

HEINL RADIO BUSINESS LETTER

2400 CALIFORNIA STREET

WASHINGTON, D. C.

CONFIDENTIAL—Not for Publication

NATIONAL BROADCASTING COMPANY, INC.
GENERAL LIBRARY

30 ROCKEFELLER PLAZA, NEW YORK, N. Y.

INDEX TO ISSUE OF JUNE 27, 1933

Wisconsin Station Goes After WGN Cleared Channel.....	2
Mackay Equips Many Ships.....	2
New Radio Deal Made By Canadian Press.....	3
Directional Antennae May Secure Power Increase For Cincinnati Station.....	4
The Rollers May Again Be Put Under Radio Commission.....	5
Radio Discussed At Advertising Federation Convention.....	6
Bosch Corporation Makes Survey Of Police Radio.....	6
DeForest Radio Sets Forth Developments Of Sale To RCA.....	7
Zworykin Believes Iconoscope Eye Solves Television Problem.....	8
Chairman Of Radio Commission To Broadcast.....	9
National Majestic Dealer Reunion To Be Held In Chicago.....	9
Atwater Kent Official Dies Suddenly.....	10
Applications Received By Federal Radio Commission.....	10
Decisions Of the Radio Commission.....	11
Applications Received For Renewal Of Licenses.....	12

WISCONSIN STATION GOES AFTER WGN CLEARED CHANNEL

Perhaps inspired by the success of Station WJKS, of Gary, Ind., in securing the frequency of Station WIBO, of Chicago, Station WIBA, of Madison, Wis., has applied to the Federal Radio Commission for permission to share the cleared channel of Station WGN, of Chicago, one of the choicest on the radio spectrum. At the same time, Station WIBA asks that its power of 500 watts night and 1 kw daytime be increased to 25,000 watts. As yet no date has been set for a hearing of the case but when the application comes up for official consideration, it is certain, if pressed, to be bitterly fought by the Chicago station. In fact, it may put every station in the country having a cleared channel on the uneasy seat, because if WGN's frequency is, by any chance, captured by the Wisconsin station, the domain of cleared channels everywhere is apt to be threatened.

Station WIBA, which now operates on a frequency of 1280 kc., along with six other stations, is owned by the Badger Broadcasting Co., of Madison, the controlling interest of which is held by the two leading newspapers in that city, the Capital Times and the Wisconsin State Journal.

Although the report could not be confirmed, it was said that former Governor Philip F. LaFollette was back of the application of WIBA in the effort to share time with WGN, and that he intended to press the case vigorously.

X X X X X X

MACKAY EQUIPS MANY SHIPS

Within the past several weeks the Mackay Radio and Telegraph Company has received contracts involving its newly developed ship radiotelegraph equipment from the Associated Oil Company, of California for its entire fleet of eight vessels, the Union Oil Co. of California for its entire fleet of ten vessels; SS HAITI, Ocean Dominion Line; SS SALVOR, Merida Syndicates Associates; SS HONDURAS, Mexican Fruit Company; SS T.A.D. JONES, Union Sulphur Company; U. S. Army Dredge CHINOOK; SS WESTERN SWORD, Sword Steamship Line; and SS AMERICAN CARDINAL, American-Foreign Corporation.

The Standard Oil Company of California contracted with Mackay Radio for the radio equipment and service for its fleet several months ago and now with the Union Oil and Associated Oil Companies' fleets also under long term contract Mackay Radio serves the three major oil companies of the Pacific Coast with a combined fleet of 40 vessels.

X X X X X X

NEW RADIO DEAL MADE BY CANADIAN PRESS

The Canadian Press has agreed to furnish news bulletins to the Canadian Radio Broadcasting Commission, the service starting July 1.

"It is an interesting experiment", said J. F. B. Livesay, General Manager of the Canadian Press, interviewed by Editor & Publisher. "We decided we would take no payment from the Commission, because in the public interest we are as anxious as is the Commission itself to cooperate in the supply of reliable news broadcasts for the people of Canada, particularly those in the northern areas out of reach of newspapers. We also want to keep our hands free as to the scope and character of the service. In this, particularly in the elimination of the objectionable noon broadcast, we have had the cordial support of Hector Charlesworth, Chairman of the Commission, himself a distinguished Canadian newspaper man.

"There will be two news bulletins of five minutes each, that is to say of 300 or 400 words apiece, prepared by the Canadian Press and made available to the Commission at our wire points across the continent, for broadcasting at 6:30 P.M. and 10:30 P.M., local standard time. The bulletins will be sponsored by the Commission as being by courtesy of the Canadian Press."

"It is gratifying", continued Mr. Livesay, "that this arrangement which is to run experimentally for two years, appears to have the unanimous approval of our membership. To one who has listened in at our meetings for the past two or three years to the hurly burly of arguments as between members who broadcast and the much larger number who don't, this^{is} not only gratifying but is almost a miracle. No one knows where radio is going in the next few years, and taking the long view, it is no doubt wise that the Canadian Press should establish its news service in the air as it has over the land.

"We are very much obliged to Mr. Charlesworth and his colleagues for agreeing to discard the proposed noon broadcast, because our experience is that our members are reluctant to carry out their obligation to produce promptly in the forenoon for the Canadian Press their local and regional news if it is to be broadcast back into their territory hours before their newspapers are on the street. As from July 1, save for these two specified broadcasts, no member of the Canadian Press will be permitted to broadcast our news."

X X X X X X X X

DIRECTIONAL ANTENNAE MAY SECURE POWER INCREASE FOR CINCINNATI STATION

Possibly because of results achieved by the directional antennae which eliminated interference between Station WJSV, in Washington, and the Naval Research Laboratory, only about a mile away, the Federal Radio Commission has granted Station WKRC, of Cincinnati, the Columbia outlet there, permission to experiment with 1,000 watts power and use a directional antennae in an effort to avoid interference with KSD and KFUD, St. Louis, and Station WGR, Buffalo.

A report must be made to the Commission not later than August 1st. If the results expected by the Cincinnati station are actually accomplished, WKRC will be enabled to operate with 1,000 watts power without causing as much interference to other stations on the 550 kc. frequency as would normally be caused by the use of 500 watts power by WKRC with its present antennae. Evidence submitted to the Commission indicates that the present operation of WKRC, KSD, (and KFUD) and WGR on the 550 kc. frequency has resulted in objectionable interference. KSD is using 500 watts power, KFUD, the same, and WGR, 1000 watts.

The special antenna used by WKRC as a means of preventing interference or alleviating existing interference conditions consists in the main, of two radiators, self-supporting towers spaced a distance of one-eighth wave length apart. In use the two self-supporting towers would be excited from the radio transmitter, 180 degrees out of phase. The current in one tower would be adjusted so as to have a value of approximately eight-tenths the value of the current in the other tower, apparatus being provided to adjust the values to whatever ratio might be required to give the desired effect. This antenna arrangement, it appears, may result in the establishment of a field intensity pattern or service area somewhat of the shape of the figure eight with maximum radiation in the direction of a line through the two towers and minimum radiation in the directions at right angles with this line. The applicant proposes to place the towers so that a line through them would be in a direction approximately northwest to southeast. This, according to the calculations of applicant's engineer, which appear reasonable and acceptable, would reduce the effective signal strength of WKRC in the direction of KSD and KFUD in St. Louis and WGR in Buffalo to values less than would normally be expected of a station operating with 500 watts power and using a conventional antenna.

X X X X X X X

THE ROLLERS MAY AGAIN BE PUT UNDER RADIO COMMISSION

For about the sixth time in as many years, it looks as if the Federal Radio Commission will again have to move. This time, it appears to be slated for removal from the Interior Department Building, which is located at 18th and F Streets, N.W., not a great ways from the Navy, War and other departments, to the great new Commerce Building on 14th Street near Pennsylvania Avenue, just opposite the Willard Hotel. The Radio Commission is reported to be up in arms at this latest reported removal and are expected to oppose it vigorously.

The life of the Federal Radio Commission, insofar as its quarters have been concerned, seems to be one move after another. When the Radio Act was passed, there was no appropriation either for offices or salary. The salary part of it was quite another story, some of the Commissioners having to wait almost a year before they got any money. While considerable discomfort was involved, the Commission, through the courtesy of Secretary of Commerce Hoover, managed to secure a couple of rooms in the Commerce Building. Thereafter they were moved to another floor in the same building, in the meantime having furnished their quarters with borrowed desks, chairs and other office equipment from Secretary Hoover.

After a time the Commission was moved to the Interior Department Building, then the largest and handsomest Government office building in town. Despite the size of that structure, the demand for space there was so great that it was necessary to secure the quarters then occupied by the Radio Commission, whereupon the Commission moved into the \$10,000,000 National Press Building in the heart of the business district of Washington. However, when economies began to be effected with the coming of the depression, the Radio Commission was again moved back into the Interior Building, however, occupying quarters in a different part of that structure. Now it looks as though they will go to the Commerce Building.

This move may, or may not, be significant in view of the fact that there have been constant rumors that sooner or later, possibly now not until after the International Conference in Mexico City, that the Radio Commission may be merged into the Commerce Department.

X X X X X

RADIO DISCUSSED AT ADVERTISING FEDERATION CONVENTION

An all-day session in the departmental gathering was dedicated to the National Association of Broadcasters at the Twenty-Ninth Annual Convention of the Advertising Federation of America, at Grand Rapids, Mich.

The program was as follows:

Tuesday, June 27: - "Problems of Station Promotion", John Patt, WGAR, Cleveland; "Sales Management", Lewis Weiss, WJR, Detroit; "Merchandising", Harry Howlett, WHK, Cleveland, "Commercial Scripts", John Henry, KOIL, Council Bluffs, Ia. (Morning session)

Tuesday Afternoon - "Cooperation with Local Civic Groups", Edward Bill, WMBD, Peoria; "Participating Ideas", Edward Craney, KGIR, Butte; "Station Surveys", Martin Campbell, WFAA, Dallas, and "Standardization of Units of Sale and Rates", Arthur B. Church, KMBC, Kansas City.

X X X X X X X

BOSCH CORPORATION MAKES SURVEY OF POLICE RADIO

A multigraphed booklet setting forth the results of "A Special Survey of Police Radio" has been prepared by the United American Bosch Corporation, of Springfield, Mass. Although the use of radio for the control of police patrol forces is growing very rapidly, there seems to be a lack of knowledge of the subject on the part of municipalities and police officials, with the result that much inadequate apparatus is purchased and lessons are being learned by rather bitter experience.

"Apparently there are few engineers available who specialize on the subject of police broadcasting and reception", Morris Metcalf, Vice-President of the United American Bosch Corp. said, "and as the conditions vary in almost every installation, it was with a view to collecting some simple facts that I compiled the booklet."

The publication is profusely illustrated and it should be of much value to police or municipal officials who desire to further interest themselves in the subject.

X X X X X X

Cable Radio Tube Corporation and Subsidiaries Report - Year ended April 30: Net loss after expenses, depreciation, bad debts written off, inventory adjustments, and other charges, \$121,772, against \$155,544 loss in preceding fiscal year.

X X X X X X X X

DeFOREST RADIO CO. SETS FORTH DEVELOPMENTS OF SALE TO RCA

The following letter has been sent to the creditors of the DeForest Radio Co., by Leslie S. Gordon and Ralph E. Lum, its receivers:

"At the hearing before Judge Niels on May 20th, the question having arisen of a possible conflict of interest between the Jenkins Television Corporation and De Forest Radio Company, Leslie S. Gordon and William S. Bergland being receivers of both companies offered their resignations as receivers of the Jenkins Television Corporation. A few days later, John Biggs, Jr., an attorney of Wilmington Delaware, and Clifton V. Edwards, an attorney of New York City, were appointed in their place and a hearing was set down for June 5th. At this latter date, additional time was requested by the receivers and the Judge set June 15th.

"At the June 15th hearing, the new receivers offered the same recommendation as had been previously presented by Leslie S. Gordon and William S. Bergland - namely, that the Jenkins Television Corporation be offered for public sale, and in spite of the continued objection of one individual stockholder, the Judge entered an order of sale for the second time, making it returnable on July 14th.

"As stated previously, compliance with the terms of the RCA bid requires that the De Forest assets include those of the Jenkins Television Corporation. It is, therefore, necessary for the De Forest Receivers to bid for the Jenkins Television Corporation assets at the public sale set for July 14th. In order to do this, we must have sufficient funds to cover our bid and this prevents distributing to the creditors such cash as we now have on hand.

"The Radio Corporation of America is holding its bid open and we know of no reason at the present time why the matter should not be concluded within a few days of July 14th, nor do we know of any reason why funds should not be available very promptly thereafter to apply on your account.

"The Receivers regret exceedingly the delay that has been caused by the action of the Delaware Court which was entirely unforeseen, and we trust that you will be patient a short time longer."

X X X X X X

ZWORYKIN BELIEVES ICONOSCOPE EYE SOLVES TELEVISION PROBLEM

At last Dr. Vladimir K. Zworykin, the inventor, who has directed the search for television for the RCA-Victor Company, has spoken. Dr. Zworykin revealed some of his findings to the Institute of Radio Engineers in Chicago. He believes the secret of television is hidden in a sensitive electric eye. One tube "sees" a scene for transmission and another tube reproduces the picture after it has been tossed through space by radio.

Orrin E. Dunlap, Jr., well known radio authority, who talked to Zworykin just before the latter went to Chicago, said, "While many experimenters have sought to solve the elusive television puzzle by means of a revolving disk or scanner that chops the picture into tiny pieces for broadcasting and then reassembles the mosaic at the receiver, Zworykin believed they were on the wrong track.

"Several years ago in a lecture at Rochester, he pointed out that the successful clues to television rested in the human eye. He was convinced that for man to perfect television, he must invent a device to emulate the eye with its retina and optic nerve. Those who know Zworykin are mindful that he is a deep student of nature, for in nature he finds the model of perfection - the goal. In 1929, he announced that he was meeting with success in the research laboratory of the Westinghouse Electric and Manufacturing Company.

"Those who have seen the Zworykin system in operation have been astounded at the clarity and size of the pictures. It is understood that the picture showing on the Iconoscope is approximately four by five inches but that it can be reflected on a large screen.

"Those familiar with the operation say the picture is as clear as a half-tone and is free of streaks and lines heretofore an annoyance in television pictures. In fact, the images are so distinct that ordinary photographs can be made of the pictures on the screen.

"The plan is to use ultra short-wave sets operating on about six meters. This means that each city will have its own television station because the tiny waves generally stop at the curvature of the earth.

"So successful have been the Zworykin results that the problem is said to be no longer electrical. Apparently television now rests in the laps of the financial and merchandising experts.

"The retail price will depend upon the number of instruments manufactured. If only one set is built, it might cost \$10,000; but if mass-production methods turn out thousands of outfits then the cost might be around \$100."

X X X X X X X

CHAIRMAN OF RADIO COMMISSION TO BROADCAST

Judge Eugene O. Sykes, Chairman of the Federal Radio Commission, who was recently appointed by President Roosevelt to head the United States delegation to the North American wave-length conference opening in Mexico City, July 10th, will make one of his rare appearances over the radio Wednesday night (June 28th). With the exception of the night the original Radio Commission made its bow, it is probably the first time Judge Sykes has ever faced the microphone over a national network.

Columbia is congratulating itself upon capturing him. Judge Sykes will be heard over the Columbia network at 10 o'clock, EST, and will be put through his paces by Martin Codel, of Broadcasting Magazine.

X X X X X X X

NATIONAL MAJESTIC DEALER REUNION TO BE HELD IN CHICAGO

A reunion of Majestic Radio and Refrigerator dealers will be held in Chicago on July 5th at the Drake Hotel. Elaborate plans have been made for the entertainment of the visiting guests which include escorted trips through the great Majestic factories during the day. In the evening a mammoth banquet will be held, immediately followed by a spectacular and gigantic Mardi Gras.

For the past three months Majestic officials have been working out the details to make this one of the greatest events they have ever staged for the benefit of their dealers.

Le Roi J. Williams, Vice-President and General Manager of Grigsby-Grunow Co., recently stated:

"Our factories are continuing with overtime and Sunday operations to meet the demands brought about by the constructive policies of President Roosevelt's new deal.

"Majestic radio shipments so far this month (as of June 13) are already double those of all last June, and the production schedule is more than five times radio shipments for last June. Our radio production schedule for this month has not been equalled in June since 1929.

"June shipments of Majestic refrigerators are ahead of last year, and our refrigerator schedules for next month have not been equalled in July for two years."

X X X X X X X

ATWATER KENT OFFICIAL DIES SUDDENLY

Paxson Deeter, well known Philadelphia attorney and Secretary of the Atwater Kent Foundation, Inc., died suddenly Saturday night at his home in Bryn Mawr, a suburb of Philadelphia. He was 53 years of age.

X X X X X X

APPLICATIONS RECEIVED BY FEDERAL RADIO COMMISSION

June 23 - C. C. Baxter, Dublin, Texas, KFPL, C.P. to make changes in equipment and increase power from 100 watts to 100 watts night, 250 watts daytime; WHEF, d/b as Attala Milling and Produce Co., Kosciusko, Miss., modification of C.P. for a new station to extend commencement and completion dates from 4/24/33 and 6/24/33 to 7/24/33 and 1/24/34, respectively (resubmitted in proper form); WIBA, Badger Broadcasting Co., Madison, Wis., (see story on page 2);

June 24 - WBZA, Westinghouse Electric and Manufacturing Co., Boston, Mass., C.P. to make changes in equipment; Willard G. Demuth, Uhrichsville, Ohio, C.P. for new station to use 1370 kc., 100 watts, daytime hours, to be considered under Rule 6 g; WGCM, Great Southern Land Co., Mississippi City, Miss., consent to voluntary assignment of license to Grace Jones Stewart under the trade name of Great Southern LandCo. (not inc.); KUOA, KUOA, Inc., Fayetteville, Ark., modification of C.P. granted 4/28/33 change equipment and transmitter locally for approval of transmitter location Mount Sequoyah, Fayetteville, Ark., and change equipment.

June 26 - WBBC, Brooklyn Broadcasting Corp., Brooklyn, N. Y., modification of license to change hours of operation from shares with WFOX WARD WLTH to share WFOX and WLTH, requesting facilities of WARD. Amended to request Share with WLTH, facilities of WARD and WFOX, Brooklyn, N. Y. WBBC to use 3/4 time, WLTH, 1/4 time; WCAP, Radio Industries Broadcast Co., Asbury Park, N. J., special experimental authorization to increase power from 500 w. to 1 KW experimentally for 90 days; WKBV, d/b as Knox Battery & Electric Co., Connersville, Ind., C.P. to change transmitter and studio location to Richmond, Ind., and change equipment.

Applications Other Than Broadcasting

June 24 - CITY Of Lubbock, Lubbock, Texas, C.P. for new Municipal police station, 2450 kc., 50 watts; KIZH, Gulf Research & Development Corp., Portable, mostly in southwestern U.S., also KIZG, licenses to cover C.P. for a geophysical station, 1602, 1628, 1652, 1676, 1700 kc., 10 watts; WPFE, City of Reading, Reading, Pa., modification of C.P. for extension of completion date to 7/15/33 covering Municipal Police station; W2XER, Donald Bruce Whittemore, Portable & Mobile, license to cover C.P. for general experimental station 34600, 41000, 51400, 60000-400000, 401000 kc., and above,

5 watts; WQO-WHR, R.C.A. Communications, Inc., Rocky Point, N. Y., modification of C.P. for extension of completion date to 9/21/33 covering point-to-point telegraph station. There were also received 135 applications for amateur station licenses and 36 applications for ship station licenses.

June 26 - Aeronautical Radio, Inc.: WSDH, Murfreesboro, Tenn., C.P. to discontinue operation by remote control for aeronautical station, and to correct designation of transmitter location; KGTH, Salt Lake City, Utah, license to cover C.P. for aeronautical station 2906, 3072.5, 3088, 5672.5, 5692.5 kc., 400 watts, also license to cover C.P. for aeronautical point-to-point station, 2720, 2732, 4110, 6510, 6520, 6530, 8015 kc., 150 watts; KGSK, Billings, Mont., license to cover C.P. for aeronautical point-to-point station, 2668, 2672 kc., 400 watts; WAEQ, Chicago, Ill., license to cover C.P. for aeronautical station, 2906, 3072.5, 3088, 4967.5, 4987.5, 5672.5, 5692.5 kc., 400 watts; KGSS, Denver, Colo., license to cover C.P. for aeronautical station, 2906, 5692.5 kc., 100 watts; WPFS, Buncombe Co., Asheville, N. C., modification of C.P. to increase the power of municipal police station from 100 to 200 watts;

Also, W8XL, The WGAR Broadcasting Co., Cuyahoga Heights Village, Ohio, modification of C.P. to extend completion date to Feb. 25, 1934 for visual broadcasting station; Western Radio Telegraph Co., near Bartlesville, Okla., ~~near~~ Oklahoma City, Okla., and Cahokia, Ill., C.P. for a new point-to-point telegraph station 5780, 5795, 5810 kc., 1 KW, to be operated daytime only; City of Port Huron, Port Huron, Mich., C.P., for new municipal police station, 2414 kc., 50 watts; National Broadcasting Co.; Portable and Mobile, C.P. and license for new general experimental station to be used for broadcast pickup purposes, 34600, 41000, 51400, 6000 to 400000 kc., 1 watt. There were also received 235 applications for amateur station licenses.

X X X X X X X X X

DECISIONS OF THE RADIO COMMISSION

Applications Granted (June 27, 1933)

WEHC, Emory & Henry College, Charlottesville, Va., modification of C.P. to change transmitter location to Stony Point Road, Charlottesville, and studio to Monticello Hotel; WQDM, A. J. St. Antoine & E. J. Regan, St. Albans, Vt., modification of license to reduce hours as follows: Daily except Sunday - 11 A.M. to 2 P.M. and Sunday 1 to 2 P.M.; KFH, Radio Station KFH Co., Wichita, Kans., modification of license to move studio locally in Wichita; WSAR, Doughty & Welch Electric Co., Inc., Fall River, Mass., license covering changes in equipment 1450 kc., 250 watts, unlimited time; WSOC, WSOC, Inc., Gastonia, N. C., Joseph F. Abernathy granted authority to operate broadcast station for period of 3 months, pending reexamination for radio-telephone 1st class license; WMBH, W. M. Robertson, Joplin, Mo., special temp. authority to operate specified hours from July 6 - Aug. 26.

Also, KSW, City of Berkeley, Police Dept., Berkeley, Cal., modification of license to change frequency from 2422 to 1712 kc., for period of 90 days; Libby, McNeill & Libby; KIGM, Nushagak Moored Scow, II #2, Alaska, KIGI, Ekuk Moored Scow VII #1, Alaska, fixed public point-to-point tel. license 3190 kc., 4 watts; State of Conn., Forest Fire Service, Portable in Conn., general experimental C.P., frequencies 25700, 26000, 27100, 34600, 41000, 51400, 60000-400000 kc., 12 watts; KSW, City of Berkeley, Cal., Police Dept., C.P. 1712 kc., 500 watts; W8XF, WJR, the Goodwill Station, Inc., Pontiac, Mich., modification of C.P. to extend completion date to Feb. 25, 1934; WPFO, City of Knoxville, Knox Co., Tenn., modification of license to increase power from 250 to 500 watts and add additional tubes to transmitter; KKW, and KEJ, RCA Communications, Inc., Bolinas, Cal., modification of license to delete Honolulu as point of communication; KEN, same except to delete New York as primary point of communication.

Miscellaneous

WMAZ, Southeastern Broadcasting Co., Inc., Macon, Ga., denied authority to operate until 11 P.M. EST, June 29, simultaneously with KEX and KOB; WLXAU, Shortwave & Television Corp., Boston, Mass., also WLXG, renewal of licenses extended on a temp. basis to not later than Oct. 1, 1933, subject to such action as the commission may take on licensee's pending applications for license after hearing.

Ratifications

Action taken June 22: KESX, Mackay Radio & Telegraph Co., San Francisco, granted 60 day authority to operate tube transmitter aboard Vessel WARWICK, pending receipt of formal application, frequencies 375 to 500 kc., 100 watts; KDCE, Radiomarine Corp. of America, Washington, D. C., granted 60 day authority to operate additional 50 watt transmitter pending receipt of formal application aboard vessel MOBILE CITY, frequencies 375 to 500 kc.; Action taken June 24: Press Wireless, Inc., San Francisco, dismissed 2 applications for license, frequencies 3285 and 3290 kc., 5 KW and 1500 watts power; Same - Hicksville, N. Y., dismissed 2 applications for license, frequencies 3285 and 3290 kc., 250 watts and 5 KW power.

X X X X X X

APPLICATIONS RECEIVED FOR RENEWAL OF LICENSES

KGU, Marion A. Mulrony and Advertiser Publishing Co., Ltd., Honolulu, Hawaii; WEAN, Shepard Broadcasting Service, Inc., Providence, R. I.; KGW, Oregonian Publishing Co., Portland, Ore.; WICC, Bridgeport Broadcasting Station, Inc., Bridgeport, Conn.; KFKU, University of Kansas, Lawrence, Kans.; KSAC, Kansas State College of Agriculture & Applied Science, Manhattan, Kans.; KSD, Pulitzer Publishing Co., St. Louis, Mo.; WCAO, Monumental Radio Co., Baltimore, Md.; WEEI, Edison Elec. Illuminating Co., of Boston, Boston, Mass.; WJAY, Cleveland Radio Broadcasting Corp., Cleveland, Ohio; WNAX, House of Gurney, Inc., Yankton, S. D.

X X X X X X X