NSE

SEPTEMBER 1938

RADIO INDEX

The All-Wave Radio Log Authority

25c

The Addresses of All The Stations

The Easy to Hear Shortwave Stations

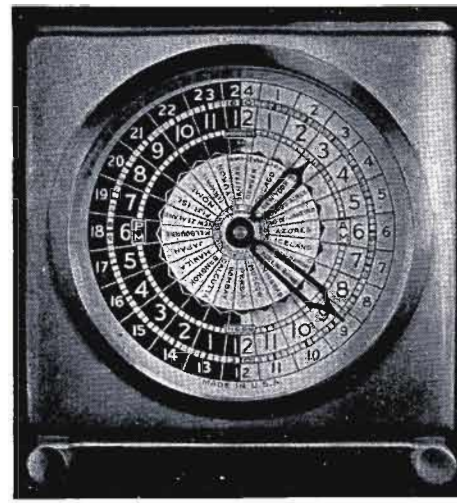
The North American Police Stations

The South Pacific Broadcasters

No. 121

NOW IT'S ELECTRIC!

THE CLOCK THAT CAN BE SET AT ANY OF THE WORLD'S 24 TIME ZONES



Modernistic Design of Brushed Brass

Tells time like an ordinary clock and automatically shows authentic time in every other zone around the world.

Actual size is 5¼ inches high by 4¾ inches wide.

Has A. M. and P. M. divided dial and 24-hour dial. Indicates minutes and quarter hours.

Just plug it in and set it for the correct time. No further adjustment nor calculation is required.

For AC 110-120 volts, 60 cycles
What DXers Have Always Wished For!
THE ELECTRIC WORLD-TIME CLOCK

$5.95

Also available in same style case in spring-driven model at $4.95. We pay the postage.

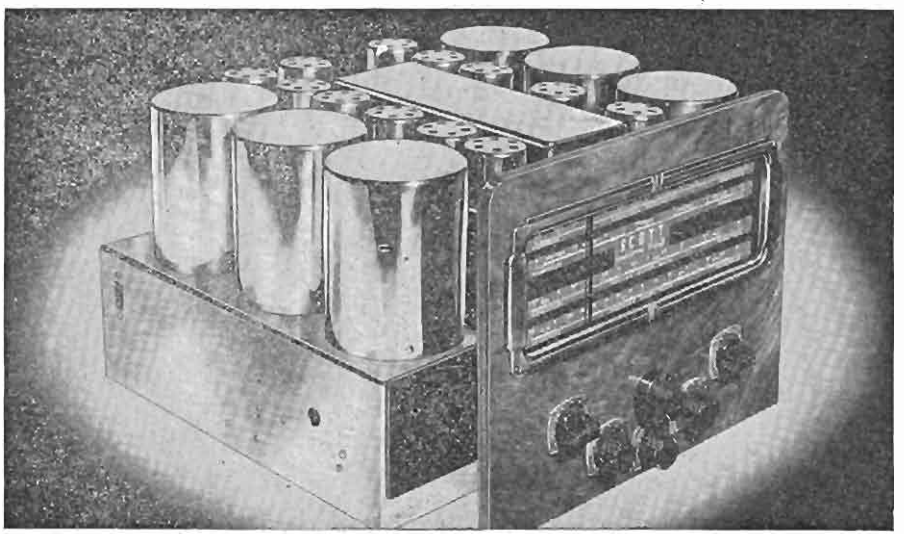
The Radex Publishing Co.

289 Queen Anne Road — Teaneck, N. J.

Announcing the Remarkable New

SCOTT PHANTOM

Revolutionizes Short Wave and Broadcast Band Reception



A COMPLETELY NEW RADIO INCORPORATING RADICALLY NEW ADVANCED PRINCIPLES OF RECEIVER AND DOUBLE-DOUBLET ANTENNA DESIGN

Now you can really enjoy foreign short wave radio reception. For, incorporated into the design of the new SCOTT Phantom and the SCOTT Super Double-Doublet Antenna System, are radically new advanced principles that so greatly reduce the effects of "man-made" static that you will find it difficult to realize you are listening to stations many thousands of miles away. Custom-Built Scott Radios have been recognized for 14 years as the "World's Finest Radio". Proud owners can be found not only throughout America but in 148 foreign countries. When you hear the magnificent tonal realism of the new Scott Phantom, you'll realize why internationally famous musicians such as Arturo Toscanini, Lauritz Melchior, Gennaro Papi, Eugene Goosens, together with kings, presidents, princes, and hundreds of business and social leaders buy a SCOTT for their personal use and recommend it to their friends.

A FEW OF THE SPECTACULAR FEATURES

New Automatic Noise Limiter reduces effects of automobile ignition interference to such a low point that foreign short wave programs which are practically blotted out in ordinary radios can now be enjoyed. Improved Scott Supershield Antenna Coupling System practically eliminates electrical interference from vacuum cleaners, oil burners, etc. New Scott Super-Double Doublet Antenna System not only gives additional noise reduction, but also greater antenna responses on all wave bands from 550 KC to 22 megs. Special R.F. Amplification on all bands gives efficiency of two stage R.F. amplification on ordinary receivers. Three stage I.F. Amplifier—one of the most powerful and highly advanced ever used in a superheterodyne receiver. New circuit arrangements practically eliminate tube hiss and provide still quieter reception of weak signals from distant foreign stations. Usable Sensitivity so tremendous it is difficult for finest laboratory equipment to even measure the extremely weak transmissions which can be tuned in and amplified with this new receiver.

FOR THOSE WHO WANT THE BEST

Scott Radios are custom built by hand in our own Chicago laboratories with the precision of a fine watch, for performance impossible with mass-produced radios. Yet, these amazing instruments cost no more than many production type receivers. They are built to order for DX enthusiasts, musicians, scientists, and critical laymen listeners who want the finest instrument that highly specialized hand craftsmanship can produce.

30 DAY HOME TRIAL

30-day home trial and budget payments in U.S.A. NOT SOLD THRU STORES. Write today for all facts and for special introductory offer!

MAIL COUPON FOR SPECIAL OFFER

E. H. SCOTT RADIO LABORATORIES, Inc.
4424 Ravenswood Ave., Dept. 15P8, Chicago, Ill.

Please send all facts about the new SCOTT PHANTOM and special offer. No obligation.

Name .....

Street .....

City ..... State.....

Studios: New York - Chicago - Los Angeles - London

SEPTEMBER 1, 1938

RADIO INDEX

Reg. U. S. Patent Office

PAGE TAYLOR
Editor

ASSOCIATE EDITORS
B. FRANCIS DASHIELL, *Technical*
CARLETON LORD, *Broadcast*
RAY LAROCQUE, *Shortwave*

FIFTEENTH YEAR NUMBER 121

CONTENTS

	PAGE
High Frequency Hoots, *by Ray LaRocque*	5
Leaves From a DXer's Scrapbook, *by Count de Veries*	11
Amateur Column, *QSA5-R9*	18
Amateur Calls Heard	20
Readers' Service Problems, *by B. Francis Dashiell*	22
SWL Trading Post	26
Covering the Shortwaves, *by E. Leisering, Jr.*	32
The Radio Codes	32
The Month's Changes	55

See subscription blank on page 96.

Published monthly except July and August by

THE RADEX PUBLISHING CO.

289 Queen Anne Road Teaneck, New Jersey

Subscriptions in the United States and Possessions, and in Canada, $1.75 per year; all other countries, $2.25 per year. Single copies, 25 cents. Applications for re-entry as second class matter at the postoffice at Teaneck, N. J., and for additional entry at Passaic, N. J., now pending. Was entered as second class matter at the postoffice at Cleveland, Ohio on April 23, 1931, under the Act of March 3, 1879. All manuscripts submitted are at the authors' risk, and willnot be returned unless accompanied by sufficient postage.

PRINTED IN THE U.S.A.

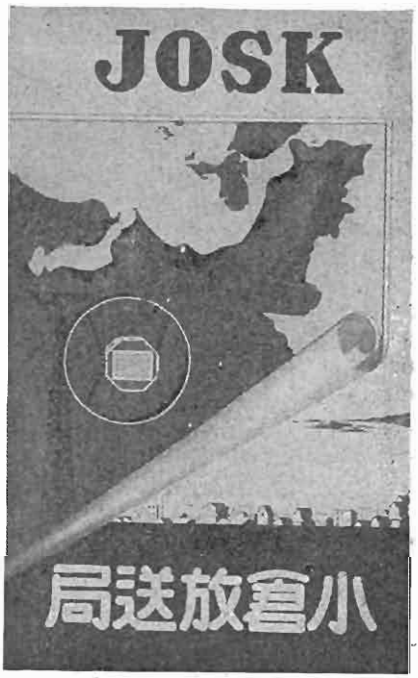
ACROSS the Editor's DESK

FROM the shores of Lake Erie and the relative quiet of a Cleveland suburb, RADEX has moved to the Atlantic Coast, within the shadow of New York City. Our new office is located in the beautiful residential township of Teaneck, in New Jersey, close to the Palisades of the Hudson, and only thirty minutes from New York. This change of location will not effect our publication or delivery dates in any way, but being closer to the center of radio activity we believe we shall be better able to serve our readers than ever before.

The Radex Club

One of the most important announcements we have to make for the coming year, is the one concerning the formation of The Radex Club. Complete details concerning the new club will be announced in this column next month. Meanwhile, however, every new subscriber to RADEX is being entered as a member, and readers who were already on our subscription lists prior to August 15, 1938, will be entered on the roster, on application, at no charge. Membership in The Radex Club will not cost anything in addition to the regular subscription price of RADEX.

The "RX" numbers used during last season have been cancelled, and new numbers will be assigned consecutively, beginning with R1. The state in which a member resides will follow his "R" number, and if he happens to be one of the first five members in his state, that additional number will follow the abbreviated name of his state. Who will be the first member from each state?



A verification card from JOSK, at Kokura, Japan, a 1000 watt station which works on 740 kcs.

New Call Letter Index

While the RADEX indices have always been the most complete index of the broadcasting stations of North America, we have felt that an even more complete index would be welcomed by our readers. With this thought in mind, we have inaugurated, in this issue, an augmented call letter index.

This list of the North American broadcasting stations, commencing with the United States list, includes all the information DXers need about transmitting stations, such as the call

letters, frequencies, locations of studios and transmitters, day and night time power, network affiliations, construction permits in force, special authorizations in force, stations sharing time, directional aerials, height of aerial towers, names and addresses of owners, and the names of program directors or the persons to whom reports of reception are to be addressed.

Our regular list of broadcasting stations by frequencies has been improved by the addition of several new symbols, to indicate which stations operate during specified hours or on limited time; to indicate stations which are working, under special authorization, on a frequency other than the one assigned, such as KTHS, or those which are using more than their regularly assigned power, as WLW.

The South Seas

The "exotic South Seas" are as attractive to DXers who travel at home with radio and atlas, as they are to those fortunate individuals who can visit them in person. While no radio will bring in South Pacific stations as easily as west coast broadcasters, these stations *can* and *have* been heard on regular, home-type broadcast receivers by listeners in every part of the United States. "Pookey" describes how to tune for trans-Pacifics (TP's to DXers) in a special column this month, and on another page is a complete list of the Oceania broadcasting stations. With the help of this information, many tuners who are saying now that "it can't be done" will hear overseas broadcasters this fall.

The Commonwealth of Australia, one of the five British Dominions, is comprised of six states and two territories. These divisions, with their capitals in parentheses, are: New South Wales (Sydney), Queensland (Brisbane), South Australia (Adelaide), Tasmania (Hobart), Victoria (Melbourne), Western Australia (Perth), Northern Territory, and the Federal Capital Territory. Canberra is the capital of the commonwealth. Papua, a part of New Guinea, is under the control of Australia. English is the dominant language.

Australia's largest cities are Sydney, with 1,253,560; Melbourne, 1,032,500; Adelaide, 324,420; and Perth, 171,245. From Chicago to Melbourne the distance is 9,837 miles.

Often referred to as "Nature's Curiosity Shop," Australia is the home of such curious animals as the kangaroo, the wallaby, the duckbill, the wombat and the bandicoot. Australia's national bird, the emu, cannot fly, and the kookaburra is a small bird with a call like the laugh of a donkey, giving it the more popular name of the "laughing jackass." The call of the kookaburra is used by the Sydney shortwave station as an identification aid. Geologically, Australia is the oldest land surface in the world. There is no watershed, and her rivers start near the coast and run inland. Some of her botanical "freaks" are the eucalyptus, a tree which sheds its bark instead of its leaves, and cherries which have the pits on the outside.

New Zealand

New Zealand, another of the five British Dominions, consists of two main islands, the North Island and the South Island. With her dependencies and smaller islands (Stewart, Chatham and Cook), the Dominion is approximately the size of the state of Colorado. Her principal cities are Wellington, the capital, with a pop-

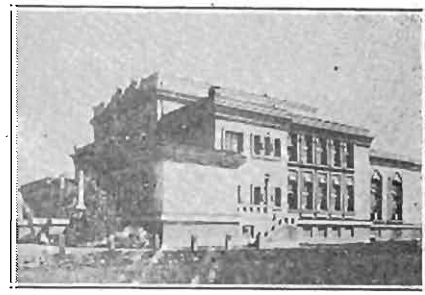
(Please turn to page 95)

HIGH FREQUENCY HOOTS

• • • By RAY LA ROCQUE

FLYING high and still gaining altitude, the Chief Night Owl has climbed from the realm of the standard broadcast band to the high frequencies, hoping to unite his flock with the many ardent followers of RADEX. Just to prove that we're not frightened by such great heights, we are going to make an occasional flight into the newly popular ultra-high frequencies—even into the "infinity" bands should the news permit such wanderings. We are going to have some fun meeting on these pages in RADEX each month. Remember, you can hoot as loud as the Chief if you desire. We'll tell you what we hear, if you tell us what you hear. What say? Shall we shake on it?

This is going to be your department. We welcome letters and reports from rookies as well as from old-timers. Let it be known that we are going to give the beginner every consideration in writing these pages. Any technical phrasing and the use of words unfamiliar to beginners will be avoided. Should we make an occasional slip, we want you (the rookies) to call our attention to it. Whenever possible we are going to point out in our listings the stations that are exceptional catches so that those who are not experienced dial twirlers will not expect to log those staations with the greatest of ease. We know that the old timers will not mind these incidental inclusions as it is they who will in turn benefit from them—for all beginners, when properly encouraged, will soon become experts and the hobby will prosper accordingly.



The building which houses the shortwave transmitters, at Podebrady, Czechoslovakia. (Courtesy of A. J. Parfitt).

MEGACYCLE BREVITIES

At the recently concluded International Telecommunications Conference at Cairo, Egypt, several revisions were made to extend the limits of the present bands for shortwave broadcasting stations. Although the bands will be widened, the action of the conference (except on the higher frequencies) will do nothing but make official most of the broadcasting now taking place outside the limits of the band. Actually, very few vacant channels are to be found in the newly opened area. . . On the 6 megacycle (49 meter) band, and the 9 megacycle (31 meter) band the increases will be 50 kcs. and 100 kcs. respectively, but the new channels to be made available by these extensions are already overcrowded with broadcasters. A new band from 7200 to 7300 kcs. (41 meter band) will be opened for broadcasting stations outside of America, but here the band must be

shared with amateurs and constant cw QRM will make good reception almost impossible. Here, too, many stations are to be found operating at the present time. . . The 11 megacycle (25 meter) and 15 megacycle (19 meter) bands will be unchanged. The 17. megacycle (16 meter) band will be extended a little so that it will run from 17750-17850 kcs. instead of from 17750-17800 kcs. as at present. The real change is to be in the 21 megacycle (13 meter) band. Here the broadcast band will be extended 200 kilocycles from 21450-21550 to 21450-21750 kcs. This will make many new channels available on this band. As yet, the countries who are making use of unsanctioned frequencies have not considered the possibilities of this band. . . Perhaps the most notable change will open several intermediate short wave bands for use in tropical or semi-tropical countries. The new bands are to be 2300 to 2500, 3300 to 3500, and 4835 to 4965 kcs. None of these changes will go into effect until September, 1939, but the Republic of Colombia already has cut deeply into the last mentioned band.

The bulletin of the National Radio Club shows the channels alloted to Eire (Irish Republic) for the Athlone shortwave station as 17840, 15120, 11740, 9595, and 6190 kcs. . . . A license has been granted to Donald E. Clark of New York City for a station aboard the EFFIE M. MORRISSEY to conduct frequency characteristic surveys in the Arctic regions . . . The German Shortwave Stations are conducting a Photo Contest for overseas listeners. For the best listening post photos submitted, four major prizes will be awarded. Two shortwave receivers, a fully equipped camera, and an exposure meter (light gauge they call it) are the prizes to be given the winners. Announcement of winners wil be made Christmas day over the German Short Wave Stations. A copy of the rules was mailed to everyone who received the July program schedule. If you did not receive any and are interested write the stations for a copy. . .

QUOTE AND UNQUOTE

In this department each month we will quote from letters received, items of general interest or questions which are perplexing any RADEXER who may wish to avail himself of the use of this space.

Leonard D. Hubbard, 17 Patten Road, London, SW18, England: Here is good news for DXers in America. Finland now has a shortwave broadcaster, known as 'Radio Lahti'. From their verification card we learn that the frequencies are 9500 kcs, 11780 kcs and 15190 kcs. Programs of the Lahti station on 166 kcs. are relayed daily from 11 am to 6 pm, EST, with a power of one kilowatt. Announcements are given on the even hour by a lady, in Finnish, English and German, and the station announcement is 'Radio Lahti, Suomi'. The address is Oy. Suomen Yleisradio Ab. Lahden Yleisradio asema, Lahti, Suomi (Finland)."

Polskie Radjo, Mazowiecka 5, Warsaw, Poland: "We take the liberty to send you full information regarding our stations.

Call letters	SPW	SPD
Location	Babice	Babice
Power	10,000 w.	2,000 w.
Frequency	13635 kcs.	11535 kcs.

Summer schedules, both stations, 6 to 9 pm, EST."

Alan I. Breen, 68 Pine Hill Terrace,

Dunedin, New Zealand: "Following is some information direct from the stations concerned—JFO, Taihoku, Formosa, 9630 kcs, 1000 watts. Relays JFAK from 4 to 9 am EST daily. Reports are requested by the director of the station. JDY, Dairen, Kwantung, Manchukuo, 9925 kcs, 10,000 watts. The daily schedule is from 7 to 8 am, EST. The director, Isao Sugiyama, and the chief engineer, Tosuke Ochiai, are anxious to receive reports, which they will verify by an attractive five-color card. KZRM, Erlanger and Galinger, Inc., Manila, Philippines, transmits on 9570 kcs on Sundays from 3 to 10 am, and on weekdays, 11:15 pm to 12:15 am; 4 to 10 am; and 4 to 7 pm, EST."

Eduardo Vila, Ave. Menocal 161 altos, Havana, Cuba: "COCX (11435 kcs.) is constructing a 5000 watt transmitter and expects to have it on the air soon to match its 20 kilowatt broadcast band outfit." (Eduardo, besides being operator at CMBY, handles tourist information for American tourists intending to visit Cuba. He can furnish any reader who is planning a trip with details they may desire about this beautiful isle—CHIEF.)

Carl Horton, Athol, Mass.: "I have been hearing a station on 18000 kcs. broadcasting a program for Hawaii. I believe it to be a shortwave outlet for KDYL. They have been heard several times starting about 11:20 p. m. on Sunday. Can anyone identify?"

Senor Ricardo Espina, Director, Radio Caracas, Caracas, Venezuela: "We hasten to send you this letter in order to notify you that our shortwave transmitter, YV5RC, has changed its frequency to 5970 kcs., with the object of avoiding certain interference which we were creating for a station in Europe."

Harry V. Miner, Wollaston, Mass.: "A station being heard on 15180 kcs. when GSO is not operating has caused much speculation among the fellows around here. Judging from the announcements the country ends in 'ania' and my guess is that it is Roumania. They are heard best from 9:00-12:00 a. m."

Richard Wright, Chicago, Illinois: "I am greatly interested in knowing the names of the National Anthems of Cuba, Mexico, Guatamala, and Costa Rica. Can anyone supply this information?"

Mr. Louis Weickum, Publicity Manager, Hamburg American Line, 57 Broadway, N. Y. C.: "We wish to inform you that all the Hamburg-American Line, North German Lloyd steamers now dock at Piers 84 and 86, foot of West 44th and W. 46th Sts., Manhattan."

J. D. Gallivan, Balboa, Canal Zone: "Data regarding the latest radio station in the Republic of Panama, station HP5G. Frequency, 11780 kcs.; power, 750 to 1500 watts; slogan, 'Ron Dalley'; opening and closing theme, 'Prelude from Traviata'; operating hours, 6 to 10 pm EST. The station address is P. O. Box 1121, and they verify for an IRC."

ULTRA HIGH ITEMS

W9XA, of the Commercial Radio Equipment Company of Kansas City, Mo. has received from the FCC a grant of an increase in power to 1000 watts, and a change of frequency to 26450 kcs. Present plans are to announce the call letters and location in several languages. Their antenna is unique in that it is supported by one

of the straightest western red cedar poles to be found in that section, the overall height being 85 feet.

"W8XWJ on 41000 kcs. has a new schedule: 9:00 a. m. to 11:30 p. m weekdays, and 10:00 a. m. to 5:00 p. m. Sundays." (RSSL Bulletin.)

W9XUP on 25950 kcs. (KSTP programs) in St. Paul, Minnesota is now operating with 1000 watts and is being heard very well in the East. Signal varies from R3 to R7 and stays till after sundown occasionally.

W2XMN in New York City on 42800 kcs. has been granted permission to conduct tests with a power of 40000 watts.

W9XTA on 26500 kcs. is a new construction permit granted by the FCC. Harrisburg, Illinois is the location and 500 watts the power. Owners are Schenert Radio Service.

W9XTC on 26505 kcs. in Rose Township, Minnesota. This is another construction permit granted by the FCC. This one was to the Minnesota Broadcasting Corporation.

W9XJL on 26100 kcs., Superior, Wisconsin (WEBC programs) has been granted permission to increase power from 80 watts to 250 watts.

W3XEX on 26050 kcs., Norfolk, Virginia (WTAR programs) is being heard consistently in New England. Sometimes signal reaches an R6!

W9XGP on 26050 kcs., Minneapolis, Minn., is listed and announces the same frequency as W3XEX, but actually they are a notch lower. The call of this station is not certain as signal is never very strong (though it is very consistent) and each announcement heard by us sounds differently. We have listed it on various days as 9XEP, 9XET, and 9XGT. Give us time, we'll get it yet. They claim they will confirm every correct report submitted.

W2XOY on 41000 kcs., Abany, N. Y. (WGY programs) although not heard here, is heard very well on the west coast.

The appeal of the ultra high frequencies is new and fascinating. Erratic conditions from day to day provide ever changing thrills. If you've overlooked the possibilities of DX on this band, you are missing something. We have given you a few items this month, but it must be remembered that other sections of the country provide an entirely different set-up. So, with your help next month, we hope to give you a much better conception of what other sections, as well as the Northeast, are hearing.

VERI NEWS AND NEW VERIES

HJ7ABD—a flashy card in two shades of green. The center of the card shows a microphone encircled by a wreath. Circles in each corner contain the following: Upper left, towers of oil wells; upper right, tobacco leaves; lower left, map of Colombia; and lower right, a nut of unknown species. Call and "Radio Bucaramanga" are in prominent green letters across the face of card.

W9XUY—a printed veri on government postal. Call printed at top in black letters and transmitter control panel is shown in center of card.

YUA—The Belgrade Short Wave Station verified our reception of YUA with a typed message on ordinary post card.

SHORTWAVES IN REVIEW

Angola

CR6AA, located in Lobito in this West African Portuguese colony is a tough one to log, even for the experienced DXer. Latest schedule is re-

ported to be as follows:

7177 kcs. 2:45-4:30 p. m. Weds. and Sat.

9660 kcs. Irregularly.

13000 kcs. Same as 7177 kcs. (RX144—Mass.)

Australia

VK3ME on 9503 kcs. is being heard very well with much regularity here in the early morning. (RX142—Mass.)

Chile

CB-1180 on 11965 kcs. is a new station heard very well daily from 6:00-11:00 p. m. Slogan sounds like "Radio Nacional y Cultural." (RX133 and RX135—Mass.)

CB-1185 on 11850 kcs. is good when DJP is not operating. (RX133—Mass.)

Costa Rica

TIEMC on 10050 kcs. in San Jose is a new station relaying broadcast station TIEM (1400 kcs.). Address is P. O. Box 1049. (RX)

TIXD on 11920 kcs. in San Jose is another new station heard daily with good quality relaying broadcast station TI2XD (800 kcs.). They announce TI2XD, 'La Voz del Radio Taylor' y TIXD 'La Voz de la Republica' en 800 kcs. y 11920 kcs." Address is Box 1729. (RX145—Cuba)

Cuba

COCM in Havana seems to have dropped to about 9815 kcs. in order to avoid QRM from IRF. (RX136—Mass.)

COCD on 6130 kcs., "La Voz del Aire", began using a new 5000 watt transmitter in July. (RX137—Cuba.)

CLX on 7000 kcs. gives weather reports at 12:05 p. m. Station is owned by the Cuban National Observatories. Address: Observatorio Nacional, Casablanca, Guanabacoa, Habana, Cuba. (RX137—Cuba.)

Ecuador

HCJB on 12460 kcs. from 6:00-11:00 p. m. daily except Monday. Also using 14420 kcs. at 10:00 p. m. with English announcements. (RX133—Mass.)

France

Complete calls and frequencies available for use by the new "Paris Mondial" station:

21490 kcs.	TPB-1	11720 kcs.	TPB-9
17780 kcs.	TPB-2	9585 kcs.	TPB-10
15765 kcs.	TPB-3	9570 kcs.	TPB-11
15295 kcs.	TPB-4	9550 kcs.	TPB-12
15240 kcs.	TPB-5	9520 kcs.	TPB-13
15130 kcs.	TPB-6	6145 kcs.	TPB-14
11885 kcs.	TPB-7	6090 kcs.	TPB-15
11845 kcs.	TPB-8	6040 kcs.	TPB-16

(RX139—Ohio)

TYE on 18090 kcs. heard broadcasting the landing of Howard Hughes to U. S. A. Networks. (RX143—Mass.)

French Indo-China

The Radio Club d' Indochine operates three radio stations in the colony, two at Hanoi and one at Haiphong.

Radio Hanoi I,at 82 rue Jules Ferry, in Hanoi, transmits on 9503 kcs. daily except Saturday from 11 pm to 2:30 am, and daily except Sunday from 6 to 9:30 am.

Radio Hanoi II, at 20 rue de la Pepiniere, Hanoi, transmits on 11891 kcs. daily except Sunday from midnight to 2:30 am, and from 6 to 9:30 am; on Saturdays from 8:30 to 10:30 pm; and on Sundays from midnight until 9:30 am.

Radio Haiphong, at 41 Boulevard Bonnal, Haiphong, is the third station operated by this radio club, but its frequency is not known.

"Radio Boy-Landry," owned by Etablissements Boy-Landry, at Saigon,

French Indo-China, transmits simultaneously on 1500, 6200 and 11710 kcs. on a rather complicated schedule, generally, however, from 5:30 to 9 am.

A little ten-watter, known as "Radio Michel-Robert," transmits on 9400 kcs. from 7 to 8:30 am on weekdays. This station is situated in Saigon.

None of these stations is easy to get, so uninitiated dial twisters should not be disappointed if they fail to come through. All this Indo-China data comes from Alan I. Breen of Dunedin, New Zealand.

Germany

DJP on 11855 kcs. has been officially added to the North American program from Germany. This station has been in use for some time on an experimental basis, but now they are listed in the regular monthly schedule of the German Short Wave Station. Operating hours for DJP are 7:15 to 10:50 p. m.

DJC on 6020 kcs. comes on the air at 11:30 p. m. instead of 10:40 p. m. as before on the South American transmission.

DJO on 11800 kcs. has been dropped from the schedule and is no longer being used. (RX)

Hawaii

KQH on 14920 kcs. heard relaying programs to WOR and the Mutual Broadcasting System. (RX143—Mass.)

Hong Kong

ZBW3 on 9525 kcs. has been heard several times coming on the air at 7:00 a. m. I believe it comes on daily at this time. (RX143—Mass.)

India

VUD on 15160 kcs. in Delhi has been heard after 8:30 p. m. on Monday, Wednesday, and Friday. They may also be on other evenings, but they were not heard. (RX143—Mass.)

Japan

JZL on 17785 kcs. transmits evening program to America at 6:00 p. m. English news is broadcast from 8:00 to 8:30 p. m. (RX133, RX135, RX143—Mass.)

JZK on 15160 kcs. replaces JZJ (11800 kcs.) in morning broadcast to U. S. A. from 7:00-7:30 a. m. (RX143—Mass.)

JVN on 10660 kcs. transmits news in English around 5:00 a. m. (RX143—Mass.)

Lithuania

LYR on 9320 kcs. in Kaunas is reported by several club bulletins as broadcasting daily between 7:00 and 10:00 a. m., but power is very low and thus far we have had no reports of this station being heard in this country.

Panama

HP5G on 11780 kcs. is a new station being heard evenings until midnight. (RX136—Mass.)

Spain

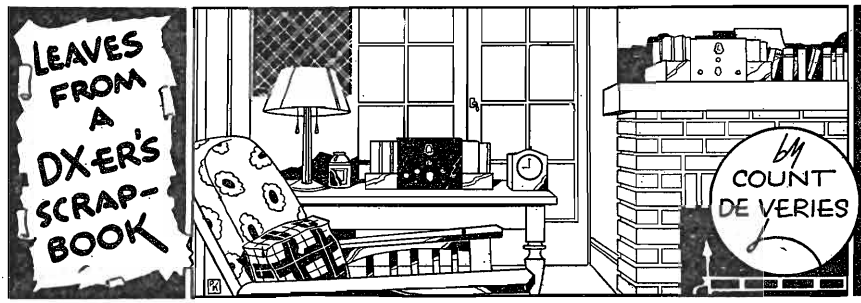
"Radio Malaga" on 14435 kcs. has been coming in at 7:30 p. m. and occasionally at 10:00 p. m. (RX133—Mass.)

EAQ on 9860 kcs. is back on the air. News in English has been heard at 7:30 and 8:45 p. m. (RX)

Sweden

SBP on 11705 kcs. broadcasts simultaneously with SM5SX, 15155 kcs. during the afternoon. SBP has been heard daily until 4:15 p. m. or later. Very good signal at times. (RX143—Mass.)

(Please turn to page 21)



COINCIDENTAL with the opening of a new radio season comes glad tidings which should be welcomed by every DXer. According to the very best of authorities, the current cycle of sunspots reached its peak more than a year ago and is now on a definite decline.

Speaking before the summer meeting of the American Association for the Advancement of Science in Ottawa the first week in July, Dr. Harlan T. Stetson of the Massachusetts Institute of Technology made this heartening announcement. And with it he issued a new lease on life for the loyal clan of midnight marauders.

Radio listeners have long been aware of the effects of sunspots on general reception. They recall the great harvest of DX catches back in 1932 and 1933 when sunspot activity languished at the bottom of the cycle. They have sad reason to remember the decline of long distance reception when the cycle started upward and the 1935-36 and 1936-37 seasons brought little in the way of real DX.

This general falling off of DX may be appreciated when it is remembered that the earth is surrounded by an electrified shell, an ionized layer of the atmosphere. Above the much-publicized stratosphere, we have the ionosphere, consisting of multitudes of molecules which have been split into positive and negative charges of electricity by radiations from away out in space.

The sunspots, whirlpools of cooling, erupting gas in the atmosphere of the sun, create electromagnetic disturbances of tremendous proportions. The larger and more numerous the sunspots, the greater the radiation which hits the ionosphere. The greater this radiation, the more molecules are split up and the layer becomes thicker and lower.

As most DXers are aware, the waves emanating from a broadcasting station are divided into two parts. The wave which travels along the ground for a distance of 25 to 100 miles is called the ground wave, while the wave which goes out and up is called the sky wave. When the sky wave hits the ionized layer above us, it reflects downward. If this reflecting ceiling is high, the sky waves come back to earth and the signal can be heard at a distance. If the reflecting ceiling is low and thick, there is a tendancy for a good portion of the signal to be absorbed, while that part which is reflected downward hits the earth at a relatively short distance from the station. In this case, distant reception becomes very difficult to achieve.

From this it can be seen that a high degree of sunspot activity results in a low, thick reflecting ceiling, greatly interferes with long distance reception. Conversely, the other end of the sunspot cycle, where activity is at a minimum, brings a high, thin ceiling and the kind of reception for which all good DXers yearn.

Astronomers generally figure that a complete sunspot cycle runs on an average of eleven years, although some intervals have been as short as eight years and

others as long as sixteen. Since the last upward turn from the minimum took place in 1933, scientists looked forward to a peak of activity in 1938 or 1939, with slight chance for improved reception before 1940 or 1941.

However, since sunspot behavior is irregular, it is sometimes impossible to tell that a peak or a trough has been passed until many months afterward. And so it is quite heartening to know that the dread peak of activity took place more than a year ago, and that we may look forward to four or five years of constantly improving reception.

We Told You So

Oddly enough, it was only last winter that these columns began to comment on the decided improvement in general reception. With many listeners apparently hexed by the sunspot hokus pokus and making but half hearted attempts for any real DX, the writer was able to report some pretty fair reception.

Commencing back in October, it was noted that hundred-watters from the Pacific Coast were making the transcontinental jump in good style, while the larger stations out there were making a very decent showing. As cooler weather set in, static diminished in intensity and, on occasions, even became a negligible factor. From all sections of the North American continent, dozens of small stations pounded through with an old-fashioned wallop.

Foreign reception was on a definite upgrade, with the Aussies and Zedders showing to advantage. Well remembered were the mornings when it was possible to hear as many as seven to ten Europeans during one session at the dials, and who could forget the epic night when thirteen TA's crowded down the lead-in?

That the writer wasn't the only listener to enjoy better-than-average reception is evidenced by letters from many listeners in various parts of the country. Typical report of those who were not scared by the sunspot bug-a-boo is the following from Phil Nichols, 83 Prospect St., East Hartford, Conn.

"In spite of predictions to the contrary," he writes, "the last season was the best for three years. Up to the middle of January, it was fine, and there have been some days since then that reception from the West Coast and Hawaii has equalled, if not excelled, the good, old days of 1932-33.

"The mornings of January 3rd and 4th were the best for TA reception in five years. They were practically perfect TA mornings, with stations such as Eiffel Tower, Hilversum, the regular run of French and several German transmitters being easily heard. One very real highlight of the season was the way the South Americans came in.

"During the frequency checks, reception from the West was wonderful. All three Hawaiian stations were heard here with fine volume, as well as such coasters as KPQ, KORE, KUJ and others not ordinarily heard.

"All in all, it has been a very successful season from all points of view, and I believe that it has renewed the interest of many old-timers."

"I didn't get started last season until late in January," advises John J. Oskay, R. D. 1, Box 179, Piscataway-town, New Brunswick, N. J., "but then I did some DXing every morning and was well rewarded. Many good nights were noted. I know that the previous season wasn't so hot for Australia and New Zealand, but this year I heard 14 new ones from down there. A few good mornings for the Europeans were noted, but I know I was late getting started for TA reception. In four months, my log jumped from 607 to 724 stations heard, which seems to speak pretty well for the season itself."

Dozens of other listeners have reported reception which compared favorably with the boom days of 1932-33, and it is evident that DXers who had little to report must have paid too much attention to dismal prognostications and too little attention to actual dial twisting. If they had forgotten about sunspots and all-nighters, and had given their fingers and ears some

exercise, the chances are they would have heard a lot of new stations.

Fortunately, the biggest bug-a-boo can now be forgotten. We have it on the very best of authority that we can stop worrying about the sunspots and allied difficulties. Instead of sessions of half-baked reception, we can look forward to stronger signals from distant stations. Old timers know what kind of reception is possible during years when sunspot activity is at a minimum, and apparently we have at least four or five years of that kind of listening ahead of us.

All of which leaves listeners the very pleasant task of settling back for a spell of old-fashioned DXing.

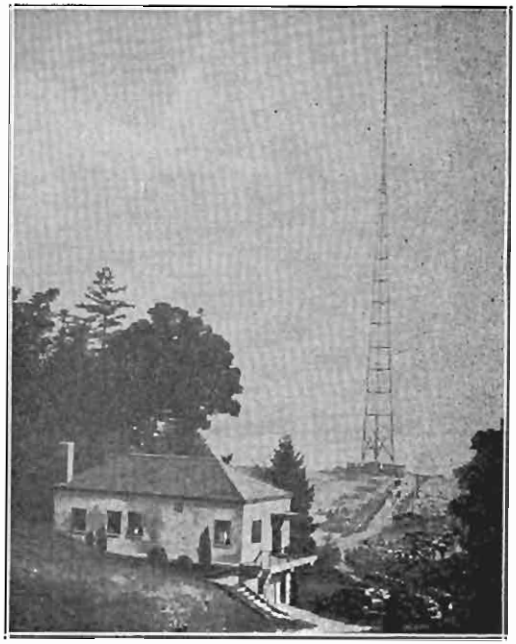
Getting the Season Started

Naturally, with all this grand reception coming up in the near future, common sense dictates that listeners should make all possible preparations for the first cool nights. There are many factors vital to efficient reception, and DXers should consider them all.

It is usually about this time of year when DXers begin to think about their receivers. Much in the manner of the car owner, they begin to wonder if the old job will do for another year. The natural tendancy is to look with favor upon a new model, yet quite frequently such an investment would not be entirely sound from the DX viewpoint.

When all the sugar coating has been removed from the advertising, it will be found that virtually every new receiver on the market is new only in appearance and refinement. Inside the cabinet, the same old circuits are being used and it is doubtful whether there are any major improvements in sensitivity, selectivity or signal-to-noise ratio. This is true solely because there have been no startling developments in reeciver design, and consequently manufacturers have had to stress trick tuning gadgets and refinements with an appeal to the eye.

Therefore, if the old receiver isn't too antiquated and if it has done a commendable job during the past year or two,



The new KVI aerial and transmitter house, on Vashon Island, Tacoma, Washington.

DXers would probably find it difficult to find any real improvements in the newer models. And if a competent serviceman was called in to align the old set and give it a thorough overhauling, the owner himself is likely to be surprised at the results.

Of course, many DXers are going to invest in new equipment. They may desire a larger and more powerful receiver, they may want wider band coverage, or they may feel that it is time to try a communications or a custom-built model. In such cases, their decision may well be difficult, and frequently they will write in for advice and suggestions.

The best answer to such questions is a reference to the article on choosing a receiver which appeared in the September 1937 RADEX. This covered virtually every factor to be considered by a purchaser and outlined tests whereby the listener could determine for himself the model best suited for his own particular requirements.

Another possible source of information is a reference to the receivers used by fellow DXers. Whenever possible, reports

from readers include a brief description of the receiving equipment used.

The only attempt on the part of RADEX to collect such data was at the time of the second Mystery DX Contest. It will be recalled that Floyd Biss, Grand Prize winner, scored his points at the dial of an Airline receiver, while George Publow, who placed second, used a Masterpiece IV. Among the first 15 prize winners, there were no less than six Philco models in use. Midwest and Airline were the only other makes to be represented more than once in this group, each being used by two winners.

Going over the entries of all contestants, Philco again led the list with 45 owners. Next in line was RCA Victor with 31, and then came Scott with 16. The various Hallicrafters models were represented by 14 contestants and Zenith chalked up a like number. Sears Silvertone appeared 12 times, while Grunow and Midwest each claimed 10 contestants. General Electric was favored by nine listeners, Airline by seven and Atwater Kent by six. Knight, Stewart Warner and Stromberg Carlson showed five boosters each. Twenty-four other makes were represented, while seven receivers were home-made.

Whatever decision the listener makes, whether to buy a new model or to pep up the old job, he should always remember that the receiver is an all-important link in the chain which pulls in the distant catches.

Location Important

It has always been conceded that a good location is a tremendous asset in the DX game. The better the location, the better are the results which can be achieved.

The very term "location" can cover a variety of factors. It can refer to an exact geographical position—seaboard or inland, desert or plain, mountain or lowland. It may apply to a rural or urban position—open country, outskirts of a small town, suburbs of a larger city and so on. It can also refer to an exact position in a given town or city with reference to sources of man-made interference and to signal-aabsorbing buildings and trees.

Obviously very few listeners will ever be fortunate enough to be able to choose a location solely from the standpoint of its reception possibilities. If such were the case, the listener would probably pick the outskirts of a small town along the seacoast, which is generally conceded to be about tops. This is particularly true when the DXer desires to hear stations across that body of water. More than anything else, this factor enables listeners along the Atlantic Seaboard to enjoy regular European reception, while DXers on the Pacific Coast have such good luck with the Australian and Asiatic stations. Next best choice is a location adjacent to a large body of water such as the Great Lakes. In fact, it is this writer's opinion that a point in Ohio along Lake Erie is the pick of them all, since it provides ample coverage of the whole continent, is close enough to the Atlantic Ocean to provide its share of European catches and is far enough West to offer regular trans-Pacific reception.

While most of us will never have the opportunity to have so wide a scope in choosing a site for our receivers, a few listeners may be moving to a new home and can thus have a chance to pick the best place in their locality. In such a case, the DXer will want to find a location which is removed from sources of noise such as high tension lines, street car tracks, manufacturing plants, gasoline stations and local business centers with their flashing signs and medical high frequency machines. He will probably find that a point on a hill will have an advantage over a position in a depression. He will want to stay away from steel buildings, trees and towers which will absorb signals.

Not a few listeners have found that an auto radio is an invaluable aid in picking a location. Cruising the streets after midnight will show sections where the noise level is high. By checking the strength of signals from stations in different direc-

tions, it is often possible to find a location where signals from all points of the compass show to best advantage.

The great majority of DXers, however, usually have no choice in their location and simply have to make the most of a given position. They are the ones who must consider the assets and liabilities of their location, make the most of the advantages, and devise means to lessen or overcome the disadvantages.

The Noise Problem

Probably the greatest liability which most of us find in any given location is the problem of man-made interference. Some listeners accept it as a matter of course and try to hear as much as they can in spite of the racket. Sooner or later, they get tired of an unsuccessful battle to bring in the really distant stations, and another DX career is ended. Other DXers decide to do something about the problem, and quite frequently they are able to reduce the interference materially and sometimes even eliminate it.

With an old-fashioned DX season in the offing, most listeners will probably want to do something about whatever noise problem they may have at their particular location. There is no doubt but what the approaching cool nights will be filled with some pretty nice catches looking for an ear to hear them, and foolish indeed would be the DXer who didn't try to remove every barrier from the path of a weak signal.

During the past few years, many manufacturers have capitalized on the racket problem through the merchandising of so-called noise-eliminating devices. Possibly the first such gadget to appear on the market was an ordinary filter intended to cut out disturbances coming into the receiver through the power line. While this served its purpose, it did not begin to affect the interference picked up by the aerial and lead-in.

Next in line came the original noise-reducing antenna system, and DXers have been divided on their opinions of the effectiveness of these devices. Working on the principle that most of the noise was picked up by the lead-in, designers pitched their aerials in the skies, away from all the interference, and defied the racket to penetrate the armored lead-in wires. Whatever else may have resulted from such an installation, the chances were excellent that signal strength would be reduced to a point where the noise wouldn't be noticed.

More recent developments along the line of doublets, double doublets and similar systems have been more effective in the reduction of interference. With some receivers, these systems will work wonders, while other installations have not been entirely satisfactory. In most cases, the DXer will be obliged to experiment with various systems until he finds the one which is best suited for his location.

The September 1936 RADEX included an article which gave a complete coverage of the aerial problems. Many types of installations were described in detail and this should be an excellent reference for the DXER who wants to make the most of his location.

By far the best way of overcoming noise is to attack it at the source, instead of attempting to administer an anesthetic at the receiver. Quite frequently the local power company can be persuaded to assist in tracing the source of the noise. If it develops that their lines or equipment are at fault, the remedy is sure and certain. Should the noise be traced to some electrical device on an adjoining property, it may take time to induce the owner of the offending devices to install the proper filters. But in the long run, if the racket is too bad, the listener should be more than willing to furnish the filters which would add so much to his DX pleasure.

The Guessers

When the new season breaks wide open and listeners commence to get their share of real DX, we may expect an influx of reports on some rather improbable catches. It seems that just as soon as a few, inoffensive Cuban and Mexican broadcasters start to show up between the domestic

stations, we begin to hear a lot of reports about Spaniards, Italians, Argentines, Brazilians, Central Americans and Fiji Islanders.

Classic examples of the guessing tactics of some listeners are numerous. A couple of years ago, just when every DXer in the country was going after a reported PRA6 or 815 kcys, the station turned out to be our old friend CMCF. More recently there was the case of the Ohio dial twister who reported a couple of Aussies when they were still in the process of construction. And so on into the night!

All this may seem unimportant on the surface and worthy of nothing more than a laugh at the expense of the red-faced lads who made bum guesses, yet it really is a pretty serious matter. It is just an example of haphazard reporting and, as such, it becomes one of the major problems of DXing.

The process by which inaccurate reports are made is simple. A DXer skims over the dial, stumbles on a weak signal. It may be a split frequency broadcaster poking his nose out between a couple of domestic stations. Or it may be early in the morning and the station may be on an even frequency. The DXer listens for a while, jots down notes on the program, but doesn't quite manage to get the call or location. Because the signal is so weak, he decides that it is far away and begins to check his station list. In the case of the split-frequency station, the announcements may sound like Spanish and he'll decide that it is some tiny broadcaster in Central or South America. If the station list shows, say, a Costa Rican or Brazilian station on that frequency, the "identification" will be complete. In the case of the early-morning station on the even frequency, the station list again will be consulted. He is quite positive that no domestic station is on at that time, so he looks for the most likely foreigner. According to the time of the morning, he will decide that is either a TA or a TP. Finally he decides on a probable identity, undoubtedly a station which he has never heard before, and off goes the report.

In all fairness, it is granted that it is sometimes impossible to use a method other than deduction to decide on the identity of a station. In the case of Australian and European stations, the signal is frequently so faint that only traces of music may be heard and it may be quite impossible to catch an announcement. Other DXers, more fortunately located, may have reported regular reception of certain stations on given frequencies. Thus when faint music is heard on these frequencies at times when the particular TA's and TP's have been reported, it is logical to assume that the stations in question are being heard.

It is difficult for any listener to ignore such a catch when everything seems to point to its identity. Many DXers feel justified in reporting to the station and asking for a verification, even though they have heard no definite announcement of call and location. They do make a point of stressing the fact that they *believe* they heard the broadcaster in question, that the accompanying program data should be compared with the station log, and that a verie is requested only in the event that the station is convinced by the report that it was actually received by the listener. While such a procedure is open to debate, it does have many supporters among the better-known and highly-respected midnight marauders.

While it is conceded that it is often difficult to identify foreign stations, especially when a foreign tongue is heard, DXers should take more than usual care in logging and reporting. It doesn't take many incorrect reports, no matter how innocent they may be, to create suspicion in the minds of the broadcasters. When there is any real doubt or question in the mind of the listener, certainly it is better to pass up a possible verification than to run the risk of bringing a cloud over the DXing fraternity as a whole and the DXers as an individual.

As the result of many hours at the dials, the veteran DXer can usually tell a

Cuban from a Mexican, and can distinguish either of these from a South American. He has learned to identify peculiarities of enunciation, he can recognize certain types of music as being typical of a given country, and he doesn't need to be a linguist to pick out call letters and locations from station announcements. And, of paramount importance, he is pretty sure of a station's identity before reporting.

The sooner all DXers cut down on their imagination and mix in a little caution and actual data with their verification formula, the better DXing will be for all of us.

The All-Nighters

Just as soon as cool weather enables us to reach out and log the stations far over the horizon, we may look for the annual series of protests about the all-night broadcasters. Of course, it is a little early to know how many of these friends will be with us during the coming season, but the chances are excellent that we will find out at least one on each of the graveyard channels, and probably there will be many more scattered around the regional channels.

Naturally, the listeners are going to squawk about the situation. There will be the usual run of protests and demands for the rights of tax-paying American citizens. There will be more talk about a petition to be sent to the FCC in Washington, and letters to Congress. Undoubtedly there will be a lot of popping off, very little real action, and practically no tangible results.

Admittedly the situation is one which can trace no end of gray in raven locks. It's no fun sitting down to log a station on one of the local frequencies, only to find that it is WJBK or KGFJ. And the way the band acts up at times, you never can tell when an all-nighter will fade way into the background of some new station, with the result that you simply cannot afford to let the channel alone. It's pretty tough to go out for a new hundred-watter across the continent and just manage to hear a whisper behind WIL. And it's most upsetting to dial for a trans-oceanic catch, only to have the faint signal spoiled by a spill-over from WNEW on the next channel.

It is conceded that the problem is most vexing, one which gives rise to many unpleasant thoughts. But what is there to be done about it? A widely scattered group of DXers cannot hope to compete with the interests of large stations in metropolitan areas. Upon short notice, most of the all-nighters could produce figures to prove that their late programs are serving a compact audience many times the size of the entire DX fraternity.

A survey sponsored by WNEW showed that there were 108,000 home receivers tuned to their "Milkman's Matinee" broadcasts, and that didn't include scores of thousands more who listened through radios in taxicabs, restaurants, taverns, cigar stores, drug stores, gasoline stations and other places which are open all night. KGFJ does not hesitate to estimate its nightly audience in the hundreds of thousands—and after nine years they must know something about all-night programs.

Despite what we may feel to be a justified complaint against the all-night stations, it is necessary to consider their side of the case. Most of these stations have sponsors for their late programs, so it would take a considerable degree of persuasion to have them give up this additional revenue. If we were running these stations, and, like the broadcaster, were

Verification card from WHO Des Moines; green and black on yellow card. (Courtesy of E. Leisering, Jr.).

in business to make what money we could, it is not unlikely that we would go after as much income as possible. If late programs produced this revenue, we'd be rather foolish to turn it down.

Idea men among the DXers have propounded ways and means of eliminating this so-called menace. These have ranged from direct Federal legislation to an effective bit of bombing on the side. From the most likely ideas, there came one plan which might have worked.

This called for a definite classification of stations with regard to operating policies. On one side would be the stations who were glad to call it a day at midnight or 1 a.m., local time. On the other would be the broadcasters who wanted to transmit regular daily programs after, say, 2 a.m. local time.

Stations with 24-hour ideas would be assigned to a few channels and could broadcast all night without interference to anyone but other stations in the same classification. The other stations would continue their present assignments and schedules, signing off at a reasonable hour and leaving their channel free for test ad DX transmissions.

That would be the DXer's idea of Utopia, and long might he roam the air lines to his heart's content.

While organized DXing could do little to bring about such a scheme, it was thought that some help might be obtained from the stations on whose channels the all-nighters blared through the dark. It was assumed that these broadcasters would be interested in having a clear channel when they desired to test equipment and conduct experiments. In a campaign again the 24-hour transmitters, these stations would have been valuable allies.

But when it came to getting the co-operation of these stations, that was something else indeed. Letters were sent out to 40 representative stations on frequencies which were blocked by one or more all-nighters. The stations were picked for their friendliness towards DXers and their past will-

(Please turn to page 95)

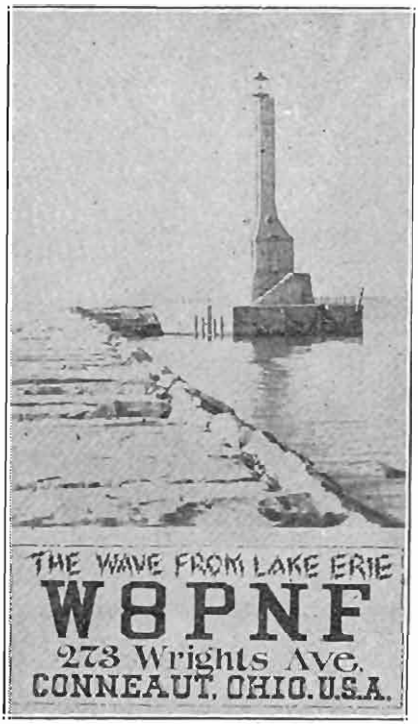
QSA5 - R9

THE volume of the reports received from our ham-listening friends this summer dropped to about R7 but with the coming of fall weather we expect the volume of reports received, as well as the strength of signals, to return to QSA5, R9. Everyone interested in amateur reception is invited to contribute an account of his experiences at the dial. Every report received will be acknowedged, either in this column or in the Calls Heard Column.

Leonard D. Hubbard of 17 Patten Road, London, SW18, England, has a nice list of Europeans which some of us would like to hear, such as UE3IH, HA2K, HA5C, HA5X and HA8U. He has heard, from our side of the Atlantic, VE1AW, VE1BK, VE2CA, VO6D, and the following W's: 1AKY, 1BLO, 1FLH, 2AD, 2BFV, 2IJD, 3IXF and 8IHU.

Eleven stations in the British Isles, along with F8KI in France and YR5AA in Roumania, constituted one night's "catch" for Phillip Craig of Waterville, Maine, but this was only the beginning. On the next night he came back with PAOFB and PAOUN in the Netherlands, ON4HS in Belgium, SM5SD in Sweden, HB9J in Switzerland, IIIT in Italy, VK2GU and VK2ZK in Australia, with assorted stations in Puerto Rico, England, Costa Rica, Haiti, Canada, Venezuela and Mexico thrown in.

One hundred twenty foreign amateurs are included in the log of Howard M. Phillips, 1401 Newton St., N. E., Washington, D. C. Some of the recent calls include G3XY, TI2JV, ZU6AJ, LA1F, TI2HR and F3MF.



A photographic QSL card, used by William Cooney, operator, of amateur station W8PNF at Conneaut, Ohio.

One of the most successful ham listeners in the country, Jack Quintrell, 445 Carmody Drive, Seat Pleasant, Md., tells us that he is the Second Operator at W3FII, on 20 meter 'phone. W3FII has his VQ4KTB card (by air mail) and Jack hopes to get his soon. Some of the recent cards Jack has received are YN3DG, VP1BA, VP6TR, LU1QA, VS7GJ, J2MI, SV1KE, OQ5AE, ZT1M, ZT5S, OZ3D, OZ3U, OZ7CC, LA1F, FI8AC, FR8VX, D4DLC and VK4DB. His recent catches include AC3KX, AR8VP, D4EVT, EA9AL, CR6AG, CR7AW, EQ4AC, ES5D, KA2OB, KA7GS, LX1TW, MX2B, YR5CF, YR5KW, ZA6AZ, ZA6CC, ZB1H, and ZC6CN.

We are reliably informed that HR5C will not verify reports.

Reports from Martin Olthoff, 212 N. 16th St., Independence, Kans., are always complete with call letters, location, frequency, volume and time of reception. Some of the better catches from his most recent report include the following ten meter amateurs: LU1BJ, Buenos Aires, 28260 kcs, R3 volume at 6:55 pm; YN3DG, Leon, Nicaragua, 28600 kcs, R3 volume, working with K4EIL.

On twenty meters, Martin reports: GM2UU, Wigtown, Scotland, 14275 kcs, R3 at 12:55 am; G5GS, Grimsby, England, 14150 kcs, R3 at 12:37 am; HH2MC, Port-au-Prince, Haiti, 14120 kcs, R5 at 4:27 pm; HK1LZ, 14060 kcs, Cartagena, Colombia, R5 at 10 pm; HK5DB, 14030 kcs, Cali, Colombia, R5 at 1:31 am; J5CC, Kagoshima, Japan, 14410 kcs, has been heard on 'phone and CW, usually R6, near 8:54 am; KA1FH, a new station in Manila, Philippines, 14280 kcs, at 5:48 am; K6ILW, a new amateur in Hilo, Hawaii, 14245 kcs, R6 at 12:51 am; OA4AJ, Lima, Peru, 14095 kcs, R6 at 10:20 pm; PK6AJ, Amboina, Moluccas, Netherland Indies, 14125 kcs, R6 at 6:07 am; VK2ADT, Lismore, Australia, 14090 kcs, R4 at 6:58 am; VK2BQ, Bellevue Hill, Sydney, Australia, 14275 kcs, R6 at 12:51 am; VK4JU, 14130 kcs, Brisbane, Australia, R4 at 7:15 am; YV4AB, Valencia, Venezuela, 14050 kcs, R3 at 8:15 am.

Gail Beyer, 3226 Sunnyside Ave., Chicago, Ill., added a new country to his log, with the reception of PK6XX in New Guinea. The station is in the

middle of the USA fone band, and the operator is an American. Since the reception was at R9 volume, he can easily be mistaken for an American station. It was announced over the air that no cards have been printed, and it is possible that none will be printed.

Listening on both ten and twenty meters, Walter Welch, 46 Parkland Ave., Lynn, Mass., has built up a good log of overseas DX. On ten meters the following have been heard between 6 and 8 pm, EST: K4DDH, K4EIL, K4EJF, K4FAB, LU1DJ and VP6MR.

A new Mexican amateur is reported by Ken Morey, 14 Lawndale St., Easthampton, Mass. This station, XE1Q, works on the low frequency end of the band, using a Collins transmitter with a power output of 175 watts. The QRA is Joseph Farrell, Zamorral 35, Mexico City, D. F.

Amateur CALLS HEARD

The names and addresses of persons reporting stations shown in this list are indicated by small letters following the call signs. Key to the small letters is given at the end of the column. No calls are listed unless reported by at least two listeners.

Ten Meters—28 Megacycles

K4EIL (*jon*); LU1DJ (*on*).

Twenty Meters—14 Megacycles

CE1AH (*bl*); CN8AJ (*dl*); CN8BA (*cg*); CN8MB (*gl*); CT1AY (*akln*); CT1QG (*cl*); CT1QH (*ail*); EA9AH (*al*); EI6G (*Cl*); FA3HC (*abl*); F3JD (*al*); F3MF (*ak*); F8KI (*cl*); F8KW (*alo*); F8RV (*am*); F8VP (*km*); GI2CC (*afl*); GM2DI (*cil*); GM2UU (*ack*); GM6WD (*co*); GW5TJ (*cl*); GW8HI (*al*); G2AI (*acl*); G2DV (*flo*); G2MF (*al*); G2PU (*acfilm*); G2TR (*abkl*); G2UT (*al*); G2XV (*kl*); G3BM (*clm*); G3DO (*abc*); G5BM (*fo*); G5DR (*cl*); G5JO (*alm*); G5LU (*alm*); G5ML (*afklmo*); G5NI (*acklm*); G5QN (*il*); G6GO (*il*); G6LK (*ao*); G6RH (*ab*); G6UX (*io*); G6WX (*clmo*); G8MX (*lm*).

HC1JB (*acl*); HC1JW (*alm*); HC2HP (*al*); HH2B (*aehlmn*); HH2X (*aclm*); HH3L (*al*); HH4AS (*cl*); HH5PA (*abclmn*); HI2C (*en*); HI3N (*acehlmo*); HI5X (*akl*); HI7G (*almo*); HI7I (*klm*); HI9I (*hl*); HK1EF (*an*); HK3LDC (*cl*); HK5AR (*lo*); HP1A (*alm*); HR2A (*fl*); HR5C (*aefln*); I1IT (*cgl*); KA1ME (*abl*); KA1ZL (*bl*); K4EJF (*acl*); K4ENT (*lno*); K4ENY (*al*); K6BNR (*acfhlo*); K6OQE (*ac*); K7AOC (*bl*); LA1F (*akl*); LU1QA (*lo*); LU4BC (*klmo*); LU4CZ (*al*); LU7BK (*ab*); LU8AB (*lo*); LY1J (*lm*); NY2AE (*lmn*); OA4AI (*al*); OA4C (*hl*); OA4R (*ailmo*); ON4VK (*alm*); PAOAA (*al*); PAOUN (*cl*); PAOXF (*il*); PY5AQ (*lo*); SM5SD (*ac*); SP2HH (*cil*); SV1KE (*lo*); TG9AA (*abel*); TI2FG (*lo*); TI2LR (*ailm*); TI2RC (*almno*); VK2ADE (*al*); VK2CP (*ae*); VK3XJ (*af*); VK4JU (*abl*); VK4TH (*ae*); VK4VD (*afl*); VK6MW (*ad*); VO2N (*cil*); VO6D (*cgl*); VO6J (*fl*); VP1BA (*befhklo*); VP1DM (*ln*); VP6LN (*mo*); VP6TR (*il*); VP6YB (*klo*); VP9L (*ln*); VP9R (*cklm*); VR6AY (*bfl*); W1OXAB (*achn*); XE1BT (*afl*); XE1GK (*cl*); XE1Q (*ao*); YL2BA (*gl*); YN1OP (*aclm*); YN3DG (*fln*); YR5AA (*ackl*); YR5KW (*gl*); YV1AA (*an*); YV1AP (*abhkmn*); YV1AQ (*mno*); YV5AB (*am*); YV5ABY (*hkm*); YV5AZ (*cn*).

(a) Gail Beyer, 3226 Sunnyside Ave., Chicago, Ill.

(b) Elwin H. Covey, Route 2, Box 3543, Napa, Calif.

(c) Philip Craig, Route 1, Box 81, Waterville, Maine.

(d) A. V. Deterly, 211 Convention St., Baton Rouge, La.

(e) Arthur M. Hankins, 1006 Ligonier St., Latrobe, Pa.

(f) Gilbert L. Harris, North Adams, Mass.

(g) Leonard D. Hubbard, 17 Patten Road, London, SW18, England.

(h) Merton Meade, 3020 N. 8th St., St. Joseph, Mo.
(i) Kenneth Morey, 14 Lawndale St., Easthampton, Mass.
(j) Martin J. Olthoff, 212 N. 16th, Independence, Kans.
(k) Howard M. Phillips, 1401 Newton St., N. E., Washington, D. C.
(l) Jack Quintrell, 445 Carmody Drive, Seat Pleasant, Md.
(m) Norquay Scott, Hillcrest Apts., 3615 Prudhomme Ave., Montreal, P. Q.
(n) Bob Taglauer, 223 Orchard Road, Ft. Mitchell, Covington, Ky.
(o) Walter E. Welch, 46 Parkland Ave., Lynn, Mass.

Shortwaves

(Continued from Page 10)

Turkey

"Radio Turkey" on 9465 and 15195 kcs. was scheduled to begin broadcasting on July 22, but we failed to pick up any signal on those channels. As yet no reports have reached us on reception of this new 20 kilowatt Ankara, Turkey station. (RX)

Vatican City

HVJ on 17840 kcs. is heard at 10:00 a. m. irregularly. The Papal station seems to be using this frequency also. (RX133—Mass.)

And that, RADEXERS, concludes our little meeting for this month. Do I hear a motion to adjourn? Wait—before you go, a little explanation on the above paragraphs. You will note they are not very different from those formerly included on these pages each month. We have utilized the same system that RADEX has used in the past, that is, we have credited the items by listing only the code numbers of the reporters. (RX) means the Chief contributed the item himself.

The new red, yellow, blue and black card issued by Radio Martinique, at Fort de France. (Courtesy of J. E. Gardner).

We hope to have many new numbers to add next month.

RX Numbers

The temporary RX numbers used in this column were assigned to the following reporters:
RX133, Harry V. Miner, Wollaston, Mass.
RX134, Richard Wright, Chicago, Ill.
RX135, Arthur F. G. Bruder, Allston, Mass.
RX136, Curtis F. Keirstead, Framingham, Mass.
RX137, Eduardo Vila, Havana, Cuba
RX138, Carl Horton, Athol, Mass.
RX139, G. H. Jacobs, Cincinnati, Ohio
RX140, A. Jansen, Boskoop, Netherlands
RX141, Albert Pickering, West Medway, Mass.
RX142, C. D. Jennison, Orange, Mass.
RX143, Robert Skyten, East Brookfield, Mass.
RX144, James Kneeland, Worster, Mass.
RX145, Enrique Hidalgo, Cienfuegos, Cuba

New WGY Studios

The new five-studio broadcasting headquarters at Schenectady, N. Y., of General Electric's station WGY, were opened on July 9. Embodying the most recent technical and structural developments, the building stands on a triangular plot at the junction of the two main highways through Schenectady.

Constructed of red-faced brick with a wide front expanse of glass block, bordered with chromium, the new studios strike an architecturally modernistic note in Schenectady. The main entrance hall is 152 feet long, and on one side looms the glass block wall, while the opposite side affords entrance to each of the five studios.

WGY's new headquarters came into use not long after the station's 625-foot vertical antenna was put into service.

SERVICE PROBLEMS
Our Reader's MEET

• • • By the TECHNICAL EDITOR

The Bass Booster

I have a Zenith 9-S-30 receiver that utilizes nine octal glass tubes. I have been told that there is a bass "lifter" circuit incorporated in its tone control. But this control is of the continuously variable type and when it is in the bass position the set does not have a bass tone as I know it. Is this too early a model for the engineers to be as familiar with the bass booster as they are today in newer models? Can I improve this control by changing over to the "switch" type used on the latest Zenith sets?

The principle of tone control is just about the same whether a continuously variable or "step" unit is used. The step method, perhaps, is best, since the engineers set the condensers and resistances used at the proper value to provide the best "foreign", "high-fidelity", "normal", "voice" and "bass" responses, and no further adjusting is necessary. The operator of the set merely switches to the desired tone. In all cases, however, the control of tone depends largely upon personal opinion. Some prefer a deep bass and others a brilliant pitch. In your case it is likely that a deep bass of a resonant quality is desired, and the receiver you own will not quite reach this particular tone.

Trouble often occurs in tone control units. The usual control consists of a fixed condenser in series with a variable resistance. By cutting this resistance entirely out all the higher pitches are by-passed, and only the deep or bass notes appear. If this resistor is not cutting out entirely when the knob is turned full to the bass side, or the fixed condenser is defective, the control should be replaced.

In the switch type of control usually nothing but a series of steps of fixed condensers of different values are used. The switch-type controls in the current Zenith models are somewhat more complicated, and, as a rule, are best when built into the circuit. A good service man might install such a control in your set, but this we do not recommend. There are a few circuits which are arranged actually to boost the bass response, and it is very likely that such controls in current models are superior to the controls used in the earlier models. In your receiver we suggest that a new replacement, if necessary, be made; if a factory replacement unit cannot be obtained, use a Yaxley No. 1, left-hand, type "O", 1 megohm control. These controls are easily obtained at practically every radio supply house or service shop.

Roaring Power Lines

I have a very good RCA 10-tube set, but there is a continuous roar of noise. Can it come from a power line that is half a mile distant as I see the insulators glow every night when it becomes dark? Every antenna used fails to stop the interference. The set in my car picks up the same noise.

Is there anything that can be added to the set to stop this trouble?

While the power line is rather distant to give a great deal of trouble, it may be that your set is large enough to be sensitive to the interference. The fact that a dull glow can be seen at night shows that the power line is overloaded and that the insulators are leaking. Leakage of this kind produces the very worst type of power-line noise or interference, particularly in wet and rainy weather. We do not believe that any device added to the set will reduce this kind of noise since it is likely that little or none appears by way of the house wiring circuit. A good filter between the radio and the wall socket will help if trouble is coming from this source. Also, it is doubtful whether any special antenna will help. Point a straight-wire antenna at the noise source and take the leadin off the end fartherest away from the power line.

Have you made complaint to the power company officials? First, to be sure, try using your radio in several locations. One, as near to the line as possible, and again a long distance off—at least 5 miles or more. If these tests prove conclusively that there is power-line interference, write a letter to the Inspector of your radio district. He is located either in the Rives-Strong Building, Los Angles, or Custom House, San Francisco, whichever is nearest to you.

Antenna "New Deal" Needed

My set has been overhauled and is working fine. We are in a new all-electric house out away from all kinds of static interference. The new antenna runs from a pole twenty feet away, across the ceiling of the porch roof, down the side wall of the house to window sill and into living room. I get a lot of noise with all this. I put a switch in the antenna lead at the window, but even when that is cut off, the noise persists. How can I eliminate this trouble?

Try a good noise-reducing antenna system, either of the doublet type or the RCA Magic Wave arrangement, since your set is of the RCA manufacture. The antenna must be short, and this might harm some of its all-wave qualities, but the leadin will not pick up electrical noises from the devices within your home. No ground is required.

Interference between nearby stations cannot be caused to a great extent by the antenna now in use. It may be due to the fact that the set is not properly balanced and aligned. When the r-f circuit of the set does not tune sharply you will find that nearby stations force some of their signals through that first stage and into the detector circuit. Make a check of this circuit; its condenser, tube and coil frequently are found out of order. Once an unwanted signal gets through the pre-selector stage of a receiver, it cannot be tuned out. In some cases the use of an additional pre-selector stage or unit has been beneficial; it not only sharpens the tuning, but gives greater sensitivity to the set so that it will pick up signals that never before had been heard.

Volume Controls

I have an eight-tube Silvertone receiver. I ordered a new volume control but they sent me a 500M type instead of a 250M. They insisted it was proper to use and would not harm the set. Shall I use it or return it for the proper one?

A 500,000 ohm volume control will

work as well as a 250,000 ohm unit when the set has been designed for the latter resistance. However, the principle difficulty is the limited range of volume obtained by turning the knob. The resistance in the control will not work over the entire limits of the unit, since only about one half is in operation. This means that the knob moves very slightly to cover the full range.

It seems to us that there should have been little trouble in obtaining the proper resistance. If you cannot get the corect Silvertone replacement, you may use the Yaxley midget control, type MR44 (250M). These can be purchased at any radio supply store for not more than one dollar.

Squealing Battery

I have a 1937 5-tube Airline set. It runs on B batteries, but there is a squealing noise and finally the set shuts off entirely. This is repeated over and over each time I use the receiver. What causes the difficulty?

You have not given the model number of your set, but we assume is uses two 34s, one 32, one 30, and one 19 tube. The squeals you mention are in most every case due to the run-down condition of the B batteries, or even the A batteries. We suggest that the B-battery voltage be checked and new batteries installed. Often, it might not be just the entire battery, but only one of the units or a portion of it. Replacement of the entire B battery may not be necessary, but just one of the units. Check the two-volt potential of the A battery and make sure it is correct.

Otherwise, the trouble will be due to some fault in the set itself, either in a tube or a resistor or condenser. Some change in plate potential or grid bias will do this. Also, if you change the 34 detector tube, which is unshielded and at the rear of the chassis, to a type 32, there will be improvement of sensitivity and tone. However, the one-megohm resistor in the grid return circuit must be removed and the gap closed, while the return must be connected directly to the negative C 9-volt brown lead wire.

Harmonics

On my six-tube General Electric M61 receiver I hear a station announcing W8XK on a frequency of 5.25 mcs. and I can find no explanation for it. The program is identical to that of KDKA. Is this a harmonic or image frequency condition?

Station KDKA, at Pittsburgh, Pa., also broadcasts its programs by short wave on 6.14, 11.87, 15.21, etc., megacycles. You should get this program, therefore, exactly on 6.14 mcs. and not on 5.25 as you state. The difference between these two frequencies is 890 kilocycles, which is just about twice the difference of the intermediate frequency of your set. The actual i-f being 460 kilocycles; twice that being 920 kcs. This small difference is due, most likely, to your reading of 5.25 megacycles; actually is should be 5.22 megacycles instead.

This result, then, indicates that your receiver is creating an image frequency. However, the image frequency usually is *higher* than the desired signal by an amount twice the i-f used by the receiver. It is suggested that you read the answer to a question similar to yours, published in the April, 1938, issue of RADEX. Harmonics are almost a thing of the past for radio transmitters are supposed to suppress all harmonics.

Band Expanding Coils

Will you please advise me on the following problem? I own a model 281 RCA 12-tube receiver in which I wish to install band expanding i-f coils. My receiver has four i-f coils so please tell me which two of the four coils I should replace with the new coils. Are there any complications I may run into in this installation? Do you think the results obtained will be worth the trouble and expense?

The RCA model 281 (1935) receiver employs twelve tubes and an intermediate-frequency of 460 kilocycles. If you replace the present i-f coils with new ones you must use the full number less one in order to obtain best results. They must have an intermediate frequency of 460 kilocycles. Since these coils vary from $2.50 each to $3.50 each, the cost alone for parts will be close of fifteen dollars, and, to do the job properly, we seriously recommend a very competent service man. Whether the cost and effort will give you additional pleasure is something we cannot guarantee, but it is certain that a good band-expanding system will improve reception by reducing inter-station noises and improving selectivity. Tone, of course, must be cast aside to a certain extent when high selectivity is used.

You can use the Meissner iron-core band-expanding i-f coils, but the work of installation requires a keen knowledge of radio servicing and design. The same applies to the Miller variable-selectivity i-f transformer. These coils will provide a high degree of selectivity for good DX reception. There is a simple electrical method of changing coupling when shifting from DX selectivity to high-fidelity reception of nearby broadcast programs. The Miller transformer, for instance, does not require any mechanical adjustment or control. A single-pole double-throw switch is all that is required with one stage of i-f amplification. The two positions of the switch merely provide for sharp or broad tuning. These are not used for the output stage, so, in your case, but three transformers would be necessary. Some difficulty will be experienced in arranging the leads to the three switches, all of which are on a common shaft. A Mallory-Yaxley switch of this type will work very nicely. The leads must be carefully arranged so as not to couple to any othe r-f circuit. After the transformers are installed the whole circuit must be carefully aligned and adjusted for proper tuning and dial reading.

Atwater-Kent 37.

I have tried every place to find a wiring diagram of the Atwater Kent model 37 receiver. This set has been dismantled and I have no idea about the tubes used in it. Can you help me?

The old Atwater Kent receiver is a tuned-radio-frequency set utilizing seven tubes. There are three-radio-frequency stages with type -26 tubes, a type -27 detector, two stages of audio-frequency amplification with type -26 first a-f stage and type -71A in the second or output stage. A type -80 rectifying tube is used in the power unit. The plate of the power last tube is fed by a brown wire; the audio-transformer primary and plate of the first audio tube connects to the black-red wire; the plate of the detector and first audio-transformer primary has a yellow wire; and the

plates of the three r-f tubes connect to the white wire. The red and the black leads feed the r-f tube filaments as well as the first a-f tube filament. The red-white and the black-white wires heat the filament of the detector tube, and black-green and red-green wires go to the filament of the last audio tube - the type 71A.

Peerless-Courier

I have an old Peerless-Courier receiver with dynamic loud speaker. But I have been unable to obtain a diagram showing how the circuit is arranged. This set has a bad hum which I should like to correct.

The Peerless-Courier receiver, we believe, is model No. 65. It has 8 tubes. Three tubes are types -24, and they are radio-frequency stages; there is a type -27 detector; a -27 first audio amplifier, and two -45s in push-pull power amplification. The rectifier is a type 80. The receiver is made, or was made, by the United Reproducers Corporation, and we think their address is Springfield, Ohio.

The primary windings of the four r-f coils or transformers are split. The half of the winding farthest from the plates of the type -24 tubes, and also the ground, are shunted by .00035 mfd. fixed condensers. If one of these becomes defective much noise will result or the signal will weaken. The 800-ohm volume control, when worn out, will give trouble. Hum, in most cases, comes from the filtering section of the power unit. Also, the hum reducing resistor of 10 ohms with a split and grounded center, can be the cause of a great deal of uncontrolled hum. Check this item carefully or replace. The type 80 tube can cause hum if not rectifying properly.

(Please turn to page 34)

The SWL Trading Post

THE names and addresses of readers who wish to exchange correspondence or SWL cards are printed in this column only on receipt of the written promise that all letters or cards will be acknowledged. Requests for exchange of SWL cards must be made on SWL cards.

The VK-NZ SWL Card Exchange and Friendship Club is open, at no cost, to all listeners who exchange cards. Information can be obtained from G. M. Anselme, 16 Hartley St., Rozelle, Sydney, N.S.W., Australia, or from C. Alsop, Stratford, New Zealand.

The following wish to exchange SWL cards:

C. Alsop, Opunake Road, Stratford, New Zealand (wishes to exchange cards, stamps and views).

Edward Bader, 118-17 - 194th St., St. Albans, N. Y.

Robert Collins, Box 387, Rangeley Lakes, Maine.

Merton M. Hiatt, Box 7, Dryden, Wash.

Leonard D. Hubbard, 17 Patten Road, London, SW18, England.

Rhevelma Hunt, 1105 N. Harmon Ave., Danville, Ill.

Robert E. Lee Hunt, Jr., 1105 N. Harmon Ave., Danville, Ill.

Kenneth D. Morey, 14 Lawndale St., Easthampton, Mass. (Cards and correspondence, especially with owners of Scott 23).

Jack Quintrell, 445 Carmody Drive, Seat Pleasant, Md.

William Wesley, Box 92, Route 1, Bennings, D. C.

(Exchangers can send cards to Quintrell and Wesley under one cover to either address).

Floyd Slosson, Dryden, Wash.

Cliff Tavener, Rosenberg, Texas

The following wish to exchange correspondence:

Robert Craddock, 1207 Idylwild St., Houston, Texas. (with DXers in his vicinity).

John Jenkins, Jr., 423 Hill Ave., Glen Ellyn, Ill.

Howard M. Phillips, 1401 Newton St., N. E., Washington, D. C. (With a DXer in the far west, middle west, south, southwest, and north, on the topic of the influence of weather on DX).

Norquay Scott, Apt. 11, Hillcrest Apts., 3615 Prudhomme Ave., Montreal, P. Q., Canada.

William Scott, 313 W. Holston Ave., Johnson City, Tenn.

Just Dialing Around

• • • By CARLETON LORD

BILLY Jones and Ernie Hare were among the first radio singers, and to them must go some credit for establishing a precedent which is very popular among radio stars today. It was back in 1921 when WJZ had what was called a "radiophone." Gus Haenschen was musical director and he needed singers, so he invited Jones and Hare to drop over.

They did, they sang, and they were invited over a second time. But, as Jones and Hare reminded the management, nothing had been said about salary. Oh, they were told, this was a new thing, this radiophone, and no one was being paid yet.

An engineer was sitting at his controls in the corner. "He gets paid, doesn't he?" the singers asked. Yes, and it developed, so did all the other people there.

"Well, then we'll be paid, too!" And so was started a quaint custom which has persisted down to this day.

* * *

When television finally bows into the American scheme of entertainment, stage door Johnnies will be in for a blow when they rush backstage to meet the feminine charmers. Experiments have shown that colors assume a temperamental behavior before the television screen, and nightmarish shades of blue, green and yellow are necessary to bring out the true tone values of the faces to be televised.

We are assured, for example, that Ginger Rogers would stop the proverbial eight-day clock if she failed to make up with blue lipstick, green rouge and yellow powder. Bizarre gowns which would shriek in anguish before the normal eye, will be just too charming before the televisor.

So tricky are the reactions of colors that television services have had to prepare elaborate guides to color registration. According to this chart, televised colors appear on the screen in one of three categories. White, red, orange, light brown and all pale shades become white or "off-white." Gray, dark brown, dark green and dark purple become gray. Black and white show black, as do the medium blues.

* * *

A lot of folks wish that television might have been available one Saturday afternoon a few years ago. Notre Dame was playing Southern California at Los Angeles, and Walter O'Keefe arrived at the stadium just before game time to find that there were no more tickets. Rather than miss the classic, the Irish alumnus located a U.S.C. student in need of cash, swapped a greenback for a pasteboard.

On entering the stands, Walter was annoyed to find that his ticket was good only for the Southern California rooters' section, 'way down front. Joining the boys who were yelling for the downfall of his alma mater, he was dismayed still more to find that he had to wear a rooter's cap with the U.S.C. colors.

Hoping that he wouldn't be noticed, O'Keefe buried himself in the midst of the students and didn't utter a sound. This was his undoing. Feeling that there was a traitor in the ranks, the Southern California boys called upon him to prove his love for their alma mater. Not liking the sound of the cries to "lynch him" and "toss him out," Walter went into action.

A moment later he was leading a snake dance and using his full lung capacity (about equal to that of the Graf Zeppelin) for the benefit of U.S.C. Although it didn't take long for him to be spotted by some of his Hollywood friends, Walter has always

One of the newest NBC stars is Laura Suarez, Brazilian soprano, who sings over the network, as well as for shortwave station W3XAL, NBC's international voice.

been thankful that the story never got back to South Bend.

* * *

When the National Broadcasting Company moved to its new quarters in Radio City, the lowly phonograph record took a new lease on life. Into the old NBC quarters at 711 Fifth Avenue moved the World Broadcasting System, an outgrowth of the old Brunswick phonograph organization.

From the WBS studios comes a variety of transcribed programs. Complete radio shows of from 15 minutes to an hour in duration are prepared for sponsors who wish to spot programs on individual stations in all parts of the country.

WBS also provides a complete library of outstanding recordings of every description. Various types of music, from the latest dance rhythms to famous symphonies, are catalogued in much the same way that a library lists books. For any musical taste, there is a group of transcriptions recorded by foremost orchestras and soloists.

This program service provides musical portions of commercial and sustaining programs over independent stations. In this way, the small hundred-watters are able to broadcast programs of far greater interest than that offered by the average local talent. This is particularly important when the small station must compete with the high class fare offered by large network outlets.

The old notion that so-called "canned music" is inferior to "live" performances is knocked galley-west by the new system of recording. A recent development in cutting records eliminates the old bug-a-boo of needle scratch and improves the quality of the transcription.

* * *

More deserted than Oliver Goldsmith's village, the NBC studios on a Saturday afternoon during the football season give mute testimony to the broadcasters' devotion to gridiron gyrations. Whether it's Yale playing Princeton, Harvard against Cornell, or Carnegie Tech mussing it up with Georgetown, there is bound to be a radio star somewhere in some stadium pulling for his alma mater.

Lining up behind the Fighting Irish of Notre Dame are Walter O'Keefe (of the Southern California O'Keefes) and Charles Butterworth, both known for Benny Friedman accuracy with arm-chair forward passes. If the band in blue calls for "Boola, Boola," Lanny Ross and Rudy Vallee pledge allegiance to Yale.

Two NBC actreses, Alice Reinhart and Marion Barney, look for the nearest loudspeaker when a University of California game is broadcast. Don Ameche must find it difficult keeping tab on Marquette, Georgetown and Wisconsin. Howard Claney and James Meighan never refuse odds on Carnegie Tech. Fred Uttal, Helen Claire and Bill Slater make up a mixed trio devoted to Lou Little's Columbia eleven.

The two Allens, Fred and Arthur, may get their fan mail mixed up, but their cheers remain separate and distinct—Fred for Boston U. and Arthur for Oberlin.

University of Washington claims two supporters in Gus Haenschen and George Hicks.

Jack Benny always cheers for the team on which he collected the week before.

* * *

Studio audiences, we suppose, are all right in their place. Broadcasts are interesting to see, admission is usually free, and no one can blame people who want to witness some top-notch entertainment.

But when a few hundred spectators are placed ahead of the radio audience, something should be done. Eddie Cantor has always been a pet peeve, because he invariably plays up to the studio audience with goofy costumes and sillier faces. Too often of late the sponsor has stepped in with the apparent insistence that every bit of the program shall receive its due share of enthusiastic applause.

Just out of curiosity recently, a stop watch was put on one of the Kostelanetz Chesterfield programs, and the results are interesting.

The program itself lasted 29 minutes, 45 seconds. Of this time, 23 minutes were devoted to the actual musical numbers, 25 seconds to the opening theme music. The sponsor claimed one minute and 40 seconds, and the program annoucements occupied the same amount of time. The applause totaled exactly three minutes flat, enough time for one more number of average length.

Spontaneous applause isn't so bad, but perfectly-timed periods which obviously are planned to fill in the half-hour to the second are pretty annoying.

* * *

We are happy to announce the marriage of Miss Anita Marquez and Mr. Alec Kinghorn, which was solemnized at the Nuestra Senora del Carmen Church, at Havana, Cuba, on July 30th. We are sure that Mr. Kinghorn's hundreds of friends throughout North America join us in wishing the new couple many years of happiness and good fortune—and many hours of good DX.

Among the CLUBS

THE DXers' Convention for the Golden Gate International DXers' Convention has been put in the hands of the Treasure Island DX Council. Each DX Club has a representative on the council, and the council will handle all matters pertaining to the convention. Meetings are held on the second Saturday of every month, at the Olympic Hotel, 230 Eddy St., San Francisco, Calif. John D. Clark is the president of the council. John R. Fisk is vice-president. Ashley V. R. Walcott, secretary, and Don R. Martinez, treasurer.

Albert Steinmetz, founder of the Verhovay Short Wave Radio Club, has moved to Los Angeles, and the president, Joseph A. Markovits, has agreed to take over the secretarial duties. Correspondence concerning this organization should be sent, therefore, to Mr. Markovits, at 304 Castlegate Road, Wilkinsburg, Pa.

A special program was radiated from shortwave station 2RO at Rome, Italy, on August 3rd, in honor of the Verhovay Club. No definite dates for other programs have yet been set, but we are informed that many interesting programs are planned for this season.

The Universal Radio DX Club of San Francisco announces a novel contest. Known as the Champion of the Week, the contest encourages members to tune for as many 20 meter amateur stations as possible, figuring scores on a point system. There is no fee to enter, and no prizes are offered.

The newly-formed Cleveland Radio Club will be honored on August 28th, by the Polish shortwave stations SPD and SPW, on a special program com-

mencing at 6:20 pm, EST. Many of our eastern readers will have this issue of RADEX in time to tune for this program, and reports from them will be highly appreciated, both by the radio stations and by the Cleveland Radio Club.

Harry Gordon, president of the National Radio Club, announces that the club is now governed by a board, headed by William Stone. Other board members are Joe Becker, vice-president, Arthur Johnson, George Brode, Harold Criswell, Jack Horner, Herbert Tucker, Warren Routzahn and Richard Cooper. Harold Wagner is the treasurer of the club. Headquarters are at 317 E. 10th St., Erie, Pa., and bulletins are issued weekly during the DX season from October 1st to April 1st; every second Tuesday during April and September, and once a month in May, June, July and August.

Howard Hughes - KHRH

JUST another radio station. In Federal Communications Commission Report No. 187, mimeo number 28226, stuck in between WWJ and KHBG, is the unadorned notation: "KHRH, Howard Hughes, Room 4414, RCA Building, New York, N. Y." Just another station to the FCC, but to DXers the world around, the most interesting station of this DX season.

On July 8, 1938, Howard Hughes was granted special temporary authority to operate an already licensed aircraft radio transmitter, aboard the plane R-18973, as a relay broadcast station, on frequencies 4797.5, 6425, 8655, 12862.5, 17310 and 23100 kcs., power of 100 watts, during the period beginning July 15, and ending in no event later than August 13, 1938. This station, as everyone knows, was for the purpose of broadcasting special programs in connection with his 'round the world flight, and it is quite reasonable to assume that the same station and frequencies will be employed during his flight to South America, which has been hinted in the press.

While Mr. Hughes was breaking aviation records, he was also making radio history. His flight around the world was covered, almost mile-for-mile, by the networks of this country. Starting with broadcasts during the flight preparations, radio listeners were able, through the networks, to hear transmissions from the ship as it crossed the Atlantic, then from Paris (via NBC), Berlin (NBC), Danzig (NBC), Moscow (MBS, NBC), Fairbanks, Alaska (MBS, NBC), Minneapolis (MBS), and back at the home airport, Floyd Bennet Field on Long Island. It was the National Broadcasting Company that brought them home, as they rode in on the WEAF beam.

The National Broadcasting Company's coverage of the meteoric flight was outstanding. Exclusive broadcasts over this network dotted their skyrocket journey around the world. The first came from Paris, announcing their arrival; the second came only a few hours later, telling the world that the airmen were off again.

As the plane winged over Berlin Richard Stoddart, NBC engineer on leave of absence, who was with Mr. Hughes as his radio engineer, talked with a receiving station there and the conversation was relayed to the United States. Mr. Stoddart was

heard again a few hours later when the plane was nearing Danzig. Then came the arrival in Moscow, where a commentator reported their appearance on the horizon, continued his description until the crew left the plane, and then brought the flyers to the microphone to talk directly to the American audience.

Hughes' two stops in Siberia were at points where radio facilities were not to be had, but on the following night listeners heard a detailed account of their arrival at Fairbanks. Alaska, the only point in America where contact was established, with the exceptions of Minneapolis and Floyd Bennet Field. The failure of the Hughes radio between Fairbanks and Minneapolis was due to their aerial, and was not a failure of the transmitter. Their receivers functioned perfectly during the entire trip.

One of the most harassed individuals, of all those concerned with the flight, was not one of the flyers, but Al Josephy, of the Mutual Special Features Division. Scheduled to be married on July 15, he left all the details of his wedding until the last week, when his bride would be in New York to assist him in the preparations. But along came the flight, and his assignment to cover it, so Al had to make all his preparations while hung over a microphone at flight headquarters. He attended to such details as ring buying, apartment hunting, engaging the minister and buying clothes, by remote control! But was he relieved when the ship sailed in on the 14th!

Down With Noise!

The National Association for Prevention of Radio Interference, known popularly by the pronounceable initials, NAPRI, has been formed to combat "unreasonable, preventable and unnecessary electrical disturbances which are knowingly . . . . created and which distort radio signals to the detriment not only of listeners' enjoyment of their radio receivers, but also constitute serious menaces to efficient operation of military, police, aviation and general commercial point-to-point radio communication."

The Association seeks to accomplish this worth-while objective through the cooperation of manufacturers and users of electrical apparatus, and through the enactment of local legislation for the control of interference.

Associate membership in this organization entails no responsibility upon members, and there are no dues or other expenses. Membership is open to everyone who is willing to pledge to support suitable legislation, and, where possible, to use only such electrical equipment as has been designed and constructed so that it will not cause interference. Application blanks, and a prospectus outlining the purposes of the association, may be obtained from their headquarters, at East Rockaway, Long Island, N. Y.

RADEX has pledged its support of this plan, and we hope that many of our readers will do likewise.

The National Broadcasting Company added its 154'th affiliate, when station KUTA in Salt Lake City became a supplementary outlet, available only to advertisers using KLO in Ogden. KDYL, also in Salt Lake City, continues as an outlet for the NBC Mountain Group.

QSA AND R CODES

The R code describes the volume with which a signal is heard.

R1 is a signal that is barely perceptible.
R2 is a very weak signal.
R3 is a weak signal.
R4 are signals of fair volume.
R5 are fairly good signals.
R6 are good signals.
R7 are moderately strong signals.
R8 are strong signals.
R9 are extremely strong signals.

The QSA Code is used to describe the understandability of a station's signal.

QSA1 is a signal that is unreadable.
QSA2 is one that is barely perceptible. A word can be understood now and then.
QSA3 is understandable with difficulty.
QSA4 is a signal that can be understood with practically no difficulty.
QSA5 is perfectly understandable.

Some persons describe radio signals further by employing the S and X symbols, S to indicate fading and X to indicate static, in this manner:

S is slight fading.
SS is deep fading.
SSS is a complete fadeout.
R is rapid fading (fluttering).
X is slight static.
XX is bad static.
XXX is very heavy static.
The letter N indicates that either fading or static was not present.

These symbols are written like this:

(a) QSA5, R7/S/XX
(b) QSA4, R7/N/N

Example (a) means that the station had a perfectly understandable signal at moderately strong volume, with slight fading and bad static. Example (b) means the station was easily understandable at quite strong volume, no fading and no static being present.

Covering the

GETTING prepared for the new DX season is a harder task than the actual DXing. To know what is in store for you now makes it simpler to follow the changes as they take place. So let us devote our column to glancing over the doings of the short-wave world and informing you of all the new happenings.

As usual, England and Germany will be sending out two of the strongest signals in the world. These two chains cover the world like the perennial blanket. In short, they can be taken for granted.

But this coming season DXers will be tuned more often to a new system. "Paris Mondial," formerly "Radio Coloniale," located in Paris, France, has come to the fore. A complete overhauling of the stations, in addition to improved program material, is bringing many new listeners to 'Mondial' wavelengths. Although sixteen new call letters have been assigned, but seven of the 'T' transmitters are active at the present writing. All are heard daily.

Proceeding down the list we have TPA3 (11,900) and TPB11 (9,570) sharing the first transmission from 1 to 4 a. m. At 5 a. m. TPA2 (15.243) comes on the air, followed at 8:30 by TPB3 (17.765). Both these stations continue until 10 a. m. After a fifteen minute interval TPA3 and TPB11 return until 5 p. m. Two newcomers are wafted across the ocean an hour later when TPB6 (15.130) and TPA4 (11.713) arrive, signing off at 8:15 p. m. TPB7 (11.885) joins TPA4 at 8:30 p. m. for a two and one-half hour transmission, the last of the day.

The Soviet Union is also sending out signals that carry a heft. Nightly at 7 p. m. RAN, operating on 9,595 kilocycles comes roaring through, certainly with a 'canny' tone, but still one that holds the listeners. RAN signs off at exactly 9:15 p. m. An hour later RNE, which has shifted to 12,000 kilocycles, carries on for the U. S. S. R.

SHORTWAVES

• • • By E. LEISERING, JR.

T14NRH (9,670 or 9.690), with its genial operator, Sr. Cespedes Marin, has gone into the undependable class. Last May, NRH celebrated its tenth birthday on the air. Nightly it was sending out fine signals, and its usual splendid programs dedicated to various radio clubs, magazines and friends of Sr. Cespedes. When June rolled 'round NRH continued broadcasting nightly, not reverting to its thrice-weekly schedule. However, the time has now arrived, we are sorry to say, when the 500-watter is erratic in its schedule. When it does go on the air, the time is from 9 p. m. until after 10 p. m. As for the frequency being used, the last times heard, NRH was on 9,690 kilocycles although its assigned frequency is 9,670 kilocycles.

The newest station operating down in Colombia HJ3ABY (6.120), located at Bogota. Uses a slogan of "La Voz de Colombia," and where have we heard that before?

La Voz del Diablo," HCIGQ (9175) is now broadcasting on Mondays, Wednesdays and Saturdays from 9 to 11 p. m.

Italy is using three frequencies in its North American broadcasts. From 7:30 p. m. to 9 p. m. daily Rome is heard over I2RO (11.810), IRF (9.830), and 12RO3 (9.635). Of the three IRF is slightly the superior of I2RO and I2RO3 is not far behind either of them.

From Japan comes the news that JZL has gone on the air. Here is another catch for the DXer. JZL is the newest of the Tokyo transmitters. It operates on 17,785 kilocycles and sends the "Overseas Program." JZL has replaced JZJ in Japanese transmissions.

Getting closer to home, W3XAU announces its new schedule. On 9,590 kilocyles it broadcasts Mondays, Thursdays, and Saturdays, 11 a. m. to 11 p. m.; Wednesdays from 8 p. m. until 11 p. m.; on Tuesdays, Fridays, and Sundays 10 p. m. to 11 p. m. On its frequency of 6,060 kilocycles, it is heard Tuesdays, Fridays and Sundays 11 a. m. to 10 p. m. and on Wednesdays 11 a. m. until 8 p. m.

W4XB, that annual catch from Miami, Florida, is broadcasting for a spell on 6,-040 kilocycles from 12 noon until 2 p. m. and 8 p. m. to 11 p. m. Get it while you can.

Norman R. Lockwood, 919 E. 149th St., Cleveland, Ohio, BCB DXer. In photo is 1937 Zenith on left and on right is an Air-King AC-DC set. Uses an inverted L 58 feet long, 30 feet high, running E-W.

A piece of discouraging news comes from South Africa. Last year about this time everyone was trying for the stations reported to be coming in with powerful strength from South Africa. It was the current sensation of the DX world. Now we learn that one of the most dependable African stations has shut down. ZRH (9.523) is the transmitter and all the periods assigned to it have been turned over to its transmitter on 6,007 kilocycles. Try catching that one.

We have on file a list of over 5,000 world stations and we would be glad to utilize these indices to answer any questions our readers may have regarding short-waves and short-wave stations. Simply address your letters to RADEX and they will be promptly answered. Your reports are also appreciated and need we say that a contest is being arranged for you DXers.

And the prize—ah! But let's wait and see.

And now to go home for a good night's sleep. Or does a good DXer ever say that?

Problems

(Continued from page 26)

Check all the five filter condensers, and the four large resistors in the voltage divider.

More Double Spots

My RCA Victor R28B is about 4 years old, and it has been bringing in the stronger nearby stations at two places on the dial. These either are image frequencies or harmonics. I procured a pre-selector hoping it would sharpen the tuning and eliminate the double spots. It actually increases the signal strength very nicely but the image reception moves around the dial, either higher or lower, and causes it to happen in more instances than when the set is used without the pre-selector. Can I change the selector so as to prevent all double spots?

Prevention of double spots or image-frequency reception in this case depends entirely upon the proper alignment of the radio receiver. The intermediate-frequency used is 175 kilocycles, and this does not help the condition. At least 460 kilocycles should be used in order to reduce repeating to a minimum, and this is impracticable in your case. If you have the receiver carefully adjusted some improvement should be noted. There is nothing you can do to the pre-selector to prevent the trouble, since that unit has little or nothing to do with the situation. It merely "steps-up" the weak signals that otherwise could not be heard, but, since more signals are coming in, there is a greater likelihood of this form of interference.

If you read the April, 1938, issue of RADFX, you will find a complete answer to this same problem. When a strong signal manages to pass through the r-f stages of the set it mixes with the other signals and creates a separate signal at a certain frequency. In many cases a good wave trap set to the interfering signal, when its double-spot appears over some other desired signal and causes interference, will prevent the image from appearing at that place. Readjusting the wave trap whenever an interfering image appears will prevent it, but all this requires additional tuning efforts. A wave trap may be used before the pre-selector without hindering the desired signals. However, you will have a nice array of gadgets to adjust and provide space for.

Still More Images

There is some trouble in my 1936 Grunow receiver for radio station WLW repeats itself all over the dial. I tune in on a weak station that I think is D-X, but find it is an image of WLW. Some few other loud stations also have one or two image spots repeating on the dial. I have even noticed one 20-meter short-wave station repeating again at 19 meters. What can be done to make this set work properly?

We suggest that you read the answers given to somewhat similar queries in this month's issue, and also the April, 1938, issue of RADEX. Also, you have failed to give us the actual model number of your receiver, and without it, we cannot well identify the circuit. Again we should like to impress our readers with the fact that only a general reply can be made

to letters when the receiver in question is not positively identified by giving its model number. All sets are so marked; usually on the chassis.

But the kind of image interference mentioned in this case can be reduced to some extent, since the set has 11 tubes, by a careful adjustment of the r-f and i-f stages for tuning, and an examination of tube and coil shielding. Failing in this way to improve the condition, we suggest a good wave trap, such as the dual type manufactured by J. W. Miller Co., of Los Angeles, Calif. Powerful signals from nearby stations, like WLW and WGN, can be attenuated to a very low degree and prevented from thrusting themselves through the r-f stages of the receiver and into the mixer stage where they can no longer be eliminated.

Double Reception

I have a Croydon 5-tube set which brings in code right on top of the short wave stations and makes reception very difficult. The short wave stations that come on the 49 meter band repeat at 5100 kcs; also, the same is true with the 75 meter band. The amateurs seem to repeat again at 3000 kcs. I have noticed the same trouble on the broadcast band, but it is not very bad there. I had the set tuned by a local service man. He checked the r-f circuit, but the set does the same thing again.

First, the fact that you hear code mixed in with the voice signals on the short wave does not indicate that there is some trouble. Code and phone signals are squeezed in all over the short-wave spectrum, but usually grouped in individual types of signals. For instance, you have a short-wave amateur band, and then at either side of it you will find code signals. Often, however, some code signals will spill over into a phone band. On the other hand, code may be due to repeat signals at several points on different harmonics.

Double reception occurs when especially strong signals enter the r-f circuit of a receiver and set up some form of combination between the signal frequency and the i-f of the set. About the only solution is to have the receiver carefully aligned and tuned so that unwanted signals cannot enter the r-f circuit. If the fault is due to the receiver and cannot well be corrected, we suggest the use of one or more good wave traps. The April, 1938 issue of RADEX, explained at length image frequency and how to cure it. Your attention is referred to this answer in that issue.

Atwater Kent 60

I have an Atwater Kent 60 receiver, and have wondered if a preselector will help it work better. I have a diagram of a single tube preselector that employs a single 2A7 tube for first detector and oscillator combined. What do you think of this?

The Atwater Kent 60 is an old model that uses eight tubes. Since it already is a tuned-radio-frequency receiver, the use of a single-tube preselector will add still another tube of radio-frequency amplification. This will not help the set to an appreciable extent, nor will it improve the selectivity, for a tuned-radio-frequency receiver is very selective. There is no use adding radio-frequency amplification beyond a sensible limit, and your set is sufficiently covered in this respect. We recommend, instead, a careful checking for neutralization and alignment and voltages on the tubes.

Twenty Stentors

LISTED below are the twenty shortwave stations which possessed the loudest voices last month. Arranged according to the number of reports received, this chart can be used by new listeners as a guide to the stations which they are most apt to receive in their own localities. Beginners should not attempt to tune for difficult catches until they become familiar enough with their receivers to bring in these easy-to-get stations regularly.

All the GS- stations are grouped under "London," and all the DJ- stations under "Berlin."

By all Readers	Best in EST	Best in CST	Best in MST	Best in PST
JZJ	JZJ	YV5RC	TGWA	YV5RC
RKI	SPD	IRF	IRF	IRF
London	RKI	HP5G	HJ1ABB	JZJ
IRF	SPW	HH2S	HJ1ABE	HP5G
CSW3	ZIK2	LRA	HJ2ABD	VPD2
SPW	CSW3	VPD2	HJ2ABJ	TG2
YV5RC	TPB6	HBO	JZJ	London
Berlin	OLR5A	HJ3ABX	HJ3ABD	RKI
SPD	COBZ	TG2	TGQA	TGWA
HH2S	HP5J	London	HJ3ABH	HH2S
PCJ	2RO3	RKI	HIN	LRA
HP5G	OLR4B	TPB3	HP5G	HBO
LRA	XEWI	TGWA	PCJ	HJ3ABX
TGWA	ZRK	HIG	HBO	VLR
TI4NRH	VK3ME	LRX	EAQ	YDB
EAQ	EAQ	OAX4J	LRA	ZRK
VPD2	TI4NRH	YSD	RKI	VK3ME
VK3ME	PCJ	TGQA	London	PCJ
ZIK2	Berlin	XEDQ	SPW	Berlin
HBO	London	HIN	Berlin	VK6ME

COBZ, assigned 9030 kcs, relays the programs of CMBZ, "Radio Sales," Apartado 866, Havana, Cuba, from 7:42 am until midnight. This station drifts in frequency.

CSW3, 9740 kcs, Lisbon, Portugal, daily, -7 pm.

DJ-, The current schedule of the Berlin stations follows:

Sundays only—6-8 am, DJL, 15110 kcs. 11:10 am—12:25 pm, DJB, 15200 kcs, and DJE, 17760 kcs.

Daily: DJA, 9560 kcs, 12:05—11 am; 6 to 10:50 pm.

DJB, 15200 kcs, 12:05 to 11 am; 4:50 to 10:50 pm.

DJC, 6020 kcs, 11:30 am to 4:25 pm.

DJD, 11770 kcs, 10:35 am to 4:25 pm; 4:50 pm to 10:50 pm.

DJE, 17760 kcs, 12:05 am to 5:50 am; 6 to 7:50 am; 8 to 10 am.

DJL, 15110 kcs, 12:05 am to 2 am; 8 to 9 am; 10:35 am to 4:25 pm.

DJN, 9540 kcs, 4:50 to 10:50 pm.

DJP, 11855 kcs, 7:15 to 10:50 pm.

DJQ, 15280 kcs, 12:05 am to 5:50 am; 4:50 to 10:50 pm.

DJR, 15340 kcs, 8 to 9 am; 4:50 to 10:50 pm.

DJS, 21450 kcs, 12:05 to 11 am.

EAQ, 9860 kcs, Madrid, Spain, daily from 4 to 10 pm.

GSB, 9510 kcs, midnight to 2:15 am; 12:20 to 6 pm; 6:20 to 8:30 pm; 9:20 to 11:20 pb

GSC, 9580 kcs, 9:20 to 11:20 pm.

GSD, 11750 kcs, midnight to 2:15 am; 12:20 to 4 pm; 6:20 to 8:30 pm; 9:20 to 11:20 pm.

GSE, 11860 kcs, midnight to 2:15 am.

GSF, 15140 kcs, 5:45 to 8:50 am; 9 am to noon; 4:15 to 6 pm.

GSG, 17790 kcs, midnight to 2:15 am; 5:45 to 8:50 am; 9 am to noon; 1220 to 4 pm; 4:15 to 6 pm; 6:20 to 8:30 pm.

GSH, 21470 kcs, 5:45 to 8:50 am; 9 am to noon.

GSI, 15260 kcs, midnight to 2:15 am; 12:20 to 4 pm; 9:20 to 11:20 pm.

GSJ, 21530 kcs, 5:45 to 8:50 am; 9 am to noon.
GSO, 15180 kcs, 5:15 to 6 pm; 6:20 to 8:30 pm.
GSP, 15310 kcs, 4:15 to 6 pm; 6:20 to 8:30 pm.
HBO, 11400 kcs, Geneva, Switzerland, Sunday, 7-7:15 pm.
HH2S, 5920 kcs, Port-au-Prince, Haiti, daily 7-10 pm.
HIG, 6290 kcs, Trujillo, D. R., daily 4-9 pm.
HIN, 6240 kcs, Trujillo, D. R., daily 4-9 pm.
HJ1ABB, 4780 kcs, Barranquilla, Colombia, 4:30-10 pm.
HJ1ABE, 4800 kcs, Cartagena, Colombia, 7 am to 6 pm; 8-11 pm.
HJ2ABJ, 4760 kcs, Santa Marta, Colombia, 5:30-10:30 pm.
HJ3ABD, 4840 kcs, Bogota, Colombia, 6-11:30 pm.
HJ3ABH, 4900 kcs, Bogota, Colombia, 6-11 pm.
HJ3ABX, 5990 kcs, Bogota, Colombia, 5:30-11:30 pm.
HP5G, 11780 kcs, Panama City, 6-10 pm.
HP5J, 9610 kcs, Panama City, 6:30-11 pm.
IRF, 9830 kcs, Rome, Italy, 12:10-1 pm; 6-9 pm.
12RO, 11810 kcs, Rome, Italy, 5 am to 9 pm.
JZJ, 11800 kcs, Tokyo, Japan, 7-7:30 am; 8-9:30 am; 2:30-4 pm; 4:30-5:30 pm.
JZK, 15160 kcs, Tokyo, Japan, 12:30-1:30 am; 2:30-4 pm; 4:30-5:30 pm.
JZL, 17785 kcs, Tokyo, Japan, 6-6:30 pm.
LRX, 9660 kcs, Buenos Aires, Argentina, 5 pm to 2 am.
OAX4J, 9350 kcs, Lima, Peru, noon to midnight.
OLR4A, 11840 kcs, Praha, Czechoslovakia, Monday, Tuesday, Thursday, Friday, 6:55-9:55 pm.
OLR4B, 11760 kcs, Praha, same schedule as OLR4A.
OLR5A, 15230 kcs, Praha, same schedule as OLR4A, plus Sunday, Wednesday, Saturday, 5 pm.
OLR5B, 15320 kcs, Praha, same schedule as OLR5A.
PCJ, 9590 kcs, Hilversum, Netherlands, Sunday 2-3 pm; 7-8 pm; 8:25-9:25 pm. Tuesday 1:45-2 pm; 2:10-3:40 pm; 7-8:30 pm; 8:45-10:15 pm; Wednesday 7-9 pm.
PCJ2, 15I220 kcs, Hilversum, Tuesday 12:30-2 am; 9:30-11:30 am.
PHI2, 17770 kcs, Hilversum, Sunday 6:25-9:30 am; Mon, Tues, Thur, Fri, Sat, 7:25-9:30 am.
SPD, 11535 kcs, Warsaw, Poland, 6-9 pm.
SPW, 13635 kcs, Warsaw, 6-9 pm.
TGWA, 9680 kcs, Guatemala City, 7-10:30 pm.
TG2, 6210 kcs, Guatemala City, 5-11 pm.
TI4NRH, 9690 kcs, Heredia, Costa Rica, Tues, Thur, Sata, 9-10 pm.
TPA4, 11718 kcs, Pris, France, 6-8:10 pm; 8:30-11 pm.
TPB3, 17810 kcs, Paris, 8:30-10 am.
TPB6, 15130 kcs, Paris, 6-8:15 pm.
TPB7, 11885 kcs, Paris, 8:30-11 pm.
VK3MF, 9500 kcs, Melbourne, Vic., daily except Sun, 4-7 am.
VK6ME, 9590 kcs, Perth, W. A., daily except Sun, 6-8 am.
VLR, 9580 kcs, Melbourne, 1-9 am.
VPD2, 9540 kcs, Suva, Fiji, 5:30-7 am.
XEDQ, 9530 kcs, Guadalajara, Jal., 7 pm to 1 am.

Radio Podebrady

The Czechoslovakian shortwave transmitter is situated in Podebrady, a spa to the east of Praha, the capital city. Eight different frequencies are available, ranging from 5145 kilocycles to 15320 kilocycles, and thirty kilowatts power is employed.

There is an array of seven aerials at Podebrady, three of them being directional and the other four omnidirectional. At the present time there are only three transmissions, however.

Transmission No. 1 is for North America. The frequencies used are OLR4A-OLR4B, or OLR54-OLR5B. These transmissions, radiated on Mondays, Tuesdays, Thursdays and Fridays, feature news and talks in English and Czech, along with musical entertainment.

Transmission No. II, for South America, is radiated over stations OLR4A-OLR4B or OLR5A-OLR5B. Transmitted on Sundays only, from 5:55 to 8:55 pm, EST, the South America program consists of entertainment in the Spanish and Czech languages.

The European transmission, No. III, employs stations OLR4A and OLR4B, daily; OLR3A on Mondays and Tuesdays; OLR2A-OLR2B on Thursdays; OK1MPT on Fridays and Saturdays. Announcements are given in Czech, German, French and English.

The OLR- stations are prompt to verify correct reports of reception, if International Reply Coupons are furnished. The address is:

Czechoslovak Shortwave Station
Fochova Tr. 16,
Praha XII, Czechoslovakia

The Frequencies

The frequencies employed are:

OK1MPT	5145	OLR4A	11840
OLR2A	6010	OLR4B	11760
OLR2B	6030	OLR54	15230
OLR3A	9550	OLR5B	15320

The new Hollywood studios of the Columbia Broadcasting System, built on a site now called "Columbia Park." The Hollywood CBS outlet is KNX, 50,000 watt broadcaster on 1050 kilocycles.

The Cairo Conference Report

ON the sixteenth of June this summer, the Chairman of the American Delegation to the International Telecommunications Conferences at Cairo, Egypt, submitted his report to the Secretary of State. Through the courtesy of Mr. T. J. Slowie, Secretary of the Federal Communications Commission, we have been provided with a copy of the report, and we present herewith all the provisions which are of interest to the DXing fraternity.

The inaugural session on February 1, 1938, was a joint session of both the Telegraph and Telephone Conference and the Radio Conference. This joint session was opened by His Majesty King Farouk, and was presided over by the Minister of Communications. At this first joint session the preident and vice presidents of the two Conferences were selected, as follows:

As president for the two Conferences, His Excellency Hassan Sabri Pasha.

As vice-presidents of the two Conferences, His Excellency Mahmoud Chaker Mohamed Pasha, and Mr. John Webb.

The first session of the Telegraph and Telephone Conference was held on February 2, and the first session of the Radio Conference, on February 3.

The Telegraph Conference

The nature of the work of the Telegraph Conference was of two kinds, one dealing with matters of the operation of telegraph services, and the other relating to classifications of service offered to the public and the ratio of rates between the various classifications. Since this is of no interest to the majority of our readers we shall not go into detail, but any reader who is interested in having this information may address a request to us, along with a self-addressed stamped envelope and we shall be glad to send a copy of the conclusions.

The American Delegation did not participate in the telephone deliberations of the Telephone and Telegraph Conference, inasmuch as the regulations deal with the conduct and service of the telephone business in Europe. Since American companies are not affected by them, and the United States neither signed them nor contemplate adhering to them, it was not deemed

necessary to dicuss them in the report.

The Radio Conference

The General Radio Regulations which were annexed to the International Telecommunication Convention in Madrid have, in general, been satisfactory to the United States. With the ever-increasing demands for additional radio frequencies, however, due to the expansion of the mobile, fixed and broadcasting services, a further tightening up of existing rules has become necessary.

Some of the more important decisions at the Cairo Radio Conference were:

1. Adoption of a plan for radio channels for the world's seven main inter-continental air routes.

2. Widening of the high-frequency broadcast band.

3. The limitation of the use of spark transmitters.

4. The establishment of restrictions on the use of the 500 kilocycle frequency (the "SOS" frequency).

The Delegation of the United States had the benefit of the Regional Inter-American Agreement at Havana, dated December 13, 1937, which conforms generally with allocations in the United States. This "Havana Plan" was submitted to the Cairo Conference by the Cuban Government, but aside from that, the other Inter-American signatories seemed to assume that the United States would take the initiative in discussions involving the Havana recommendations.

The Delegation recommended that immediate steps be taken to effect the following changes in aviation frequency assignments:

1. Stations now on 8540 shoud be moved to 8640.

2. Stations now on 8560 should be moved to 8660.

3. Stations now on 8640 should be shifted to 8340.

4. Experimental stations in the United States now using 8655 should move to 8660.

Broadcasting

In considering the needs of the broadcasting services, the Conference divided the work under five general headings, viz., long wave broadcasting, regular broadcasting, tropical broadcasting, shortwave broadcasting over long distances, and broadcasting (including television) above 25000 kilocycles.

(1) Long Wave Broadcasting

With respect to long wave broadcasting, the Madrid plan was only slightly altered. The band 160-265 kcs. was continued for European broadcasting, but under the new regulations a few more stations will be allowed in Europe, in the band 150-160 kilocycles. The regulations also provide the use of the band 160-265 kilocycles for broadcasting in South Africa, British India, New Zealand and Australia.

(2) Regular Broadcasting Band

The regular broadcasting band, 550-1500 kilocycles, was continued, and in addition the Conference extended the band to 1560 kilocycles for broadcasting in Europe; and provided for the use of the band 1500-1600 in other regions for boradcasting on a shared basis with the fixed andmobile services. The United States would have preferred an exclusive allocation to broadcasting in this band, but this could not be agreed upon by countries outside the Americas. However, inasmuch as the 1500-1600 kilocycle band is of a regional character, and since it was set

up as an exclusively broadcasting band at the Havana Conference, it is believed that broadcasting will take place in this band in the Americas.

(3) Tropical Broadcasting

One of the most difficult problems confronting the Conference was the selection of frequencies for tropical broadcasting, and the plan as finally drawn up was accepted only with reservations by the governments of Venezuela and Colombia. These countries declare that additional frequencies outside the band allocated for tropical broadcasting may be used by them, but that they will respect the priority of any existing station.

The bands of frequencies allocated to tropical broadcasting are:

(a) 2300-2500 kcs.

(b) 3300-3500 kcs.

(c) 4770-4965 kcs.

In the Americas, only band (a) and part of band (c) (4770-4900 kcs) are permitted for tropical broadcasting.

One important provision requires that the carrier frequencies of broadcasting stations be in multiples of 10 kilocycles, beginning with 4775 and ending with 4895 kilocycles.

(4) Shortwave Broadcasting

The United States delegation recommended adherence to the present provisions whereby frequencies above 6000 kilocycles should be used for long distance communication, and stipulated that existing services should not be removed from their present bands unless suitable replacement bands were allocated.

It was pointed out that it would not be wise to extend the present band unless positive assurance was given by all nations that they would adhere strictly to their allocated frequencies. The Delegation also stated that not less than five kilowatts of power should be used by an international broadcasting station, and that directional antennae should be used wherever practicable. They also suggested that the higher frequencies should be used on a shared basis, which could easily be done due to the difference in time in different parts of the world.

New Shortwave Bands

The new bands allocated to shortwave broadcastings are actually extensions of the existing bands. They are: 6150-6200 kilocycles; 9600-9700 kilocycles; 17800-17850 kilocycles; 21550-21750 kilocycles.

Every station operating within these bands, not in the broadcasting service, is required to move to another frequency as soon as possible. All shortwave broadcasting stations which are working outside these bands are required to move to the band as soon as possible.

In addition to these new bands, the amateur band of 7200-7300 kilocycles has been made available for shared use between amateurs and broadcasting services outside the Americas. This band shall be exclusively an amateur band in the Americas.

The Amateurs

The United States Delegation espoused the cause of the amateurs, and vigorously oposed the Italian suggestion that parts of the 7 and 14 megacycle bands be assigned to broadcasting services. This Italian proposal received strong support from many countries outside the Americas, and this encroachment upon the amateurs' frequencies was averted only by the American compromise in the 7200-7300 kilocycle band.

The Radio Symbols

For many years, and especially since the Washington Conference in 1927, there has been provided the general call "CQ", used when a station wishes to enter into communication with a mobile station without knowing the call letters of the mobile stations within their range. Under some circumstances it is used as a general call to all stations, without request for reply, and intended to be used or read by anyone who can receive it. In recent years, however, the use of this general call has become confused and misunderstood. In order to provide for this situation, a new call, "CP" has been adopted as a call to several stations without request for a reply.

Several changes were made in the signals known as "Q" signals. The signal "QRK" has been changed to indicate "legibility", as distinct from "signal strength." QRK, now followed by numbers from 1 to 5, indicates the degree of legibility.

The symbol "QSA" for strength of signals has been retained, and is also supplemented by the numbers 1 to 5, indicating the degree of signal strength.

Two new symbols, "QUK" and "QUL" have been added, for the benefit of aircraft in requesting condition of sea and height of waves.

Dr. Lee de Forest, one of radio broadcasting's pioneers, took his first look at television since 1934 the other day at a television demonstration in Radio City. "It was very impressive," he said at the conclusion of a film transmitted by coaxial cable from the NBC's experimental studios. "If programs like this can be laid down over a radius of 35 or 40 miles, I see no reason why television should not be a marvelous success."

DX Calendar

The Cleveland Radio Club has arranged with station KFBB at Great Falls, Mont., to broadcast a special program on October 30, commencing at 1 am, EST. KFBB transmits on 1280 kcs. with 1000 watts power.

Herbert Tucker, of the International DXers' Alliance, has arranged special pograms from two foreign stations. The first of these will come on October 15, from 3 to 4 am, EST. The station is PRD2, Rio de Janeiro, Brazil. This station transmits on 1060 kcs. with 5 kilowatts of power.

The second IDA program will be from EAJ7, Madrid, Spain, on December 18, probably from 1 to 2 am. The frequency is 1095 kilocycles, and 5 kilowatts of power is employed.

Uncle Jim McWilliams, who directs NBC'S Question Bee on Saturday nights, finds men are more successful with his questions than women. Maybe, he explains, it's because women are more susceptible to mike fright.

Half a million dollars is the valuation of the instruments heard in NBC's Voice of Firestone symphony orchestra on Monday nights. This represents an average investment of more than $7,000 for each of the 70 musicians in the orchestra.

Tommy Dorey has been bitten by the camera bug in Hollywood. The NBC swing maestro who is filling an engagement at the film capital has just bought a complete movie camera set. His arrangers are doing likewise.

In her various NBC programs, Actress Mercedes McCambridge points out that she has been decapitated, burned to death in a fire, fried in fat, stabbed, shot, poisoned and gassed to death.

WHAT'S ON THE AIR TONIGHT

Fill in the calls and frequencies of the stations through which you best receive the network programs. You can then turn quickly to the one that has the feature you want.

Network	Stations
Columbia (C)	
Mutual (M)	
National Blue (B)	
National Red (R)	

Time: E—Eastern; C—Central; M—Mountain; P—Pacific. For Daylight Time, add one hour to Standard Time.

While these programs are correct at the time of going to press, changes are made very frequently.

To learn which stations broadcast the various network programs in your locality, look up your own, or neighboring, city, in the Index by Locations, commencing on paage 76.

SUNDAY

E-10:30 am, C-9:30, M-8:30, P-7:30
C—Major Bowes' Family
Entire Network except Pacific Network first half hour; full network last half hour.

E-11:30 am, C-10:30, M-9:30, P-8:30
C—Salt Lake City Choir
Available to full network.
CBC—Radio City Music Hall
To CGC National Network
B—Radio City Music Hall
To full network

E-noon, C-11:00, M-10:00, P-9:00
C—Church of the Air
Available to full network
E-1:00 pm, C-Noon, M-11:00, P-10:00
B—RCA Magic Key
CBF CBL CFCF CMQ KAND KARK KDKA KDYL KECA KERN KEX KFBK KFDM KFSD KFYR KGA KGBX KGHF KGHL KGIR KGNC KGO KGU KIDO KJR KLO KMA KMED KMJ KOA KOAM KOB KOIL KPFA KRGV KRIS KSEI KSO KSOO KTAR KTBS KTHS KTMS KVOO KWG KWK KXYZ WABY WAGA WALA WAVE WBAL WBOW WBRE WBZ WBZA WCOL WCSC WCSH WDAY WDSU WEAN WEBC WEBR WENR WFAA WFBC WFEA WFIL WLA WGAL WGBF WHAM WHK WIBA WICC WIOD WIRE WIS WJAX WJBO WJDX WJTN WJZ WKY WLEU WLW WMAL WMFF WMPS WMT WOAI WOOD WORK WOWO WPTF WREN WROL WRTD WSAN WSGN WSM WSOC WSPD WSUN WSYR WTAR WTCN WTMJ WWNC WXYZ
E-2:00 pm, C-1:00, M-Noon, P-11:00
C—Everybody's Music
Available to full network

E-3:00 p.m., C-2:00, M-1:00, P-Noon
CBC—Benay Venuta's Program
Available to National Network
M—Benay Venuta's Program
Available to full network

E-4:00 pm, C-3:00, M-2:00, P-1:00
R—Marion Talley, Soprano
KDYL KFI KGW KHQ KOA KPO KSD KSTP KYW WBEN WCAE WCOL WCSH WDAF WDEL WEAF WEBC WFBR WGY WHO WIBA WIRE JAR WMAQ WNAC WOOD WOW WRC WSAI WTAG WTAM WTIC WTMJ WWJ

E-4:30 pm, C-3:30, M-2:30, P-1:30
C—Guy Lombardo's Orchestra
KFH WMBC KMOX KOMA KTUL WABC WBNS WBRK WCAO WCAU WDRC WEEI WFBL WFBM WGAR WGR WHAS WHEC WIBX WJR WJSV WMAS WOKO WORC WPRO WWL WWVA

E-5:00 pm, C-4:00, M-3:00, P-2:00
R—Catholic Hour
Available to full network

E-6:00 pm, C-5:00, M-4:00, P-3:00
R—Hobby Lobby; Harry Salter
CBM KPRC KSD KSTP KVOO KYW WBAP WBEN WCAE WCOL WCSH WDEL WEAF WFBR WFLA WGAL WGL WGY WIOD WJAR WJAX WLW WMAQ WMBG WNAC WOAI WORK WPTF WRC WSOC WSPD WTAG WTAM WTAR WTIC WWJ WWNC

E-6:30 pm, C-5:30, W-4:30, P-3:30
C—Passing Parade; Oscar Bradley
KLBA KLZ KRLD KTRH KTSA KTUL KWKH WABC WACO WADC WALA WBIG WBNS WBRC WBT WCA WCAU WCOA WDAE WDBJ WDBO WDNC WDOD WDRC WEAN WFBL WFBM WFEA WGR WGST WHAS WHEC WHK WHP WIBX WICC WJAS WJR WJSV WKBN WKRC WLAC WLBZ WMAS WMBR WNAC WNOX WOKO WORC WQAM WREC WSBT WSFA WSJS WSMK WSPD WTOC WWL WWVA

E-7:00 p.m., C-6:00, M-5:00, P-4:00
R—Charlie McCarthy; Stroud Twins
CFCF CRCT KDYL KFI KFYR KGW KHQ KOA KOMO KPO KPRC KSD KSTP KTAR KTBS KVOO KYW WAVE WBEN WCAE WCSH WDAF WDAY WEAF WEBC WFAA WFBR WFLA WGY WHO WIBA WIOD WIRE WIS WJAR WJAX WJDX WKY WLW WMAQ WMC WNAC WOAI WOW WPTF WRC WRVA WSB WSM WSMB WSOC WSUN WTAG WTAM WTAR WTIC WTMJ WWJ WWNC

E-7:30 pm, C-6:30, M-5:30, P-4:30
C—Philharmonic Symphony
Available to full network

E-8:00 pm, C-7:00, M-6:00, P-5:00
R—Manhattan Merry Go-Round
CFCF KDYL KFI KFYR KGW KHQ KOA KOMO KPO KPRC KSD KSTP KTBS KTHS KYW WAVE WBEN WCAE WCKY WCSH WDAF WDAY WEAF WEBC WEEI WFAA WFBR WFLA WGY WHO WIBA WIOD WIRE WIS WJAR WJAX WJDX WKY WMAQ WMC WOAI WOW WPTF WRC WRVA WSB WSM WSMB WSOC WTAG WTAM WTAR WTIC WTMJ WWJ WWNC

E-8:30 pm, C-7:30, M-6:30, P-5:30
R—Album of Familiar Music
CFCF CRCT KDYL KFI KFYR KGW KHQ KOA KOMO KPO KPRC KSD KSTP KTBS KYW WAPI WAVE WBEN WCAE WCSH WDAF WDAY WEAF WEBC WEEI WFAA WFBR WFLA WGY WHO WIBA WIOD WIS WJAR WJAX WJDX WKY WMAQ WMC WOAI WOW WPTF WRC WRVA WSAI WSB WSM WSMB WSOC WTAG WTAM WTAR WTMJ WWJ WWNC

E-9:00 pm, C-8:00, M-7:00, P-6:00
R—Horace Heidt's Brigadiers
KDYL KECA KEX KFSD KGA KJR KSD KSTP KOA KYW WCAE WCSH WDAF WDEL WEAF WFBR WGY WHO WIRE WJAR WLW WMAQ WNAC WOW WRC WTAG WTAM WTIC WWJ

MONDAY

E-5:45 pm, C-4:45, M-3:45, P-2:45
B—Lowell Thomas
CRCT KDKA WBAL WBZ WBZA
WFLA WIOD WJAX WJZ WLW
WXYZ

E-6:00 pm, C-5:00, M-4:00, P-3:00
R—Amos 'n' Andy
KSD KSTP KYW WBEN WCAE
WCSH WEAF WFBR WGY WHO
WJAR WLW WNAC WRC WTAG
WTAM WTIC WWJ

R—Uncle Ezra's Radio Station
KARK KFYR KGBX KGNC KPRC
KSTP KTBS KTHS KVOO KYW
WBAP WBEN WCAE WCKY WCOL
WCSH WDAF WDAY WEAF WEBC
WFAA WFBR WGBF WGY WHO
WIBA WIRE WJAR WKY WMAQ
WNAC WOAI WOOD WOW WRC
WTAG WTAM WTIC WTMJ

E-6:30 pm, C-5:30, M-4:30, P-3:30
M—The Lone Ranger
WFIL WNBF WSYR WOR WXYZ

E-6:45, C-5:45, M-4:45, P-3:45
C—Boake Carter
KDAL KFAB KFH KGLO KLRA
KMBC KMOX KRLD KRNT KSCJ
KTRH KWKH WABC WADC WAPI
WBBM WBIG WBNS WBT WCAO
WCAU WCCO WCHS WDAE
WDBJ WDBO WDOD WDRC WEEI
WEOA WFAM WFBL WFBM WGAR
WGST WHAS WHEC WHIO WHP
WISN WJAS WJNO WJR WJSV
WKBH WKBN WKRC WLAC WMBD
WMBR WMFG WNAX WNOX WOC
WOKO WORC WPRO WQAM WREC
WRVA WTAQ WWL WWVA

E-7:00 pm, C-6:00, M-5:00, P-4:00
R—Burns and Allen
CRCT KYW WBEN WCAE WCSC
WCSH WEAF WFBR WFLA WGY
WHO WIOD WIRE WIS WJAR
WJAX WLW WMAQ WNAC WPTF
WRC WRVA SOC WTAG WTAM
WTAR WTIC WWJ

E-7:30 pm, C-6:30, M-5:30, P-4:30
C—Pick and Pat
WBT WCAO WCAU WDRC WEAN
WFBL WGR WGST WHEC WHK
WHP WICC WJAS WJR WJSV
WKRC WLBZ WMAS WNAC WOKO
WORC WSPD

E-9:00 pm, C-8:00, H-7:00, P-6:00
C—Wayne King and Orchestra
KDB KERN KFAB KFBK KFPY
KFRC KGB KHJ KLZ KMBC KMJ
KMOX KOIN KOL KRNT KSL KVI
KWG WAAB WABC WADC WBBM
WENS WBT WCAO WCAU WCCO
WDRC WEAN WFBL WFBM HAS
WHK WIBW WJAS WJR WJSV
WKBW WKRC WOKO WSPD WWL
R—Contented Program
CFCF CRCT KDYL KFI KGW KHQ
KOA KOMO KPO KPRC KSD KYW
WBEN WCAE WCSH WDAF WEAF
WEEI WFBR WFLA WGY WHO
WIOD WIS WJAR WJAX WKY
WMAQ WMC WOAI WOW WPTF
WRC WRVA WSB WSM WTAG
WTAM WTAR WTIC WWJ WWNC
Also on Canadian Network

TUESDAY

E-5:45 pm, C-4:45, M-3:45, P-2:45
B—Lowell Thomas, see Monday

E-6:00 pm, C-5:00, M-4:00, P-3:00
R—Amos 'n' Andy, see Monday
B—Easy Aces
KDKA KDYL KFI KGW KHQ KOA
KOIL KOMO KPO KSO KWK WBAL
WBZ WBZA WCKY WENR WFIL
WGAR WHAM WHIO WIRE WJZ
WMAL WMT WSYR WXYZ

E-7:00 pm, C-6:00, M-5:00, P-4:00
R—Johnny Presents—
KFYR KPRC KSD KSTP KTBS
KTHS KVOO KYW WAVE WBAP
WBEN WCAE WCSH WDAF WDAY
WEAF WEBC WFBR WFLA WGY
WHO WIBA WIOD WIS WJAR
WJAX WJDX WKY WLW WMAQ
WMC WNAC WOW WPTF WRC
WRVA WSB WSM WSMB WSOC
WSUN WTAG WTAM WTAR WTIC
WTMJ WWJ WWNC

E-7:30 pm, C-6:30, M-5:30, P-4:30
R—Wayne King's Orchestra
KFYR KPRC KSD KSTP KTBS
KVOO KYW WAVE WBAP WBEN
WCAE WCKY WCSH WDAF WDAY
WEAF WEBC WEEI WFBR WGY
WHO WHIO WIBA WIRE WJAR
WJDX WKY WMAQ WMC WOAI
WOW WRC WSB WSM WSMB
WTAG WTAM WTIC WTMJ WWJ

E-8:00 pm, C-7:00, M-6:00, P-5:00
R—Vox Pop; Sidewalk Interviews
KSD KYW WBEN WCAE WCKY
WCSH WDAF WEAF WEEI FBR
WGY WHO WIRE WJAR WMAQ
WOW WRC WTAG WTAM WTIC
WWJ

E-8:30 pm, C-7:30, M-6:30, P-5:30
C—Benny Goodman's Orchestra
KFAB KFH KFPY KGKO KIRO
KLRA KLZ KMBC KMOX KNOW
KNX KOIN KOMA KOY KRLD
KRNT KSCJ KSFO KSL KTRH
KTSA KTUL KVI KVOR KWKH
WABC WACO WADC WALA WBBM
WBIG WBNS WBRC WBT WCAO
WCAU WCCO WCHS WDAE WDBJ
WDBO WDNC WDOD WDRC WEEI
WFBL WFBM WGAR WGST WHAS
WHEC WHIO WHP WIBOW WIBX
WISN WJAS WJR WJSV WKBB
WKBN WKBW WKRC WLAC WLBZ

R—Voice of Firestone
CFCF CRCT KFYR KPRC KSD
KSTP KTBS KVOO KYW WAVE
WBEN WCAE WCSC WCSH WDAF
WDAY WEAF WEBC WEEI WFAA
WFBC WFBR WFLA WGY WHO
WIBA WIOD WIRE WIS WJAR
WJAX WJDX WKY WMAQ WMC
WOAI WOW WPTF WRC WRVA
WSB WSM WSMB WSOC WTAG
WTAM WTAR WTIC WTMJ WWJ
WWNC

E-8:00 pm, C-7:00, M-6:00, P-5:00
C—Orson Welles; Drama
Available to full network
WMAS WMBD WMBR WNAX
WNBF WNOX WOC WOKO WORC
WPG WPRO WQAM WREC WRVA
WSBT WSFA WSJS WTOC WWL

E-9:00 pm, C-8:00, M-7:00, P-6:00
R—Believe It Or Not
KANS KARK KDYL KELO KERN
KFBK KFDM KFI KFYR KGBX
KGNC KGW KHQ KMJ KOA KOMO
KPO KPRC KSD KSTP KTAK
KTBS KTSM KVOO KWG KYW
WAVE WBEN WBRC WBRE WCAE
WCOL WCSH WDAF WDAY WDEL
WEAF WEBC WFBC WFBR WFLA
WGBF WGL WGY WHO WIBA
WIOD WIRE WIS WJAR WJAX
WKY WLW WMAQ WMBG WMC
WNAC WOAI WORK WOW WPTF
WRC WROL WSAI WSB WSM
WSMB WSOC WSPD WSUN WTAG
WTAM WTAR WTIC WTMJ WWJ

WEDNESDAY

E-5:45 pm, C-4:45, M-3:45, P-2:45
B—Lowell Thomas, see Monday

E-6:00 pm, C-5:00, M-4:00, P-3:00
B—Easy Aces, see Tuesday
R—Amos 'n' Andy, see Monday

E-6:30 pm, C-5:30, M-4:30, P-3:30
M—The Lone Ranger
WAAB WKBW WNBF WOL WSYR
WOR WXYZ

E-6:45 pm, C-5:45, M-4:45, P-3:45
C—Boake Carter, see Monday

E-7:00 pm, C-6:00, M-5:00, P-4:00
R—One Man's Family
CBL KDYL KOA KPRC KSD KSTP
KVOO KYW WAVE WBAP WBEN
WBRC WCAE WDAF WDEL WEAF
WEBC WFBR WFLA WGY WHAM
WHO WIBA WIOD WIRE WIS
WJAR WJAX WJDX WKY WLW
WMAQ WMBG WMC WNAC WOAI
WOW WRC WSAN WSB WSM
WSMB WSOC WSUN WSYR TAG
WTAM WTAR WTIC WTMJ WWJ
WWNC

E-7:30 pm, C-6:30, M-5:30, P-4:30
C—Paul Whiteman's Orchestra
KFAB WABC WADC WAIM WBBM
WBIG WBNS WBT WCAO WCAU
WCHS WDAE WDBJ WDBO WDNC
WEEI WFAM WFBL WGAR WGBI
WGH WGST WHEC WHIO WHP
WIBX WJAS WJNO WJR WJSV
WKBB WKRC WLBZ WMAS WMBR
WMMN WNBF WNBX WOKO
WORC WPAR WPG WPRO WQAM
WRVA WSJS WTOC
R—Tommy Dorsey's Orchestra
KARK KPRC KSD KSTP KTBS
KYW WAVE WBEN WBRC WCAE
WCSH WDAF WDEL WEAF WFAA
WFBR WFLA WGY WHO WIOD
WIRE WIS WJAR WJAX WKY
WLW WMAQ WMBG WMC WNAC
WOOD WOW WPTF WRC WSB
WSM WSMB WSOC WSUN WTAG
WTAM WTAR WTIC WTMJ WWJ
WWNC

E-9:00 pm, C-8:00, M-7:00, P-6:00
R—Kay Kyser's Orchestra
KANS KARK KDYL KERN KFBK
KFI KFYR KGBX KGHL KGIR
KGNC KGU KGW KHQ KIDO KMJ
KOA KOB KOMO KPFA KPO
KPRC KSD KSEI KSTP KTAR
KTBS KTHS KTSM KVOO KWG

KYW WAVE WBEN WBRC WCAE WCSC WCSH WDAF WDAY WDEL WEAF WEBC WFAA WFBC WFBR WFEA WFLA WGL WGY WHO WIBA WIOD WIRE WIS WJAR WJAX WJDX WKY WLW WMAQ WMBG WMC WNAC WOAI WOOD WORK WOW WPTF WRC WSB WSM WSMB WSOC WSUN WTAG WTAM WTAR WTIC WTMJ WWJ WWNC

E-9:30 pm, C-8:30, M-7:30, P-6:30
C—Edgar Guest; Frankie Masters
KFAB KMBC KMOX KRNT WABC WBBM WBNS WCAO WCAU WCHS WDRC WEEI WFBL WFBM WHAS WHEC WHIO WIBX WJAS WJR WKBW WKRC WMAS WNBF WOC WOKO WORC WPRO

E-10:30 pm, C-9:30, M-8:30, P-7:30
C—Paul Whiteman's Orchestra
KDAL KFBB KFH KFPY KGAR KGLO KGVO KIRO KLRA KLZ KMOX KNOW KNX KOH KOIN KOMA KOY KRLD KRNT KSCJ KSFO KSL KTRH KTSA KTUL KVI KVOR KWKH WACO WAPI WCCO WCOA WCOC WDOD WFBM WHAS WHLB WIBW WISN WKBH WLAC WMFG WMBD WNOX WOC WREC WSFA WTAQ WWL
M—The Lone Ranger
KALE KDB KDON KFRC FFXM KGB KGDM KHJ KPMC KQW KSLM KVOE KXO

THURSDAY

E-5:45 pm, C-4:45, M-3:45, P-2:45
B—Lowell Thomas, see Monday

E-6:00 pm, C-5:00, M-4:00, P-3:00
R—Amos 'n' Andy, see Monday
B—Easy Aces, see Tuesday

E-6:45 pm, C-5:45, M-4:45, P-3:45
C—Boake Carter, see Monday
R—Rudy Vallee's Hour
E-7:00 pm, C-6:00, M-5:00, P-4:00
KDYL KFI KGW KHQ KOA KOMO KPO KPRC KSD KSTP KVOO KYW WAVE WBAP WBEN WBRC WCAE WCSH WDAF WDEL WEAF WEBC WFAA WFBR WFLA WGY WHO WIBA WIOD WIRE WJAR WJAX WKY WLW WMAQ WMBG WMC WNAC WOAI WRC WSB WSM WSMB WTAG WTAM WTIC WTMJ WWJ

E-8:00 pm, C-7:00, M-6:00, P-5:00
C—Major Bowes' Amateurs
CFRB CKAC KFAB KFBB KFPY KGAR KLRA KLZ KMBC KMOX KNOW WNX KOIN KOMA KOY KRLD KRNT KSCJ KSFO KSL KTRH KTSA KTUL KVI KVOR KWKH WABC WACO WADC WAPI WBBM WBIG WBNS WBT WCAO WCAU WCCO WCHS WCOA WDAE WDBJ WDBO WDNC WDOD WDRC WEEI WEOA WFBL WFBM WGAR WGBI WGST WHAS WHEC WHIO WHP WIBW WIBX WISN WJAS WJNO WJR WJSV WKBH WKBN WKBW WKRC WLAC WLBZ WMAS WMBD WMBR WMMM WNAX WNBF WNOX WOC WOKO WORC WPAR WPG WPRO WQAM WREC WRVA WSFA WSJS WTAQ WTOC WWL

E-9:00 pm, C-8:00, M-7:00, P-6:00
R—Bing Crosby; Bob Burns
CBF CBL CBM KARK KDYL KFI KGHL KGIR KGW KHQ KOA KOMO KPFA KPO KPRC KSD KSTP KTAR KTBS TBS KVOO KYW WAVE WBAP WBEN WBRC WCAE WCSH WDAF WDEL WEAF WEBC WFBC WFBR WFLA WGY WHAM WHO WIBA WIOD WIRE WIS WJAR WJAX WJDX WKY WLW WMAQ WMBG WMC WNAC WOAI WOW WPTF WRC WROL WSB WSM WSMB WSOC WSYR WTAG WTAM WTAR WTIC WTMJ WWJ

FRIDAY

E-5:45 pm, C-4:45, M-3:45, P-2:45
B—Lowell Thomas, ee Monday

E-6:00 pm, C-5:00, M-4:00, P-3:00
R—Amos 'n' Andy, See Monday

E-6:15 pm, C-5:15, M-4:15, P-3:15
R—Uncle Ezra, See Monday

E-645 pm, C-5:45, M-4:45, P-3:45
C—Boake Carter, See Monday

E-7:00 pm, C-6:00, M-5:00, P-4:00
R—Cities Service Concert
CRCT CFYR KOA KPRC KSD KSTP KTBS KTHS KVOO KYW WBAP WBEN WCAE WCSH WDAF WDAY WEAF WEBC WEEI WFAA WFBR WGY WHO WIBA WIOD WJAR WKY WMAQ WOAI WOW WRC WRVA WSAI WTAG WTAM WTIC WTMJ WWJ

E-8:00 pm, C-7:00, M-6:00, P-5:00
B—George Olson's Orchestra
KDKA KFEL KLO KOIL KPRC KSO WTAR WTBS KVOO KWK WABY WAVE WBAL WBRC WBZ WBZA WCSC WEAN WEBC WEBR WFAA WFBC WFIL WFLA WHAM WHK WICC WIOD WIS WJAX WJDX WJZ WKY WLS WLW WMAL WMC WMT WOAI WOWO WPTF WREN WROL WRTD WSB WSM WSMB WSOC WSPD WSUN WSYR WTAR WTNC WWNC WXYZ
R—Frank Munn; Abe Lyman
KSD KYW WBEN WCAE WCSH WDAF WEAF WEEI WFBR WGY WJAR WLW WMAQ WOW WRC WTAG WTAM WWJ
E-8:30 pm, C-7:30, M-6:30, P-5:30
B—The March of Time
KDKA KECA KERN KFBK KFEL KFSD KGA KGO KJR KLO KMJ KOIL KSO KWG KWK KXYZ WABY WAGA WBAL WBZ WBZA WCKY WCOL WCSC WDSU WEAN WEBR WFIL WHAM WHK WICC WJZ WLS WMAL WMPS WMT WREN WSPD WSYR WXYZ
B—Death Valley Days
KDKA KDYL KFI KGW KHQ KOIL KOMO KPO KSO KWK WBAL WBZ WBZA WFIL WGAR WHAM WJZ WLS WLW WMAL WMT WREN WSYR WXYZ

E-9:00 pm, C-8:00, M-7:00, P-6:00
R—First Nighter; Drama
KDYL KFI KFYR KGW KHQ KOA KOMO KPO KPRC WSD KSTP KTBS KTHS KYW WAVE WBEN WCAE WCSH WDAF WDAY WEAF WEBC WEEI WFAA WFBR WFLA WGY WHO WIBA WIOD WIS WJAR WJAX WJDX WKY WLW WMAQ WMC WPTF WRC WRVA WSB WSM WSMB WSOC WTAG WTAM WTAR WTIC WTMJ WWJ WWNC

SATURDAY

E-6:30 pm, C-5:30, M-4:30, P-3:30
B—Uncle Jim's Question Bee
WBZ WBZA WGY WJZ

E-8:00 pm, C-7:00, M-6:00, P-5:00
B—National Barn Dance
KDKA KOIL KPRC KSO KTBS KTHS KWK WABY WAPI WAVE WBAL WBAP WBZ WBZA WFIL WFLA WHK WHAM WIOD WIRE WIS WJAX WJDX WJZ WKY WLS WMAL WMC MMT WOAI WOOD WPTF WREN WRVA WSB WSMB WSOC WSUN WSYR WTAR WWNC WXYZ
C—Prof. Quiz
KDB KERN KFAB KFBK KFPY KFRC KGB KHJ KLRA KLZ KMBC KMJ KMOX KOIN KOL KOMA KRLD KRNT KSL KTRH KTSA KVI KWG WABC WBBM WBNS WBT WCAO WCAU WCCO WDAE WDBO WDRC WEAN WFBL WFBM WJAS WJR WJSV WKBW WKRC WMBR WOKO WQAM WREC WSPD WWL

E-9:00 pm, C-8:00, M-7:00, P-6:00
C—Your Hit Parade
KERN KFAB KFBK KFH KEPY KFRC KGB KGKO KGMB KHJ KLRA KLZ KMBC KMJ KMOX KOH KOIN KOL KOMA KRLD KRNT KSCJ KSL KTRH KTSA KTUL KVI KVOR KWG KWKH WABC WACO WADC WALA WBBM WBIG KBNS WBRC WBT WCAO WCAU WCCO WCOA WDAE WDBJ WDBO WDNC WDOD WDRC WEAN WFBL WFBM WFEA WGST WHAS WHEC WHK WHP WIBW WIBX WICC WISN WJAS WJR WJSV WKBW WKRC WLAC WLBZ WMAS WMBD WMBG WMBR WNAC WNAX WNOX WOC WOKO WORC WPG WQAM WREC WSBT WSFA WSJS WSPD WTOC WWL WWVA

CLASSIFIED INDEX TO CHAIN PROGRAMS—This index has been omitted, for this month only, on account of the many changes which are being made, and will be made, on account of Daylight Saving Time. The Classified Index will be resumed in the October issue.

North American Police Stations

1596 kcs.

WPGG Findlay, Ohio
WPGQ Columbus, Ohio
WPHC Masillon, Ohio
WPHK Wilmington, Ohio
WPHT Cambridge, Ohio
WPFT Portable in Ohio

1610 kcs.

WQPC Chicago, Ill.
WQPD DuQuoin
WQPF Effingham, Ill.
WQPG Sterling, Ill.
WQPM Macomb, Ill.
WQPP Pontiac, Ill.
WQPS Springfield, Ill.
WQPX Portable in Ill.

1626 kcs.

KOSO Oklahoma City, Okla.
KOSP Portable in Okla.
KOSR Portable in Okla.
KOSU Portable in Okla.
KOSW Portable in Okla.
KOSX Portable in Okla.
KOSY Portable in Okla.
WBSP Charleston, W. Va.
WMWV Moundsville, W. Va.
WPWV Charleston, W. Va.
WSWV Shinnston, W. Va.

1634 kcs.

KRNP Reno, Nev.
WPHE Indianapolis, Ind.
WPHS Chesterton, Ind.
WPHU Jasper, Ind.
WQFE Seymour, Ind.
WQFW Columbia City, Ind.
WRSA Scituate, R. I.

1642 kcs.

KASP Little Rock, Ark.
WRDH Houghton Heights, Mich.
WRDP Paw Paw, Mich.
WRDS East Lansing, Mich.

1658 kcs.

KNHD Redwood Falls, Minn.
KSPT Pecos, Texas
KSW Berkeley, Calif.
WPGC S. Schenectady, N. Y.

1666 kcs.

WMP Framingham, Mass.
WPEL W. Bridgewater, Mass.
WPEV Portable in Mass.
WPEW Northampton, Mass.
WSPN Nantucket, Mass.
WSPO Oak Bluffs, Mass.
..... Yarmouth, Mass.

1674 kcs.

KGHK Palo Alto, Calif.
KGZT Santa Cruz, Calif.
KHPA Lees Summit, Mo.
KHPB Macon, Mo.
KHPC Kirkwood, Mo.
KHPD Springfield, Mo.
KHPE Poplar Bluff, Mo.
KHPF Jefferson City, Mo.
KIUK Jefferson City, Mo.
KSPH Hillsborough, Calif.
KWCP Watsonville, Calif.
WPSP Harrisburg, Pa.

1682 kcs.

KACC Fairfield, Iowa
KACD Atlantic, Iowa
KADJ Sacramento, Calif.
KADK Hilo, Hawaii
KAPI Grass Valley, Calif.
KGHO Des Moines, Iowa
KNFN Cedar Falls, Iowa
KNFO Storm Lake, Iowa
KSCY Yreka, Calif.
KSPR Redding, Calif.
KADW Portable in Iowa

1698 kcs.

KNGG Phoenix, Ariz.
WAKJ Duval County, Fla.
WAKR Pensacola, Fla.
WAKS Orlando, Fla.
WAKT Tampa, Fla.
WAKU Ft. Myers, Fla.
WAKZ W. Palm Beach, Fla.
WDSP New Castle, Del.
WEVN Belair, Md.
WMSC Cumberland, Md.
WMSE Easton, Md.
WMSF Frederick, Md.
WMSH Conowingo, Md.
WMSR Randallstown, Md.
WMSW Waldorf, Md.
..... Hartford, Md.

1706 kcs.

KGPC St. Louis, Mo.
KOHA Astoria, Ore.
KOHB Baker, Ore.
KOHC Coquille, Ore.
KOHD The Dalles, Ore.
KOHE Eugene, Ore.
KOHF Portable in Ore.
KOHG Grant's Pass, Ore.
KOHH Portable in Ore.
KOHK Klamath Falls, Ore.
KOHL La Grande, Ore.
KOHM Milwaukee, Ore.
KOHN Bend, Ore.
KOHP Pendleton, Ore.
KOHR Roseburg, Ore.
KOHS Salem, Ore.
KOHU Burns, Ore.
WANH Raleigh, N. C.
WANI Williamston, N. C.
WANJ Asheville, N. C.
WANK Salisbury, N. C.
WANL Elizabethtown, N. C.
WKDU Cincinnati, Ohio
WPET Lexington, Ky.

1712 kcs.

KACU Longview, Texas
KADM Gainesville, Texas
KADT Marshall, Texas
KAPM Wailuku, Hawaii
KGHY Whittier, Calif.
KGJX Pasadena, Calif.
KGPJ Beaumont, Texas
KGPL Los Angeles, Calif.
KGPQ Honolulu, Hawaii
KGPR Fort Worth, Texas
KGZL Shreveport, La.
KGZQ Waco, Texas
KGZY San Bernardino, Calif.
KHAA Wahiawa, Hawaii
KHAB Kaneoha, Hawaii
KHAC Pearl City, Hawaii
KHTP Houston, Texas
KNFJ Pomona, Calif.
KNGE Cleburne, Texas
KNGL Galveston, Texas
KNGX Los Angeles, Calif.
KNHF Denton, Texas
KPAT Port Arthur, Texas
KSBC San Bernardino, Calif.
KVP Dallas, Texas
WAKF Everett, Mass.
WAKV Fall River, Mass.
WMPB Brockton, Mass.
WMPH Newport, R. I.
WMPN Needham, Mass.
WMPR Revere, Mass.
WPDB Chicago, Ill.
WPDC Chicago, Ill.
WPDD Chicago, Ill.
WPDU Pittsburgh, Pa.
WPED Arlington, Mass.
WPEH Somerville, Mass.
WPEI E. Providence, R. I.
WPFA Newton, Mass.
WPFN Fairhaven, Mass.
WPGF Providence, R. I.
WPGU Cohasset, Mass.
WPGV Boston, Mass.
WPHG Medford, Mass.
WPIA Warren, R. I.
WQFL Oak Park, Ill.
WQFX Waukegan, Ill.
..... Westport, Mass.

2366 kcs.

WAKC Freehold, N. J.

2382 kcs.

KGHT	Brownsville, Texas
KGHV	Corpus Christi, Texas
KNFE	Duluth, Minn.
KNHB	Green Bay, Wis.
WAKE	Oshkosh, Wis.
WASP	Selma, Ala.
WMPE	Elkhorn, Wis.
WMPM	Montgomery, Ala.
WPDN	Auburn, N. Y.
WPEA	Syracuse, N. Y.
WPFM	Birmingham, Ala.
WPGW	Mobile, Ala.

2406 kcs.

KGHZ	Little Rock, Ark.
KGPW	Salt Lake City, Utah
KNHE	Fort Smith, Ark.

2414 kcs.

KACE	Olympia, Wash.
KACJ	Wentachee, Wash.
KACK	Bellingham, Wash.
KACN	Ventura, Calif.
KACO	Tracy, Calif.
KACS	Bakersfield, Calif.
KACV	Walla Walla, Wash.
KADL	Port Orchard, Wash.
KAPH	Stockton, Calif.
KAPL	Hoquiam, Wash.
KASE	Modesto, Calif.
KASF	Bremerton, Wash.
KGHS	Spokane, Wash.
KGHW	Centralia, Wash.
KGPA	Seattle, Wash.
KGPF	Santa Fe, N. Mex.
KGPS	Bakersfield, Calif.
KGZA	Fresno, Calif.
KGZM	El Paso, Texas
KGZN	Tacoma, Wash.
KGZO	Santa Barbara, Calif.
KGZV	Aberdeen, Wash.
KGZX	Albuquerque, N. Mex.
KNFA	Clovis, N. Mex.
KNFI	Mt. Vernon, Wash.
KNFP	Everett, Wash.
KNGU	Yakima, Wash.
KNGY	Lodi, Calif.
KSOM	Merced, Calif.
WAKN	Herkimer, N. Y.
WCK	Detroit, Mich.
WMO	Highland Park, Mich.
WMPF	Waycross, Ga.
WPDA	Tulare, Calif.
WPDJ	Passaic, N. J.
WPDX	Detroit, Mich.
WPDY	Atlanta, Ga.
WPFH	Baltimore, Md.
WPFI	Columbus, Ga.
WPGH	Albany, N. Y.
WPGJ	Utica, N. Y.
WPGM	La Grange, Ga.
WQFB	Macon, Ga.
WQFJ	Oneonta, N. Y.
WQFV	Augusta, Ga.

2422 kcs.

KACA	Atchison, Kans.
KACI	Eureka, Calif.
KADS	Marysville, Calif.
KAGD	Woodland, Calif.
KASG	Willows, Calif.
KGPE	Kansas City, Mo.
KGPG	Vallejo, Calif.
KGZC	Topeka, Kans.
KNGF	Sacramento, Calif.
KNGV	Salina, Kans.
WMJ	Buffalo, N. Y.
WMFP	Niagara Falls, N. Y.
WPDR	Rochester, N. Y.
WPDW	Washington, D. C.
WPFU	Portland, Maine
WPHB	Nashua, N. H.
.....	Rockland, Maine

2430 kcs.

KGPB	Minneapolis, Minn.
KGZJ	Phoenix, Ariz.
KNGP	Shreveport, La.
KNHG	Prescott, Ariz.
WAKH	Bloomfield, N. J.
WAME	Baton Rouge, La.
WBRP	Baton Rouge, La.
WCPD	Charleston, S. C.
WPDI	Columbus, Ohio
WPDM	Dayton, Ohio
WPDS	St. Paul, Minn.
WPEK	New Orleans, La.
WPFD	Highland Park, Ill.
WPFK	Hackensack, N. J.
WPGI	Portsmouth, Ohio
WPHO	Zanesville, Ohio
WPRH	Rock Hill, S. C.
WQFO	Lancaster, Ohio
WSAG	Ashland, Ky.
WSPP	Scotch Plains, N. Y.
.....	Spartanburg, S. C.

2442 kcs.

KADV	Eugene, Ore.
KASD	San Angelo, Texas
KGHU	Austin, Texas
KGPP	Portland, Ore.
KGPX	Denver, Colo.
KGZH	Klamath Falls, Ore.
KGZR	Salem, Ore.
KNHM	Fargo, N. Dak.
WAKO	Ft. Lauderdale, Fla.
WAMB	Connersville, Ind.
WAMG	Kalamazoo, Mich.
WASF	Elwood, Ind.
WBNC	New Castle, Ind.
WBPD	Bloomington, Ind.
WMDZ	Indianapolis, Ind.
WMPI	Anderson, Ind.
WPDE	Louisville, Ky.
WPDF	Flint, Mich.
WPDH	Richmond, Ind.
WPDL	Lansing, Mich.
WPEB	Grand Rapids, Mich.
WPES	Saginaw, Mich.
WPFC	Muskegon, Mich.
WPFE	Reading, Pa.
WPFG	Jacksonville, Fla.
WPFT	Lakeland, Fla.
WPFX	Palm Beach, Fla.
WPFY	Yonkers, N. Y.
WPFZ	Miami, Fla.
WPGL	Binghamton, N. Y.
WPGP	Muncie, Ind.
WPHM	Orlando, Fla.
WQFM	Wilkes-Barre, Pa.
.....	Crawfordsville, Ind.
.....	Longmont, Colo.
.....	York, Pa.

2450 kcs.

KACF	Chickasha, Okla.
KACL	Altus, Okla.
KACP	Ponca City, Okla.
KACR	Seminole, Okla.
KADG	Tulsa, Okla.
KADH	Mangum, Okla.
KADQ	Hilo, Hawaii
KAPB	Cushing, Okla.
KAPC	Drumright, Okla.
KAPD	Eldorado, Kans.
KAPE	Norman, Okla.
KAPF	Okmulgee, Okla.
KARD	Ardmore, Okla.
KGHN	Hutchinson, Kans.
KGHP	Lawton, Okla.
KGPH	Oklahoma City, Okla.
KGPO	Tulsa, Okla.
KGPZ	Wichita, Kans.
KGZF	Chanute, Kans.
KGZP	Coffeyville, Kans.
KNGK	Duncan, Okla.
KNGM	Rapid City, S. Dak.
KNGT	Muskogee, Okla.
KNHC	Ada, Okla.
KVPB	Huron, S. Dak.
KWCM	Shawnee, Okla.
WMPD	Waukesha, Wis.
WPDK	Milwaukee, Wis. t
WPEE	Brooklyn, N. Y.
WPEF	New York, N. Y. (Bronx)
WPEG	New York, N. Y. (Manhattan)
WPEP	Kenosha, Wis.
WPHF	Richmond, Va.
WQFG	Roanoke, Va.
WQFH	Lynchburg, Va.
WQFI	Petersburg, Va.

2458 kcs.

KACM	Big Spring, Texas
KADR	Abilene, Texas
KAPJ	Sweetwater, Texas
KGZI	Wichita Falls, Texas
KGZW	Lubbock, Texas
KNFB	Idaho Falls, Idaho
KNGW	Brownwood, Texas
WAGR	Urbana, Ill.
WAMN	Lorain, Ohio
WASB	Decatur, Ill.
WDPW	Wilmington, N. C.
WMPJ	Clinton, Ill.
WPDG	Youngstown, Ohio
WPDO	Akron, Ohio
WPDV	Charlotte, N. C.
WPFS	Asheville, N. C.
WPGD	Rockford, Ill.
WPHD	Steubenville, Ohio
WQFZ	Ottawa, Ill.
WRBH	Cleveland, Ohio
.....	Electra, Texas

2466 kcs.

KAWP	Iowa City, Iowa

—KGOZ	Cedar Rapids, Iowa	
KGPD	San Francisco, Calif.	
—KGPI	Omaha, Nebr.	
KGPK	Sioux City, Iowa	
KGPM	San Jose, Calif.	
—KGPN	Davenport, Iowa	
KGZG	Des Moines, Iowa	
WAKB	New London, Conn.	
WAKG	Clearwater, Fla.	
WFPT	Tampa, Fla.	
WMPW	Waterbury, Conn.	
WPEG	Memphis, Tenn.	
WPFM	Woonsocket, R. I.	
WPFV	Pawtucket, R. I.	
WPFW	Bridgeport, Conn.	
—WPGA	Bay City, Mich.	
WPGB	Port Huron, Mich.	
WPGK	Cranston, R. I.	
WPGX	Worcester, Mass.	
WPHA	Fitchburg, Mass.	
WPHN	Tampa, Fla.	
WPHP	Jackson, Mich.	
WQFA	New Haven, Conn.	
WQFC	Gainesville, Fla.	
WQFK	Clearwater, Fla.	
WRDR	Grosse Pointe, Mich.	

2474 kcs.

KGHG	Las Vegas, Nev.
KGHM	Reno, Nev.
KNFH	Garden City, Kans.
KNGH	Dodge City, Kans.
WAKI	Sandusky, Ohio
WAMH	Shelby, Ohio
WKMP	Kenton, Ohio
WMPK	Fremont, Ohio
WPDP	Philadelphia, Pa.
WPFO	Knoxville, Tenn.
WPFQ	Swarthmore, Pa.
WPFS	Asheville, N. C.
WPGZ	Johnson City, Tenn.
WPHY	Elizabethton, Tenn.
WQFY	Mansfield, Ohio
WRDQ	Toledo, Ohio

2482 kcs.

KGZE	San Antonio, Texas
WPGT	New Castle, Pa.
WPHZ	Oil City, Pa.
WQFF	Monessen, Pa.
WQFU	Sharon, Pa.

2490 kcs.

KACQ	Kalaloch, Wash.
KADF	Yuma, Ariz.
KADI	Oceanside, Calif.
KADQ	Brea, Calif.
KASH	Portable in Wash.
KBMP	Brawley, Calif.
KGHD	Seattle, Wash.
KGHE	Snoqualmie Pass, Wash.
KGHQ	Chinook Pass, Wash.
KGHX	Santa Ana, Calif.
KGZD	San Diego, Calif.
KGZU	Lincoln, Nebr.
KNFC	Port Angelus, Wash.
KNFG	Olympia, Wash.
KNFK	Bellingham, Wash.
KNFM	Compton, Calif.
KNFX	Ellenburg, Wash.
KNGA	Goldendale, Wash.
KNGB	Yakima, Wash.
KNGC	Vancouver, Wash.
KNGD	Walla Walla, Wash.
KNGJ	El Centro, Calif.
KNGN	Norfolk, Nebr.
KNGQ	Wenatchee, Wash.
KNGR	Spokane, Wash.
KNGZ	Ephrata, Wash.
KSPM	Portable in Wash.
WAKA	Huntington, Ind.
WAKK	Frankfort, Ind.
WAMI	Bluffton, Ind.
WAMJ	Natchez, Miss.
WAMK	Jackson, Miss.
WASC	Peru, Ind.
WBWV	Bluefield, W. Va.
WMPG	Greenville, Miss.
WMPL	La Porte, Ind.
WMPQ	Logansport, Ind.
WMPV	Valparaiso, Ind.
WPDT	Kokomo, Ind.
WPDZ	Fort Wayne, Ind.
WPFP	Clarksburg, W. Va.
WPGN	South Bend, Ind.
WPGO	Huntington, N. Y.
WPGS	Mineola, N. Y.
WPHI	Charleston, W. Va.
WPHJ	Fairmont, W. Va.
WPHQ	Parkersburg, W. Va.
WQFQ	Lafayette, Ind.
.....	Davenport, Wash.
.....	Raymond, Wash.

Oceania Broadcasting Stations

550	10000	2CR	Cumnock, N. S. W.
560	10000	6WA	Minding, W. A.
570	60000	2YA	Wellington, N. Z.
	100	4VL	Charleville, Qsld.
580	10000	3WV	Horsham, Vic.
600	500	FJP	Noumea, New Caled'ia
	1000	7ZI	Hobart, Tas.
610	50000	KZRM	Manila, Philippines
	3500	2FC	Sydney, N. S. W.
620	4500	3AR	Melbourne, Vic.
630	7000	4QN	Clevedon, Qsld.
640	7500	5CK	Crystal Brook, S. A.
650	10000	1YA	Auckland, N. Z.
660	100	2DU	Dubbo, N. S. W.
	100	7BU	Burnie, Tas.
670	7500	2CO	Corowa, N. S. W.
680	300	2HR	Singleton, N. S. W.
	100	4YZ	Invercargill, N. Z.
	100	7QT	Queenstown, Tas.
690	3500	6WF	Perth, W. A.
700	7000	2NR	Grafton, N. S. W.
710	7000	7NT	Kelso, Tas.
720	10000	3YA	Christchurch, N. Z.
	2000	6GF	Kalgoorlie, W. A.
730	4000	5CL	Adelaide, S. A.
740	3000	2BL	Sydney, N. S. W.

N. Z. Brdcstag. Board,
Featherstone St.
Charleville Brdcstg. Service,
Pty. Ltd., Burke St.
.....

Commercial Broadcasters,
Pty. Ltd., 82 Elizabeth St.
Regina Bldg., David, Manila,
96 Market St.
120A Russel St.
.....
.....
N. Z. Brdcstg. Board, Shortland St.
Western Broadcasters,
Pty. Ltd., MacQuarrie St.
Findlays, Pty. Ltd., Wilson St.
Riverina Regional
Hunter River Broadcasters,
Pty. Ltd., 1 William St.
R. T. Parsons, 155 Layard St., N.
West Coast Broadcasters, Pty. Ltd.,
21 Paterson St., Launceston.
Hay St.
.....
.....
N. Z. Broadcasting Board,
Gloucester St.
.....
Hindmarsh Square
96 Market St.

750	2500	KGU	Honolulu, Hawaii	Advertiser Pub. Co., Ltd., Advertiser Sq.
760	100	2YB	New Plymouth, N. Z.	North Taranaki Radio Soc., Empire Bldg., King St.
770	3500	3LO	Melbourne, Vic.	120A Russel St.
780	1000	KZEG	Manila, Philippines	Radio Katoomba, Ltd., 16 Barrack St.
	500	2KA	Katoomba, N. S. W.	A. W. A., Ltd., 47 York St., Sydney, N. S. W.
	200	4TO	Townsville, Qsld.	
790	10000	4YA	Dunedin, N.	N. Z. Brdcstg. Board, Stuart St.
800	2500	4QG	Brisbane, Qsld.	Australian Brdcstg. Commission, State Insurance Bldgs.
820	65	2ZH	Napier, N. Z.	C. B. Hansen & Co., Dalton St.
830	7000	3GI	Longford, Vic.	.....
840	5000	2YC	Wellington, N. Z.	Brdcstg. Board, Featherstone St.
850	1000	5RM	Renmark, S. A.	River Murray Broadcasters, Ltd., 29 Rundle St., Adelaide.
860	100	2BH	Broken Hill, N. S. W.	Radio Silver City, Ltd., Box 143A
	500	4AY	Ayr, Qsld.	Ayr Broadcasters, Pty., Ltd., Ardmillan Road
	500	7HO	Hobart, Tas.	Commercial Broadcasters, Pty., Ltd., 82 Elizabeth St.
870	1000	2GB	Sydney, N. S. W.	The Nations Station, Adyar House, 29 Bligh St.
880	150	1YX	Auckland, N. Z.	Broadcasting Board, Shortland St.
	100	2XL	Cooma, N. S. W.	Cooma Broadcasters, Pt., Ltd., Cromwell St.
	100	4WK	Warwick, W. A.	Warwick Brdcstg. Co., Pty., Ltd., King and Albion Sts.
	500	6PR	Applecross, W. A.	Nicholsons, Ltd., 86-90 Barrack St., Perth
890	500	5AN	Adelaide, S. A.	.....
900	1000	KZIB	Manila, Philippines	.....
	500	2LM	Lismore, N. S. W.	Richmond River Broadcasters, Ltd., Box 3A
	250	2ZP	Wairoa, N. Z.	E. A. Perry, 128 Queen St.
	200	3UL	Warragul, Vic.	Argus Newspapers, 365 Elizabeth St., Melbourne
910	2000	4RK	Rockhamton, Qsld.	Aust. Brdcstg. Comm.
920	400	ZJV	Suva, Fiji	Amalgamated Wireless, (Asia), Ltd.
	50	2YN	Nelson, N. Z.	The 2ZR Radio Club, Trafalgar St.
930	600	3UZ	Melbourne, Vic.	45 Bourke St.
940	400	3ZR	Greymouth, N. Z.	West Coast Radio Society, Mackay St.
	500	4QR	Brisbane, Qsld.	.....
950	1000	2UE	Sydney, N. S. W.	Radio 2UE Sydney, Ltd., 29 Bligh St.
960	500	5DN	Adelaide, S. A.	29 Rundle St.
970	500	3BO	Bendigo, Vic.	A. W. A., 47 York St., Sydney, N. S. W.
980	100	2KM	Kempsey, N. S. W.	Radio Kempsey, Ltd., 16 Barrack St., Sydney
	200	2ZJ	Gisborne, N. Z.	C. T. C. Hands, 229 Gladstone Road
	2000	6AM	Northam, W. A	6 AM Broadcasters, Ltd., St. Georges Terrace, Perth
990	2000	2GZ	Orange, N. S. W.	Country Brdcstg. Service, Ltd., 12 Spring St., Sydney
	200	2YD	Wellington, N. Z.	.....
1000	200	4CA	Cairns, Qsld.	A. W. A., 47 York St., Sydney
	500	4GR	Toowoomba, Qsld.	Gold Radio Service, Ltd., 43 Adelaide St., Brisbane
	500	7EX	Launceston, Tas.	7EX Pty., Ltd., 74 Charles St.
1010	750	3HA	Hamilton, Vic.	Western Provinces Rado Pty., Ltd., 37 Gray St.
	35	4ZD	Dunedin, N. Z.	Otago Radio Ass'n., 180 Battray St.
	60	4ZM	Dunedin, N. Z.	McCracken and Wells, 17 George St.
1020	1000	2KY	Sydney, N. S. W.	Labor Council of N. S. W., 424 George St.
1030	600	3DB	Melbourne, Vic.	36 Flinders St.
1040	2000	5PI	Crystal Brook, S. A.	Midlands Brdcstg. Serv., Ltd., Weymouth St., Adelaide
1050	200	2CA	Canberra, F. C. T.	Canbera Broadcasters, Ltd.
1070	150	1ZB	Auckland, N. Z.	Fellowship of the FriendlyR oad (Inc.), Queens Arcade
	100	2RG	Griffith, N. S. W.	Irrigation Area Newspapers, Ltd., Box 388
	2000	6WB	Katanning, W. A.	Western Aust. Broadcasters, Ltd., Box 1079

1080	500	4RO	Rockhampton, Qsld.	Rockhampton Brdcstg. Co., Pty., Ltd., 43 Adelaide St., Brisbane
	500	7HT	Hobart, Tas.	Metropolitan Broadcasters, Pty., Ltd., 44 Elizabeth St.
1090	2000	3LK	Lubeck, Vic.	3DB Brdcstg. Co., Pty., Ltd., 36 Flinders St., Melbourne
1100	500	4LG	Longreach, Qsld.	Central Western Brdcstg. Co.
	500	7LA	Launceston, Tas.	Findlay & Wills Broadcasters Pty., Ltd., 67 Brisbane St.
				Commonwealth Brdcstg. Corp., Ltd., 49 Market St.
1120	1000	4BC	Brisbane, Qsld.	Commonwealth Brdcstg. Corp., (Qsld) Lt., 43 Adelaide St.
1130	100	2AD	Armidale, N. S. W.	New England Broadcasters, 113 Fulkiner St.
	1000	2ZB	Wellington, N. Z.	.....
	500	6ML	Perth, W. A.	W. A. Broadcasters, Ltd., Lyric House, Murray St.
1140	500	2HD	Newcastle, N. S. W.	Airsales Brdcstg. Co., Box 123
	150	4YO	Dunedin, N. Z.	Brdcstg. Board, Stuart St.
1150	2000	2WG	Wagga, N. S. W	Riverina Radio Brdcstg. Co., Ltd., 16 FitzMaurice St.
	15	2ZM	Gisborne, N. Z.	Atwater Kent Radio Service, 258 Gladstone Road
1160	....	7ZR	Hobart, Tas.	.....
1170	2000	2NZ	Inverel, N. S. W.	Northern Broadcasters, Ltd., Otho St.
1180	600	3KZ	Melbourne, Vic.	Brighton Brdcstg. Service, 24-30 Victoria St.
1190	1000	2CH	Sydney, N. S. W.	N. S. W. Council of Churches
1200	500	3YL	Christchurch, N. Z.	Brdcstg. Board, Gloucester St.
	500	5KA	Adelaide, S. A.	Sport Radio Brdcstg. Co., Ltd., Currie St.
1210	200	2GF	Grafton, N. S. W.	Grafton Brdcstg. Co., Pty., Ltd., 47 York St., Sydney
	200	3YB	Warrnambool, Vic.	Argus Brdcstg. Services, Pty., Ltd., 365 Elizabeth St., Melbourne
	500	6KG	Kalgoorlie, W. A.	Goldfields Brdcasters (193), Ltd., 209 Hannon St.
1220	2000	4AK	Oakey, Qsld.	Brisbane Brdcstg. Pty., Ltd., 288 Queen St., Brisbane
	1000	4ZB	Dunedin, N. Z.	.....
1230	2000	2NC	Newcastle, N. S. W.	Hunter River Regional
1240	20	2ZL	Hastings, N. Z.	John Holden, 609 Park Road
	1000	3TR	Sale, Vic.	Broadcast Entertainments, Pty., Ltd., St. Georges Terrace
	500	6IX	Perth, W. A.	
1250	175	1ZM	Manurewa, N. Z.	W. W. Rodgers, Ltd., Massey Road
1260	2000	3SR	Shepparton, Vic.	Argus Brdcstg. Services, Pty., Ltd., 65 Elizabeth St., Melbourne
1270	1000	2SM	Sydney, N. S. W.	Catholic Brdcstg. Co., Wynyard Sq.
1280	600	3AW	Melbourne, Vic.	3AW Brdcstg. Co., Pty., Ltd., 382 Latrobe St.
	20	4ZC	Cromwell, N. Z.	John I. Bilton, Lowburn Ferry
1290	500	4BK	Brisbane, Qsld.	Brisbane Brdcstg. Pty., Ltd., 288 Kueen St.
1300	2000	2TM	Tamworth, N. S. W.	Tamworth Radio Development Co., 312 Peel St.
1310	65	1ZJ	Auckland, N. Z.	Johns, Ltd., Chancery St.
	500	5AD	Adelaide, S. A.	Advertiser Newspapers, Ltd.
1320	1000	KGMB	Honolulu, Hawaii	Honolulu Brdcstg. Co., Ltd., Box 581
	500	3BA	Ballarat, Vic.	Ballarat Broadcasters, Pty., Ltd., 56 Lydiard St.
1330	100	3SH	Swan Hill, Vic.	Swan Hill Brdcstg. Co., Campbell St.
	500	4BU	Bundaberg, Qsld.	Bundaberg Broadcasters, Pty., Ltd., 117 Bourbong St.
1340	300	2LF	Young, N. S. W.	Young Broadcasters, Ltd., 9 Bligh St., Sydney
1350	100	3GL	Geelong, Vic.	Geelong Broadcasters Pty., Ltd., Moorabool St.
1360	100	3MA	Mildura, Vic.	Sunraysia Broadcasters, Pty., Ltd., 22 Deakin Ave.
	100	4PM	Port Moresby, Papua	A. W. A., Ltd., 47 York St., Sydney
1370	100	2MO	Gunnedah, N. S. W.	M. J. Oliver, Marquis St.

	100	5SE	Mount Gambier, S. A.	South Eastern Brdcstg. Co., Ltd., Waymouth St., Adelaide
	500	6GE	Geraldton, W. A.	Great Northern Broadcasters, Ltd., St. Georges Terrace, Perth
				Broadcasters (Australia) Ltd., Eagle St.
180	200	2GN	Goulburn, N. S. W.	Goulburn Brdcstg. Co., Pty., Ltd.
	100	4MK	Mackay, Qsld.	Mackay Brdcstg. Service, 64 Nelson St.
	100	6PM	Fremantle, W. A.	6PM Broadcasters, Ltd., St. Georges Terrace, Perth
1400	250	KHBC	Hilo, Hawaii	Honolulu Brdcstg. Co., Ltd., Box 595
	100	2PK	Parkes, N. S. W.	Parkes Brdcstg. Co., Pty., Ltd., 283 Clarinda St.
	100	4MB	Maryborough, Qsld.	Maryborough Brdcstg. Co., Ltd., 43 Adelaide St., Brisbane
	100	5AU	Port Augusta, S. A.	Port Augusta Brdcstg. Co., Ltd.
	100	7DY	Derby, Tas.	North East Tasmanian Radio Broadcasters, Paterson St., Launceston
1410	5300	2KO	Newcastle, N. S. W.	Newcastle Brdcstg. Co., Ltd., 72 Hunter St.
1420	600	3XY	Melbourne, Vic.	Station 3XY Pty., Ltd., 4 Bank Place
1430	500	2WL	Wollongong, N. S. W.	Wollongong Brdcstg. Co., Church and Edward Sts.
	1000	3ZB	Christchurch, N. Z.	Natl. Commercial Brdcstg. System
1440	100	2QN	Deniliquin, N. S. W.	Deniliquin Brdcstg. Co., Ltd., End St.
	100	4IP	Ipswich, Qsld.	Ipswich Brdcstg. Co., Pty., Ltd., Brisbane St.
1450	100	5MU	Murray Bridge, S. A.	Murray Bridge Brdcstg. Co., Ltd., Weymouth St., Adelaide
1460	300	7UV	Ulverstone, Tas.	Northern Tasmania Broadcasters, Pty., Ltd., 480 Bourke St.
1470	100	2MW	Murwillumbah, N.S.W.	Tweed Radio & Brdcstg. Co., Ltd., Commercial Road
	200	3CV	Charlton, Vic.	Mallee Broadcasters, Pty., Ltd.
1480	200	2AY	Albury, N. S. W.	A. W. A., Ltd., 47 York St., Sydney
1490	100	2BE	Bega, N. S. W.	Bega and Far South Coast Broadcasters, Ltd., Carp St.
	100	4ZR	Roma, Qsld.	MaranoaBrdcstg. Co., Ltd., Hawthorne Road
1500	100	2BS	Bathurst, N. S. W.	Bathurst Broadcasters, Ltd., 51 Keppell St.
	200	3AK	Melbourne, Vic.	Melbourne Broadcasters, Pty., Ltd., 480 Bourke St.
1510	500	YDA	Tandjong Prick, Java, N. E. I.	.....

WHEN this column started in the September, 1937, issue, "Pooky" offered eight prizes for the eight best letters accepted for publication. This space was awarded to the Universal DX Club, the club which had the largest percentage of members entered in the RADEX Mystery DX Contest, and since its beginning, we have published six of the eight alloted letters, including the one you will read here. This means you will have to hurry and send in your letters for publication in the two remaining issues, as this column is prepared considerably in advance of the publication date. We are repeating herewith the complete list of prizes which were offered:

1. Graf Zepplin cover, first U. S. flight, 1929, perfect condition, German Zep stamp.
2. One desk pad, 1938, deluxe model. (You furnish the desk).
3. One typist's kit: Star type cleaner, micrometer carbon paper, patent stamp moistener, old tooth brush.

4. Twelve white Rose of Sharon, rare shrub, sturdy two-year-old stock.
5. Shhh! One large color photograph, guaranteed highly desirable. *No details.*
6. One trial membership in the UDXC, six months, all privileges.
7. Twenty-five Indian Head pennies, assorted years, superb, guaranteed by the U. S. government.
8. One Philco doublet aerial, used, perfect condition, complete.

When submitting entries, it will be necessary to name your first three choices for prizes, and to name those which you especially *do not want.*

This month, we are privileged to present a very interesting letter from Mrv. Branks, 5 Dublin St., Invercargill, New Zealand.

Radio In New Zealand

"Once I read an article entitled 'New Zealand—the DXer's Paradise'. I don't know if this is true, as we have our troubles—mainly man-made static—but nevertheless, New Zealand is a fair enough corner of the earth for DX.

"In this "Island Paradise" there are 26 broadcasting stations and a big change was recently made in the administration of radio. Formerly there were two systems in operation—the National stations, owned and operated by the government and supported by a litsener's license fee of $6 per annum, and the "B" stations, which were privately owned. The Labor Government's policy, however, is to close down the "B" stations and establish commercial broadcasting under government control. At present we have four systems!

"The National Broadcasting Service operates the following permanent stations: 2YA, Wellington, (570 kcs., 60,000w., 6:30 a.m.,); 4YZ, Invercargill, (680 kcs., 5,000 w., 5:30 a.m.); 1YA, Auckland, (650 kcs., 10,000 w., 6:30 a.m.); 3YA, Christchurch, (720 kcs., 10,000 w., 6:30 a.m.); New Plymouth, (760 kcs., 100 w., 5:30 a.m., except Tues. and Thurs.); 4YA, Dunedin, (790 kcs., 10,000 w., 6:30 a.m.); 2YC, Wellington, (840 kcs., 5,000 w., 6:00 a.m.); 1YX, Auckland, (880 kcs., 150 w., 6:00 a.m.); 2YN, Nelson, (920 kcs., 30 w., 6:00 a.m.); 2YD, Wellington, (990 kcs., 250 w., 6:00 a.m.); 4Y0, Dunedin, (1140 kcs., 150 w., 6:00 a.m.); and 3YL, Christchurch, (1200 kcs., 250 w., 6:00 a.m.). The times noted are closing hour, American E.S.T. The stations close a half hour earlier from October to the end of April because of Summer Time. 4YZ will go up to 5000 watts in August, when a new regional station of the same power will open in Hawke's Bay.

"The National Commercial Service at present controls four stations which are maintained by advertising. Their powers will be increased later. They are: 2ZB, Wellington, (1130 kcs., 1000w, 7:00 a.m.); 4ZB, Dunedin, (1220 kcs., 1000w, 7:00 a.m.); and 3ZB, Christchurch, (1430 kcs., 1000w, 7:00 a.m.).

"There are four private stations left which did not wish to be bought over, although negotiations are proceding for the sale of 4ZM. The other three do not wish to sell out at any price. Their power and hours are restricted. 4ZD, Dunedin, (1010 kcs., 20w, 6:30 a.m. Wed. Thur.); 4ZM, Dunedin, 1010 kcs., 30 w, 5:30 Sun., 6:30 Tues., 7:30 Sat.); 2ZM, Gisborne, (1150 kcs., 15w, 6:00 Monday, Sat., 6:30 Thur., Sun.) 1ZJ, Auckland, (1310 kcs., 65 w, 5:00 a.m. Wed.)

"The remaining broadcasters, six in number, are all that remain of those bought out by the NBS. They are remaining on the air until the National Regional stations are completed, when the majority will close down, and any left will assume a 'Y' call sign. They are 2ZH, Napier, 820 kcs., 2ZP, Warroa, 900 kcs., 3ZR, Greymouth, 940 kcs., 2ZJ, Gisborne, 980 kcs., 1ZM, Manurewa, 1250 kcs., and 4ZC, Cromwell, 1280 kcs. All are 200 watts or less.

"Operation of only 26 stations leaves many clear channels and our nearest neighbor is Australia, with its 100 odd broadcasters between 1200 and 3000 miles away. Sitting at the dials on a winter's afternoon from 3:00 p.m., the South Americans are heard when conditions are favorable. From 4 to 8 p.m., the Americans, Canadians, and Mexicans are heard. From 6 to 9 p.m., the Pacific Islands, 7 p.m. to 2 a.m., Aus-

tralians, 10 p.m. to 1:30 a.m., Japanese, 12:30 a.m. to 5:00 a.m., Chinese, Siamese, and Indians. At the equinoxes, large numbers of Europeans are logged from 4:00 a.m. to 7:30 a.m., and during the summer the Americans commencing their morning sessions are heard from 11:00 p.m. to 3:00 a.m.

"Athough we have to go over 1000 miles for our nearest stations, almost 7000 miles to America, from where even the 100 watters trickle in, and up to 12,000 miles to log Europeans, our DX is DX, and there are, in the country, logs of 800 overseas stations. Coming to New Zealand, fellows?"

Communications for "Pooky" should be addressed in care of Universal DX Club Headquarters, 345 Maple Ave., Oradell, N. J.

Tuning South Pacific Stations

• • • By JOHN J. OSKAY

RECEPTION of overseas radio stations on the standard broadcast band is a reat that has been accomplished many times, by many American DXers. Success is attained, however, only if one tunes at the proper time, during the right seasons, and on the correct frequencies.

Realizing the need for a foreign broadcast band station guide for new DXers, the author has made a tabulation of the stations which one can most expect to hear, during the months of September and October. This chart, the result of ten years of observation, is especially adapted to the northeastern part of the United States, but it can be used as a fairly accurate guide in all parts of the country. Every station shown in the tabe has been heard more than once; they start to come through at about 4 am. EST, and are usually heard until after 5 am.

550	2CR	Australia
560	6WA	Australia
570	2YA	New Zealand
580	3WV	Australia
600	7ZL	Australia
610	2FC	Australia
620	3AR	Australia
630	4QN	Australia
640	5CK	Australia
650	1YA	New Zealand
670	2CO	Australia
690	6WF	Australia
700	2NR	Australia
710	7NT	Australia
720	3YA	New Zealand
730	5CL	Australia
740	2BL	Australia
770	3LO	Australia
790	4YA	New Zealand
830	3GI	Australia
840	2YC	New Zealand
850	5RM	Australia
870	2GB	Australia
910	4RK	Australia
950	2UE	Australia
980	6AM	Australia
990	2GZ	Australia
1010	3HA	Australia
1020	2KY	Australia
1040	5PI	Australia
1050	2CA	Australia
1070	6WB	Australia
1110	2UW	Australia
1120	4BC	Australia
1130	6ML	Australia
1140	2HD	Australia
1150	2WG	Australia
1170	2NZ	Australia
1180	3KZ	Australia
1190	2CH	Australia
1220	4AK	Australia
1230	2NC	Australia
1240	3TR	Australia
1260	5SR	Australia
1270	2SM	Australia
1280	3AW	Australia
1290	4BK	Australia
1300	2TM	Australia
1380	4BH	Australia
1410	2KO	Australia
1420	3XY	Australiaa
1460	7UV	Australia

WHAT'S NEW?

Multiple Aerial

A NEW kit for a community antenna system, commonly known as a Master Antenna System, has been announced. Actual tests made on this new accessory demonstrate from twenty-five to thiry per cent. increase in signal-noise ratio, accomplished mainly by eliminating feed-back and ground noise interference.

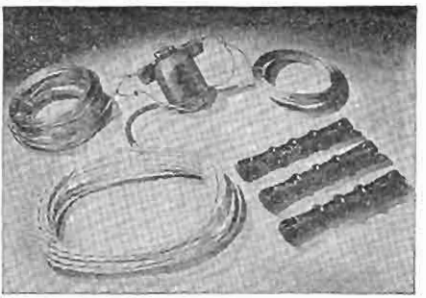
Instead of a separate lightning arrestor to be mounted and wired, the new kit incorporates the lightning arrestor directly in the aerial unit, thereby simplifying the installation work and reducing the installation time by an hour or two. A refinement in the antenna-ground circuit eliminates loss of signal strength usually experienced with multiple-outlet systems when a number of sets are used simultaneously.

Manufacturer: Technical Appliance Corp., 17 E. 16th St., New York, N. Y.

Noise-Reducing Aerial

A new antenna, known as the RCA Victor Master Antenna, operates on principles entirely different from those formerly employed by noise-reducing antennas. Instead of depending on location for its noise-reducing qualities, it has a special counterpoise coupling arrangement which permits an individual balancing adjustment to be made on each particular installation. The method of making this adjustment is to set up some severe interfering device in the room with the radio and adjusting the coupling unit until the noise disappears.

Two kits are available, the MA for 1939 RCA Victor radios that have a built-in noise eliminator, and the other kit, known as stock number 9845, may be used on any radio.



Technical Appliance Corporation's new Master Antenna system.

Manufacturer: RCA Manufacturing Co., Camden, N. J.

Dual-Purpose Victrola

The smallest self-contained electric Victrola ever built has been introducd by RCA Victor. All the mechanism necessary to reproduce phonograph records, including a vacuum tube amplifier and loudspeaker, has been incorporated in an attractive walnut cabinet measuring only 3 inches high, 10 inches deep and less than a foot long.

Known as the R-89, the new instrument is designed for dual-purpose service. When connected to the house current, it plays either 10 or 12 inch records with surprising tone. For superior record reproduction, it can be used as a Victrola attachment to any modern AC radio.

The new Victrola has a new type crystal pickup, true tracking tone arm, an electrodynamic speaker, and a three tube amplifier. A simple plug-in attachment provides for its conversion for radio use.

Manufacturer: RCA Mfg. Co., Camden, N. J.

PARADE *of the* STATES

FOR the first time in the history of DXing, radio fans throughout the country will have an opportunity, during the 1938-39 season, to tune for special programs from broadcasting stations of their own selection, under a plan sponsored by the publishers of RADEX.

This plan, known as the *Parade of the States,* provides that all the readers of this magazine submit their votes for the most *desired* station in each state and territory, on a ballot printed below. The stations receiving the greatest number of votes will be asked to broadcast, and any other stations which might interfere will be requested to stand by during the program.

The success of this plan will be assured if *each one* of our readers will take but a moment of his time to check over his log, and submit the questionnaire to us as soon as possible. The more ballots we receive the greater will be the chances that the stations will agree to broadcast.

Following the name of each state and territory, on the ballot, place the call letters of the station in that state or territory which you are most anxious to log. Stations which broadcast regularly on frequency checks, or which are on the air twenty-four hours a day, should be avoided, since they can be heard without benefit of special programs.

This ballot can be clipped and pasted on a 1c postal card. Address all ballots to The Radex Publishing Co., 289 Queen Anne Road, Teaneck, N. J.

If you do not wish to mutilate your copy of RADEX you can write your selections on a postal card. Do not vote for more than one station in any state, and do not vote for stations which you can usually hear on their regular programs.

BALLOT

Listed below are the call letters of the radio station in each State and Territory which I am most anxious to add to my radio log. I hereby promise to submit a report on their signals if I receive them on any DX programs which they may arrange for RADEX.

Signed .....

Alabama .....
Alaska .....
Arizona .....
Arkansas .....
California .....
Colorado .....
Connecticut .....
Delaware .....
D. C. .....
Florida .....
Georgia .....
Hawaii .....
Idaho .....
Illinois .....
Indiana .....
Iowa .....
Kansas .....
Kentucky .....
Louisiana .....
Maine .....
Maryland .....
Massachusetts .....
Michigan .....
Minnesota .....
Mississippi .....
Missouri .....
Montana .....
Nebraska .....
Nevada .....
New Hampshire .....
New Jersey .....
New Mexico .....
New York .....
North Carolina .....
North Dakota .....
Ohio .....
Oklahoma .....
Oregon .....
Pennsylvania .....
Puerto Rico .....
Rhode Island .....
South Carolina .....
South Dakota .....
Tennessee .....
Texas .....
Utah .....
Vermont .....
Virginia .....
Washington .....
West Virginia .....
Wisconsin .....
Wyoming .....

The MONTH'S CHANGES in Station Data

New

610	KFAR	Fairbanks, Alaska. Midnight Sun Brdcstg. Co.
620	KWFT	Wichita Falls, Tex. Wichita Falls Brdcstg. Co.
780	WPIC	Sharon, Pa. Sharon Herald Pub. Co.
1200	WENY	Elmira, N. Y. Elmira Star-Gazette
1210	WCOU	Lewiston, Maine
	WCOV	Montgomery, Ala. Allen & Covington
	WJMC	Rice Lake, Wis. Walter H. McGenty
	WOCB	Cape Cod, Mass. Cape Cod Brdcstg. Co.
1310	KBND	Bend, Ore. The Bend Bulletin
	KTFL	Tulsa, Okla. Harry Schwartz
	KVIC	Victoria, Texas
	WSAV	Savannah, Ga. Arthur Lucas
1420	KRBM	Bozeman, Mont. Roberts McNab Co.
	KVAK	Atchison, Kans. Carl Latenser
	WFMJ	Youngstown, Ohio. Wm. F. Maag, Jr.
	WSLI	Jackson, Miss. Standard Life Insurance Co.
1500	KBKR	Baker, Ore. Louis P. Thornton
	KSAM	Huntsville, Tex. Sam Houston Brdcstg. Assn.
	WDAN	Danville, Ill. Northwestern Pub. Co.

Frequency

760	WCAL	Northfield, Minn., from 1250
	WLB	Minneapolis, Minn., from 1250
1390	KABR	Aberdeen, S. Dak., from 1420

Power

570	KGKO	Fort Worth, Tex. 1000 from 250
1110	KSOO	Sioux Falls, S. Dak., 5000 from 2500

Location

570	KGKO	Fort Worth, Texas, from Wichita Falls

Calls

1310	KOCY	Oklahoma City, Okla., from KFXR
1530	KITE	Kansas City, Mo., from KXBY

Reinstated

1500	KYCA	Prescott, Ariz. Southwest Brdcstg. Co.

Time Conversion Table

EST 24-hr. Clock	EST	CST	MST	PST	GMT
0000.....	Midn't	11 pm	10 pm	9 pm	0500
0100.....	1 am	Midn't	11 pm	10 pm	0600
0200.....	2 am	1 am	Midn't	11 pm	0700
0300.....	3 am	2 am	1 am	Midn't	0800
0400.....	4 am	3 am	2 am	1 am	0900
0500.....	5 am	4 am	3 am	2 am	1000
0600.....	6 am	5 am	4 am	3 am	1100
0700.....	7 am	6 am	5 am	4 am	1200
0800.....	8 am	7 am	6 am	5 am	1300
0900.....	9 am	8 am	7 am	6 am	1400
1000.....	10 am	9 am	8 am	7 am	1500
1100.....	11 am	10 am	9 am	8 am	1600
1200.....	Noon	11 am	10 am	9 am	1700
1300.....	1 pm	Noon	11 am	10 am	1800
1400.....	2 pm	1 pm	Noon	11 am	1900
1500.....	3 pm	2 pm	1 pm	Noon	2000
1600.....	4 pm	3 pm	2 pm	1 pm	2100
1700.....	5 pm	4 pm	3 pm	2 pm	2200
1800.....	6 pm	5 pm	4 pm	3 pm	2300
1900.....	7 pm	6 pm	5 pm	4 pm	2400
2000.....	8 pm	7 pm	6 pm	5 pm	0100
2100.....	9 pm	8 pm	7 pm	6 pm	0200
2200.....	10 pm	9 pm	8 pm	7 pm	0300
2300.....	11 pm	10 pm	9 pm	8 pm	0400
2400.....	Midn't	11 pm	10 pm	9 pm	0500

For times throughout the entire world consult the RADEX Time Converter.

KEY TO SYMBOLS

As shown in the Index by Frequencies

Frequencies are given in kilocycles per second, and wavelengths in meters. Night power is shown in watts in third column. Daytime power is shown in parentheses in fourth column, in kilowatts. Thus: (.25) indicates 250 watts. Exact frequencies, when not multiples of ten, are shown in the fourth column.

Second Column Symbols

a Verifies for return postage.
b Verifies only occasionally.
c Does not verify.
d Verifies — no postage required.
z No information available.

Fourth Column Symbols

A Status in doubt—in Court.
B National "Blue" Network.
C Columbia Network.
D Daytime only.
F Canadian Network.
G Assigned this frequency but using another under Special Authorization.
H Assigned lower power but using this power under Special Authorization.
M Mutual Network.
N National "Red" and "Blue" Networks.
P Has Construction Permit only.
Q Station not in use.
R National "Red" Network.
S Sundays only.
Sy Synchronized.
X Has Permit to change power.
Y Has Permit to change location.
Z Has Permit to change frequency.
a-b-c Small letters show stations using same transmitter.
1-2-3 Figures denote stations sharing time.
... No information.

540 kcs. (555.2m.)

CJRM	a	1000	F	Regina, Sask.	1819 Cornwall St.
ZNS	d	400	....	Nassau, Bahamas	Box 48

550 kcs. (545.1 m.)

CFNB	a	500	F(1)	Fredericton, N. B.	York St.
KFUO	a	500	2(1)	St. Louis, Mo.	801 DeMun St.
KFYR	a	1000	N(5)	Bismarck, N. Dak.	320 Broadway
KOAC	a	1000	....	Corvallis, Ore.	State Agricultural Col.
KSD	a	1000	2R(5)	St. Louis, Mo.	Pulitzer Pub. Co.
KTSA	a	1000	C(5)	San Antonio, Tex.	KTSA Brdcstg. Co.
WDEV	a	500	D	Waterbury, Vt.	Chas. B. Adams, Adm.
WGR	a	1000	C(5)	Buffalo, N. Y.	Rand Bldg.
WKRC	a	1000	C(5)	Cincinnati, Ohio	Hotel Alms
WSVA	a	500	D	Harrisonburg, Va.	Main & Market Sts.
XEFC	a	100	....	Merida, Yuc.	Calle 59, No. 517

560 kcs. (535.4 m.)

KFDM	a	500	N(1)	Beaumont, Texas	Box 2950
KLZ	a	1000	C(5)	Denver, Colo.	Shirley-Savoy Hotel
KSFO	a	1000	C(5)	San Francisco, Calif.	Russ Bldg.
KWTO	a	5000	D	Springfield, Mo.	St. Louis and Kimbrough
WFIL	a	1000	BMX	Philadelphia, Pa.	638 Pub. Ledger Bldg.
WIND	a	1000	(5)	Gary, Ind.	504 Broadway
WIS	a	1000	N(5)	Columbia, S. C.	1811 Main St.
WQAM	a	1000	C	Miami, Fla.	327 N. E. First Ave.

570 kcs. (526 m.)

CMCY	a	5000	X	Havana, Cuba	De los Presidentes 215
KGKO	a	1000	B(5)	Ft. Worth, Texas	Ft. Worth Star-Telegram
KMTR	a	1000	....	Los Angeles, Calif.	915 N. Formosa Ave.
KVI	a	1000	C(5)	Tacoma, Wash.	Rust Bldg.
WKBN	a	500	1C	Youngstown, Ohio	17 N. Champion St.
WMCA	a	1000	....	New York, N. Y.	1697 Broadway
WNAX	a	1000	C(5)	Yankton, S. Dak.	2nd and Capitol
WOSU	a	750	1(1)	Columbus, Ohio	Ohio State University
WSYR	a	1000	Ba	Syracuse, N. Y.	315 Starret-Syracuse Bldg.
WSYU	a	1000	Qa	Syracuse, N. Y.	315 Starret-Syracuse Bldg.
WWNC	a	1000	N	Asheville, N. C.	Citizen-Times Co., Inc.

580 kcs. (516.9 m.)

CFPR	a	50	....	Prince Rupert, B. C.	Box 132
CHRC	a	100	....	Quebec, P. Q.	Victoria Hotel
CKCL	a	100	F	Toronto, Ont.	444 University Ave.

CKUA	a	500	F	Edmonton, Alta.	University of Alta.
KMJ	a	1000	N	Fresno, Calif.	Van Ness & Calaveras
KSAC	a	500	2(1)	Manhattan, Kans.	State College
WCHS	a	500	C(1)	Charleston, W. Va.	223½ Capitol St.
WDBO	a	1000	C(5)	Orlando, Fla.	563 N. Orange Ave.
WIBW	a	1000	C2(5)	Topeka, Kans.	11th & Topeka Blvd.
WILL	a	1000	D	Urbana, Ill.	University of Ill.
WTAG	a	1000	R	Worcester, Mass.	20 Franklin St.
XELO	a	10000	....	Tijuana, B. Cfa.	Box 6, San Diego, Calif.
XEMU	z	250	....	Piedras Negras, Coah.	.....

590 kcs. (508.2 m.)

KHQ	a	1000	R(5)	Spokane, Wash.	Sprague & Post
WEEI	a	1000	C(5)	Boston, Mass.	CBS, Inc.
WKZO	a	1000	BDX	Kalamazoo, Mich.	Burdick Hotel
WOW	a	1000	R(5)	Omaha, Nebr.	4th and Farnum

600 kcs. (499.7 m.)

CFCF	a	500	BF	Montreal, P. Q.	1231 St. Catherine St. W.
CJOR	a	500	....	Vancouver, B. C.	846 Howe St.
CMQ	a	25000	....	Havana, Cuba	Montey Prado
FQN	a	250	609	St. Pierre, Miquelon	Radio Club St. Pierrais
KFSD	a	1000	B	San Diego, Calif.	U. S. Grant Hotel
WCAO	a	500	C(1)	Baltimore, Md.	811 W. Lanvale
WICC	a	500	BM(1)	Bridgeport, Conn.	Stratfield Hotel
WMT	a	1000	BM(5)	Cedar Rapids, Iowa	Hotel Montrose
WREC	a	1000	C(5)	Memphis, Tenn.	Hotel Peabody
XEOJ	z	....	....	....	

610 kcs. (491.5 m.)

KFAR	z	1000	P	Fairbanks, Alaska	
KFRC	c	1000	M(5)	San Francisco, Calif.	1000 Van Ness Ave.
WCLE	a	500	DM	Cleveland, Ohio	1224 Huron Road
WDAF	a	1000	R(5)	Kansas City, Mo.	1729 Grand Ave.
WIOD	a	1000	Na	Miami, Fla.	Biscayne Blvd.
WIP	a	1000	....	Philadelphia, Pa.	35 S. Ninth St.
WMBF	a	1000	Qa	Miami, Fla.	Biscayne Blvd.
XEXM	z	500	.2	Mexico City, D. F.	Argentina y L. G.
XEYO	z	500	.2	Mexico City, D. F.	5 de Mayo 19

620 kcs. (483.6 m.)

KGW	a	1000	R(5)	Portland, Ore.	325 Adler St.
KTAR	a	1000	N	Phoenix, Ariz.	711 Heard Bdg.
KWFT	z	250	(1)P	Wichita Falls, Tex.	
TIPG	z	2000	625	San Jose, Costa Rica	
WFLA	a	1000	Na(5)	Tampa, Fla.	Tarr Bldg.
WHJB	a	250	CD	Greensburg, Pa.	Penn Albert Hotel
WLBZ	a	500	CM(1)	Bangor, Maine	100 Main St.
WSUN	a	1000	Na(5)	St. Petersburg, Fla.	Recreation Pier
WTMJ	a	1000	N(5)	Milwaukee, Wis.	333 W. State St.

630 kcs. (475.9 m.)

CFCO	a	100	F	Chatham, Ont.	Wm. Pitt Hotel
CFCY	a	1000	F	Charlottetown, P.E.I.	Canadian Nat'l Hotel
CJRC	a	500	F(1)	Winnipeg, Man.	Royal Alexandra Hotel
CKOV	a	100	F	Kelowna, B. C.	Water St. & Mill Ave.
CMCD	a	250	....	Havana, Cuba	Calle G y 25, Vedado
KFRU	a	500	1(1)	Columbia, Mo.	9th and Elm Sts.
KGFX	a	200	D	Pierre, S. Dak.	Box 573
WGBF	a	500	NE(1)	Evansville, Ind.	519 Vine St.
WMAL	a	250	B(.5)	Washington, D. C.	National Press Bldg.
WPRO	a	500	C(1)	Providence, R. I.	15 Chestnut
XEZ	z	500	....	Merida, Yuc.	Av. Colon
....	z	10000	P	Havana, Cuba	.....

640 kcs. (468.5 m.)

KFI	a	50000	R	Los Angeles, Calif.	1000 S. Hope St.
WGAN	z	500	DP	Portland, Me.	Port. Brdcstg. System
WHKC	a	500	ML	Columbus, Ohio	22 E. Gay St.
WOI	a	5000	D	Ames, Iowa	College of Agriculture
XEBX	z	250	....	Sabinas, Coah.	Domicilio conocido
YSS	a	500	....	San Salvador, E. S.	.....

650 kcs. (461.3 m.)

TIX	z	1000	....	San Jose, Costa Rica	
WSM	a	50000	MN	Nashville, Tenn.	National Bldg.

660 kcs. (454.3 m.)

WAAW	a	500	D	Omaha, Nebr.	19th and Harney
WEAF	a	50000	R	New York, N. Y.	30 Rockefeller Plaza
XEAL	z	1000	....	Mexico City, D. F.	Apartado 1903
XEAO	a	250	....	Mexicali, B. Cfa.	Altamirano 156

670 kcs. (447.5 m.)

WMAQ	a	50000	R	Chicago, Ill.	Merchandise Mart

680 kcs. (440.9 m.)

CMBQ	z	5000	P	Havana, Cuba	Palacio del Centro Gallego
CMCG	a	1000	....	Havana, Cuba	Calle Malecon 340
KFEQ	a	2500	D	St. Joseph, Mo.	Schneider Bldg.
KPO	a	50000	R	San Francisco, Calif.	111 Sutter St.
VAS	a	2000	685	Glace Bay, N. S.	Canadian Marconi Co.
VOWR	c	500	681	St. John's, Nfld.	Box 157
WLAW	a	1000	D	Lawrence, Mass.	278 Essex St.
WPTF	a	5000	N	Raleigh, N. C.	324 Fayetteville St.

690 kcs. (434.5 m.)

CFRB	a	10000	C	Toronto, Ont.	622 Fleet St.
CJCJ	a	100	F	Calgary, Alta.	124 - 7th Ave., W.
XET	a	5000	....	Monterrey, N. L.	Apartado 203

700 kcs. (428.3 m.)

WLW	a	500000	HMN	Cincinnati, Ohio	1329 Arlington St.

710 kcs. (422.3 m.)

KIRO	a	1000	C	Seattle, Wash.	66 Cobb Bldg.
KMPC	a	500	L	Beverly Hills, Calif.	9631 Wilshire Blvd.
WOR	a	50000	M	Newark, N. J.	147 Market St.

720 kcs. (416.4 m.)

CMK	a	3000	....	Havana, Cuba	Aptdo. 770
WGN	a	50000	M	Chicago, Ill.	441 N. Michigan Ave.
XEH	a	250	....	Monterrey, N. L.	Padre Mier 215

730 kcs. (410.7 m.)

CFPL	a	100	F	London, Ont.	Richmond St.
CJCA	a	1000	F	Edmonton, Alta.	10122 - 100 "A" St.
CKAC	a	5000	C	Montreal, P. Q.	980 St. Catherines, W.
CKPR	a	100	F	Fort William, Ont.	104½ S. May St.
CMCL	z	10000	P	Havana, Cuba	Radio City
XEPN	a	100000	....	Piedras Negras, Coah.	Box 360
XERB	a	100000	....	Rosarito Beach, B. C.	.....

740 kcs. (405.2 m.)

KMMJ	a	1000	D	Clay Center, Nebr.	KMMJ, Inc.
KTRB	a	250	D	Modesto, Calif.	Box 405
WHEB	a	250	D	Portsmouth, N. H.	Box 522
WSB	a	50000	R	Atlanta, Ga.	Biltmore Hotel

750 kcs. (399.8 m.)

CMBL	z	2500	....	Havana, Cuba	Calle 25 No. 445
KGU	a	2500	LN	Honolulu, Hawaii	Advertiser Square
WJR	a	50000	C	Detroit, Mich.	Fisher Bldg.
XEAA	a	200	....	Mexicali, B. Cfa.	Box 22, Calexico, Calif.
XEAM	z	25	....	Matamoros, Tams.	Morelos y 5ta.

760 kcs. (394.5 m.)

CMHX	a	200	....	Cienfuegos, Cuba	Box 205
KXA	a	250	(.5)X	Seattle, Wash.	312 Bigelow Bldg.
WBAL	a	2500	BMSy	Baltimore, Md.	Lexington Bldg.
WCAL	a	1000	2(5)	Northfield, Minn.	St. Olaf College
WEW	a	1000	D	St. Louis, Mo.	221 N. Grand Blvd.
WJZ	a	50000	BSy	New York, N. Y.	30 Rockefeller Plaza
WLB	a	1000	2(5)	Minneapolis, Minn.	University of Minn.
XEOK	a	2500	....	Tijuana, B. Cfa.	Calle 5ta, 312

770 kcs. (389.4 m.)

CMBF	z	10000	....	Havana, Cuba	Edif. Metropolitana 732
KFAB	a	10000	CSy	Lincoln, Nebr.	Hotel Lincoln
WBBM	a	50000	CSy	Chicago, Ill.	410 N. Michigan Ave.

780 kcs. (384.4 m.)

CHWK	b	100	F	Chilliwack, B. C.	Box 507
CKSO	a	1000	F	Sudbury, Ont.	Grand Theater Bldg.
CMJK	a	250	....	Camaguey, Cuba	Finlay No. 3
KEHE	a	1000	(5)	Los Angeles, Calif.	214 S. Vermont Ave.
KFDY	a	1000	D	Brookings, S. Dak.	Box L
KFQD	c	250	....	Anchorage, Alaska	411 Fourth Ave.
KGHL	a	1000	N(5)	Billings, Mont.	5th and Broadway
KWLK	z	250	DP	Longview, Wash.	Twin City Brdcstg. Corp.
WEAN	a	1000	BM(5)	Providence, R. I.	New Crown Hotel
WMC	a	1000	R(5)	Memphis, Tenn.	Hotel Gayoso
WPIC	z	250	DP	Sharon, Pa.	Sharon Herald Pub. Co.
WTAR	a	1000	N	Norfolk, Va.	Bank of Commerce Bldg.
XEN	a	1000	....	Mexico City, D. F.	Venustiano Carranza 30

790 kcs. (379.5 m.)

CMGH	a	500	....	Matanzas, Cuba	Box 87
KGO	a	7500	B	San Francisco, Calif.	111 Sutter St.
KOAM	z	1000	DN	Pittsburg, Kans.	404 Commerce Bldg.
WGY	a	50000	R	Schenectady, N. Y.	1 River Road

800 kcs. (374.8 m.)

HIX	a	800	....	Ciudad Trujillo, D.R.	J. R. Saladin
WBAP	a	50000	Na	Fort Worth, Tex.	Carter Publications, Inc.
WFAA	a	50000	Na	Dallas, Texas	Baker Hotel
WTBO	a	250	D	Cumberland, Md.	Commercial Bank Bldg.

810 kcs. (370.2 m.)

CMCF	a	600	X	Havana, Cuba	Paseo de Marti 9
WCCO	a	50000	C	Minneapolis, Minn.	Nicollet Hotel
WNYC	a	1000	D	New York, N. Y.	Centre and Duane Sts.

XEBZ	a	100	....	Mexico City, D. F.	Flora Av Chapultepec
XEDF	a	100	....	Nuevo Laredo, Tams.	Gral. Gonzalez 3006

820 kcs. (365.6 m.)

CMHW	a	100	....	Santa Clara, Cuba	Marta Abreu 2
WHAS	a	50000	C	Louisville, Ky.	300 W. Liberty St.
XEBG	z	1000	....	Tijuana, B. Cfa.	Av. "E" 268

830 kcs. (361.2 m.)

CMJX	a	500	....	Camaguey, Cuba	Box 23
KOA	a	50000	R	Denver, Colo.	1625 California St.
WEEU	a	1000	D	Reading, Pa.	Berks Brdcstg. Co.
WHDH	a	1000	L	Boston, Mass.	62 Boylston
WRUF	a	5000	L	Gainesville, Fla.	University of Fla.

840 kcs. (356.9 m.)

CBL	a	50000	F	Toronto, Ont.	805 Davenport Rd.
CFQC	a	1000	F	Saskatoon, Sask.	216 First Ave., N.
VOGY	a	400	....	St. Johns, Nfld.	Newfoundland Hotel
XERA	c	250000	....	Villa Acuna, Coah.	Brinkley Hosp., Del Rio, Texas

850 kcs. (352.7 m.)

CMCM	a	....	....	Havana, Cuba	Apartado 33
KIEV	a	250	D	Glendale, Calif.	Cannon System, Ltd.
WESG	a	1000	DC	Elmira, N. Y.	Mark Twain Hotel
WKAR	a	1000	D	E. Lansing, Mich.	Mich. State College
WWL	a	10000	CX	New Orleans, La.	Roosevelt Hotel

860 kcs. (348.6 m.)

WABC	a	50000	Ca	New York, N. Y.	485 Madison Ave.
WBOQ	a	50000	Qa	New York, N. Y.	485 Madison Ave.
WHB	a	1000	DM	Kansas City, Mo.	Scarritt Bldg.
XEMO	a	5000	....	Tijuana, B. Cfa.	Box 202, San Diego, Cal.
XENC	z	50	....	Mexico City, D. F.	Esabel la Catolica, Desp. 3

870 kcs. (344.6 m.)

WENR	a	50000	Ba	Chicago, Ill.	Merchandise Mart
WLS	a	50000	Ba	Chicago, Ill.	1230 Washington Blvd.
XEFB	a	200	....	Monterrey, N. L.	5 de Mayo Ote. 112
XEJW	z	500	....	Mexico City, D. F.	San Juan de Letran 81

880 kcs. (340.7 m.)

CBO	a	1000	F	Ottawa, Ont.	Chateau Laurier Hotel
CFJC	a	1000	F	Kamloops, B. C.	Wilcox-Hall Bldg.
CMW	a	1400	X	Havana, Cuba	Paseo de Marti 105
KFKA	a	500	2M(1)	Greeley, Colo.	Box 735
KLX	a	1000	....	Oakland, Calif.	Tribune Bldg. Co.
KPOF	a	1000	2	Denver, Colo.	1845 Champa St.
WCOC	a	1000	C	Meridian, Miss.	Box 603
WGBI	a	500	C1(1)	Scranton, Pa.	1000 Wyoming Ave.
WQAN	a	500	1(1)	Scranton, Pa.	149 Penn Ave.
WRNL	a	500	D	Richmond, Va.	4th and Grace Sts.
WSUI	a	500	(1)	Iowa City, Iowa	University of Iowa

890 kcs. (336.9 m.)

KARK	a	500	N(1)	Little Rock, Ark.	Nat'l Standard Bldg.
KFNF	a	500	2X(1)	Shenandoah, Iowa	407 Sycamore St.
KFPY	a	1000	C(5)	Spokane, Wash.	Symons Bldg.
KUSD	a	500	2	Vermillion, S. Dak.	University of S. Dak.

WBAA	a	500	(1)	W. Lafayette, Ind.	Purdue University
WGST	a	1000	C(5)	Atlanta, Ga.	Ansley Hotel
WJAR	a	1000	R(5)	Providence, R. I.	Weybossett St.
WMMN	a	500	CX(1)	Fairmont, W. Va.	Monongahela Valley Brdcstg. Co.
XEK	a	100	....	Mexico City, D. F.	Jalapa No. 51
XEW	a	50000	....	Mexico City, D. F.	Box 2516

900 kcs. (333.1 m.)

KGBU	a	500	X	Ketchikan, Alaska	107-111 Front St.
KHJ	a	1000	M(5)	Los Angeles, Calif.	7th and Bixel Sts.
KSEI	a	250	N(1)	Pocatello, Idaho	141 S. 6th St.
WBEN	a	1000	R(5)	Buffalo, N. Y.	Hotel Statler
WELI	a	500	D	New Haven, Conn.	City Brdcstg. Corp.
WFMD	a	500	D	Frederick, Md.	Francis Scott Key Hotel
WJAX	a	1000	N(5)	Jacksonville, Fla.	1 Broadcast Place
WKY	a	1000	N(5)	Oklahoma City, Okla.	Skirvin Tower Hotel
WLBL	a	5000	D	Stevens Point, Wis.	Box 233
WTAD	a	1000	D	Quincy, Ill.	510 E. Main

910 kcs. (329.6 m.)

CBF	a	50000	FN	Montreal, P. Q.	1231 St. Catherines, W.
CJAT	a	1000	F	Trail, B. C.	Box 1959
CKY	a	15000	F	Winnipeg, Man.	Sherbrooke St.
XENT	a	150000	....	Nuevo Laredo, Tams.	Box 410, Laredo, Tex.

920 kcs. (325.9 m.)

CMX	a	1000	X	Havana, Cuba	Apartado 32
KFEL	a	500	Ma	Denver, Colo.	Albany Hotel
KOMO	a	1000	R(5)	Seattle, Wash.	Skinner Bldg.
KPRC	a	1000	R(5)	Houston, Texas	Lamar Hotel
KVOD	a	500	Ba	Denver, Colo.	Continental Oil Bldg.
WAAF	a	1000	D	Chicago, Ill.	Palmer House
WORL	a	500	D	Boston, Mass.	Brdcstg. Serv. Org.
WPEN	a	1000	....	Philadelphia, Pa.	22nd and Walnut Sts.
WRAX	a	1000	Q	Philadelphia, Pa.	217 S. Broad St.
WSPA	a	1000	D	Spartanburg, S. C.	Ravenel & Avant Sts.
WWJ	a	5000	R	Detroit, Mich.	616 Lafayette Blvd.

930 kcs. (322.4 m.)

CFAC	a	1000	F	Calgary, Alta.	1006 Southam Bldg.
CFCH	a	100	F	North Bay, Ont.	Northern Brdc. Co.
CFLC	a	100	....	Prescott, Ont.	307 George St.
CHNS	a	1000	F	Halifax, N. S.	Lord Nelson Hotel
CKPC	a	100	F	Brantford, Ont.	Arcade Bldg.
KMA	a	1000	B(5)	Shenandoah, Iowa	Earl E. May Co.
KROW	a	1000	....	Oakland, Calif.	464 - 19th St.
WBRC	a	1000	R(5)	Birmingham, Ala.	Bankhead Hotel
WDBJ	a	1000	C(5)	Roanoke, Va.	Box 150
XEBH	a	500	....	Hermosillo, Son.	Apartado 68

940 kcs. (319 m.)

KOIN	a	1000	C(5)	Portland, Ore.	New Heathman Hotel
WAAT	a	500	D	Jersey City, N. J.	50 Journal Sq.
WAVE	a	1000	N	Louisville, Ky.	1525 Brown Hotel
WCSH	a	1000	R(2.5)	Portland, Me.	The Eastland
WDAY	a	1000	N(5)	Fargo, N. Dak.	118 Broadway
WHA	a	5000	D	Madison, Wis.	University of Wis.
WICA	a	250	D	Ashtabula, Ohio	221 Center St.
XEFO	a	5000	....	Mexico City, D. F.	.....

950 kcs. (315.6 m.)

CJOC	a	100	F	Lethbridge, Alta.	Marquis Hotel

CMBC	z	10000	....	Havana, Cuba	Apartado 132
CRCK	a	1000	F	Quebec, P. Q.	Chateau Frontenac Hotel
KFWB	a	1000	(5)	Hollywood, Calif.	5833 Fernwood Ave.
KMBC	a	1000	C(5)	Kansas City, Mo.	Pickwick Hotel
WHAL	z	500	DP	Saginaw, Mich.	Gross & Shields
WRC	a	1000	R(5)	Washington, D. C.	Nat'l Press Bldg.

960 kcs. (312.3 m.)

CFRN	a	100	F	Edmonton, Alta.	C. P. R. Bldg.
CHNC	a	1000	F	New Carlisle, P. Q.	Box 101
CMKS	z	....	....	Guantanamo, Cuba	Edificio Diaz
CRCY	c	100	F	Toronto, Ont.	805 Davenport Road
XEAW	c	100000	...	Reynosa, Tams.	Box 948, McAllen, Tex.

970 kcs. (309.1 m.)

CMBY	z	150	....	Havana, Cuba	Calle Infanta 132
KJR	a	5000	B	Seattle, Wash.	Skinner Bldg.
WCFL	a	5000	N	Chicago, Ill.	666 Lake Shore Drive
WIBG	a	100	D	Glenside, Pa.	Seaboard Brdcstg. Corp.

980 kcs. (306 m.)

KDKA	b	50000	B	Pittsburgh, Pa.	Grant Bldg.
XEAC	a	1000	....	Tijuana, B. Cfa.	Av. Mexico 12
XEFE	z	250	Z	Nuevo Laredo, Tams.	Gonzales y Riva Palacio

990 kcs. (302.8 m.)

CMKL	z	....	....	Bayamo, Cuba	Cespedes 26
WBZ	a	50000	BSy	Boston, Mass.	Hotel Bradford
WBZA	a	1000	BSy	Springfield, Mass.	Hotel Kimball
XEAF	a	750	....	Nogales, Son.	Hotel Central
XES	a	250	....	Tampico, Tams.	Box 309

1000 kcs. (299.8 m.)

CMBZ	a	500	X(1)	Havana, Cuba	Apartado 866
KFVD	a	1000	L	Los Angeles, Calif.	Standard Brdcstg. Co.
VOCM	z	200	1006	St. John's, Nfld.	St. John's Eve. Telegram
WHO	a	50000	R	Des Moines, Iowa	914 Walnut St.
XEBI	a	25	....	Aguascalientes, Ags.	Primo Verdad 14

1010 kcs. (296.9 m.)

CHML	a	100	F	Hamilton, Ont.	Pigott Bldg.
CKCD	a	100	1	Vancouver, B. C.	198 Hastings St., W.
CKCK	a	1000	F	Regina, Sask.	1853 Hamilton St.
CKCO	a	100	F	Ottawa, Ont.	272 Somerset St., W.
CKIC	a	50	....	Wolfville, N. S.	Acadia University
CKWX	a	100	1	Vancouver, B. C.	801 W. Georgia St.
CMJA	a	300	....	Camaguey, Cuba	Box 64
KGGF	a	1000	2M	Coffeyville, Kans.	Journal Bldg.
KQW	a	1000	M	San Jose, Calif.	87 E. San Antonio St.
WHN	a	1000	(5)	New York, N. Y.	1540 Broadway
WNAD	a	1000	2	Norman, Okla.	University of Okla.
WNOX	a	1000	C(5)	Knoxville, Tenn.	Hotel Johnson
XEFQ	a	50	....	Cananea, Son.	Sonora 97
XEU	a	250	....	Veracruz, Ver.	Independencia 98

1020 kcs. (293.9 m.)

KYW	a	10000	R	Philadelphia, Pa.	1622 Chestnut St.
WDZ	a	250	D	Tuscola, Ill.	WDZ Brdcstg. Co.
XEJ	a	1000	....	Juarez, Chih.	Av. Lerdo 309

1030 kcs. (291.1 m.)

CFCN	a	10000	F	Calgary, Alta.	Central Trust Bldg.
CJBR	z	1000	F	Rimouski, P. Q.	J. A. Brillant
CKLW	a	5000	FM	Windsor, Ont.	Guaranty Trust Bldg.
CMCK	a	5000	....	Havana, Cuba	San Miguel 86
XEB	a	10000	....	Mexico City, D. F.	Apartado 79-44

1040 kcs. (288.3 m.)

KRLD	a	10000	C	Dallas, Texas	Adolphus Hotel
KWJJ	a	500	...	Portland, Ore.	622 Salmon St.
KYOS	b	250	D	Merced. Calif.	Merced Star Pub. Co.
WTIC	a	50000	R	Hartford, Conn.	26 Grove St.

1050 kcs. (285.5 m.)

CBM	a	5000	FR	Montreal, P. Q.	1231 St. Catherines W.
CMKD	a	250	....	Santiago, Cuba	Box 23
HIT	z	50	....	Ciudad Trujillo, D.R.	Apartado 1105
KFBI	a	5000	L	Abilene, Kans.	Box 345
KNX	a	50000	C	Los Angeles, Calif.	CBS, Inc.
WEAU	z	1000	D	Eau Claire, Wis.	Central Brdcstg. Co.
WGVA	z	1000	DP	Indianapolis, Ind.	Glenn Van Auken

1060 kcs. (282.8 m.)

KTHS	a	10000	N	Hot Springs, Ark.	Box 86
VOAC	z	40	1065	St. John's, Nfld.	.....
WBAL	a	10000	BM	Baltimore, Md.	Lexington Bldg.
WJAG	a	1000	D	Norfolk, Nebr.	Norfolk Daily News
W3XJ	z	100	P	College Park, Md.	McNary & Chambers

1070 kcs. (280.2 m.)

CMBX	a	500	....	Havana, Cuba	San Miguel 194-altos
CMHA	z	50	....	Sagua la Grande, Cuba	Carrillo No. 31
KJBS	a	500	L	San Francisco, Calif.	1380 Bush St.
WCAZ	a	100	D	Carthage, Ill.	502 Wabash Ave.
WTAM	a	50000	R	Cleveland, Ohio	1367 E. 6th St.

1080 kcs. (277.6 m.)

CMJQ	z	200	....	Camaguey, Cuba	.....
WBT	a	50000	C	Charlotte, N. C.	Wilder Bldg.
WCBD	a	5000	1L	Chicago, Ill.	128 N. Pulaski Road
WMBI	a	5000	1L	Chicago, Ill.	153 Institute Place
XEBA	z	20	....	Guzman, Jal.	Independencia 32
XEBK	a	100	....	Nuevo Laredo, Tams.	Bravo y Guerrero
XEDP	a	500	....	Mexico City, D. F.	Bucareli 12

1090 kcs. (275.1 m.)

HIN	a	740	....	Ciudad Trujillo, D.R.	Frank Hatton
KMOX	a	50000	C	St. Louis, Mo.	Mart Bldg.

1100 kcs. (272.6 m.)

CBR	a	5000	F	Vancouver, B. C.	C.N.R. Station Bldg.
KGDM	a	1000	DM	Stockton, Calif.	42 S. California St.
KWKH	a	10000	C	Shreveport, La.	Box 17
WBIL	a	5000	1	New York, N. Y.	132 W. 43rd St.
WPG	a	5000	C1	Atlantic City, N. J.	Convention Hall
XEL	z	250	....	Mexico City, D. F.	Plaza de San Juan 15

1110 kcs. (270.1 m.)

CMCJ	a	500	X	Havana, Cuba	Estevez 4

KSOO	a	2500	LXN	Sioux Falls, S. Dak.	Carpenter Hotel
WRVA	a	50000	CM	Richmond, Va.	Hotel Richmond

1120 kcs. (267.7 m.)

CHLP	a	100	F	Montreal, P. Q.	180 St. Catherines E.
CHSJ	a	500	F(1)	St. John, N. B.	Admiral Beatty Hotel
CKOC	a	500	F(1)	Hamilton, Ont.	King Wm. & John Sts.
CKX	a	1000	F	Brandon, Man.	Rosser Ave.
CMGF	a	250	....	Matanzas, Cuba	Gral. Betancourt 51
CMKM	a	200	....	Manzanillo, Cuba	Box 4
CRCS	a	100	F	Chicoutimi, P. Q.	4 Rue Larouche
KFIO	a	100	D	Spokane, Wash.	Zieglar Bldg.
KFSG	a	500	a(2.5)	Los Angeles, Calif.	1100 Glendale Blvd.
KRKD	a	500	a(2.5)	Los Angeles, Calif.	312 Spring Arcade
KRSC	a	250	....	Seattle, Wash.	Wash. Athletic Club
KTBC	z	1000	DP	Austin, Texas	State Capitol Brdc. Assn.
WCOP	a	500	D	Boston, Mass.	Copley Plaza Hotel
WDEL	a	250	R(.5)	Wilmington, Del.	10th and King Sts.
WISN	a	250	C(1)	Milwaukee, Wis.	231 W. Michigan St.
WJBO	a	500	B	Baton Rouge, La.	334 Florida St.
WTAW	a	500	L	College Station, Tex.	Agricultural Col.

1130 kcs. (265.3 m.)

CMJI	a	150	....	Ciego de Avila, Cuba	Box 28
KSL	a	50000	C	Salt Lake City, Utah	Vermont Bldg.
WJJD	a	20000	L	Chicago, Ill.	201 N. Wells St.
WOV	a	1000	D	New York, N. Y.	132 W. 43rd St.
XEJP	z	100	....	Mexico City, D. F.	5 de Febrero 128

1140 kcs. (263 m.)

CMCW	b	500	....	Havana, Cuba	Malecon 54, esq. Galiano
KVOO	a	25000	1N	Tulsa, Okla.	Wright Bldg.
WAPI	a	5000	1C	Birmingham, Ala.	Ala. State College
WSPR	a	500	DM	Springfield, Mass.	63 Chestnut St.

1150 kcs. (260.7 m.)

CMJF	z	200	....	Camaguey, Cuba	Republica 88
WHAM	a	50000	B	Rochester, N. Y.	Sagamore Hotel
XEBP	z	250	....	Durango, Dgo.	Pino Suarez 412
XEC	a	100	....	Tijuana, B. Cfa.	Teatro Zaragoza
XEDW	z	20	....	Minatitlan, Ver.	Av. Hidalgo 40

1160 kcs. (258.5 m.)

CMHJ	a	175	....	Cienfuegos, Cuba	Box 112
CMKG	z	....	....	Santiago, Cuba	.....
WOWO	a	10000	1B	Fort Wayne, Ind.	Westinghouse Station
WWVA	a	5000	1C	Wheeling, W. Va.	Hawley Bldg.
XEAS	a	100	....	Saltillo Coah.	Morelos 15
XED	a	2500	....	Guadalajara, Jal.	Apartado 197
XEFM	z	20	....	Leon, Gto.	Aquiles Serdan 7
XEP	a	500	....	Juarez, Chih.	16 de Septiembre 111

1170 kcs. (256.3 m.)

CMBS	a	150	X	Havana, Cuba	Calzada y "H" St.
WCAU	a	50000	C	Philadelphia, Pa.	1622 Chestnut St.
XEXX	z	1000	....	Mexico City, D. F.	.....

1180 kcs. (254.1 m.)

CMJO	a	50	....	Ciego de Avila, Cuba	Maceo y C. Central
KEX	a	5000	2B	Portland, Ore.	Oregonian Bldg.

KOB	a	10000	2N	Albuquerque, N. Mex.	Alb. Brdcstg. Co.
WDGY	a	1000	....	Minneapolis, Min.	909 W. Broadway
WINS	a	1000	....	New York, N. Y.	114 E. 58th St.
WMAZ	a	1000	C(5)	Macon, Ga.	211 Cotton Ave.
XEFA	z	500	....	Tacuba, D. F.	Mar Mediterraneo 236

1190 kcs. (252 m.)

CMKX	z	....	....	Santiago, Cuba	C. No. 3, Rto. E. Fomento
KTKC	a	250	D	Visalia, Calif.	Tulare-Kings Counties Assn.
VONF	a	500	1195	St. John's, Nfld.	Box 135
WATR	a	100	DXZ	Waterbury, Conn.	47 Grand St.
WOAI	a	50000	N	San Antonio, Tex.	1038 Navarro
WSAZ	a	1000	L	Huntington, W. Va.	Box 729

1200 kcs. (249.9 m.)

CFGP	z	100	....	Grande Prairie, Alta.	906 McLeod B., Ermonton
CHAB	a	100	F	Moose Jaw, Sask.	Grant Hall Hotel
CKNX	b	100	....	Wingham, Ont.	Box 65
CKTB	a	100	F	St. Catharines, Ont.	King St.
CMCO	a	250	....	Havana, Cuba	Calle Oficios 116
KADA	a	100	M	Ada, Okla.	C. C. Morris
KBTM	a	100	D	Jonesboro, Ark.	W. J. Beard
KDNC	z	100	(.25) P	Lewistown, Mont.	Democrat-News Co.
KELO	z	100	N	Sioux Falls, S. Dak.	S. F. Broadcast Assn.
KFJB	a	100	(.25)	Marshalltown, Iowa	1603 W. Main St.
KFXD	a	100	(.25)	Nampa, Idaho	Box 891
KFXJ	a	100	(.25)	Grand Junction, Colo.	Hillcrest Manor
KGCI	z	100	DP	Coeur d'Alene, Idaho	2nd and Sherman
KGDE	c	100	(.25)	Fergus Falls, Minn.	Charles L. Jaren
KGEK	a	100	L	Sterling, Colo.	109 W. 2nd St.
KGFJ	a	100	....	Los Angeles, Calif.	1417 S. Figueroa
KGHI	a	100	(.25)	Little Rock, Ark.	Pyramid Life Bldg.
KGVL	z	100	DP	Greenville, Tex.	Hunt Brdcstg. Assn.
KMLB	a	100	(.25)	Monroe, La.	Francis Hotel
KOOS	a	100	(.25)	Marshfield, Ore.	KOOS, Inc.
KSUN	a	100	(.25)	Lowell, Ariz.	Drawer C
KVCV	a	100	....	Redding, Calif.	Golden Empire Brd. Co.
KVEC	a	250	D	San Luis Obispo, Calif.	Valley Elec. Co.
KVOS	b	100	M	Bellingham, Wash.	115 W. Magnolia St.
KWG	a	100	N	Stockton, Calif.	Medico-Dental Bldg.
KWNO	z	250	D	Winona, Minn.	Winona Radio Service
WABI	a	100	(.25)	Bangor, Maine	Community Brdcstg. Serv.
WAIM	a	100	C	Anderson, S. C.	Anderson College
WAYX	a	100	(.25)	Waycross, Ga.	Box 714
WBBZ	a	100	M(.25)	Ponca City, Okla.	615 W. Grand
WBHP	a	100	....	Huntsville, Ala.	Wilton H. Pollard
WBNO	a	100	2	New Orleans, La.	St. Charles Hotel
WCAT	a	100	D	Rapid City, S. Dak.	School of Mines
WCAX	a	100	(.25)	Burlington, Vt.	203 College St.
WCLO	a	100	(.25)	Janesville, Wis.	200 E. Milwaukee St.
WCPO	a	100	(.25)	Cincinnati, Ohio	Scripps-Howard Radio
WDSM	z	100	P	Superior, Wis.	1507 Tower Ave.
WENY	z	250	DP	Elmira, N. Y.	Elmira Star-Gazette
WEST	a	100	3(.25)	Easton, Pa.	Associated Brdcasters.
WFAM	a	100	4	South Bend, Ind.	225 W. Colfax Ave.
WFTC	a	100	(.25)	Kinston, N. C.	Jonas Weiland
WHBC	a	100	(.25)	Canton, Ohio	319 Tuscola St., W.
WHBY	a	100	(.25)	Green Bay, Wis.	Bellin Bldg.
WIBX	a	100	C(.25)	Utica, N. Y.	1st Nat'l. Bank Bldg.
WIL	a	100	(.25)	St. Louis, Mo.	Melbourne Hotel
WJBC	a	100	5(.25)	Bloomington, Ill.	Kaskaskia Brdcstg. Co.
WJBL	a	100	5	Decatur, Ill.	Gushard Bldg.
WJBW	a	100	2	New Orleans, La.	Godchaux Bldg.
WJNO	a	100	C(.25)	W. Palm Beach, Fla.	Box 189
WJRD	a	250	D	Tuscaloosa, Ala.	James R. Doss, Jr.
WKBO	a	100	3(.25)	Harrisburg, Pa.	Penn Harris Hotel
WLVA	a	100	(.25)	Lynchburg, Va.	Allied Arts Bldg.
WMFR	a	100	D	High Point, N. C.	WMFR, Inc.

WMPC	a	100	(.25)	Lapeer, Mich.	81 Liberty St.
WOLS	z	100	D	Florence, S. C.	Sanborn Hotel
WRBL	a	100	(.25)	Columbus, Ga.	Royal Theater Bldg.
WSAL	z	250	D	Salisbury, Md.	321 E. Main St.
WTHT	a	100	M	Hartford, Conn.	983 Main St.
WTOL	a	100	D	Toledo, Ohio	Community Brdcstg. Co.
WWAE	a	100	4	Hammond, Ind.	Hammond-Calumet Corp.
XEBU	z	50	...	Chihuahua, Chih.	Apartado 157

1210 kcs. (247.8 m.)

CHLT	z	100	....	Sherbrooke, P. Q.	3 Marquette St.
CJCS	a	50	....	Stratford, Ont.	Frank M. Squires
CJCU	z	50	....	Aklavik, N. W. T.	Dr. J. A. Urquahart
CKBI	a	100	F	Prince Albert, Sask.	Sanderson Bldg.
CKCH	a	100	F	Hull, P. Q.	85 Champlain Ave.
CKMC	a	50	....	Cobalt, Ont.	R. L. MacAdam
CMHI	a	150	....	Santa Clara, Cuba	Independencia 34
KALB	a	100	(.25)	Alexandria, La.	Box 788
KANS	a	100	N	Wichita, Kans.	KANS Brdcstg. Co.
KASA	c	100	....	Elk City, Okla.	Casa Grande Hotel
KDLR	a	100	....	Devils Lake, N. Dak.	1025 Third St.
KDON	z	100	M	Monterey, Calif.	Mont. Peninsula Brd. Co.
KFJI	a	100	....	Klamath Falls, Ore.	Willard Hotel
KFOR	a	100	CM(.25)	Lincoln, Nebr.	Hotel Lincoln
KFPW	a	100	....	Fort Smith, Ark.	Goldman Hotel
KFVS	a	100	5(.25)	Cape Girardeau, Mo.	Box 275
KFXM	a	100	2M	San Bernardino, Calif.	Calif. Hotel
KGLO	a	100	C(.25)	Mason City, Iowa	Hotel Hanford
KGY	a	100	M	Olympia, Wash.	11th & Capitol Way
KHBG	z	100	D	Okmulgee, Okla.	Okmulgee Brdc. Corp.
KIUL	a	100	....	Garden City, Kans.	Garden City Brdc. Co.
KLAH	a	100	....	Carlsbad, N. Mex.	Carlsbad Brdcstg. Co.
KOCA	a	100	(.25)	Kilgore, Texas	Oil Capital Brdc. Assn.
KPFA	a	100	N(.25)	Helena, Mont.	Peoples Forum of the Air
KPPC	a	100	2	Pasadena, Calif.	585 E. Colorado
KROY	a	100	CD	Sacramento, Calif.	Royal Miller
KVSO	a	100	M(.25)	Ardmore, Okla.	Ardmoreite Pub. Co.
KWJB	z	100	P(.25)	Globe, Ariz.	Sims Brdcstg. Co.
WALR	a	100	....	Zanesville, Ohio	1st Trust & Bank Bldg.
WBAX	a	100	M	Wilkes-Barre, Pa.	70 S. Main St.
WBBL	a	100	S	Richmond, Va.	1627 Monument Ave.
WBLY	a	100	D	Lima, Ohio	1424 Rice Ave.
WBRB	a	100	3	Red Bank, N. J.	63 Broad St.
WCOL	a	100	N	Columbus, Ohio	
WCOU	a	100	P	Lewiston, Maine	33 N. High St.
WCRW	a	100	4	Chicago, Ill.	2756 Pine Grove Ave.
WEBQ	a	100	5(.25)	Harrisburg, Ill.	100 E. Poplar
WEDC	a	100	4	Chicago, Ill.	3850 Ogden Ave.
WFAS	a	100	3	White Plains, N. Y.	Hotel Roger Smith
WFOY	a	100	(.25)	St. Augustine, Fla.	Fountain of Youth Properties
WGBB	a	100	3	Freeport, N. Y.	64 S. Grove St.
WGCM	a	100	(.25)	Gulfport, Miss.	WGCM, Inc.
WGNY	a	100	3	Newburgh, N. Y.	161 Broadway
WGRM	a	100	....	Grenada, Miss.	P. K. Ewing
WHAI	z	250	DP	Greenfield, Mass.	John W. Haigis
WHBF	a	100	(.25)	Rock Island, Ill.	Hotel Harms
WHBU	a	100	(.25)	Anderson, Ind.	Citizens Bank Bldg.
WIBU	a	100	(.25)	Poynette, Wis.	Route No. 3
WJBY	a	100	(.25)	Gadsden, Ala.	108 S. 6th St.
WJEJ	a	100	....	Hagerstown, Md.	Lovely Dame Bldg.
WJIM	z	100	(.25)	Lansing, Mich.	Harold F. Gross
WJMC	z	250	DP	Rice Lake, Wis.	Walter H. McGenty
WJTN	a	100	B(.25)	Jamestown, N. Y.	James Brdcstg. Co., Inc.
WJW	a	100	(.25)	Akron, Ohio	41 S. High St.
WKOK	a	100	L	Sunbury, Pa.	1150 N. Front St.
WMFG	a	100	(.25)	Hibbing, Minn.	Head of the Lakes B. C.
WOMT	a	100	....	Manitowoc, Wis.	Box 326
WPAX	a	100	D	Thomasville, Ga.	135 E. Jackson St.
WSAY	z	100	D	Rochester, N. Y.	192 S. Goodman St.

WSBC	a	100	4(.25)	Chicago, Ill.	2400 Madison Ave.
WSIX	a	100	(.25)	Nashville, Tenn.	WSIX, Inc.
WSNJ	z	100	D	Bridgeton, N. J.	Eastern States Brdc. Corp.
WSOC	a	100	N(.25)	Charlotte, N. C.	516 W. Trade St.
WTAX	a	100	....	Springfield, Ill.	416 E. Capitol Ave.
XEAT	a	250	....	Parral, Chih.	Box 90
XEE	a	50	....	Durango, Dgo.	Apartado 148
XEFV	a	100	....	Juarez, Chih.	Tlaxcala 1013
XETH	a	100	....	Puebla, Pue.	Calle 17, Oriente 11
....	z	100	(.25)P	Cape Cod, Mass.	Cape Cod Brdsctg. Co.

1220 kcs. (245.8 m.)

CMJE	z	50	....	Camaguey, Cuba	Aguero No. 2
KFKU	a	1000	a(5)	Lawrence, Kans.	University of Kans.
KTMS	z	500	B	Santa Barbara, Calif.	News Press Pub. Co.
KTW	a	1000	2S	Seattle, Wash.	7th and Spring Sts.
KWSC	a	1000	2(5)	Pullman, Wash.	State College
WCAD	a	500	D	Canton, N. Y.	St. Lawrence University
WCAE	a	1000	MR(5)	Pittsburgh, Pa.	WCAE, Inc.
WDAE	a	1000	C(5)	Tampa, Fla.	Tampa Terrace
WREN	a	1000	Ba(5)	Lawrence, Kans.	7th and Vermont St.
XEBL	a	50	....	Mazatlan, Sin.	Apartado 78
XEDA	z	200	....	Gral. Anaya, D. F.	Ixtlachuatl 5
XETF	a	12	....	Veracruz, Ver.	Independencia 28

1230 kcs. (243.8 m.)

CMCB	z	150	....	Havana, Cuba	La Metropolitana
KGBX	a	500	N	Springfield, Mo.	St. Louis at Kimbrough
KGGM	a	1000	....	Albuquerque, N. Mex.	KiMo Bldg.
KYA	a	1000	(5)	San Francisco, Calif.	988 Market St.
WFBM	a	1000	C(5)	Indianapolis, Ind.	307 N. Pennsylvania St.
WNAC	a	1000	R(5)	Boston, Mass.	Yankee Network, Inc.
XEAZ	z	200	....	Zacatecas, Zac.	.....
XEG	z	250	....	Monterrey, N. L.	Moreles Oriente 580

1240 kcs. (241.8 m.)

CJCB	a	1000	F	Sydney, N. S.	Eastern Brdcasters, Ltd.
CMHB	z	50	....	Sancti Spiritus, Cuba	Independencia 33
KGCU	a	250	1	Mandan, N. Dak.	404 W. Main St.
KLPM	a	250	1XZ	Minot, N. Dak.	Box 707
KTAT	a	1000	M	Fort Worth, Tex.	Tarrant Brdcstg. Co.
KTFI	a	1000	N	Twin Falls, Idaho	Box 521
WKAQ	a	1000	....	San Juan, P. R.	Box 1414
WXYZ	a	1000	B	Detroit, Mich.	King-Trendle Brd. Corp.
XEKL	z	500	....	Leon, Gto.	Madero 18
XELA	z	50	....	Saltillo, Coah.	Cuauhtemoc 28 sur
XEME	z	50	...	Merida, Yuc.	Calle 59 "A"

1250 kcs. (239.9 m.)

CMKC	a	150	....	Santiago, Cuba	Box 466
HRN	c	50	....	Tegucigalpa, Hond.	Paul John
KFOX	a	1000	....	Long Beach, Calif.	220 E. Anaheim St.
KIT	a	250	MX(.5)	Yakima, Wash.	109½ E. Yakima Ave.
KXOK	z	1000	P	St. Louis, Mo.	Star-Times Pub. Co.
WAIR	a	250	D	Winston-Salem, N. C.	Rob't. E. Lee Hotel
WDSU	a	1000	B	New Orleans, La.	Hotel Monteleone
WHBI	a	1000	(2.5)	Newark, N. J.	100 Shipman St.
WKST	z	250	DP	New Castle, Pa.	Keystone Brdcstg. Co.
WNEW	a	1000	(2.5)	New York, N. Y.	501 Madison Ave.
WTCN	a	1000	B(5)	Minneapolis, Minn.	Wesley Temple Bldg.
XEAI	z	500	....	Mexico City, D. F.	Bahia de Sta. Barbara 114
XEXH	z	250	....	San Luis Potosi, S.L.P.	H. Ayuntamiento S.L.P.

1260 kcs. (238 m.)

CMBD	a	500	2X	Havana, Cuba	Calle 17 y "O"

CMC	z	150	2	Havana, Cuba	Prado No. 4
KGVO	a	1000	C	Missoula, Mont.	240 N. Higgins Ave.
KHSL	a	250	....	Chico, Calif.	Golden Empire Brd. Co.
KOIL	a	1000	BM(5)	Omaha, Nebr.	Central States Brd. Co.
KPAC	a	500	D	Port Arthur, Tex.	Port Arthur College
KRGV	a	1000	N	Weslaco, Texas	KRGV, Inc.
KUOA	a	5000	D	Siloam Springs, Ark.	John Brown University
KVOA	a	1000	....	Tucson, Ariz.	Consolidated Nat'l Bank
WHIO	a	1000	C(5)	Dayton, Ohio	39 S. Ludlow St.
WNBX	a	500	CM(1)	Springfield, Vt.	39 Main St.
WTOC	a	1000	C	Savannah, Ga.	DeSoto Hotel

1270 kcs. (236.1 m.)

CMHD	b	250	....	Caibarien, Cuba	Escobar 17
KGCA	a	100	2D	Decorah, Iowa	201 Water St.
KOL	a	1000	M(5)	Seattle, Wash.	Northern Life Tower
KVOR	a	1000	C	Colorado Springs, C.	Out West Brdcstg. Co.
KWLC	a	100	2D	Decorah, Iowa	Luther College
WASH	a	500	DNa	Grand Rapids, Mich.	Natl. Bank Bldg.
WFBR	a	500	R(1)	Baltimore, Md.	7 St. Paul St.
WJDX	a	1000	R(5)	Jackson, Miss.	Lamar Life Ins. Co.
WOOD	a	500	Na	Grand Rapids, Mich.	Natl. Bank Bldg.
XEXB	a	250	....	Jalapa, Ver.	Gobierno del E. de Ver.
XEXE	z	17	....	Texcoco, D. F.	H. Ayuntamiento de Tex.

1280 kcs. (234.2 m.)

CMKO	z	....	....	Holguin, Cuba	.....
KFBB	a	1000	C(5)	Great Falls, Mont.	Box 1817
KLS	a	250	....	Oakland, Calif.	327 - 21st St.
WCAM	a	500	1	Camden, N. J.	City Hall
WCAP	a	500	1	Asbury Park, N. J.	Convention Hall
WDOD	a	1000	C(5)	Chattanooga, Tenn.	Hotel Patten
WIBA	a	1000	N(5)	Madison, Wis.	111 King St.
WORC	a	500	C	Worcester, Mass.	60 Franklin St.
WRR	a	500	M	Dallas, Texas	Southland Bldg.
WTNJ	a	500	1	Trenton, N. J.	Stacey Trent Hotel
XEMX	z	100	....	Mexico City, D. F.	Juan Cuatmazin

1290 kcs. (232.4 m.)

CMCU	a	500	....	Havana, Cuba	Vibora
KDYL	a	1000	RX	Salt Lake City, Utah	Intermountain Brd. Corp.
KLCN	a	100	D	Blytheville, Ark.	Main & Division Sts.
KTRH	a	1000	C(5)	Houston, Texas	Rice Hotel
WEBC	a	1000	N(5)	Duluth, Minn.	Spaulding Hotel
WJAS	a	1000	C(5)	Pittsburgh, Pa.	7th Ave.
WNBZ	a	100	D	Saranac Lake, N. Y.	Hotel Saranac
WNEL	a	1000	(2.5)	San Juan, P. R.	Box 1252

1300 kcs. (230.6 m.)

KALE	a	1000	M	Portland, Ore.	New Heathman Hotel
KFAC	a	1000	....	Los Angeles, Calif.	3443 Wilshire Blvd.
KFH	a	1000	C(5)	Wichita, Kans.	124½ S. Market St.
TGI	a	....	....	Guatemala City, Guat.	.....
WBBR	a	1000	1	Brooklyn, N. Y.	124 Columbia Heights
WEVD	a	1000	1	New York, N. Y.	Hotel Claridge
WFAB	a	1000	1	New York, N. Y.	154 W. 57th St.
WFBC	a	1000	N(5)	Greenville, S. C.	Imperial Hotel
WHAZ	a	1000	1	Troy, N. Y.	8th Ave.
WHBL	a	250	....	Sheboygan, Wis.	Press Bldg.

1310 kcs. 228.9 m.)

CHCK	a	50	....	Charlottetown, P.E.I.	J. A. Gesner
CJKL	a	100	F	North Bay, Ont.	R and E Building
CJLS	a	100	F	Yarmouth, N. S.	Box 684
KGMB	a	1000	CM	Honolulu, Hawaii	Box 581
KID	a	500	(1)	Idaho Falls, Idaho	Box 487

KRNT	a	1000	C(5)	Des Moines, Iowa	715 Locust St.
WADC	a	1000	C(5)	Akron, Ohio	Box 29
WORK	a	1000	N	York, Pa.	15 S. Beaver St.
WSMB	a	1000	R(5)	New Orleans, La.	Maison Blanche Bldg.
XEAU	z	....	....	Tijuana, B. Cfa.	.....

1330 kcs. (225.4 m.)

CMHK	z	250	....	Cruces, Cuba	Calle Heredia 61
KGB	a	1000	M	San Diego, Calif.	1012 First Ave.
KMO	a	1000	M	Tacoma, Wash.	914½ Broadway
KRIS	z	500	N	Corpus Christi, Tex.	Gulf Coast Brdcstg. Co.
KSCJ	a	1000	C(5)	Sioux City, Iowa	415 Douglas St.
WDRC	a	1000	C	Hartford, Conn.	750 Main St.
WSAI	a	1000	MN(5)	Cincinnati, Ohio	1329 Arlington St.
WTAQ	a	1000	C	Green Bay, Wis.	Bellin Bldg.

1340 kcs. (223.7 m.)

CMAB	z	300	....	Pinar del Rio, Cuba	Hotel Ricardo
CMJW	z	300	....	Camaguey, Cuba	Apartado 322
KDTH	z	500	DP	Dubuque, Iowa	Telegraph Herald Co.
KGIR	a	1000	N(2.5)	Butte, Mont.	121 W. Broadway
KGNO	a	250	....	Dodge City, Kans.	1st Natl. Bank Bldg.
WCOA	a	500	C(1)	Pensacola, Fla.	Pensacola Brdcstg. Co.
WFEA	a	500	MN(1)	Manchester, N. H.	Carpenter Hotel
WSPD	a	1000	B(5)	Toledo, Ohio	The Fort Industry Co.
XEAP	z	50	....	Obregon, Son.	Veracruz 83
XEBS	z	200	....	Mexico City, D. F.	Castilla 153
XEDH	z	200	....	Villa Acuna, Coah.	Galeana y B. Dominguez
XEXD	z	350	....	Jalapa, Ver.	Gobierno del E. De Ver.

1350 kcs. (222.1 m.)

CMCA	a	450	....	Havana, Cuba	Galiano 102
CMKW	z	....	....	Santiago, Cuba	Reparto Vista Alegre
KIDO	a	1000	N(2.5)	Boise, Idaho	Hotel Boise
KWK	a	1000	BM(5)	St. Louis, Mo.	Hotel Chase
WAWZ	a	500	1(1)	Zarephath, N. J.	Pillar of Fire
WBNX	a	1000	1	New York, N. Y.	260 E. 161st St.
WMBG	a	500	R	Richmond, Va.	914 W. Broad St.

1360 kcs. (220.4 m.)

CMJH	b	50	....	Ciego de Avila, Cuba	Castilla 37
KCRC	a	250	M	Enid, Okla.	Oxford Hotel
KGER	a	1000	....	Long Beach, Calif.	435 Pine St.
WCSC	a	500	N(1)	Charleston, S. C.	Francis Marion Hotel
WFBL	a	1000	C(5)	Syracuse, N. Y.	Onondago Hotel
WGES	a	500	1(1)	Chicago, Ill.	4000 Washington Blvd.
WQBC	a	1000	D	Vicksburg, Miss.	Hotel Vicksburg
WSBT	a	500	1	South Bend, Ind.	225 W. Colfax Ave.

1370 kcs. (218.8 m.)

CFAR	z	100	....	Flin Flon, Man.	120 Main St.
CKCW	a	100	F	Moncton, N. B.	K of P Hall
CMGE	a	150	....	Cardenas, Cuba	Av. Cespedes 180
KAST	a	100	D	Astoria, Ore.	611 Commercial St.
KCMO	a	100	....	Kansas City, Mo.	1515 Commerce Trust B.
KEEN	a	100	3	Seattle, Wash.	2101 Smith Tower
KELD	z	100	....	El Dorado, Ark.	Radio Enterprises, Inc.
KERN	a	100	N	Bakersfield, Calif.	McClatchey Brdcstg. Co.
KFGQ	a	100	D	Boone, Iowa	924 W. 2nd St.
KFJZ	a	100	(.25)	Fort Worth, Texas	502 Trinity Life
KFRO	a	250	D	Longview, Texas	Box 616
KGAR	a	100	C(.25)	Tucson, Ariz.	142 S. 6th Ave.
KGFL	a	100	4	Roswell, N. Mex.	507 N. Main St.
KGKL	a	100	(.25)	San Angelo, Texas	St. Angelus Hotel
CKCV	a	100	F	Quebec, P. Q.	254 Marguerite-Bourgeois
KAND	z	100	D	Corsicana, Tex.	State Natl. Bank Bldg.

KARM	a	100	C	Fresno, Calif.	George Harm
KCKN	a	100	....	Kansas City, Kans.	901 N. 8th St.
KBND	z	100	(.25)	P Bend, Ore.	
KCRJ	a	100	(.25)	Jerome, Ariz.	Drawer D
KFPL	b	100	(.25)	Dublin, Texas	Box 176
KFYO	a	100	(.25)	Lubbock, Texas	Box 1448
KGEZ	a	100	....	Kalispell, Mont.	Box 1
KGFW	a	100	....	Kearney, Nebr.	919 W. 27th St.
KHUB	a	250	D	Watsonville, Calif.	Anna Atkinson
KINY	a	100	XZ	Juneau, Alaska	Edwin A. Kraft
KOCY	a	100	(.25)	Oklahoma City, Okla.	Plaza Court Brdc. Co.
KPDN	a	100	D	Pampa, Texas	R. C. Hoiles
KRBA	z	100	DP	Lufkin, Texas	Rngelina Hotel
KRMD	a	100	(.25)	Shreveport, La.	Box 1712
KROC	a	100	(.25)	Rochester, Minn.	Martin Hotel
KRQA	a	100	....	Santa Fe, N. Mex.	Box 985
KRRV	z	250	D	Sherman, Texas	Red River Valley Corp.
KSRO	a	250	D	Santa Rosa, Calif.	Press-Democrat Pub. Co.
KSUB	a	100	....	Cedar City, Utah	El Escalante Hotel
KTFL	z	250	DP	Tulsa, Okla.	
KTSM	a	100	N(.25)	El Paso, Texas	Box 1976
KVIC	z	100	P	Victoria, Texas	
KVOL	a	100	....	Lafayette, La.	Evangeline Hotel
KVOX	z	100	(.25)	Moorhead, Minn.	KVOX Brdcstg. Co.
KWOC	z	100	DP	Poplar Bluff, Mo.	Fields McCarthy Co.
KWOS	z	100	D	Jefferson City, Mo.	Tribune Printing Co.
KXRO	a	100	M(.25)	Aberdeen, Wash.	Morck Hotel
WAML	a	100	(.25)	Laurel, Miss.	Box 26
WBEO	a	100	D	Marquette, Mich.	146 W. Washington
WBOW	a	100	N(.25)	Terre Haute, Ind.	19½ S. 6th St.
WBRE	a	100	N	Wilkes-Barre, Pa.	16 N. Main St.
WBRK	z	100	C(.25)	Pittsfield, Mass.	8 Bank Row
WCLS	a	100	L	Joliet, Ill.	301 E. Jefferson St.
WCMI	a	100	(.25)	Ashland, Ky.	Box 106
WDAH	a	100	S(.25)	El Paso, Tex.	Box 1976
WEBR	a	100	B(.25)	Buffalo, N. Y.	23 North St.
WEMP	a	100	D	Milwaukee, Wis.	711 Empire Bldg.
WEXL	a	50	....	Royal Oak, Mich.	212 W. 6th St.
WFBG	a	100	3	Altoona, Pa.	12th Ave. & 13th St.
WFDF	a	100	....	Flint, Mich.	Union Industrial Bldg.
WGAU	z	100	P(.25)	Athens, Ga.	J. K. Patrick & Co.
WGH	a	100	(.25)	Newport News, Va.	Metropolitan Bldg.
WGTM	z	100	D	Wilson, N. C.	Wilson and Farmer
WHAT	a	100	4	Philadelphia, Pa.	Public Ledger Bldg.
WJAC	a	100	3(.25)	Johnstown, Pa.	Locust St.
WLAK	z	100	....	Lakeland, Fla.	Lake Region Brdc. Co.
WLBC	a	100	(.25)	Muncie, Ind.	Anthony Bldg.
WLNH	a	100	M	Laconia, N. H.	523 Main St.
WMBO	a	100	....	Auburn, N. Y.	Metcalf Bldg.
WMFF	a	100	B(.25)	Plattsburg, N. Y.	Hotel Cumberland
WNBH	a	100	M(.25)	New Bedford, Mass.	251 Union St.
WOL	a	100	MZ	Washington, D. C.	1111 "H" St.
WRAW	a	100	....	Reading, Pa.	533 Penn St.
WROL	a	100	N(.25)	Knoxville, Tenn.	524 S. Gay St.
WSAJ	a	100		Grove City, Pa.	418 Poplar St.
WSAV	z	100	P	Savannah, Ga.	
WSGN	a	100	B(.25)	Birmingham, Ala.	Birmingham News Co.
WSJS	a	100	C	Winston-Salem, N.C.	416 N. Marshall
WTAL	a	100	(.25)	Tallahassee, Fla.	Fla. Capitol Brdcasters.
WTEL	a	100	4	Philadelphia, Pa.	3701 N. Broad
WTJS	a	100	(.25)	Jackson, Tenn.	Sun Bldg.
WTRC	a	100	(.25)	Elkhart, Ind.	Hotel Elkhart
XEAG	z	10	....	Cordoba, Ver.	Av. "L" 135
XEBO	z	25	....	Irapuato, Gto.	Guerrero 26
XEFW	a	300	....	Tampico, Tams.	Salvador Diaz Miron 6
XETB	a	125	....	Torreon, Coah.	Apartado 225
XEX	a	125	....	Monterrey, N. L.	Apartado 10
XEXS	z	100	....	Mexico City, D. F.	.....

1320 kcs. (227.1 m.)

CMOX	a	200	....	Havana, Cuba	Perez y Chisholm
KGHF	a	500	B	Pueblo, Colo.	113 Broadway

KICA	a	100	4	Clovis, N. Mex.	Box 111
KIUP	a	100	....	Durango, Colo.	2800 Main St.
KLUF	a	100	....	Galveston, Tex.	Geo. R. Clough
KMAC	a	100	5(.25)	San Antonio, Tex.	Smith-Young Tower
KOBH	a	100	(.25)	Rapid City, S. Dak.	Alex Johnson Hotel
KOKO	a	100	....	La Junta, Colo.	Southwest Brdcstg. Co.
KONO	a	100	5	San Antonio, Tex.	Milan Bldg.
KRE	a	100	(.25)	Berkeley, Calif.	2337 Shattuck Ave.
KRKO	a	50	3	Everett, Wash.	2814 Rucker Ave.
KRMC	z	100	(.25)	Jamestown, N. Dak.	Gladstone Hotel
KSLM	a	100	M	Salem, Ore.	343 Court St.
KTEM	a	250	D	Temple, Texas	Bell Brdcstg. Co.
KTOK	a	100	MN	Oklahoma City, Okla.	1113 N. Broadway
KUJ	a	100	....	Walla Walla, Wash.	Marcus Whitman Hotel
KVGB	z	100	....	Great Bend, Kans.	Ernest Edward Ruehlen
KVRS	z	100	P(.25)	Rock Springs, Wyo.	Wyo. Brdcstg. Co.
KWYO	a	100	(.25)	Sheridan, Wyo.	Big Horn Brdcstg. Co.
WABY	a	100	N(.25)	Albany, N. Y.	Strand Theater Bldg.
WAGF	a	250	D	Dothan, Ala.	Box 25
WATL	a	100	(.25)	Atlanta, Ga.	26 Cain St.
WBLK	a	100	....	Clarksburg, W. Va.	The Exponent Co.
WBNY	a	100	2(.25)	Buffalo, N. Y.	485 Main St.
WBTM	a	100	(.25)	Danville, Va.	Miller Bldg.
WCBM	a	100	(.25)	Baltimore, Md.	Keith Theater Bldg.
WDAS	a	100	(.25)	Philadelphia, Pa.	1211 Chestnut St.
WDWS	a	100	(.25)	Champaign, Ill.	48-56 Main St.
WEOA	a	100	C(.25)	Evansville, Ind.	Evansv. on the Air, Inc.
WFOR	a	100	..	Hattiesburg, Miss.	Box 947
WGL	a	100	N(.25)	Fort Wayne, Ind.	Westinghouse Stations
WGRC	a	250	D	New Albany, Ind.	North Side Brd. Corp.
WHBQ	a	100	....	Memphis, Tenn.	Hotel Claridge
WHDF	a	100	(.25)	Calumet, Mich.	Scott St.
WHLB	a	100	C(.25)	Virginia, Minn.	Head of the Lakes B. C.
WHLS	z	250	DP	Port Huron, Mich.	Port Huron Brdcstg. Co.
WIBM	a	100	(.25)	Jackson, Mich.	306 W. Michigan Ave.
WLLH	a	100	Sv	Lawrence, Mass.	Merrimac Brdcstg. Co.
WLLH	a	100	MSv(.25)	Lowell, Mass.	Box D
WMBR	a	100	C(.25)	Jacksonville, Fla.	Atlantic Annex Bldg.
WMFD	a	100	D	Wilmington, N. C.	Hotel Wilmington
WMFO	a	100	D	Decatur, Ala.	Box 1025
WMIN	a	100	(.25)	St. Paul, Minn.	St. Anthony & Syndicate
WOC	a	100	C(.25)	Davenport, Iowa	1000 Brady St.
WPAY	a	100	....	Portsmouth, Ohio	Vee Bee Corp.
WPRA	z	100	(.25)	Mayaguez, P. R.	P. R. Advertising Co.
WRAK	a	100	(.25)	Williamsport, Pa.	244 W. 4th St.
WRDO	a	100	M	Augusta, Maine	1 Commercial St.
WRJN	a	100	(.25)	Racine, Wis.	Hotel Racine
WSAU	a	100	....	Wausau, Wis.	Northern Brdcstg. Co.
WSVS	a	50	2D	Buffalo, N. Y.	666 E. Delevan St.
XECZ	z	100	....	San Luis Potosi, S.L.P.	Zaragoza 32
XEI	a	125	....	Morelia, Mich.	Madero 545
XELZ	z	100	....	Mexico City, D. F.	Pino 243
....	z	100	....	Owen Sound, Ont.	Owen Sound Sun-Times

1380 kcs. (217.3 m.)

CMCR	z	....	....	Havana, Cuba	Infanta 115
CMCX	z	150	....	Havana, Cuba	Calle Maceo 7
KOH	a	500	C	Reno, Nev.	440 N. Virginia St.
KQV	a	500	1C	Pittsburgh, Pa.	1406 C of C Bldg.
WALA	a	500	C(1)	Mobile, Ala.	Box 288
WKBH	a	1000	C	La Crosse, Wis.	409 Main St.
WNBC	a	250	DX	New Britain, Conn.	147 Main St.
WSMK	a	200	1C	Dayton, Ohio	121 N. Main St.

1390 kcs. (215.7 m.)

CJGX	a	100	F	Yorkton, Sask.	Royal Alexandra Hotel
CMJC	z	150	....	Camaguey, Cuba	Cisneros y Gral Gomez
KABR	a	500	(1)	Aberdeen, S. Dak.	
KLRA	a	1000	C(5)	Little Rock, Ark.	Box 550
KOY	a	1000	C	Phoenix, Ariz.	Salt River Val. Brdc. Co.
KRLC	a	250	....	Lewiston, Idaho	Lewis-Clarke Hotel

WHK	a	1000	BM(2.5)	Cleveland, Ohio	1311 Terminal Tower
WQDM	a	1000	D	St. Albans, Vt.	8 Kingman St.

1400 kcs. (214.2 m.)

GMGC	a	150	....	Matanzas, Cuba	Independencia 56
CMKR	z	100	....	Santiago, Cuba	Maso alta 71
KHBC	a	250	CM	Hilo, Hawaii	Box 595
KLO	a	500	B	Ogden, Utah	Hotel Ben Lomond
KTUL	a	1000	C(5)	Tulsa, Okla.	Nat'l. Bank Bldg.
WARD	a	500	2	Brooklyn, N. Y.	427 Fulton St.
WBBC	a	500	2(1)	Brooklyn, N. Y.	552-54 Atlantic Ave.
WEGL	z	500	P	Brooklyn, N. Y.	Brooklyn Daily Eagle
WHDL	a	250	D	Olean, N. Y.	Exchange Bank
WIRE	a	1000	MR(5)	Indianapolis, Ind.	540 N. Meridian St.
WLTH	a	500	2	Brooklyn, N. Y.	105 Second Ave., N.Y.C.
WVFW	a	500	2	Brooklyn, N. Y.	4 & 5 Court Square

1410 kcs. (212.6 m.)

CKFC	a	50	5	Vancouver, B. C.	1504 Sun Bldg.
CKMO	a	100	5	Vancouver, B. C.	812 Robson St.
CMCQ	a	5000	....	Havana, Cuba	Vista Alegre 80
KFJM	a	500	(1)	Grand Forks, N. Dak.	University of N. Dak.
KGNC	a	1000	N(2.5)	Amarillo, Texas	Plains Radio Brdc. C.
KMED	c	250	N	Medford, Ore.	Sparta Bldg.
WAAB	a	500	M(1)	Boston, Mass.	Yankee Network, Inc.
WBCM	a	500	(1)	Bay City, Mich.	Hotel Wenonah
WHIS	a	500	(1)	Bluefield, W. Va.	Bland St.
WROK	a	500	(1)	Rockford, Ill.	109 S. Water St.
WSFA	a	500	C(1)	Montgomery, Ala.	Jefferson Davis Hotel

1420 kcs. (211.1 m.)

CHLN	z	100	....	Three Rivers, P. Q.	Le Nouvelliste
CKGB	a	100	F	North Bay, Ont.	R. H. Thompson
KABC	a	100	(.25)	San Antonio, Tex.	Texas Theater Bldg.
KATE	a	250	D	Albert Lea, Minn.	Albert Lea Brdcstg. C
KBPS	a	100	4	Portland, Ore.	546 N. E. 12th Ave.
KCMC	a	100	(.25)	Texarkana, Tex.	KCMC, Inc.
KDNT	z	100	DP	Denton, Texas	Harwell V. Shepard
KEUB	a	100	....	Price, Utah	Eastern Utah Brdc. Co.
KFAM	z	100	P(.25)	St. Cloud, Minn.	Times Pub. Co.
KFIZ	a	100	....	Fond du Lac, Wis.	Lange Bldg.
KGFF	a	100	M(.25)	Shawnee, Okla.	9th and Bell Sts.
KGGC	a	100	....	San Francisco, Calif.	230 Eddy St.
KGIW	a	100	1	Alamosa, Colo.	Box 26
KGLU	z	100	P(.25)	Safford, Ariz.	Gila Brdcstg. Co.
KIDW	a	100	1	Lamar, Colo.	Southwest Brdcstg. Co.
KIUN	a	100	....	Pecos, Texas	Hawkins & Tubbs
KLBM	z	100	P(.25)	La Grande, Ore.	.....
KNET	a	100	D	Palestine, Texas	Palestine Brdcstg. Assn.
KORE	a	100	M	Eugene, Ore.	733 Willamette St.
KRBC	a	100	(.25)	Abilene, Tex.	Box 263
KRBM	z	100	P(.25)	Bozeman, Mont.	Roberts McNab Co.
KRIC	z	100	P	Beaumont, Texas	Beaumont Brdcstg. Assn.
KRLH	a	100	D	Midland, Texas	Clarence Scharbaur
KTRI	z	100	P(.25)	Sioux City, Iowa	Sioux City Brdcstg. Co.
KUMA	a	100	[illegible]	Yuma, Ariz.	Box 267
KVAK	z	100	DP	Atchison, Kans.	
KWBG	a	100	....	Hutchinson, Kans.	W. N. Greenwald
KXL	a	100	[illegible](.25)	Portland, Ore.	Multnomah Hotel
WACO	a	100	[illegible]	Waco, Texas	KTSA Brdcstg. Co.
WAGM	a	100	....	Presque Isle, Me.	Main St.
WAPO	a	100	(.25)	Chattanooga, Tenn.	9th Broad St.
WAZL	a	100	2	Hazelton, Pa.	Natl. Bank Bldg.
WCBS	a	100	(.25)	Springfield, Ill.	208½ S. 5th St.
WCHV	a	100	3(.25)	Charlottesville, Va.	Box 221
WEED	a	100	3(.25)	Rocky Mount, N. C.	Box 221
WELL	a	100	....	Battle Creek, Mich.	1 W. Michigan Ave.
WFMJ	z	100	DP	Youngstown, Ohio	Wm. F. Maag, Jr.
WGPC	a	100	....	Albany, Ga.	Rylander Theater

WHFC	a	100	(.25)	Cicero, Ill.	6138 Cermak Road
WILM	a	100	2	Wilmington, Del.	920 King St.
WJMS	a	100	....	Ironwood, Mich.	St. James Hotel
WLAP	a	100	(.25)	Lexington, Ky.	Main & Esplanade
WLEU	a	100	B(.25)	Erie, Pa.	Commerce Bldg.
WMAS	a	100	C(.25)	Springfield, Mass.	Hotel Stonehaven
WMBC	a	100	(.25)	Detroit, Mich.	7310 Woodward Ave.
WMBH	a	100	(.25)	Joplin, Mo.	1334 Roosevelt St.
WMBS	a	250	D	Uniontown, Pa.	Fayette Brdcstg. Corp.
WMFJ	a	100	....	Daytona Beach, Fla.	126½ Magnolia Ave.
WMSD	a	100	....	Sheffield, Ala.	Box 688
WNNY	z	100	P(.25)	Watertown, N. Y.	.....
WPAD	a	100	(.25)	Paducah, Ky.	2201 Broadway
WPAR	a	100	C	Parkersburg, W. Va.	Chancellor Hotel
WPRP	z	100	(.25)	Ponce, P. R.	Julio M. Canesa
WSLI	z	100	P(.25)	Jackson, Miss.	Stand. Life Ins. Co.
....	z	100	....	Kenora, Ont.	Kenora Brdcstg. Co.

1430 kcs. (209.7 m.)

CMJP	a	75	....	Moron, Cuba	Callejas No. 80
KECA	a	1000	B(5)	Los Angeles, Calif.	1000 S. Hope St.
KGNF	a	1000	D	NorthPlatte,Nebr.	W. 12th St.
KSO	a	500	BM(2.5)	Des Moines, Iowa	715 Locust St.
WBNS	a	1000	C(5)	Columbus, Ohio	33 N. High St.
WHEC	a	500	C(1)	Rochester, N. Y.	40 Franklin St.
WHP	a	500	C(1)	Harrisburg, Pa.	216 Locust St.
WMPS	a	500	B(1)	Memphis, Tenn.	Box 445
WOKO	a	500	C(1)	Albany, N. Y.	Hotel Ten Eyck

1440 kcs. (208.2 m.)

CMOA	z	150	....	Havana, Cuba	Aguilar 126, altos
HP50	z	....	...	Colon, Panama	La Voz de la Victor
KDFN	a	500	....	Casper, Wyo.	Box 930
KELA	a	500	M	Centralia, Wash.	Central Brdcstg. Corp.
KXYZ	a	1000	B	Houston, Texas	Gulf Bldg.
WBIG	a	1000	C	Greensboro, N. C.	The O. Henry Hotel
WCBA	a	500	a	Allentown, Pa.	39-41 Tenth St.
WMBD	a	1000	C(5)	Peoria, Ill.	200 Alliance Life Bldg.
WSAN	a	500	Na	Allentown, Pa.	39 Tenth St.
XEFI	a	250	...	Chihuahua, Chih.	Apartado 157

1450 kcs. (206.8 m.)

CFCT	a	500	....	Victoria, B. C.	620 View St.
CHGS	a	50	F	Summerside, P. E. I.	190 Water St.
CMHM	z	100	....	Cienfuegos, Cuba	Hotel Union
KGCX	a	1000	....	Wolf Point, Mont.	Westland Radio Station
KIEM	a	500	M(1)	Eureka, Calif.	Vance Hotel
KTBS	a	1000	N	Shreveport, La.	Box 17
TGA	d	..	....	Quezaltenango, Guat.	Dir. of Elec. Comm.
WAGA	a	500	B(1)	Atlanta, Ga.	Western Union Bldg.
WGAR	a	500	CX(1)	Cleveland, Ohio	Hotel Statler
WHOM	a	250	....	Jersey City, N. J.	29 W. 57th St., N.Y.C.
WSAR	a	1000	M	Fall River, Mass.	Academy of Music Bldg
XEF	a	100	....	Juarez, Chih.	Box 70

1460 kcs. (205.4 m.)

CMKF	z	250	....	Holguin, Cuba	Libertad esq. Arias
KSTP	a	10000	R(25)	St. Paul, Minn.	St. Paul Hotel
WJSV	a	10000	C	Washington, D. C.	Earle Bldg.

1470 kcs. (204 m.)

KGA	a	5000	BM	Spokane, Wash.	1023 W. Riverside Ave
WLAC	a	5000	C	Nashville, Tenn.	2421 West End Ave.

1480 kcs. (202.6 m.)

KOMA	a	5000	C	Oklahoma City, Okla.	Biltmore Hotel

WHIP	z	5000	D	Hammond, Ind.	137 Pochman Ave.
WKBW	a	5000	C	Buffalo, N. Y.	Rand Bldg.

1490 kcs. (201.2 m.)

KFBK	a	10000	N	Sacramento, Calif.	708 Eye St.
WCKY	a	10000	N	Covington, Ky.	6th and Madison

1500 kcs. (199.9 m.)

CJIC	a	100	F	Sault Ste. Marie, Ont.	Windsor Hotel
KAWM	z	100	....	Gallup, N. Mex.	A. W. Mills
KBIX	a	100	M	Muskogee, Okla.	Barnes Bldg.
KBKR	z	100	(.25) P	Baker, Ore.	
KBST	z	100	....	Big Spring, Tex.	Crawford Hotel
KDAL	a	100	C	Duluth, Minn.	Red River Brdc. Co.
KDB	a	100	M(.25)	Santa Barbara, Calif.	S. B. Brdcasters, Ltd.
KGFI	a	100	(.25)	Brownsville, Tex.	Eagle Brdcstg. Co., Inc.
KGKB	a	100	(.25)	Tyler, Texas	Commercial College Bldg.
KGKY	a	100	(.25)	Scottsbluff, Nebr.	1517½ Broadway
KNEL	a	250	D	Brady, Texas	Box 1077
KNOW	a	100	C	Austin, Texas	Norwood Bldg.
KOTN	a	100	D	Pine Bluff, Ark.	Hotel Pines
KOVC	a	100	(.25)	Valley City, N. Dak.	KOVC, Inc.
KPAB	z	100	(.25)	Laredo, Tex.	Hamilton Hotel
KPLC	a	100	(.25)	Lake Charles, La.	Majestic Hotel
KPLT	z	250	D	Paris, Texas	Gibralter Hotel
KPQ	a	100	M(.25)	Wenatchee, Wash.	20 Second St.
KRNR	a	100	M(.25)	Roseburg, Ore.	News-Review Co.
KSAL	a	100	(.25)	Salina, Kans.	Journal Building
KUTA	z	100	P	Salt Lake City, Utah	Utah Brdcstg. Co.
KVNU	z	100	P	Logan, Utah	Cache Valley Brd. Co.
KVOE	a	100	M	Santa Ana, Calif.	Voice of Orange Empire
KWEW	z	100	DP	Hobbs, N. Mex.	W. E. Whitmore
KXO	a	100	....	El Centro, Calif.	Box 140
KYSM	z	100	P(.25)	Mankato, Minn.	F. B. Clement & Co.
WCNW	a	100	1(.25)	Brooklyn, N. Y.	846 Flatbush Ave.
WDAN	z	250	DP	Danville, Ill.	Northwestern Pub. Co.
WDNC	a	100	C	Durham, N. C.	Washington Duke Hotel
WGAL	a	100	(.25)	Lancaster, Pa.	8 W. King St.
WGIL	z	250	DP	Galesburg, Ill.	Galesburg Brdc. Co.
WHBB	a	100	....	Selma, Ala.	Box 26
WHEF	a	100	(.25)	Kosciusko, Miss.	Box 631
WJBK	a	100	(.25)	Detroit, Mich.	6559 Hamilton Ave.
WKAT	a	100	....	Miami Beach, Fla.	A. Frank Katzentine
WKBB	a	100	YC(.25)	E. Dubuque, Ill.	Hotel Julian
WKBV	a	100	(.25)	Richmond, Ind.	Box 308
WKBZ	a	100	(.25)	Muskegon, Mich.	Mich. Theater Bldg.
WKEU	a	100	D	Griffin, Ga.	906 Hill St.
WMEX	a	100	(.25)	Boston, Mass.	Northern Corp.
WNBF	a	100	C(.25)	Binghamton, N. Y.	Arlington Hotel
WNLC	a	100	DM	New London, Conn.	Mohican Hotel
WOMI	a	100	(.25)	Owensboro, Ky.	Owensboro Brdc. Co.
WOPI	a	100	...	Bristol, Tenn.	22nd and State
WRDW	a	100	C(.25)	Augusta, Ga.	309 Eighth St.
WRGA	a	100	(.25)	Rome, Ga.	10 Third Ave.
WRTD	a	100	B	Richmond, Va.	State-Planters Bank Bldg.
WSYB	a	100	....	Rutland, Vt.	Box 328
WTMV	a	100	(.25)	E. St. Louis, Ill.	Miss. Val. Brdc. Co.
WWRL	a	100	1(.25)	Woodside, N. Y.	41-30 - 58th St.
WWSW	a	100	(.25)	Pittsburgh, Pa.	Hotel Keystone

1510 kcs. (198.6 m.)

CFRC	a	100	F	Kingston, Ont.	Fleming Hall
CKCR	a	100	....	Waterloo, Ont.	24 King St., S.

1520 kcs. (197.3 m.)

TGW	d	1000	....	Guatemala City, Guat.	Ministerio de Fomento

1530 kcs. (196 m.)

KITE	a	1000	...	Kansas City, Mo.	106 W. 14th St.
WBRY	a	1000	M	Waterbury, Conn.	136 Grand St.

1550 kcs. (193.4 m.)

KPMC	a	1000	M	Bakersfield, Calif.	Pioneer Mercantile Co.
WQXR	a	1000	...	New York, N. Y.	730 Fifth Ave.

STATION NEWS

THE Canadian Broadcasting Corporation announces that the Minister of Transport has *intimated* the authorization by the government of the construction of a new 50 kilowatt transmitter for the Prairie region. This transmitter, taken in conjunction with the new 50 kilowatter being built in the Maritimes, will complete the second installment of the national plan of high-power coverage.

Canadian Mobile Unit

A new technique in radio broadcasting in North America was introduced this summer by the Canadian Broadcasting Corporation through the use of a special mobile recording laboratory, a recent acquisition of the corporation's special events department.

This unit, which consists of a van in which is installed equipment for shortwave and ultrawave broadcasting, and for recording purposes, and which operates on a frequency of 37 megacycles with call letters VE9AZ, was designed by CBC engineers, and constructd under the supervision of Roy Cahoon, chief special events engineer.

Examiners' Reports

An FCC Examiner recommended grant of an application for a construction permit for a new station to be located in Gastonia, N. C. This station would employ 1420 kcs., with 100 watts nights and 250 watts daytime. The applicant is F. C. Todd.

At the request of the Lincoln Memorial University, applicant, the construction permit for WLMU, Middlesboro, Ky., has been retired to the closed files. This station was to have worked on 1210 kcs. with 100 watts nighttime power.

KUJ, Walla Walla, Wash., recommended grant of CP to change frequency from 1370 to 560 kcs., and increase power from 100 to 250 watts.

WAPI, Birmingham, Ala., recommended grant of application for voluntary assignment of license to Voice of Alabama, Inc.

WBNX, New York, N. Y., recommended grant of application for CP to increase power from one kilowatt to one kilowatt nights, 5 kilowatts days.

WHBF, Rock Island, Ill., recommended grant of CP to increase power to one kilowatt, using a directional aerial at night.

WHBL, Sheboygan, Wis., recommended grant of CP to increase power to 250 watts nights, 1 kilowatt days.

WMBG, Richmond, Va., recommended grant of application for CP to increase power from 500 watts to 1 kilowatt nights, 5 kilowatts days.

WSBT, South Bend, Ind., recommended grant of application to change frequency from 1350 to 1010 kcs., increase power from 500 watts to 1 kilowatt, and hours of operation from sharing with WGES to unlimited, using a directional aerial at night.

Edward Hirsch of St. Albans, L. I., N. Y., tells us that station HC1JB, at Quito, Ecuador, is heard frequently from 9 to 10 pm, EST, on 14420 kcs. The station features broadcasts known as "Sermons in the Andes Mountains. Mr. Hirsch also reports a stranger on 12950 kcs, speaking Spanish, in the late afternoons.

NORTH AMERICAN B. C. STATIONS BY LOCATIONS

Frequency in kilocycles in second column. Night power in watts in third column. Net work affiliations in fourth column, C Columbia, R National Red, B National Blue, N National Red and Blue. F Canadian, M Mutual.

ALABAMA

Birmingham			
WAPI	1140	5000	C
WBRC	930	1000	R
WSGN	1310	100	B
Decatur			
WMFO	1370	100	
Dothan			
WAGF	1370	250	
Gadsden			
WJBY	1210	100	
Huntsville			
WBHP	1200	100	
Mobile			
WALA	1380	500	C
Montgomery			
WSFA	1410	500	C
Selma			
WHBB	1500	100	
Sheffield			
WMSD	1420	100	
Tuscaloosa			
WJRD	1200	250	

ALASKA

Anchorage			
KFQD	780	250	
Fairbanks			
KFAR	610	1000	
Juneau			
KINY	1310	100	
Ketchikan			
KGBU	900	500	

ARIZONA

Globe			
KWJB	1210	100	
Jerome			
KCRJ	1310	100	
Lowell			
KSUN	1200	100	
Phoenix			
KOY	1390	1000	C
KTAR	620	1000	N
Safford			
KGLU	1420	100	
Tucson			
KGAR	1370	100	C
KVOA	1260	1000	
Yuma			
KUMA	1420	100	

ARKANSAS

Blytheville			
KLCN	1290	100	
El Dorado			
KELD	1370	100	
Fort Smith			
KFPW	1210	100	
Hot Springs			
KTHS	1060	10000	N
Jonesboro			
KBTM	1200	100	
Little Rock			
KARK	890	500	N
KGHI	1200	100	
KLRA	1390	1000	C
Pine Bluff			
KOTN	1500	100	
Siloam Springs			
KUOA	1260	5000	

CALIFORNIA

Bakersfield			
KERN	1370	100	N
KPMC	1550	1000	M
Berkeley			
KRE	1370	100	
Beverly Hills			
KMPC	710	500	
Chico			
KHSL	1260	250	
El Centro			
KXO	1500	100	
Eureka			
KIEM	1450	500	M
Fresno			
KARM	1310	100	C
KMJ	580	1000	N
Glendale			
KIEV	850	250	
Hollywood			
KFWB	950	1000	
Long Beach			
KFOX	1250	1000	
KGER	1360	1000	
Los Angeles			
KECA	1430	1000	B
KEHE	780	1000	
KFAC	1300	1000	
KFI	640	50000	R
KFSG	1120	500	
KFVD	1000	1000	
KGFJ	1200	100	
KHJ	900	1000	M
KMTR	570	1000	
KNX	1050	50000	C
KRKD	1120	500	
Merced			
KYOS	1040	250	
Modesto			
KTRB	740	250	
Monterey			
KDON	1210	100	M
Oakland			
KLS	1280	250	
KLX	880	1000	
KROW	930	1000	
Pasadena			
KPPC	1210	100	
Redding			
KVCV	1200	100	
Sacramento			
KFBK	1490	10000	N
KROY	1210	100	C
San Bernardino			
KFXM	1210	100	M
San Diego			
KFSD	600	1000	B
KGB	1330	1000	M
San Francisco			
KFRC	610	1000	M
KGGC	1420	100	
KGO	790	7500	B
KJBS	1070	500	
KPO	680	50000	R
KSFO	560	1000	C
KYA	1230	1000	
San Jose			
KQW	1010	1000	M
San Luis Obispo			
KVEC	1200	250	
Santa Ana			
KVOE	1500	100	M
Santa Barbara			
KDB	1500	100	M
KTMS	1220	500	B
Santa Rosa			
KSRO	1310	250	
Stockton			
KGDM	1100	1000	M
KWG	1200	100	N
Visalia			
KTKC	1190	250	
Watsonville			
KHUB	1310	250	

COLORADO

Alamosa			
KGIW	1420	100	
Colorado Springs			
KVOR	1270	1000	C
Denver			
KFEL	920	500	M
KLZ	560	1000	C
KOA	830	50000	R
KPOF	880	1000	
KVOD	920	500	B
Durango			
KIUP	1370	100	
Grand Junction			
KFXJ	1200	100	
Greeley			
KFKA	880	500	M
La Junta			
KOKO	1370	100	
Lamar			
KIDW	1420	100	
Pueblo			
KGHF	1320	500	B
Sterling			
KGEK	1200	100	

CONNECTICUT

Bridgeport			
WICC	600	500	M
Hartford			
WDRC	1330	1000	C
WTIC	1040	50000	R
WTHT	1200	100	M
New Britain			
WNBC	1380	250	
New Haven			
WELI	900	500	
New London			
WNLC	1500	100	M
Waterbury			
WATR	1190	100	
WBRY	1530	1000	M

DELAWARE

Wilmington			
WDEL	1120	250	R
WILM	1420	100	

DISTRICT OF COLUMBIA

Washington			
WJSV	1460	10000	C
WMAL	630	250	B
WOL	1310	1000	M
WRC	950	1000	R

FLORIDA

Daytona Beach			
WMFJ	1420	100	
Gainesville			
WRUF	830	5000	
Jacksonville			
WJAX	900	1000	N
WMBR	1370	100	C
Lakeland			
WLAK	1310	100	
Miami			
WIOD	610	1000	N
WMBF	610	1000	
WQAM	560	1000	C
Miami Beach			
WKAT	1500	100	
Orlando			
WDBO	580	1000	C
Pensacola			
WCOA	1340	500	C
St. Augustine			
WFOY	1210	100	
St. Petersburg			
WSUN	620	1000	N
Tallahassee			
WTAL	1310	100	
Tampa			
WDAE	1220	1000	C
WFLA	620	1000	N
West Palm Beach			
WJNO	1200	100	C

GEORGIA

Albany			
WGPC	1420	100	
Athens			
WGAU	1310	100	
Atlanta			
WAGA	1450	500	B
WATL	1370	100	
WGST	890	1000	C
WSB	740	50000	R
Augusta			
WRDW	1500	100	C
Columbus			
WRBL	1200	100	
Griffin			
WKEU	1500	100	
Macon			
WMAZ	1180	1000	C
Rome			
WRGA	1500	100	
Savannah			
WSAV	1310	100	
WTOC	1260	1000	C

NORTH AMERICAN B. C. STATIONS BY LOCATIONS

Thomasville
WPAX 1210 100
Waycross
WAYX 1200 100

HAWAII

Hilo
KHBC 1400 250M
Honolulu
KGMB 1320 1000 C
KGU 750 2500 N

IDAHO

Boise
KIDO 1350 1000 N
Coeur d'Alene
KGCI 1200 100
Idaho Falls
KID 1320 500
Lewiston
KRLC 1390 250
Nampa
KFXD 1200 100
Pocatello
KSEI 900 250 N
Twin Falls
KTFI 1240 1000 N

ILLINOIS

Bloomington
WJBC 1200 100
Carthage
WCAZ 1070 100
Champaign
WDWS 1370 100
Chicago
WAAF 920 1000
WBBM 770 50000 C
WCBD 1080 5000
WCFL 970 5000 N
WCRW 1210 100
WEDC 1210 100
WENR 870 50000 B
WGES 1360 500
WGN 720 50000M
WJJD 1130 20000
WLS 870 50000 B
WMAQ 670 50000 R
WMBI 1080 5000
WSBC 1210 100
Cicero
WHFC 1420 100
Danville
WDAN 1500 250
Decatur
WJBL 1200 100
East Dubuque
WKBB 1500 100 C
East St. Louis
WTMV 1500 100
Galesburg
WGIL 1500 250
Harrisburg
WEBQ 1210 100
Joliet
WCLS 1310 100
Peoria
WMBD 1440 1000 C
Quincy
WTAD 900 1000
Rockford
WROK 1410 500
Rock Island
WHBF 1210 100
Springfield
WCBS 1420 100
WTAX 1210 100
Tuscola
WDZ 1020 250
Urbana
WILL 580 1000

INDIANA

Anderson
WHBU 1210 100
Elkhart
WTRC 1310 100
Evansville
WEOA 1370 100 C
WGBF 630 500 N
Fort Wayne
WGL 1370 100 N
WOWO 1160 10000 B
Gary
WIND 560 1000
Hammond
WHIP 1480 5000
WWAE 1200 100
Indianapolis
WFBM 1230 1000 C
WGVA 1050 1000
WIRE 1400 1000 R
Muncie
WLBC 1310 100
New Albany
WGRC 1370 250
Richmond
WKBV 1500 100
South Bend
WFAM 1200 100
WSBT 1360 500
Terre Haute
WBOW 1310 100 N
West Lafayette
WBAA 890 500

IOWA

Ames
WOI 640 5000
Boone
KFGQ 1370 100
Cedar Rapids
WMT 600 1000 B
Davenport
WOC 1370 100 C
Decorah
KGCA 1270 100
KWLC 1270 100
Des Moines
KRNT 1320 1000 C
KSO 1430 500 B
WHO 1000 50000 R
Dubuque
KDTH 1340 500
Iowa City
WSUI 880 500
Marshalltown
KFJB 1200 100
Mason City
KGLO 1210 100 C
Shenandoah
KFNF 890 500
KMA 930 1000 B
Sioux City
KSCJ 1330 1000 C
KTRI 1420 100

KANSAS

Abilene
KFBI 1050 5000
Atchison
.... 1420 100
Coffeyville
KGGF 1010 1000M
Dodge City
KGNO 1340 250
Garden City
KIUL 1210 100
Great Bend
KVGB 1370 100
Hutchinson
KWBG 1420 100
Kansas City
KCKN 1310 100
Lawrence
KFKU 1220 1000
WREN 1220 1000 B
Manhattan
KSAC 580 500
Pittsburg
KOAM 790 1000 N
Salina
KSAL 1500 100
Topeka
WIBW 580 1000 C
Wichita
KANS 1210 100 B
KFH 1300 1000 C

KENTUCKY

Ashland
WCMI 1310 100
Covington
WCKY 1490 10000 N
Lexington
WLAP 1420 100
Louisville
WAVE 940 1000 N
WHAS 820 50000 C
Middlesboro
WLMU 1210 100
Owensboro
WOMI 1500 100
Paducah
WPAD 1420 100

LOUISIANA

Alexandria
KALB 1210 100
Baton Rouge
WJBO 1120 500 B
Lafayette
KVOL 1310 100
Lake Charles
KPLC 1500 100
Monroe
KMLB 1200 100
New Orleans
WBNO 1200 100
WDSU 1250 1000 B
WJBW 1200 100
WSMB 1320 1000 R
WWL 850 10000 C
Shreveport
KRMD 1310 100
KTBS 1450 1000 N
KWKH 1100 10000 C

MAINE

Augusta
WRDO 1370 100M
Bangor
WABI 1200 100
WLBZ 620 500 C
Portland
WCSH 940 1000 R
WGAN 640 500
Presque Isle
WAGM 1420 100

MARYLAND

Baltimore
WBAL 760 2500 B
WBAL 1060 10000 B
WCAO 600 500 C
WCBM 1370 100
WFBR 1270 500 R
College Park
W3XJ 1060 100
Cumberland
WTBO 800 250
Frederick
WFMD 900 500
Hagerstown
WJEJ 1210 100
Salisbury
WSAL 1200 250

MASSACHUSETTS

Boston
WAAB 1410 500M
WBZ 990 50000 B
WCOP 1120 500
WEEI 590 1000 C
WHDH 830 1000
WMEX 1500 100
WNAC 1230 1000 R
WORL 920 500
Cape Cod
..... 1210 100
Fall River
WSAR 1450 1000M
Greenfield
WHAI 1210 250
Lawrence
WLAW 680 1000
WLLH 1370 100
Lowell
WLLH 1370 100M
New Bedford
WNLH 1310 100M

NORTH AMERICAN B. C. STATIONS BY LOCATIONS

Pittsfield
WBRK 1310 100 C
Springfield
WBZA 990 1000 B
WMAS 1420 100 C
WSPR 1140 500M
Worcester
WORC 1280 500 C
WTAG 580 1000 R

MICHIGAN

Battle Creek
WELL 1420 100
Bay City
WBCM 1410 500
Calumet
WHDF 1370 100
Detroit
WJBK 1500 100
WJR 750 50000 C
WMBC 1420 100
WWJ 920 5000 R
WXYZ 1240 1000 B
East Lansing
WKAR 850 1000
Flint
WFDF 1310 100
Grand Rapids
WASH 1270 500 N
WOOD 1270 500 N
Ironwood
WJMS 1420 100
Jackson
WIBM 1370 100
Kalamazoo
WKZO 590 1000 B
Lansing
WJIM 1210 100
Lapeer
WMPC 1200 100
Marquette
WBEO 1310 100
Muskegon
WKBZ 1500 100
Port Huron
WHLS 1370 250
Royal Oak
WEXL 1310 50
Saginaw
WHAL 950 500

MINNESOTA

Albert Lea
KATE 1420 250
Duluth
KDAL 1500 100 C
WEBC 1290 1000 N
Fergus Falls
KGDE 1200 100
Hibbing
WMFG 1210 100
Mankato
KYSM 1500 100
Minneapolis
WCCO 810 50000 C
WDGY 1180 1000 C
WLB 760 1000
WTCN 1250 1000 B
Moorhead
KVOX 1310 100
Northfield
WCAL 760 1000
Rochester
KROC 1310 100
St. Cloud
KFAM 1420 100
St. Paul
KSTP 1460 10000 R
WMIN 1370 100
Virginia
WHLB 1370 100 C
Winona
KWNO 1200 250

MISSISSIPPI

Grenada
WGRM 1210 100
Gulfport
WGCM 1210 100
Hattiesburg
WFOR 1370 100
Jackson
WJDX 1270 1000 R
WSLI 1420 100
Kosciusko
WHEF 1500 100
Laurel
WAML 1310 100
Meridian
WCOC 880 1000 C
Vicksburg
WQBC 1360 1000

MISSOURI

Cape Girardeau
KFVS 1210 100
Columbia
KFRU 630 500
Jefferson City
KWOS 1310 100
Joplin
WMBH 1420 100
Kansas City
KCMO 1370 100
KITE 1530 1000
KMBC 950 1000 C
WDAF 610 1000 R
WHB 860 1000M
Poplar Bluff
KWOC 1310 100
St. Joseph
KFEQ 680 2500
St. Louis
KFUO 550 500
KMOX 1090 50000 C
KSD 550 1000 R
KWK 1350 1000 B
KXOK 1250 1000
WEW 760 1000
WIL 1200 100
Springfield
KGBX 1230 500 N
KWTO 560 5000

MONTANA

Billings
KGHL 780 1000 N
Bozeman
KRBM 1420 100
Butte
KGIR 1340 1000 N
Great Falls
KFBB 1280 1000 C
Helena
KPFA 1210 100 N
Kalispell
KGEZ 1310 100
Lewistown
KDNC 1200 100
Missoula
KGVO 1260 1000 C
Wolf Point
KGCX 1450 1000

NEBRASKA

Clay Center
KMMJ 740 1000
Kearney
KGFW 1310 100
Lincoln
KFAB 770 10000 C
KFOR 1210 100 C
Norfolk
WJAG 1060 1000
North Platte
KGNF 1430 1000
Omaha
KOIL 1260 1000 B
WAAW 660 500
WOW 590 1000 R
Scottsbluff
KGKY 1500 100

NEVADA

Reno
KOH 1380 500 C

NEW HAMPSHIRE

Laconia
WLNH 1310 100M
Manchester
WFEA 1340 500 N
Portsmouth
WHEB 740 250

NEW JERSEY

Asbury Park
WCAP 1280 500
Atlantic City
WPG 1100 5000 C
Bridgeton
WSNJ 1210 100
Camden
WCAM 1280 500
Jersey City
WAAT 940 500
WHOM 1450 250
Newark
WHBI 1250 1000
WOR 710 50000M
Red Bank
WBRB 1210 100
Trenton
WTNJ 1280 500
Whippany
W3XDD ... 50000
Zarephath
WAWZ 1350 500

NEW MEXICO

Albuquerque
KGGM 1230 1000
KOB 1180 10000 N
Carlsbad
KLAH 1210 100
Clovis
KICA 1370 100
Gallup
KAWM 1500 100
Hobbs
KWEW 1500 100
Roswell
KGFL 1370 100
Santa Fe
KRQA 1310 100

NEW YORK

Albany
WABY 1370 100 N
WOKO 1430 500 C
Auburn
WMBO 1310 100
Binghamton
WNBF 1500 100 C
Brooklyn
WARD 1400 500
WBBC 1400 500
WBBR 1300 1000
WCNW 1500 100
WLTH 1400 500
WVFW 1400 500
Buffalo
WBEN 900 1000 R
WBNY 1370 100
WEBR 1310 100 B
WGR 550 1000 C
WKBW 1480 5000 C
WSVS 1370 50
Canton
WCAD 1220 500
Elmira
WENY 1200 250
WESG 850 1000 C
Freeport
WGBB 1210 100
Jamestown
WJTN 1210 100 B
Newburgh
WGNY 1210 100
New York
WABC 860 50000 C
WBIL 1100 5000
WBNX 1350 1000
WBOQ 860 50000
WEAF 660 50000 R
WEVD 1300 1000
WFAB 1300 1000
WHN 1010 1000
WINS 1180 1000
WJZ 760 50000 B
WMCA 570 1000
WNEW 1250 1000
WNYC 810 1000

NORTH AMERICAN B. C. STATIONS BY LOCATIONS

WOV 1130 1000
WQXR 1550 1000
Olean
WHDL 1400 250
Plattsburg
WMFF 1310 100 B
Rochester
WHAM 1150 50000 B
WHEC 1430 500 C
WSAY 1210 100
Saranac Lake
WNBZ 1290 100
Schenectady
WGY 790 50000 R
Syracuse
WFBL 1360 1000 C
WSYR 570 1000 B
WSYU 570 1000
Troy
WHAZ 1300 1000
Utica
WIBX 1200 100 C
Watertown
WNNY 1420 100
White Plains
WFAS 1210 100
Woodside
WWRL 1500 100

NORTH CAROLINA

Asheville
WWNC 570 1000 N
Charlotte
WBT 1080 50000 C
WSOC 1210 100 N
Durham
WDNC 1500 100 C
Greensboro
WBIG 1440 1000 C
High Point
WMFR 1200 100
Kinston
WFTC 1200 100
Raleigh
WPTF 680 5000 N
Rocky Mount
WEED 1420 100
Wilmington
WMFD 1370 100
Wilson
WGTM 1310 100
Winston-Salem
WAIR 1250 250
WSJS 1310 100 C

NORTH DAKOTA

Bismarck
KFYR 550 1000 N
Devils Lake
KDLR 1210 100
Fargo
WDAY 940 1000 N
Grand Forks
KFJM 1410 500
Jamestown
KRMC 1370 100
Mandan
KGCU 1240 250
Minot
KLPM 1240 250
Valley City
KOVC 1500 100

OHIO

Akron
WADC 1320 1000 C
WJW 1210 100
Ashtabula
WICA 940 250
Canton
WHBC 1200 100
Cincinnati
WCPO 1200 100
WKRC 550 1000 C
WLW 700 500000N
WSAI 1330 1000 N
Cleveland
WCLE 610 500M
WGAR 1450 500 C
WHK 1390 1000 B
WTAM 1070 50000 R
Columbus
WBNS 1430 1000 C
WCOL 1210 100 N
WHKC 640 500M
WOSU 570 750
Dayton
WHIO 1260 1000 C
WSMK 1380 200 C
Lima
WBLY 1210 100
Portsmouth
WPAY 1370 100
Toledo
WSPD 1340 1000 B
WTOL 1200 100
Youngstown
WFMJ 1420 100
WKBN 570 500 C
Zanesville
WALR 1210 100

OKLAHOMA

Ada
KADA 1200 100M
Ardmore
KVSO 1210 100M
Elk City
KASA 1210 100
Enid
KCRC 1360 250M
Muskogee
KBIX 1500 100M
Norman
WNAD 1010 1000
Oklahoma City
KOCY 1310 100
KOMA 1480 5000 C
KTOK 1370 100M
WKY 900 1000 N
Okmulgee
KHBG 1210 100
Ponca City
WBBZ 1200 100M
Shawnee
KGFF 1420 100M
Tulsa
KTUL 1400 1000 C
KVOO 1140 25000 N

OREGON

Astoria
KAST 1370 100
Bend
KBND 1310 100
Corvallis
KOAC 550 1000
Eugene
KORE 1420 100M
Klamath Falls
KFJI 1210 100
La Grande
KLBM 1420 100
Marshfield
KOOS 1200 100
Medford
KMED 1410 250 N
Portland
KALE 1300 1000M
KBPS 1420 100
KEX 1180 5000 B
KGW 620 1000 R
KOIN 940 1000 C
KWJJ 1040 500
KXL 1420 100
Roseburg
KRNR 1500 100M
Salem
KSLM 1370 100M

PENNSYLVANIA

Allentown
WCBA 1440 500
WSAN 1440 500 N
Altoona
WFBG 1310 100
Easton
WEST 1200 100
Erie
WLEU 1420 100 B
Glenside
WIBG 970 100
Greensburg
WHJB 620 250 C
Grove City
WSAJ 1310 100
Harrisburg
WHP 1430 500 C
WKBO 1200 100
Hazelton
WAZL 1420 100
Johnstown
WJAC 1310 100
Lancaster
WGAL 1500 100
New Castle
WKST 1250 250
Philadelphia
KYW 1020 10000 R
WCAU 1170 50000 C
WDAS 1370 100
WFIL 560 1000 B
WHAT 1310 100
WIP 610 1000
WPEN 920 1000
WRAX 920 1000
WTEL 1310 100
Pittsburgh
KDKA 980 50000 B
KQV 1380 500 C
WCAE 1220 1000 R
WJAS 1290 1000 C
WWSW 1500 100
Reading
WEEU 830 1000
WRAW 1310 100
Scranton
WGBI 880 500 C
WQAN 880 500
Sharon
WPIC 780 250
Sunbury
WKOK 1210 100
Uniontown
WMBS 1420 250
Wilkes-Barre
WBAX 1210 100M
WBRE 1310 100 N
Williamsport
WRAK 1370 100
York
WORK 1320 1000 N

PUERTO RICO

Mayaguez
WPRA 1370 100
Ponce
WPRP 1420 100
San Juan
WKAQ 1240 1000
WNEL 1290 1000

RHODE ISLAND

Providence
WEAN 780 1000M
WJAR 890 1000 R
WPRO 630 500 C

SOUTH CAROLINA

Anderson
WAIM 1200 100 C
Charleston
WCSC 1360 500 N
Columbia
WIS 560 1000 N
Florence
WOLS 1200 100
Greenville
WFBC 1300 1000 N
Spartanburg
WSPA 920 1000

SOUTH DAKOTA

Aberdeen
KABR 1380 500
Brookings
KFDY 780 1000
Pierre
KGFX 630 200
Rapid City
KOBH 1370 100
WCAT 1200 100
Sioux Falls
KELO 1200 100 N
KSOO 1110 2500 N

NORTH AMERICAN B. C. STATIONS BY LOCATIONS

Vermillion		
KUSD	890	500
Yankton		
WNAX	570	1000 C

TENNESSEE

Bristol		
WOPI	1500	100
Chattanooga		
WAPO	1420	100
WDOD	1280	1000 C
Jackson		
WTJS	1310	100
Knoxville		
WNOX	1010	1000 C
WROL	1310	100 N
Memphis		
WHBQ	1370	100
WMC	780	1000 R
WMPS	1430	500 B
WREC	600	1000 C
Nashville		
WLAC	1470	5000 C
WSIX	1210	100
WSM	650	50000 N

TEXAS

Abilene		
KRBC	1420	100
Amarillo		
KGNC	1410	1000 N
Austin		
KNOW	1500	100 C
KTBC	1120	1000
Beaumont		
KFDM	560	500 N
KRIC	1420	100
Big Spring		
KBST	1500	100
Brady		
KNEL	1500	250
Brownsville		
KGFI	1500	100
College Station		
WTAW	1120	500
Corpus Christi		
KRIS	1330	500 N
Corsicana		
KAND	1310	100
Dallas		
KRLD	1040	10000 C
WFAA	800	50000 N
WRR	1280	500M
Denton		
KDNT	1420	100
Dublin		
KFPL	1310	100
El Paso		
KTSM	1310	100 N
WDAH	1310	100
Fort Worth		
KFJZ	1370	100
KGKO	570	1000 B
KTAT	1240	1000M
WBAP	800	50000 N
Galveston		
KLUF	1370	100
Greenville		
KGVL	1200	100
Houston		
KPRC	920	1000 R
KTRH	1290	1000 C
KXYZ	1440	1000 B
Kilgore		
KOCA	1210	100
Laredo		
KPAB	1500	100
Longview		
KFRO	1370	250
Lubbock		
KFYO	1310	100
Lufkin		
KRBA	1310	100
Midland		
KRLH	1420	100
Palestine		
KNET	1420	100
Pampa		
KPDN	1310	100
Paris		
KPLT	1500	250
Pecos		
KIUN	1420	100
Port Arthur		
KPAC	1260	500
San Angelo		
KGKL	1370	100
San Antonio		
KABC	1420	100
KMAC	1370	100
KONO	1370	100
KTSA	550	1000 C
WOAI	1190	50000 N
Sherman		
KRRV	1310	250
Temple		
KTEM	1370	250
Texarkana		
KCMC	1420	100
Tyler		
KGKB	1500	100
Waco		
WACO	1420	100 C
Weslaco		
KRGV	1260	1000 N

UTAH

Cedar City		
KSUB	1310	100
Logan		
KVNU	1500	100
Ogden		
KLO	1400	500 B
Price		
KEUB	1420	100
Salt Lake City		
KDYL	1290	1000 R
KSL	1130	50000 C
KUTA	1500	100

VERMONT

Burlington		
WCAX	1200	100
Rutland		
WSYB	1500	100
St. Albans		
WQDM	1390	1000
Springfield		
WNBX	1260	500 C
Waterbury		
WDEV	550	500

VIRGINIA

Charlottesville		
WCHV	1420	100
Danville		
WBTM	1370	100
Harrisonburg		
WSVA	550	500
Lynchburg		
WLVA	1200	100
Newport News		
WGH	1310	100
Norfolk		
WTAR	780	1000 N
Richmond		
WBBL	1210	100
WMBG	1350	500 R
WRNL	880	500
WRTD	1500	100 B
WRVA	1110	5000 C
Roanoke		
WDBJ	930	1000 C

WASHINGTON

Aberdeen		
KXRO	1310	100M
Bellingham		
KVOS	1200	100M
Centralia		
KELA	1440	500M
Everett		
KRKO	1370	50
Longview		
KWLK	780	250
Olympia		
KGY	1210	100M
Pullman		
KWSC	1220	1000
Seattle		
KEEN	1370	100
KIRO	710	1000 C
KJR	970	5000 B
KOL	1270	1000M
KOMO	920	1000 R
KRSC	1120	250
KTW	1220	1000
KXA	760	250
Spokane		
KFIO	1120	100
KFPY	890	1000 C
KGA	1470	5000 B
KHQ	590	1000 R
Tacoma		
KMO	1330	1000M
KVI	570	1000 C
Walla Walla		
KUJ	1370	100
Wenatchee		
KPQ	1500	100M
Yakima		
KIT	1250	250M

WEST VIRGINIA

Bluefield		
WHIS	1410	500
Charleston		
WCHS	580	500 C
Clarksburg		
WBLK	1370	100
Fairmont		
WMMN	890	500 C
Huntington		
WSAZ	1190	1000
Parkersburg		
WPAR	1420	100 C
Wheeling		
WWVA	1160	5000 C

WISCONSIN

Eau Claire		
WEAU	1050	1000
Fond du Lac		
KFIZ	1420	100
Green Bay		
WHBY	1200	100
WTAQ	1330	1000 C
Janesville		
WCLO	1200	100
LaCrosse		
WKBH	1380	1000 C
Madison		
WHA	940	5000
WIBA	1280	1000 N
Manitowoc		
WOMT	1210	100
Milwaukee		
WEMP	1310	100
WISN	1120	250 C
WTMJ	620	1000 N
Poynette		
WIBU	1210	100
Racine		
WRJN	1370	100
Rice Lake		
WJMC	1210	250
Sheboygan		
WHBL	1300	250
Stevens Point		
WLBL	900	5000
Superior		
WDSM	1200	100
Wausau		
WSAU	1370	100

WYOMING

Casper		
KDFN	1440	500
Rock Springs		
KVRS	1370	100
Sheridan		
KWYO	1370	100

BAHAMAS

Nassau		
ZNS	540	400

CANADA

ALBERTA

Calgary		
CFAC	930	1000 F
CFCN	1030	10000 F
CJCJ	690	100 F
Edmonton		
CFRN	960	100 F
CJCA	730	1000 F
CKUA	580	500 F

Grande Prairie
CFGP 1200 100
Lethbridge
CJOC 950 100 F

BRIT.| COLUMBIA

Chilliwack
CHWK 780 100 F
Kamloops
CFJC 880 1000 F
Kelowna
CKOV 630 100 F
Prince Rupert
CFPR 580 50
Trail
CJAT 910 1000 F
Vancouver
CBR 1100 5000 F
CJOR 600 500
CKCD 1010 100
CKFC 1410 50
CKMO 1410 100
CKWX 1010 100
Victoria
CFCT 1450 500

MANITOBA

Brandon
CKX 1120 1000 F
Flin Flon
CFAR 1370 100
Winnipeg
CJRC 630 500 F
CKY 910 15000 F

NEW BRUNSWICK

Fredericton
CFNB 550 500 F
Moncton
CKCW 1370 100 F
St. John
CHSJ 1120 500 F

N. W. TERRITORY

Aklavik
CJCU 1210 50

NOVA SCOTIA

Glace Bay
VAS 685 2000
Halifax
CHNS 930 1000 F
Sydney
CJCB 1240 1000 F
Wolfville
CKIC 1010 50
Yarmouth
CJLS 1310 100 F

ONTARIO

Brantford
CKPC 930 100 F
Chatham
CFCO 630 100 F
Cobalt
CKMC 1210 50
Fort William
CKPR 730 100 F
Hamilton
CHML 1010 100 F
CKOC 1120 500 F
Kenora
..... 1420 100
Kingston
CFRC 1510 100 F
London
CFPL 730 100 F
North Bay
CFCH 930 100 F
CJKL 1310 100 F
CKGB 1420 100 F
Ottawa
CBO 880 1000 F
CKCO 1010 100 F
Owen Sound
..... 1370 100
Prescott
CFLC 930 100
St. Catharines
CKTB 1200 100 F
Sault Ste. Marie
CJIC 1500 100 F
Stratford
CJCS 1210 50
Sudbury
CKSO 780 1000 F
Toronto
CBL 840 50000 F
CFRB 690 10000 C
CKCL 580 100 F
CRCY 960 100 F
Waterloo
CKCR 1510 100
Windsor
CKLW 1030 5000 F
Wingham
CKNX 1200 100

PRINCE EDWARD ISLAND

Charlottetown
CFCY 630 1000 F
CHCK 1310 50
Summerside
CHGS 1450 50 F

QUEBEC

Chicoutimi
CRCS 1120 100 F
Hull
CKCH 1210 100 F
Montreal
CBF 910 50000 N
CBM 1050 5000 F
CFCF 600 500 B
CHLP 1120 100 F
CKAC 730 5000 C
New Carlisle
CHNC 960 1000 F
Quebec
CHRC 580 100
CKCV 1310 100 F
CRCK 950 1000 F
Rimouski
CJBR 1030 1000 F
Sherbrooke
CHLT 1210 100
Three Rivers
CHLN 1420 100

SASKATCHEWAN

Moose Jaw
CHAB 1200 100 F
Prince Albert
CKBI 1210 100 F
Regina
CJRM 540 1000 F
CKCK 1010 1000 F
Saskatoon
CFQC 840 1000 F
Yorkton
CJGX 1390 100 F

COSTA RICA

San Jose
TIPG 625 2000
TIX 650 1000

CUBA

Bayamo
CMKL 990 ....
Caibarien
CMHD 1270 250
Camaguey
CMJA 1010 300
CMJC 1390 150
CMJE 1220 50
CMJF 1150 200
CMJK 780 250
CMJQ 1080 200
CMJW 1340 300
CMJX 830 500
Cardenas
CMGE 1370 150
Ciego de Avila
CMJH 1360 50
CMJI 1130 150
CMJO 1180 50
Cienfuegos
CMHJ 1160 175
CMHM 1450 100
CMHX 760 200
Cruces
CMHK 1330 250
Guantanamo
CMKS 960 ....
Havana
CMBC 950 10000
CMBD 1260 500
CMBF 770 10000
CMBL 750 2500
CMBQ 680 5000
CMBS 1170 150
CMBX 1070 500
CMBY 970 150
CMBZ 1000 500
CMC 1260 150
CMCA 1350 450
CMCB 1230 150
CMCD 630 250
CMCF 810 600
CMCG 680 1000
CMCJ 1110 500
CMCK 1030 5000
CMCL 730 10000
CMCM 850 ....
CMCO 1200 250
CMCQ 1410 5000
CMCR 1380 ....
CMCU 1290 500
CMCW 1140 500
CMCX 1380 150
CMCY 570 5000
CMK 720 3000
CMOA 1440 150
CMOX 1320 200
CMQ 600 25000
CMW 880 1400
CMX 920 1000
..... 630 10000
Holguin
CMKF 1460 250
CMKO 1280 ....
Manzanillo
CMKM 1120 200
Matanzas
CMGC 1400 150
CMGF 1120 250
CMGH 790 500
Moron
CMJP 1430 75
Pinar del Rio
CMAB 1340 300
Sagua la Grande
CMHA 1070 50
Sancti Spiritus
CMHB 1240 50
Santa Clara
CMHI 1210 150
CMHW 820 100
Santiago
CMKC 1250 150
CMKD 1050 250
CMKG 1160 ....
CMKR 1400 100
CMKW 1350 ....
CMKX 1190 ....

DOMINICAN REPUBLIC

HIN 1090 740
Ciudad Trujillo
HIT 1050 50
HIX 800 800

EL SALVADOR

San Salvador
YSS 640 500

GUATEMALA

Guatemala City
TGW 1520 1000
TG1 1305 ....

HONDURAS

Tegucigalpa
HRN 1250 50

NORTH AMERICAN B. C. STATIONS BY LOCATIONS

MEXICO

AGUASCALIENTES

Aguascalientes
XEBI 1000 25

BAJA CALIFORNIA

Mexicali
XEAA 750 200
XEAO 660 250
Rosarito Beach
XERB 730 100000
Tijuana
XEAC 980 1000
XEAU 1320 ....
XEBG 820 1000
XEC 1150 100
XELO 580 10000
XEMO 860 5000
XEOK 760 2500

CHIHUAHUA

Chihuahua
XEBU 1200 50
XEFI 1440 250
Juarez
XEF 1450 100
XEFV 1210 100
XEJ 1020 1000
XEP 1160 500
Parral
XEAT 1210 250

COAHUILA

Piedras Negras
XEMU 580 250
XEPN 730 100000
Sabinas
XEBX 640 250
Saltillo
XEAS 1160 100
XELA 1240 50
Torreon
XETB 1310 125

Villa Acuna
XEDH 1340 200
XERA 840 250000

D. F.

Gral. Anaya
XEDA 1220 200
Mexico City
XEAI 1250 500
XEAL 660 1000
XEB 1030 10000
XEBS 1340 200
XEBZ 810 100
XEDP 1080 500
XEFO 940 5000
XEJP 1130 100
XEJW 870 500
XEK 890 100
XEL 1100 250
XELZ 1370 100
XEMX 1280 100
XEN 780 1000
XENC 860 50
XEW 890 50000
XEXM 610 500
XEXS 1310 100
XEXX 1170 1000
XEYO 610 500
Tacuba
XEFA 1180 500
Texcoco
XEXE 1270 17

DURANGO

Durango
XEBP 1150 250
XEE 1210 50

GUANAJUATO

Irapuato
XEBO 1310 25
Leon
XEFM 1160 20
XEKL 1240 500

JALISCO

Guadalajara
XED 1160 2500
Guzman
XEBA 1080 20

MICHOACAN

Morelia
XEI 1370 125

NUEVO LEON

Monterrey
XEFB 870 200
XEG 1230 250
XEH 720 250
XET 690 5000
XEX 1310 125

PUEBLA

Puebla
XETH 1210 100

SAN LUIS POTOSI

San Luis Potosi
XECZ 1370 100
XEXH 1250 250

SINALOA

Mazatlan
XEBL 1220 50

SONORA

Cananea
XEFQ 1010 50
Hermosillo
XEBH 930 500
Nogales
XEAF 990 750
Obregon
XEAP 1340 50

TAMAULIPAS

Matamoros
XEAM 750 25

Nuevo Laredo
XEBK 1080 100
XEDF 810 100
XEFE 980 250
XENT 910 150000
Reynosa
XEAW 960 100000
Tampico
XEFW 1310 300
XES 990 250

VERACRUZ

Cordoba
XEAG 1310 10
Jalapa
XEXB 1270 250
XEXD 1340 350
Minatitlan
XEDW 1150 200
Veracruz
XETF 1220 12
XEU 1010 250

YUCATAN

Merida
XEFC 550 100
XEME 1240 50
XEZ 630 500

ZACATECAS

Zacatecas
XEAZ 1230 200

MIQUELON

St. Pierre
FQN 609 250

NEWFOUNDLAND

St. John's
VOAC 1065 40
VOCM 1006 200
VOGY 840 400
VONF 1195 500
VOWR 681 500

A veritable Solomon is Phil Spitalny, who has the job of managing 30 beautiful young women and claims they are easy to handle. For over four years he has bossed an all-girl orchestra and, what seems most remarkable, he has gotten away with it.

The "Hour of Charm" director has a unique organization and perhaps it is that angle which has made it a success. From more than 1500 auditioners in all parts of the country, he chose his group of musicions. Each girl signed an iron-clad contract agreeing, among other things, to stay single for at least six months.

Maestro Spitalny manages the very lives of his musical queens. He selects their cloths, arranges their coiffures, and picks their beaus. He taboos boyish bobs, jewelry, red finger-nail polish, too much make-up and decollette gowns. He has set a top weight of 120 pounds and anyone going over that mark is put on a strict diet.

If a girl has a date, she asks permission before accepting it. Phil must know the name of the boy friend and where they're going.

Salaries start at $75 a week plus a percentage of the profits for all. Perhaps that's the reason why the girls are willing to be managed so completely.

NORTH AMERICAN B. C. STATIONS BY CALLS

CBF 910 50000
Montreal, P. Q.
CBL 840 50000
Toronto, Ont.
CBM 1050 5000
Montreal, P. Q.
CBO 880 1000
Ottawa, Ont.
CBR 1100 5000
Vancouver, B. C.
CFAC 930 1000
Calgary, Alta.
CFAR 1370 100
Flin Flon, Man.
CFCF 600 500
Montreal, Que.
CFCH 930 100
North Bay, Ont.
CFCN 1030 10000
Calgary, Alta.
CFCO 630 100
Chatham, Ont.
CFCT 1450 500
Victoria, B. C.
CFCY 630 1000
Charlottetown, P.E.I.
CFGP 1200 100
Grande Praire, Alta.
CFJC 880 1000
Kamloops, B. C.
CFLC 930 100
Prescott, Ont.
CFNB 550 500
Fredericton, N. B.
CFPL 730 100
London, Ont.
CFPR 580 50
Prince Rupert, B. C.
CFQC 840 1000
Saskatoon, Sask.
CFRB 690 10000
Toronto, Ont.
CFRC 1510 100
Kingston, Ont.
CFRN 960 100
Edmonton, Alta.
CHAB 1200 100
Moose Jaw, Sask.
CHCK 1310 50
Charlottetown, P.E.I.
CHGS 1450 50
Summerside, P.E.I.
CHLN 1420 100
Three Rivers, P. Q.
CHLP 1120 100
Montreal, Que.
CHLT 1210 100
Sherbrooke, P. Q.
CHML 1010 100
Hamilton, Ont.
CHNC 960 1000
New Carlisle, Que.
CHNS 930 1000
Halifax, N. S.
CHRC 580 100
Quebec, P. Q.
CHSJ 1120 500
St. John, N. B.

CHWK 780 100
Chilliwack, B. C.
CJAT 910 1000
Trail, B. C.
CJBR 1030 1000
Rimouski, P. Q.
CJCA 730 1000
Edmonton, Alta.
CJCB 1240 1000
Sydney, N. S.
CJCJ 690 100
Calgary, Alta.
CJCS 1210 50
Stratford, Ont.
CJCU 1210 50
Aklavik, N. W. T.
CJGX 1390 100
Yorkton, Sask.
CJIC 1500 100
S. Ste. Marie, Ont.
CJKL 1310 100
North Bay, Ont.
CJLS 1310 100
Yarmouth, N. S.
CJOC 950 100
Lethbridge, Alta.
CJOR 600 500
Vancouver, B. C.
CJRC 630 500
Winnipeg, Man.
CJRM 540 1000
Regina, Sask.
CKAC 730 5000
Montreal, Que.
CKBI 1210 100
Prince Albert, Sask.
CKCD 1010 100
Vancouver, B. C.
CKCH 1210 100
Hull, Que.
CKCK 1010 1000
Regina, Sask.
CKCL 580 100
Toronto, Ont.
CKCO 1010 100
Ottawa, Ont.
CKCR 1510 100
Waterloo, Ont.
CKCV 1310 100
Quebec, Que.
CKCW 1370 100
Moncton, N. B.
CKFC 1410 50
Vancouver, B. C.
CKGB 1420 100
North Bay, Ont.
CKIC 1010 50
Wolfville, N. S.
CKLW 1030 5000
Windsor, Ont.
CKMC 1210 50
Cobalt, Ont.
CKMO 1410 100
Vancouver, B. C.
CKNX 1200 100
Wingham, Ont.
CKOC 1120 500
Hamilton, Ont.

CKOV 630 100
Kelowna, B. C.
CKPC 930 100
Brantford, Ont.
CKPR 730 100
Fort William, Ont.
CKSO 780 1000
Sudbury, Ont.
CKTB 1200 100
St. Catharines, Ont.
CKUA 580 500
Edmonton, Alta.
CKWX 1010 100
Vancouver, B. C.
CKX 1120 1000
Brandon, Man.
CKY 910 15000
Winnipeg, Man.
CMAB 1340 300
Pinar del Rio, Cuba
CMBC 950 10000
Havana, Cuba
CMBD 1260 500
Havana, Cuba
CMBF 770 10000
Havana, Cuba
CMBL 750 2500
Havana, Cuba
CMBQ 680 5000
Havana, Cuba
CMBS 1170 150
Havana, Cuba
CMBX 1070 500
Havana, Cuba
CMBY 970 150
Havana, Cuba
CMBZ 1000 500
Havana, Cuba
CMC 1260 150
Havana, Cuba
CMCA 1350 450
Havana, Cuba
CMCB 1230 150
Havana, Cuba
CMCD 630 250
Havana, Cuba
CMCF 810 600
Havana, Cuba
CMCG 680 1000
Havana, Cuba
CMCJ 1110 500
Havana, Cuba
CMCK 1030 5000
Havana, Cuba
CMCL 730 10000
Havana, Cuba
CMCM 850 ....
Havana, Cuba
CMCO 1200 250
Havana, Cuba
CMCQ 1410 5000
Havana, Cuba
CMCR 1380 ....
Havana, Cuba
CMCU 1290 500
Havana, Cuba
CMCW 1140 500
Havana, Cuba

CMCX 1380 150
Havana, Cuba
CMCY 570 5000
Havana, Cuba
CMGC 1400 150
Matanzas, Cuba
CMGE 1370 150
Cardenas, Cuba
CMGF 1120 250
Matanzas, Cuba
CMGH 790 500
Matanzas, Cuba
CMHA 1070 50
Sagua la Grande, Cuba
CMHB 1240 50
Sancti Spiritus, Cuba
CMHD 1270 250
Caibarien, Cuba
CMHI 1210 150
Santa Clara, Cuba
CMHJ 1160 175
Cienfuegos, Cuba
CMHK 1330 250
Cruces, Cuba
CMHM 1450 100
Cienfuegos, Cuba
CMHW 820 100
Santa Clara, Cuba
CMHX 760 200
Cienfuegos, Cuba
CMJA 1010 300
Camaguey, Cuba
CMJC 1390 150
Camaguey, Cuba
CMJE 1220 50
Camaguey, Cuba
CMJF 1150 200
Camaguey, Cuba
CMJH 1360 50
Ciego de Avila, Cuba
CMJI 1130 150
Ciego de Avila, Cuba
CMJK 780 250
Camaguey, Cuba
CMJO 1180 50
Ciego de Avila, Cuba
CMJP 1430 75
Camaguey, Cuba
CMJQ 1080 200
Camaguey, Cuba
CMJW 1340 300
Camaguey, Cuba
CMJX 830 500
Camaguey, Cuba
CMK 720 3000
Havana, Cuba
CMKC 1250 150
Santiago, Cuba
CMKD 1050 250
Santiago, Cuba
CMKF 1460 250
Holguin, Cuba
CMKG 1160 ....
Santiago, Cuba
CMKL 990 ....
Bayamo, Cuba
CMKM 1120 200
Manzanillo, Cuba

CMKO 1280 ....
Holguin, Cuba
CMKR 1400 100
Santiago, Cuba
CMKS 960 ....
Guantanamo, Cuba
CMKW 1350 ....
Santiago, Cuba
CMKX 1190 ....
Santiago, Cuba
CMOA 1440 150
Havana, Cuba
CMOX 1320 200
Havana, Cuba
CMQ 600 25000
Havana, Cuba
CMW 880 1400
Havana, Cuba
CMX 920 1000
Havana, Cuba
CRCK 950 1000
Quebec, Que.
CRCS 1120 100
Chicoutimi, Que.
CRCY 960 100
Toronto, Ont.
FQN 609 250
St. Pierre, Miquelon
HIN 1090 740
Ciudad Trujillo, D. R.
HIT 1050 50
Ciudad Trujillo, D. R.
HIX 800 800
Ciudad Trujillo, D. R.
HP50 1440 ....
Panama City, Panama
HRN 1250 50
Tegucigalpa, Hon.
KABC 1420 100
San Antonio, Texas
KABR 1380 500
Aberdeen, S. Dak.
KADA 1200 100
Ada, Okla.
KALB 1210 100
Alexandria, La.
KALE 1300 1000
Portland, Ore.
KAND 1310 100
Corsicana, Texas
KANS 1210 100
Wichita, Kans
KARK 890 500
Little Rock, Ark.
KARM 1310 100
Fresno, Calif.
KASA 1210 100
Elk City, Okla.
KAST 1370 100
Astoria, Ore.
KATE 1420 250
Albert Lea, Minn.
KAWM 1500 100
Gallup, N. Mex.
KBIX 1500 100
Muskogee, Okla.
KBND 1310 100
Bend, **Ore.**

KBPS 1420 100
Portland, Ore.
KBST 1500 100
Big Spring, Texas
KBTM 1200 100
Jonesboro, Ark.
KCKN 1310 100
Kansas City, Kans.
KCMC 1420 100
Texarkana, Texas
KCMO 1370 100
Kansas City, Mo.
KCRC 1360 250
Enid, Okla.
KCRJ 1310 100
Jerome, Ariz.
KDAL 1500 100
Duluth, Minn.
KDB 1500 100
Santa Barbara, Calif.
KDFN 1440 500
Casper, Wyo.
KDKA 980 50000
Pittsburgh, Pa.
KDLR 1210 100
Devils Lake, N. D.
KDNC 1200 100
Lewistown, Mont.
KDNT 1420 100
Denton, Texas
KDON 1210 100
Monterey, Calif.
KDTH 1340 500
Dubuque, Iowa
KDYL 1290 1000
Salt Lake City, Utah
KECA 1430 1000
Los Angeles, Calif.
KEEN 1370 100
Seattle, Wash.
KEHE 780 1000
Los Angeles, Calif.
KELA 1440 500
Centralia, Wash.
KELD 1370 100
El Dorado, Ark.
KELO 1200 100
Sioux Falls, S. Dak.
KERN 1370 100
Bakersfield, Calif.
KEUB 1420 100
Price, Utah
KEX 1180 5000
Portland, Ore.
KFAB 770 10000
Lincoln, Neb.
KFAC 1300 1000
Los Angeles, Calif.
KFAM 1420 100
St. Cloud, Minn.
KFBB 1280 1000
Great Falls, Mont.
KFBI 1050 5000
Abilene, Kans.
KFBK 1490 10000
Sacramento, Calif.
KFDM 560 500
Beaumont, Texas

NORTH AMERICAN B. C. STATIONS BY CALLS

KFDY 780 1000
Brookings, S. D.
KFEL 920 500
Denver, Colo.
KFEQ 680 2500
St. Joseph, Mo.
KFGQ 1370 100
Boone, Iowa
KFH 1300 1000
Wichita, Kans.
KFI 640 50000
Los Angeles, Calif.
KFIO 1120 100
Spokane, Wash.
KFIZ 1420 100
Fond du Lac, Wis.
KFJB 1200 100
Marshalltown, Iowa
KFJI 1210 100
Klamath Falls, Ore.
KFJM 1410 500
Grand Forks, N. D.
KFJZ 1370 100
Fort Worth, Texas
KFKA 880 500
Greeley, Colo.
KFKU 1220 1000
Lawrence, Kans.
KFNF 890 500
Shenandoah, Iowa
KFOR 1210 100
Lincoln, Neb.
KFOX 1250 1000
Long Beach, Calif.
KFPL 1310 100
Dublin, Texas
KFPW 1210 100
Fort Smith, Ark.
KFPY 890 1000
Spokane, Wash.
KFQD 780 250
Anchorage, Alaska
KFRC 610 1000
San Francisco, Calif.
KFRO 1370 250
Longview, Texas
KFRU 630 500
Columbia, Mo.
KFSD 600 1000
San Diego, Calif.
KFSG 1120 500
Los Angeles, Calif.
KFUO 550 500
St. Louis, Mo.
KFVD 1000 1000
Los Angeles, Calif.
KFVS 1210 100
Cape Girardeau, Mo.
KFWB 950 1000
Hollywood, Calif.
KFXD 1200 100
Nampa, Idaho
KFXJ 1200 100
Grand Junction, Colo.
KFXM 1210 100
San Bernardino, Calif.
KFYO 1310 100
Lubbock, Texas

KFYR 550 1000
Bismarck, N. D.
KGA 1470 5000
Spokane, Wash.
KGAR 1370 100
Tucson, Ariz.
KGB 1330 1000
San Diego, Calif.
KGBU 900 500
Ketchikan, Alaska
KGBX 1230 500
Springfield, Mo.
KGCA 1270 100
Decorah, Iowa
KGCI 1200 100
Coeur d'Alene, Idaho
KGCU 1240 250
Mandan, N. D.
KGCX 1450 1000
Wolf Point, Mont.
KGDE 1200 100
Fergus Falls, Minn.
KGDM 1100 1000
Stockton, Calif.
KGEK 1200 100
Sterling, Colo.
KGER 1360 1000
Long Beach, Calif.
KGEZ 1310 100
Kalispell, Mont.
KGFF 1420 100
Shawnee, Okla.
KGFI 1500 100
Brownsville, Tex.
KGFJ 1200 100
Los Angeles, Calif.
KGFL 1370 100
Roswell, N. Mex.
KGFW 1310 100
Kearney, Neb.
KGFX 630 200
Pierre, S. D.
KGGC 1420 100
San Francisco, Calif.
KGGF 1010 1000
Coffeyville, Kans.
KGGM 1230 1000
Albuquerque, N. M.
KGHF 1320 500
Pueblo, Colo.
KGHI 1200 100
Little Rock, Ark.
KGHL 780 1000
Billings, Mont.
KGIR 1340 1000
Butte, Mont.
KGIW 1420 100
Alamosa, Colo.
KGKB 1500 100
Tyler, Texas
KGKL 1370 100
San Angelo, Texas
KGKO 570 1000
Fort Worth, Texas
KGKY 1500 100
Scottsbluff, Neb.
KGLO 1210 100
Mason City, Iowa

KGLU 1420 100
Safford, Ariz.
KGMB 1320 1000
Honolulu, T. H.
KGNC 1410 1000
Amarillo, Texas
KGNF 1430 1000
North Platte, Neb.
KGNO 1340 250
Dodge City, Kans.
KGO 790 7500
San Francisco, Calif.
KGU 750 2500
Honolulu, T. H.
KGVL 1200 100
Greenville, Texas
KGVO 1260 1000
Missoula, Mont.
KGW 620 1000
Portland, Ore.
KGY 1210 100
Olympia, Wash.
KHBC 1400 250
Hilo, T. H.
KHBG 1210 100
Okmulgee, Okla.
KHJ 900 1000
Los Angeles, Calif.
KHQ 590 1000
Spokane, Wash.
KHSL 1260 250
Chico, Calif.
KHUB 1310 250
Watsonville, Calif.
KICA 1370 100
Clovis, N. M.
KID 1320 500
Idaho Falls, Idaho
KIDO 1350 1000
Boise, Idaho
KIDW 1420 100
Lamar, Colo.
KIEM 1450 500
Eureka, Calif.
KIEV 850 250
Glendale, Calif.
KINY 1310 100
Juneau, Alaska
KIRO 710 1000
Seattle, Wash.
KIT 1250 250
Yakima, Wash.
KITE 1530 1000
Kansas City, Mo.
KIUL 1210 100
Garden City, Kans.
KIUN 1420 100
Pecos, Texas
KIUP 1370 100
Durango, Colo.
KJBS 1070 500
San Francisco, Calif.
KJR 970 5000
Seattle, Wash.
KLAH 1210 100
Calsbad, N. Mex.
KLBM 1420 100
La Grande, Ore.

NORTH AMERICAN B. C. STATIONS BY CALLS

KLCN 1290 100
Blytheville, Ark.
KLO 1400 500
Ogden, Utah
KLPM 1240 250
Minot, N. D.
KLRA 1390 1000
Little Rock, Ark.
KLS 1280 250
Oakland, Calif.
KLUF 1370 100
Galveston, Texas
KLX 880 1000
Oakland, Calif.
KLZ 560 1000
Denver, Colo.
KMA 930 1000
Shenandoah, Iowa
KMAC 1370 100
San Antonio, Texas
KMBC 950 1000
Kansas City, Mo.
KMED 1410 250
Medford, Ore.
KMJ 580 1000
Fresno, Calif.
KMLB 1200 100
Monroe, La.
KMMJ 740 1000
Clay Center, Neb.
KMO 1330 1000
Tacoma, Wash.
KMOX 1090 50000
St. Louis, Mo.
KMPC 710 500
Beverly Hills, Calif.
KMTR 570 1000
Los Angeles, Calif.
KNEL 1500 250
Brady, Texas
KNET 1420 100
Palestine, Texas
KNOW 1500 100
Austin, Texas
KNX 1050 50000
Los Angeles, Calif
KOA 830 50000
Denver, Colo.
KOAC 550 1000
Corvallis, Ore.
KOAM 790 1000
Pittsburg, Kans.
KOB 1180 10000
Albuquerque, N. M.
KOBH 1370 100
Rapid City, S. Dak.
KOCA 1210 100
Kilgore, Texas
KOCY 1310 100
Oklahoma City, Okla.
KOH 1380 500
Reno, Nev.
KOIL 1260 1000
Omaha, Neb.
KOIN 940 1000
Portland, Ore.
KOKO 1370 100
La Junta, Colo.

KOL 1270 1000
Seattle, Wash.
KOMA 1480 5000
Oklahoma City, Okla.
KOMO 920 1000
Seattle, Wash.
KONO 1370 100
San Antonio, Texas
KOOS 1200 100
Marshfield, Ore.
KORE 1420 100
Eugene, Ore.
KOTN 1500 100
Pine Bluff, Ark.
KOVC 1500 100
Valley City, N. Dak.
KOY 1390 1000
Phoenix, Ariz.
KPAB 1500 100
Laredo, Texas
KPAC 1260 500
Port Arthur, Texas
KPDN 1310 100
Pampa, Texas
KPFA 1210 100
Helena, Mont.
KPLC 1500 100
Lake Charles, La.
KPLT 1500 250
Paris, Texas
KPMC 1550 1000
Bakersfield, Calif.
KPO 680 50000
San Francisco, Calif.
KPOF 880 1000
Denver, Colo.
KPPC 1210 100
Pasadena, Calif.
KPQ 1500 100
Wenatchee, Wash.
KPRC 920 1000
Houston, Texas
KQV 1380 500
Pittsburgh, Pa.
KQW 1010 1000
San Jose, Calif.
KRBA 1310 100
Lufkin, Texas
KRBC 1420 100
Abilene, Texas
KRBM 1420 100
Bozeman, Mont.
KRE 1370 100
Berkeley, Calif.
KRGV 1260 1000
Weslaco, Texas
KRIC 1420 100
Beaumont, Texas
KRIS 1330 500
Corpus Christi, Tex.
KRKD 1120 500
Los Angeles, Calif.
KRKO 1370 50
Everett, Wash.
KRLC 1390 250
Lewiston, Idaho
KRLD 1040 10000
Dallas, Texas

KRLH 1420 100
Midland, Texas
KRMC 1370 100
Jamestown, N. Dak.
KRMD 1310 100
Shreveport, La.
KRNR 1500 100
Roseburg, Ore.
KRNT 1320 1000
Des Moines, Iowa
KROC 1310 100
Rochester, Minn.
KROD 1500 100
El Paso, Texas
KROW 930 1000
Oakland, Calif.
KROY 1210 100
Sacramento, Calif.
KRQA 1310 100
Santa Fe, N. Mex.
KRRV 1310 250
Sherman, Texas
KRSC 1120 250
Seattle, Wash.
KSAC 580 500
Manhattan, Kans.
KSAL 1500 100
Salina, Kans.
KSCJ 1330 1000
Sioux City, Iowa
KSD 550 1000
St. Louis, Mo.
KSEI 900 250
Pocatello, Idaho
KSFO 560 1000
San Francisco, Calif.
KSL 1130 50000
Salt Lake City, Utah
KSLM 1370 100
Salem, Ore.
KSO 1430 500
Des Moines, Iowa
KSOO 1110 2500
Sioux Falls, S. Dak.
KSRO 1310 250
Santa Rosa, Calif.
KSTP 1460 10000
St. Paul, Minn.
KSUB 1310 100
Cedar City, Utah
KSUN 1200 100
Lowell, Ariz.
KTAR 620 1000
Phoenix, Ariz.
KTAT 1240 1000
Fort Worth, Texas
KTBC 1120 1000
Austin, Texas
KTBS 1450 1000
Shreveport, La.
KTEM 1370 250
Temple, Texas
KTFI 1240 1000
Twin Falls, Idaho
KTHS 1060 10000
Hot Springs, Ark.
KTKC 1190 250
Visalia, Calif.

NORTH AMERICAN B. C. STATIONS BY CALLS

KTMS 1220 500
Santa Barbara, Calif.
KTOK 1370 100
Oklahoma City, Okla.
KTRB 740 250
Modesto, Calif.
KTRH 1290 1000
Houston, Texas
KTRI 1420 100
Sioux City, Iowa
KTSA 550 1000
San Antonio, Texas
KTSM 1310 100
El Paso, Texas
KTUL 1400 1000
Tulsa, Okla.
KTW 1220 1000
Seattle, Wash.
KUJ 1370 100
Walla Walla, Wash.
KUMA 1420 100
Yuma, Ariz.
KUOA 1260 5000
Siloam Springs, Ark.
KUSD 890 500
Vermillion, S. Dak.
KUTA 1500 100
Salt Lake City, Utah
KVCV 1200 100
Redding, Calif.
KVEC 1200 250
San Luis Obispo, Cal.
KVGB 1370 100
Great Bend, Kans.
KVI 570 1000
Tacoma, Wash.
KVNU 1500 100
Logan, Utah
KVOA 1260 1000
Tucson, Ariz.
KVOD 920 500
Denver, Colo.
KVOE 1500 100
Santa Ana, Calif.
KVOL 1310 100
Lafayette, La.
KVOO 1140 25000
Tulsa, Okla.
KVOR 1270 1000
Colo. Springs, Colo.
KVOS 1200 100
Bellingham, Wash.
KVOX 1310 100
Moorhead, Minn.
KVRS 1370 100
Rock Springs, Wyo.
KVSO 1210 100
Ardmore, Okla.
KWBG 1420 100
Hutchinson, Kans.
KWEW 1500 100
Hobbs, N. Mex.
KWG 1200 100
Stockton, Calif.
KWJB 1210 100
Globe, Ariz.
KWJJ 1040 500
Portland, Ore.

KWK 1350 1000
St. Louis, Mo.
KWKH 1100 10000
Shreveport, La.
KWLC 1270 100
Decorah, Iowa
KWLK 780 250
Longview, Wash.
KWNO 1200 250
Winona, Minn.
KWOC 1310 100
Poplar Bluff, Mo.
KWOS 1310 100
Jefferson City, Mo.
KWSC 1220 1000
Pullman, Wash.
KWTO 560 5000
Springfield, Mo.
KWYO 1370 100
Sheridan, Wyo.
KXA 760 250
Seattle, Wash.
KXL 1420 100
Portland, Ore.
KXO 1500 100
El Centro, Calif.
KXOK 1250 1000
St. Louis, Mo.
KXRO 1310 100
Aberdeen, Wash.
KXYZ 1440 1000
Houston, Texas
KYA 1230 1000
San Francisco, Calif.
KYOS 1040 250
Merced, Calif.
KYSM 1500 100
Mankato, Minn.
KYW 1020 10000
Philadelphia, Pa.
TGA 1450 ....
Quezaltenango, Guat.
TGW 1520 1000
Guatemala City, Guat.
TG1 1305 ....
Guatemala City, Guat.
TIX 650 1000
San Jose, Costa Rica
VAS 685 2000
Glace Bay, N.S.
VOAC 1065 40
St. John's Nfld.
VOCM 1006 200
St. John's Nfld.
VOGY 840 400
St. John's Nfld.
VONF 1195 500
St. John's Nfld.
VOWR 681 500
St. John's Nfld.
WAAB 1410 500
Boston, Mass.
WAAF 920 1000
Chicago, Ill.
WAAT 940 500
Jersey City, N. J.
WAAW 660 500
Omaha, Neb.

WABC 860 50000
New York, N. Y.
WABI 1200 100
Bangor, Maine
WABY 1370 100
Albany, N. Y.
WACO 1420 100
Waco, Texas
WADC 1320 1000
Akron, Ohio
WAGA 1450 500
Atlanta, Ga.
WAGF 1370 250
Dothan, Ala.
WAGM 1420 100
Presque Isle, Me.
WAIM 1200 100
Anderson, S. C.
WAIR 1250 250
Winston-Salem, N. C.
WALA 1380 500
Mobile, Ala.
WALR 1210 100
Zanesville, Ohio
WAML 1310 100
Laurel, Miss.
WAPI 1140 5000
Birmingham, Ala.
WAPO 1420 100
Chattanooga, Tenn.
WARD 1400 500
Brooklyn, N. Y.
WASH 1270 500
Grand Rapids, Mich.
WATL 1370 100
Atlanta, Ga.
WATR 1190 100
Waterbury, Conn.
WAVE 940 1000
Louisville, Ky.
WAWZ 1350 500
Zarephath, N. J.
WAYX 1200 100
Waycross, Ga.
WAZL 1420 100
Hazelton, Pa.
WBAA 890 500
West Lafayette, Ind.
WBAL 760 2500
Baltimore, Md.
WBAL 1060 10000
Baltimore, Md.
WBAP 800 50000
Fort Worth, Texas
WBAX 1210 100
Wilkes-Barre, Pa.
WBBC 1400 500
Brooklyn, N. Y.
WBBL 1210 100
Richmond, Va.
WBBM 770 50000
Chicago, Ill.
WBBR 1300 1000
Brooklyn, N. Y.
WBBZ 1200 100
Ponca City, Okla.
WBCM 1410 500
Bay City, Mich.

NORTH AMERICAN B. C. STATIONS BY CALLS

WBEN 900 1000
Buffalo, N. Y.
WBEO 1310 100
Marquette, Mich.
WBHP 1200 100
Huntsville, Ala.
WBIG 1440 1000
Greensboro, N. C.
WBIL 1100 5000
New York, N. Y.
WBLK 1370 100
Clarksburg, W. Va.
WBLY 1210 100
Lima, Ohio
WBNO 1200 100
New Orleans, La.
WBNS 1430 1000
Columbus, Ohio
WBNX 1350 1000
New York, N. Y.
WBNY 1370 100
Buffalo, N. Y.
WBOQ 860 50000
New York, N. Y.
WBOW 1310 100
Terre Haute, Ind.
WBRB 1210 100
Red Bank, N. J.
WBRC 930 1000
Birmingham. Ala.
WBRE 1310 100
Wilkes-Barre, Pa.
WBRK 1310 100
Pittsfield, Mass.
WBRY 1530 1000
Waterbury, Conn.
WBT 1080 50000
Charlotte, N. C.
WBTM 1370 100
Danville, Va.
WBZ 990 50000
Boston, Mass.
WBZA 990 1000
Springfield, Mass.
WCAD 1220 500
Canton, N. Y.
WCAE 1220 1000
Pittsburgh, Pa.
WCAL 760 1000
Northfield, Minn.
WCAM 1280 500
Camden, N. J.
WCAO 600 500
Baltimore, Md.
WCAP 1280 500
Asbury Park, N. J.
WCAT 1200 100
Rapid City, S. Dak.
WCAU 1170 50000
Philadelphia, Pa.
WCAX 1200 100
Burlington, Vt.
WCAZ 1070 100
Carthage, Ill.
WCBA 1440 500
Allentown, Pa.
WCBD 1080 5000
Chicago, Ill.

WCBM 1370 100
Baltimore, Md.
WCBS 1420 100
Springfield, Ill.
WCCO 810 50000
Minneapolis, Minn.
WCFL 970 5000
Chicago, Ill.
WCHS 580 500
Charleston, W. Va.
WCHV 1420 100
Charlottesville, Va.
WCKY 1490 10000
Covington, Ky.
WCLE 610 500
Cleveland, Ohio
WCLO 1200 100
Janesville, Wis.
WCLS 1310 100
Joliet, Ill.
WCMI 1310 100
Ashland, Ky.
WCNW 1500 100
Brooklyn, N. Y.
WCOA 1340 500
Pensacola, Fla.
WCOC 880 1000
Meridien, Miss.
WCOL 1210 100
Columbus, Ohio
WCOP 1120 500
Boston, Mass.
WCPO 1200 100
Cincinnati, Ohio
WCRW 1210 100
Chicago, Ill.
WCSC 1360 500
Charleston, S. C.
WCSH 940 1000
Portland, Me.
WDAE 1220 1000
Tampa, Fla.
WDAF 610 1000
Kansas City, Mo.
WDAH 1310 100
El Paso, Texas
WDAN 1500 250
Danville, Ill.
WDAS 1370 100
Philadelphia, Pa.
WDAY 940 1000
Fargo, N. Dak.
WDBJ 930 1000
Roanoke, Va.
WDBO 580 1000
Orlando, Fla.
WDEL 1120 250
Wilmington, Del.
WDEV 550 500
Waterbury, Vt.
WDGY 1180 1000
Minneapolis, Minn.
WDNC 1500 100
Durham, N. C.
WDOD 1280 1000
Chattanooga, Tenn.
WDRC 1330 1000
Hartford, Conn.

WDSM 1200 100
Superior, Wis.
WDSU 1250 1000
New Orleans, La.
WDWS 1370 100
Champaign, Ill.
WDZ 1020 250
Tuscola, Ill.
WEAF 660 50000
New York, N. Y.
WEAN 780 1000
Providence, R. I.
WEAU 1050 1000
Eau Claire, Wis.
WEBC 1290 1000
Duluth, Minn.
WEBQ 1210 100
Harrisburg, Ill.
WEBR 1310 100
Buffalo, N. Y.
WEDC 1210 100
Chicago, Ill.
WEED 1420 100
Rocky Mount, N. C.
WEEI 590 1000
Boston, Mass.
WEEU 830 1000
Reading, Pa.
WELI 900 500
New Haven, Conn.
WELL 1420 100
Battle Creek, Mich.
WEMP 1310 100
Milwaukee, Wis.
WENR 870 50000
Chicago, Ill.
WENY 1200 250
Elmira, N. Y.
WEOA 1370 100
Evansville, Ind.
WESG 850 1000
Elmira, N. Y.
WEST 1200 100
Easton, Pa.
WEVD 1300 1000
New York, N. Y.
WEW 760 1000
St. Louis, Mo.
WEXL 1310 50
Royal Ooak, Mich.
WFAA 800 50000
Dallas, Texas
WFAB 1300 1000
New York, N. Y.
WFAM 1200 100
South Bend, Ind.
WFAS 1210 100
White Plains, N. Y.
WFBC 1360 1000
Greenville, S. C.
WFBG 1310 100
Altoona, Pa.
WFBL 1360 1000
Syracuse, N. Y.
WFBM 1230 1000
Indianapolis, Ind.
WFBR 1270 500
Baltimore, Md.

WFDF 1310 100
Flint, Mich.
WFEA 1340 500
Manchester, N. H.
WFIL 560 1000
Philadelphia, Pa.
WFLA 620 1000
Tampa, Fla.
WFMD 900 500
Frederick, Md.
WFMJ 1420 100
Youngstown, Ohio
WFOR 1370 100
Hattiesburg, Miss.
WFOY 1210 100
St. Augustine, Fla.
WFTC 1200 100
Kinston, N. C.
WGAL 1500 100
Lancaster, Pa.
WGAN 640 500
Portland, Me.
WGAR 1450 500
Cleveland, Ohio
WGAU 1310 100
Athens, Ga.
WGBB 1210 100
Freeport, N. Y.
WGBF 630 500
Evansville, Ind.
WGBI 880 500
Scranton, Pa.
WGCM 1210 100
Gulfport, Miss.
WGES 1360 500
Chicago, Ill.
WGH 1310 100
Newport News, Va.
WGIL 1500 250
Galesburg, Ill.
WGL 1370 100
Fort Wayne, Ind.
WGN 720 50000
Chicago, Ill.
WGNY 1210 100
Newburgh, N. Y.
WGPC 1420 100
Albany, Ga.
WGR 550 1000
Buffalo, N. Y.
WGRC 1370 250
New Albany, Ind.
WGRM 1210 100
Grenada, Miss.
WGST 890 1000
Atlanta, Ga.
WGTM 1310 100
Wilson, N. C.
WGVA 1050 1000
Indianapolis, Ind.
WGY 790 50000
Schenectady, N. Y.
WHA 940 5000
Madison, Wis.
WHAI 1210 250
Greenfield, Mass.
WHAL 950 500
Saginaw, Mich.

WHAM 1150 50000
Rochester, N. Y.
WHAS 820 50000
Louisville, Ky.
WHAT 1310 100
Philadelphia, Pa.
WHAZ 1300 1000
Troy, N. Y.
WHB 860 1000
Kansas City, Mo.
WHBB 1500 100
Selma, Ala.
WHBC 1200 100
Canton, Ohio
WHBF 1210 100
Rock Island, Ill.
WHBI 1250 1000
Newark, N. J.
WHBL 1300 250
Sheboygan, Wis.
WHBQ 1370 100
Memphis, Tenn.
WHBU 1210 100
Anderson, Ind.
WHBY 1200 100
Green Bay, Wis.
WHDF 1370 100
Calumet, Mich.
WHDH 830 1000
Boston, Mass.
WHDL 1400 250
Olean, N. Y.
WHEB 740 250
Portsmouth, N. H.
WHEC 1430 500
Rochester, N. Y.
WHEF 1500 100
Kosciusko, Miss.
WHFC 1420 100
Cicero, Ill.
WHIO 1260 1000
Dayton, Ohio
WHIP 1480 5000
Hammond, Ind.
WHIS 1410 500
Bluefield, W. Va.
WHJB 620 250
Greensburg, Pa.
WHK 1390 1000
Cleveland, Ohio
WHKC 640 500
Columbus, Ohio
WHLB 1370 100
Virginia, Minn.
WHLS 1370 250
Port Huron, Mich.
WHN 1010 1000
New York, N. Y.
WHO 1000 50000
Des Moines, Iowa
WHOM 1450 250
Jersey City, N. J.
WHP 1430 500
Harrisburg, Pa.
WIBA 1280 1000
Madison, Wis.
WIBG 970 100
Glenside, Pa.

WIBM 1370 100
Jackson, Mich.
WIBU 1210 100
Poynette, Wis.
WIBW 580 1000
Topeka, Kans.
WIBX 1200 100
Utica, N. Y.
WICA 940 250
Ashtabula, Ohio
WICC 600 500
Bridgeport, Conn.
WIL 1200 100
St. Louis, Mo.
WILL 580 1000
Urbana, Ill.
WILM 1420 100
Wilmington, Del.
WIND 560 1000
Gary, Ind.
WINS 1180 1000
New York, N. Y.
WIOD 610 1000
Miami, Fla.
WIP 610 1000
Philadelphia, Pa.
WIRE 1400 1000
Indianapolis, Ind.
WIS 560 1000
Columbia, S. C.
WISN 1120 250
Milwaukee, Wis.
WJAC 1310 100
Johnstown, Pa.
WJAG 1060 1000
Norfolk, Neb.
WJAR 890 1000
Providence, R. I.
WJAS 1290 1000
Pittsburgh, Pa.
WJAX 900 1000
Jacksonville, Fla.
WJBC 1200 100
Bloomington, Ill.
WJBK 1500 100
Detroit, Mich.
WJBL 1200 100
Decatur, Ill.
WJBO 1120 500
Baton Rouge, La.
WJBW 1200 100
New Orleans, La.
WJBY 1210 100
Gadsden, Ala.
WJDX 1270 1000
Jackson, Miss.
WJEJ 1210 100
Hagerstown, Md.
WJIM 1210 100
Lansing, Mich.
WJJD 1130 20000
Chicago, Ill.
WJMC 1210 250
Rice Lake, Wis.
WJMS 1420 100
Ironwood, Mich.
WJNO 1200 100
W. Palm Beach, Fla.

NORTH AMERICAN B. C. STATIONS BY CALLS

WJR 750 50000
Detroit, Mich.
WJRD 1200 250
Tuscaloosa, Ala.
WJSV 1460 10000
Washington, D. C.
WJTN 1210 100
Jamestown, N. Y.
WJW 1210 100
Akron, Ohio
WJZ 760 50000
New York, N. Y.
WKAQ 1240 1000
San Juan, P. R.
WKAR 850 1000
East Lansing, Mich.
WKAT 1500 100
Miami Beach, Fla.
WKBB 1500 100
East Dubuque, Ill.
WKBH 1380 1000
LaCrosse, Wis.
WKBN 570 500
Youngstown, Ohio
WKBO 1200 100
Harrisburg, Pa.
WKBV 1500 100
Richmond, Ind.
WKBW 1480 5000
Buffalo, N. Y.
WKBZ 1500 100
Muskegon, Mich.
WKEU 1500 100
Griffin, Ga.
WKOK 1210 100
Sunbury, Pa.
WKRC 550 1000
Cincinnati, Ohio
WKST 1250 250
New Castle, Pa.
WKY 900 1000
Oklahoma City, Okla.
WKZO 590 1000
Kalamazoo, Mich.
WLAC 1470 5000
Nashville, Tenn.
WLAK 1310 100
Lakeland, Fla.
WLAP 1420 100
Lexington, Ky.
WLAW 680 1000
Lawrence, Mass.
WLB 760 1000
Minneapolis, Minn.
WLBC 1310 100
Muncie, Ind.
WLBL 900 5000
Stevens Point, Wis.
WLBZ 620 500
Bangor, Me.
WLEU 1420 100
Erie, Pa.
WLLH 1370 100
Lawrence, Mass.
WLLH 1370 100
Lowell, Mass.
WLMU 1210 100
Middlesboro, Ky.

WLNH 1310 100
Laconia, N. H.
WLS 870 50000
Chicago, Ill.
WLTH 1400 500
Brooklyn, N. Y.
WLVA 1200 100
Lynchburg, Va.
WLW 700 500000
Cincinnati, Ohio
WMAL 630 250
Washington, D. C.
WMAQ 670 50000
Chicago, Ill.
WMAS 1420 100
Springfield, Mass.
WMAZ 1180 1000
Macon, Ga.
WMBC 1420 100
Detroit, Mich.
WMBD 1440 1000
Peoria, Ill.
WMBF 610 1000
Miami. Fla.
WMBG 1350 500
Richmond, Va.
WMBH 1420 100
Joplin, Mo.
WMBI 1080 5000
Chicago, Ill.
WMBO 1310 100
Auburn, N. Y.
WMBR 1370 100
Jacksonville, Fla.
WMBS 1420 250
Uniontown, Pa.
WMC 780 1000
Memphis, Tenn.
WMCA 570 1000
New York, N. Y.
WMEX 1500 100
Boston, Mass.
WMFD 1370 100
Wilmington, N. C.
WMFF 1310 100
Plattsburg, N. Y.
WMFG 1210 100
Hibbing, Minn.
WMFJ 1420 100
Dayton Beach, Fla.
WMFO 1370 100
Decatur, Ala.
WMFR 1200 100
High Point, N. C.
WMIN 1370 100
St. Paul, Minn.
WMMN 890 500
Fairmont, W. Va.
WMPC 1200 100
Lapeer, Mich.
WMPS 1430 500
Memphis, Tenn.
WMSD 1420 100
Sheffield, Ala.
WMT 600 1000
Cedar Rapids, Iowa
WNAC 1230 1000
Boston, Mass.

WNAD 1010 1000
Norman, Okla.
WNAX 570 1000
Yankton, S. D.
WNBC 1380 250
New Britain, Conn.
WNBF 1500 100
Binghamton, N. Y.
WNBH 1310 100
New Bedford, Mass.
WNBX 1260 500
Springfield, Vt.
WNBZ 1290 100
Saranac Lake, N. Y.
WNEL 1290 1000
San Juan, P. R.
WNEW 1250 1000
New York, N. Y.
WNLC 1500 100
New London, Conn.
WNNY 1420 100
Watertown, N. Y.
WNOX 1010 1000
Knoxville, Tenn.
WNYC 810 1000
New York, N. Y.
WOAI 1190 50000
San Antonio, Texas
WOC 1370 100
Davenport, Iowa
WOI 640 5000
Ames, Iowa
WOKO 1430 500
Albany, N. Y.
WOL 1310 1000
Washington, D. C.
WOLS 1200 100
Florence, S. C.
WOMI 1500 100
Owensboro, Ky.
WOMT 1210 100
Manitowoc, Wis.
WOOD 1270 500
Grand Rapids, Mich.
WOPI 1500 100
Bristol, Tenn.
WOR 710 50000
Newark, N. J.
WORC 1280 500
Worcester, Mass.
WORK 1320 1000
York, Pa.
WORL 920 500
Boston, Mass.
WOSU 570 750
Columbus, Ohio
WOV 1130 1000
New York, N. Y.
WOW 590 1000
Omaha, Neb.
WOWO 1160 10000
Fort Wayne, Ind.
WPAD 1420 100
Paducah, Ky.
WPAR 1420 100
Parkersburg, W. Va.
WPAX 1210 100
Thomasville, Ga.

WPAY 1370 100
Portsmouth, Ohio
WPEN 920 1000
Philadelphia, Pa.
WPG 1100 5000
Atlantic City, N. J.
WPIC 780 250
Sharon, Pa.
WPRA 1370 100
Mayaguez, P. R.
WPRO 630 500
Providence, R. I.
WPRP 1420 100
Ponce, P. R.
WPTF 680 5000
Raleigh, N. C.
WQAM 560 1000
Miami, Fla.
WQAN 880 500
Scranton, Pa.
WQBC 1360 1000
Vicksburg, Miss.
WQDM 1390 1000
St. Albans, Vt.
WQXR 1550 1000
New York, N. Y.
WRAK 1370 100
Williamsport, Pa.
WRAW 1310 100
Reading, Pa.
WRAX 920 1000
Philadelphia, Pa.
WRBL 1200 100
Columbus, Ga.
WRC 950 1000
Washington, D. C.
WRDO 1370 100
Augusta, Me.
WRDW 1500 100
Augusta, Ga.
WREC 600 1000
Memphis, Tenn.
WREN 1220 1000
Lawrence, Kans.
WRGA 1500 100
Rome, Ga.
WRJN 1370 100
Racine, Wis.
WRNL 880 500
Richmond, Va.
WROK 1410 500
Rockford, Ill.
WROL 1310 100
Knoxville, Tenn.
WRR 1280 500
Dallas, Texas
WRTD 1500 100
Richmond, Va.
WRUF 830 5000
Gainesville, Fla.
WRVA 1110 5000
Richmond, Va.
WSAI 1330 1000
Cincinnati, Ohio
WSAJ 1310 100
Grove City, Pa.
WSAL 1200 250
Salisbury, Md.

WSAN 1440 500
Allentown, Pa.
WSAR 1450 1000
Fall River, Mass.
WSAU 1370 100
Wausau, Wis.
WSAV 1310 100
Savannah, Ga.
WSAY 1210 100
Rochester, N. Y.
WSAZ 1190 1000
Huntington, W. Va.
WSB 740 50000
Atlanta, Ga.
WSBC 1210 100
Chicago, Ill.
WSBT 1360 500
South Bend, Ind.
WSFA 1410 500
Montgomery, Ala.
WSGN 1310 100
Birmingham, Ala.
WSIX 1210 100
Nashville, Tenn.
WSJS 1310 100
Winston-Salem, N. C.
WSLI 1420 100
Jackson, Miss.
WSM 650 50000
Nashville, Tenn.
WSMB 1320 1000
New Orleans, La.
WSMK 1380 200
Dayton, Ohio
WSNJ 1210 100
Bridgeton, N. J.
WSOC 1210 100
Charlotte, N. C.
WSPA 920 1000
Spartanburg, S. C.
WSPD 1340 1000
Toledo, Ohio
WSPR 1140 500
Springfield, Mass.
WSUI 880 500
Iowa City, Iowa
WSUN 620 1000
St. Petersburg, Fla.
WSVA 550 500
Harrisonburg, Va.
WSVS 1370 50
Buffalo, N. Y.
WSYB 1500 100
Rutland, Vt.
WSYR 570 1000
Syracuse, N. Y.
WSYU 570 1000
Syracuse, N. Y.
WTAD 900 1000
Quincy, Ill.
WTAG 580 1000
Worcester, Mass.
WTAL 1310 100
Tallahassee, Fla.
WTAM 1070 50000
Cleveland, Ohio
WTAQ 1330 1000
Green Bay, Wis.

WTAR 780 1000
Norfolk, Va.
WTAW 1120 500
College Station, Tex.
WTAX 1210 100
Springfield, Ill.
WTBO 800 250
Cumberland, Md.
WTCN 1250 1000
Minneapolis, Minn.
WTEL 1310 100
Philadelphia, Pa.
WTHT 1200 100
Hartford, Conn.
WTIC 1040 50000
Hartford, Conn.
WTJS 1310 100
Jackson, Tenn.
WTMJ 620 1000
Milwaukee, Wis.
WTMV 1500 100
East St. Louis, Ill.
WTNJ 1280 500
Trenton, N. J.
WTOC 1260 1000
Savannah, Ga.
WTOL 1200 100
Toledo, Ohio
WTRC 1310 100
Elkhart, Ind.
WVFW 1400 500
Brooklyn, N. Y.
WWAE 1200 100
Hammond, Ind.
WWJ 920 5000
Detroit, Mich.
WWL 850 10000
New Orleans, La.
WWNC 570 1000
Asheville, N. C.
WWRL 1500 100
Woodside, N. Y.
WWSW 1500 100
Pittsburgh, Pa.
WWVA 1160 5000
Wheeling, W. Va.
WXYZ 1240 1000
Detroit, Mich.
W3XDD ... 50000
Whippany, N. J.
W3XJ 1060 100
College Park, Md.
XEAA 750 200
Mexicali, B. C.
XEAC 980 1000
Tijuana, L. C.
XEAF 990 750
Nogales, Son.
XEAG 1310 10
Cordoba, Ver.
XEAI 1250 500
Mexico City, D. F.
XEAL 660 1000
Mexico City, D. F.
XEAM 750 25
Matamoros, Tams.
XEAO 660 250
Mexicali, B. C.

NORTH AMERICAN B. C. STATIONS BY CALLS

XEAP 1340 50
Obregon, Son.
XEAS 1160 100
Saltillo, Coah.
XEAT 1210 250
Parral, Chih.
XEAU 1320 ....
Tijuana, B. Cfa.
XEAW 960 100000
Reynosa, Tams.
XEAZ 1230 200
Zacatecas, Zac.
XEB 1030 10000
Mexico City, D. F.
XEBA 1080 20
Guzman, Jal.
XEBG 820 1000
Tijuana, B. Cfa.
XEBH 930 500
Hermosillo, Sonora
XEBI 1000 25
Aguascalientes, Ags.
XEBK 1080 100
Neuvo Laredo, Tams.
XEBL 1220 50
Mazatlan, Sin.
XEBO 1310 25
Irapuato, Guan.
XEBP 1150 250
Durango, Dgo.
XEBS 1340 200
Mexico City, D. F.
XEBU 1200 50
Chihuahua, Chih.
XEBX 640 250
Sabinas, Coah.
XEBZ 810 100
Mexico City, D. F.
XEC 1150 100
Tijuana, L. C.
XECZ 1370 100
San Luis Potosi, S.L.P.
XED 1160 2500
Guadalajara, Jal.
XEDA 1220 200
Gral. Anaya, D. F.
XEDF 810 100
Nuevo Laredo, Tams.
XEDH 1340 200
Villa Acuna, Coah.
XEDP 1080 500
Mexico City, D. F.
XEDW 1150 20
Minatitlan, Ver.
XEE 1210 50
Durango, Dgo.

XEF 1450 100
Juarez, Chih.
XEFA 1180 500
Tacuba, D. F.
XEFB 870 200
Monterrey, N. L.
XEFC 550 100
Merida, Yuc.
XEFE 980 250
Nuevo Laredo, Tams.
XEFI 1440 250
Chihuahua, Chih.
XEFM 1160 20
Leon, Gto.
XEFO 940 5000
Mexico City, D. F.
XEFQ 1010 50
Cananea, Son.
XEFV 1210 100
Juarez, Chih.
XEFW 1310 300
Tampico, Tams.
XEG 1230 250
Monterrey, N. L.
XEH 720 250
Monterrey, N. L.
XEI 1370 125
Morelia, Mich.
XEJ 1020 1000
Juarez, Chih.
XEJP 1130 100
Mexico City, D. F.
XEJW 870 500
Mexico City, D. F.
XEK 890 100
Mexico City, D. F.
XEKL 1240 500
Leon, Guan.
XEL 1100 250
Mexico City, D. F.
XELA 1240 50
Saltillo, Coah.
XELO 580 10000
Tijuana, B. Cfa.
XELZ 1370 100
Mexico City, D. F.
XEME 1240 50
Merida, Yuc.
XEMO 860 5000
Tijuana, L. C.
XEMU 580 250
Piedras Negras, Coah.
XEMX 1280 100
Mexico City, D. F.

XEN 780 1000
Mexico City, D. F.
XENC 860 50
Mexico City, D. F.
XENT 910 150000
Nuevo Laredo, Tams.
XEOJ ....
XEOK 760 2500
Tijuana, L. C.
XEP 1160 500
Juarez, Chih.
XEPN 730 100000
Piedras Negras, Coah.
XERA 840 250000
Villa Acuna, Coah.
XERB 730 100000
Rosarito Beach, B.Cfa.
XES 990 250
Tampico, Tams.
XET 690 5000
Monterrey, N. L.
XETB 1310 125
Torreon, Coah.
XETH 1210 100
Puebla, Pue.
XEU 1010 250
Veracruz, Ver.
XEW 890 50000
Mexico City, D. F.
XEX 1310 125
Monterrey, N. L.
XEXB 1270 250
Jalapa, Ver.
XEXD 1340 350
Jalapa, Ver.
XEXE 1270 17
Texcoco, D. F.
XEXH 1250 250
San Luis Potosi, S.L.P.
XEXM 610 500
Mexico City, D. F.
XEXS 1310 100
Mexico City, D. F.
XEXX 1170 1000
Mexico City, D. F.
XEYO 610 500
Mexico City, D. F.
XEZ 630 500
Merida, Yuc.
YSS 640 500
San Salvador, E. S.
ZNS 540 400
Nassau, Bahamas

The BROADCASTING STATIONS of NORTH AMERICA

—o—

This supplementary call letter index, giving *all* the information DXers want about all the stations, will appear on these pages every month until completed.

The abbreviations used throughout this list will be familiar to all our readers, except perhaps "CP" for Construction Permit, "LS" for Local Sunset, and "ss" for Sunset.

KABC, San Antonio, Texas. 1420 kcs. 100 w. nights, 250 w. to LS, Unltd. time. *Prog. Dir.,* Chas. L. Belfi. Alamo Broadcasting Co., Inc., Milam Bldg.

KABR, Aberdeen, S. Dak. 1420 kcs. 100 w., Unltd. time. *Prog. Dir.,* W. L. Dean. Aberdeen Broadcast Co., Alonzo Ward Hotel.
CP 1390 KCS, 500 W. NIGHTS, 1000 W. TO LS, WITH DIRECTIONAL AERIAL AT NIGHT.

KADA, Ada, Okla. 1200 kcs. 100 w. Unltd. time. Oklahoma Network and MBS. *Prog. Dir.,* Warren Moore. *Address:* C. C. Morris, 115½ S. Rennie St.

KALB, Alexandria, La. 1210 kcs. 100 w. night, 250 w. to LS Unltd. time. *Prog. Dir.,* Virgil G. Evans. *Office:* Alexandria Broadcasting Co., Inc., 3rd and Jackson Sts. Mail to Box 788.

KALE, Portland, Ore. 1300 kcs. 100 w., Unltd. time. Mutual Network. *Prog. Dir.,* Dick Rand. *Add:* KALE, Inc., New Heathman Hotel.

KAND, Corsicana, Texas. 1310 kcs. 100 w. days. *Aerial,* 1 tower, 179 ft. *Manager,* Chas. L. Whittier. *Add:* Navarro Broadcasting Association, State National Bank Bldg.
CP 250 W. TO LS.

KANS, Wichita, Kans. 1210 kcs. 100 w. Unltd. time. National Red and Blue Networks. *Aerial,* 1 tower, 180 ft. *Manager,* Herbert Hollister. *Add:* KANS Broadcasting Co., Hotel Lassen.

KARK, Little Rock, Ark. 890 kcs. 500 w. night, 1000 w. to LS, Unltd. time. NBC Red and Blue Networks. *Transmitter,* North Little Rock, on Route 87. *Aerial,* 1 tower, 310 ft. *Prog. Dir.,* Jack Lewis. *Add:* Ark. Radio & Equipment Co., Nat'l. Standard Bldg., 212 Center St.

KARM, Fresno, Calif. 1310 kcs. 100 w., Unltd. time. CBS Network. *Aerial,* 1 tower, 183 ft. *Manager,* Lou Keplinger. *Address:* George Harm, 1333 Van Ness St.

KASA, Elk City, Okla. 1210 kcs. 100 w., Unltd. time. Oklahoma Network and MBS. *Aerial,* 2 towers, 105 ft. *Prog. Dir.,* Lyman Brown. *Address:* E. M. Woody, Casa Grande Hotel.

KAST, Astoria, Ore. 1370 kcs. 100 w. daytime. *Aerial,* 2 towers, 55 ft., on Astoria Hotel. *Prog. Dir.,* Leonard Shreve. *Address:* Astoria Broadcasting Co., Hotel Astoria, 611 Commercial St.

KATE, Albert Lea, Minn. 1420 kcs. 250 w. days. *Aerial,* 1 tower, 242 ft. *Prog. Dir.,* Geo. B. Russell. *Add:* Albert Lea Broadcasting Co., Inc., 332 So. Broadway.

KAWM, Gallup, N. Mex. 1500 kcs. 100 w. Unltd. time. Transmitter at 1100 E. Aztec Ave. *Aerial,* 1 tower, 140 ft. *Owner* A. W. Mills.
CP 250 w. TO LS.

KBIX, Muskogee, Okla. 1500 kcs. 100 w. Unltd. time. Okla. Network and MBS. *Aerial,* 1 tower, 179 ft. *Manager,* J. H. Speck. *Address:* Okla. Press Publishing Co., Barnes Bldg.

KBND, UNDER CONSTRUCTION. Bend, Ore. 1310 kcs., 100 w. nights, 250 w. days, unltd. time. *Owner:* The Bend Bulletin.

KBPS, Portland, Ore. 1420 kcs. 100 w. Shares time with KXL. *Manager,* Wm. Allingham. *Add:* Benson Polytechnic School, 546 E. 12th Ave., N.

KBST, Big Spring, Texas. 1500 kcs. 100 w. Unltd. time. *Aerial,* 1 tower, 165 ft. *Prog. Dir.,* Mary V. Keneaster. *Add:* Big Spring Herald Broadcasting Co., Crawford Hotel.

KBTM, Jonesboro, Ark. 1200 kcs. 100 w. days. Transmitter on Route 1. *Aerial,* 1 tower, 200 ft. *Add:* W. J. Beard (Beard's Temple of Music), 104½ W. Washington St.

KCKN, Kansas City, Kans. 1310 kcs. 100 w. Unltd. time. Kansas Network. *Aerial,* 1 tower, 178 ft. *Prog. Dir.,* Ralph Nelson. *Add:* KCKN Broadcasting Co., 901 N. 8th St.

KCMC, Texarkana, Texas. 1420 kcs. 100 w. night, 250 w. to LS, Unltd. time. *Aerial,* 1 tower, 197 ft. *Prog. Dir.,* W. T. Casper. *Add:* KCMC, Inc., 317 Pine St.

KCMO, Kansas City, Mo. 1370 kcs. 100 w. Unltd. time. *Aerial,* 1 tower, 179 ft. *Prog. Dir.,* Lee Roberts. *Add:* KCMO Broadcasting Co., 1515 Commerce Trust Bldg.

KCRC, Enid, Okla. 1360 kcs. 250 w. Unltd. time. Okla. Network and MBS. *Aerial,* 1 tower, 179 ft. *Prog. Dir.,* Ralph Rogers. *Add:* Enid Radiophone Co., Oxford Hotel, Wilson and Kennedy Sts.

KCRJ, Jerome, Ariz. 1310 kcs. 100 w. night, 250 w. to LS, Unltd. time. *Aerial,* 1 tower, 145 ft. *Prog. Dir.,* Melvin S. Vittum. *Add:* Charles C. Robinson, Drawer D.

KDAL, Duluth, Minn. 1500 kcs., 100 w. Unltd. *Network:* CBS. *Aerial:* 1 tower, 165 ft. *Prog. Dir:* Gilbert Fawcett. *Owner:* Red River Broadcasting Co., Inc., Bradley Bldg.

KDB, Santa Barbara, Calif. 1500 kcs., 100 w. nights, 250 w. to LS, Unltd. *Network:* Mutual and Don Lee. *Aerial:* 2 towers, 60 ft. *Prog. Dir:* Tony La Frano. *Owner:* Santa Barbara Broadcasters, Ltd., 15 Haley St.

KDFN, Casper, Wyo. 1440 kcs., 500 w. Unltd. *Studios:* First and Lennox Sts. *Aerial:* 1 tower, 305 ft. *Manager:* D. L. Hathaway. *Owner:* Donald Lewis Hathaway, P. O. Box 930.

KDKA, Pittsburgh, Pa. 980 kcs., 50,000 w. Unltd. *Network:* NBC Blue. *Transmitter:* Saxonburg. *Aerial:* 1 tower, 718 ft. *Station Manager:* A. E. Nelson. *Owner:* Westinghouse Electric & Mfg. Co., Grant Bldg.

KDLR, Devils Lake, N. Dak. 1210 kcs., 100 w. Unltd. time. *Aerial:* 1 tower, 199 ft., 1 inch. *Prog. Dir:* Hildur Wick. *Owner:* KDLR, Inc., 1025 Third St.
CP 250 W. UNLTD.

KDNC, Lewistown, Mont. 1200 kcs., 100 w. nights, 250 w. to LS, Unltd. time. *Owner:* Democrat-News Co., Inc.

KDNT, Denton, Texas. 1420 kcs., 100 w., daytime only. *Prog. Dir:* Jack Wallace. *Owner:* Harwell V. Shepard.
History: CP granted in Feb., 1938. First program, June 1, 1938.

KDON, Monterey, Calif. 1210 kcs., 100 w. Unltd. time. *Network:* DonLee-Mutual. *Aerial:* 1 tower, 210 ft. *Prog. Dir:* Cecil Lynch. *Owner:* Monterey Peninsula Broadcasting Co., 275 Pearl St.

KDTH, UNDER CONSTRUCTION. Dubuque, Iowa. 1340 kcs., 500 w. daytime only. *Owner:* Telegraph Herald Co.

(This list will be continued next month)

Editor's Desk

(Continued from page 4)

ulation of 143,000; Auckland, with 217,000; Christchurch, Invercargill and Dunedin. The last-named city is pronounced "done Eden". The distance from Chicago to Wellington is 8,465 miles.

The original inhabitants of New Zealand were the Maoris, the most highly intelligent of all the Polynesians. The official language of the Dominion is English. New Zealand boasts the lowest illiteracy rate in the world, a very high standard of living, is proud of the fact that there is no smallpox nor malaria, and there are no snakes nor ferocious animals.

Philippine

The Philippine Islands are now known as the Commonwealth of the Philippines, and in 1944 it will become the Philippine Republic. The largest city is Manila, which is also its capital, with a population of 324,522; the second city is Iloilo. The Islands are situated in the Malay Archipelago, and their combined area is about equal to that of Arizona.

Winner

Early this spring we had an opportunity to participate in a DX program from station WADC in Akron, Ohio. The program, arranged by Herbert Tucker, was one of the series of "Programs of the Week," and we offered as a prize, a year's subscription to RADEX to the listener reporting the broadcast from the greatest distance.

Reports came from many sections of this and a few other countries—Minnesota, Nova Scotia, Saskatchewan, Bermuda, and Oregon, being represented among the postmarks. The most distant report was the one from E. C. Saling of Estacada, Oregon, so to him goes the subscription, starting with this issue.

Scrapbook

(Continued from page 18)

ingness to co-operate with special programs. The problem was stated in its entirety, the suggested solution set forth, and the opinions of the individual stations solicited.

The first station to reply agreed with the solution as it was suggested. The next reply agreed that blocked channels weren't fair, but discounted the value of DX programs to the stations. The third station, although operating on a limited schedule, felt that there was a case in favor of the all-nighters. Those were the three replies, and the other 37 stations didn't consider the matter of sufficient importance to reply.

So with the DXers unable to show sufficient strength to make any impression on the array of channel hogs and with the affected stations unwilling to take a hand in the case, there was no alternative but to let the matter drop and to make the most of the situation.

And after all, it isn't as bad as it might be. With reception in general due for a big boost this winter, distant signals should show a real wallop. When domestic stations cannot be heard, coutless foreign catches await the skillful tuner. Split-frequency tuning in the early evening offers unlimited possibilities, while the early morning hours should find many TA's and TP's waiting to be logged.

And when the DXer finds a night when he is unable to go overseas and he can't hear anything new on these shores, it wouldn't be a bad idea to lay off for a day or two. Repeated doses of fruitless tuning can quench the most ardent thirst for DX, while less frequent turns at the dials will whet the most jaded DX appetite.

QUICK INDEX TO STATION DATA

North American Broadcast

By frequencies .....Sept. '38, p. 56
By locations .....Sept. '38, p. 76
By call letters .....Sept. '38, p. 83
Frequency checks .....June '38, p. 46
Names of owners .....Sept. '38, p. 56
Owners addresses .....Sept. '38, p. 56
Time on the air .....May '38, p. 62

Shortwaves

Broadcasters....May '38, p. 43; June '38, p. 49
North American Police.....Sept. '38, p. 46
By locations .....Apr. '37, p. 61
By calls .....Apr. '37, p. 65

Foreign Broadcast

By frequencies .....Dec. '36, p. 43
By locations .....Dec. '36, p. 52
By calls .....Dec. '36, p. 57
Asia .....Feb. '38, p. 46
Europe .....June '37, p. 49
Oceania .....Sept. '38, p. 48
South America .....May '37, p. 50

Long Waves

By frequencies .....Apr. '36, p. 49
By locations .....Apr. '36, p. 51
By calls .....Apr. '36, p. 52

Miscellaneous

Radio Codes Explained .....June '38, p. 11
Roster of DX Clubs .....Nov. '37, p. 58
Choosing a radio .....Sept. '37, p. 3
NBC Network stations .....Feb. '38, p. 49
Columbia Network stations.....Mar. '38, p. 47
Mutual Network stations .....Feb. '37, p. 16
Canadian Network stations .....Mar. '37, p. 49

Next Month in RADEX

IN the October issue we shall present the first of a series of stories starring Mr. Turner Dial, expert radio technician. In his first story, Mr. Dial will tell us how to get our radios ready for the big fall and winter season ahead. Written by our capable technical editor, Mr. Dashiell, the "Turner Dial" stories will be immensely useful, as well as entertaining.

— RADEX —

The broadcasting stations of South America wil be presented, in a complete listing, and Mr. Lord's column will be full of hepfui hints on how these stations may be tuned. A little "travel talk" on South America will appear in the Editor's column, and pictures of South American radio stations will be presented.

— RADEX —

The first part of a complete shortwave index will start in October.

— RADEX —

The Station News column will be enlarged, to include applications to the Federal Communications Commission.

WANTED—Real experience stories. We will pay up to $10 for your story if it concerns a real radio experience. Must be exceptionally interesting and authentic. Notification of acceptance will be sent immediately. No manuscripts can be returned unless accompanied by sufficient postage. The Radex Publishing Co., 289 Queen Anne Road, Teaneck, N. J.

I WILL TRAIN YOU

TO START A SPARE TIME OR FULL TIME

RADIO SERVICE BUSINESS WITHOUT CAPITAL

J. E. SMITH, President
National Radio Institute
Established 1914

The world-wide use of Radio has made many opportunities for you to have a spare time or full time Radio service business of your own. Four out of every five homes in the United States have Radio sets which regularly need repairs, new tubes, etc. Servicemen can earn good commissions selling new sets to owners of old models. Even if you have no knowledge of Radio or electricity, I will train you at home in your spare time to sell, install, fix, all types of Radio sets to start your own Radio business and build it up on money you make in your spare time while learning. Mail coupon for my 64-page book. It's Free—it shows what I have done for others—what I am ready to do for you.

Many Make $5, $10, $15 a Week Extra in Spare Time While Learning

The day you enroll I start sending Extra Money Job Sheets; show you how to do Radio repair jobs. Throughout your training I send plans and directions that made good spare time money—$200 to $500—for hundreds, while learning. I send you special Radio equipment to conduct experiments and build circuits. This 50-50 method of training makes learning at home interesting, fascinating, practical. I ALSO GIVE YOU A MODERN PROFESSIONAL, ALL-WAVE, ALL-PURPOSE RADIO SET SERVICING INSTRUMENT to help you make good money fixing Radios while learning and equip you for full time jobs after graduation.

Get Ready Now for Your Own Radio Business and for Jobs Like These

Radio broadcasting stations employ engineers, operators, station managers and pay up to $5,000 a year. Fixing Radio sets in spare time pays many $200 to $500 a year—full time jobs with Radio jobbers, manufacturers and dealers as much as $30, $50, $75 a week. Many Radio Experts open full or part time Radio sales and repair businesses. Radio manufacturers and jobbers employ testers, inspectors, foremen, engineers, servicemen, and pay up to $6,000 a year. Automobile, police, aviation, commercial Radio, loud speaker systems are newer fields offering good opportunities now and for the future. Television promises to open many good jobs soon. Men I trained have good jobs in these branches of Radio. Read how they got their jobs. Mail coupon.

Find Out What Radio Offers You

Act Today. Mail the coupon now for Sample Lesson and 64 page book. They're free to any fellow over 16 years old. They point out Radio's spare time and full time opportunities and those coming in Television; tell about my training in Radio and Television; show you letters from men I trained, telling what they are doing and earning. Find out what Radio offers YOU! MAIL COUPON in an envelope, or paste on a postcard—NOW!

J. E. SMITH,
President
Dept. 8JO
National Radio Institute,
Washington, D.C.

Here's Proof

Earned $50 First Month in Spare Time

"I knew nothing about Radio. After four lessons I began servicing Radios, earning $50 the first month. Last winter I made as high as $100 a month in spare time."—G. F. WALTON, 808 West Olney Road, Norfolk, Va.

Own Business Pays $300 a Month

"I now have my own Radio business which shows three hundred dollars a month profit — thanks again to National Radio."—FRANK T. REESE, 39 N. Felton St., Philadelphia, Penna.

Get My LESSON on Radio Servicing Tips FREE

I want to prove my Training is just what you need to master Radio. My sample lesson text, "Radio Receiver Troubles—Their Cause and Remedy" covers a long list of Radio receiver troubles in A.C., D.C. battery, universal, auto, T.R.F., super-heterodyne, all-wave, and other types of sets, cross-indexed for quick reference. Special section on receiver checkup, alignment, balancing, neutralizing, testing. Get this lesson Free. Mail the Coupon.

GOOD FOR BOTH 64 PAGE BOOK SAMPLE LESSON FREE

J. E. SMITH, President, Dept. 8JO
National Radio Institute, Washington, D. C.

Dear Mr. Smith: Without obligating me, send your sample lesson and the book which tells about spare time and full time Radio opportunities, and how I can train for them at home in spare time.
(Please write plainly.)

Name..... Age.....

Address .....

City..... State.....

14X-1