taken May 1 - KGDL - Mackay Radio & Telg. Co., Inc., New York, granted 60 day auth. to operate new emergency eqpt. aboard vessel Algonquin, pending receipt of formal application.

Action taken May 2 - <u>WOU</u> - New England Tel. and Tel. Co., Marshfield, Mass., granted auth. to operate coastal harbor station as a special exp. station in the exp. service, for period May 5 and 6, 1933; <u>WLXH</u>, same.

Action taken May 3 - New - Airport Dept., City and County of San Francisco, San Bruno, Calif., granted CP, freq. 278 kc., 15 w. for transmission of beacon signals; signals to be transmitted only upon specific request received from aircraft desiring to use the airport served by this transm.; WEAD, Aeronautical Radio, Inc., Harrisburg, Pa., granted CP to move transmitter from airport at Harrisburg to Olmsted Field, Middletown, Pa.