

**SEPTEMBER 1938**

# **RAD** IO **IN** **D** EX

*The All-Wave Radio Log Authority*



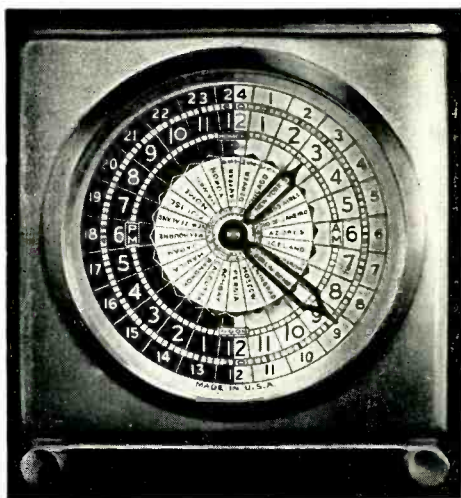
**25<sup>c</sup>**

**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.

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

*Actual size is 5 $\frac{1}{4}$  inches high by  
4 $\frac{3}{4}$  inches wide.*

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**

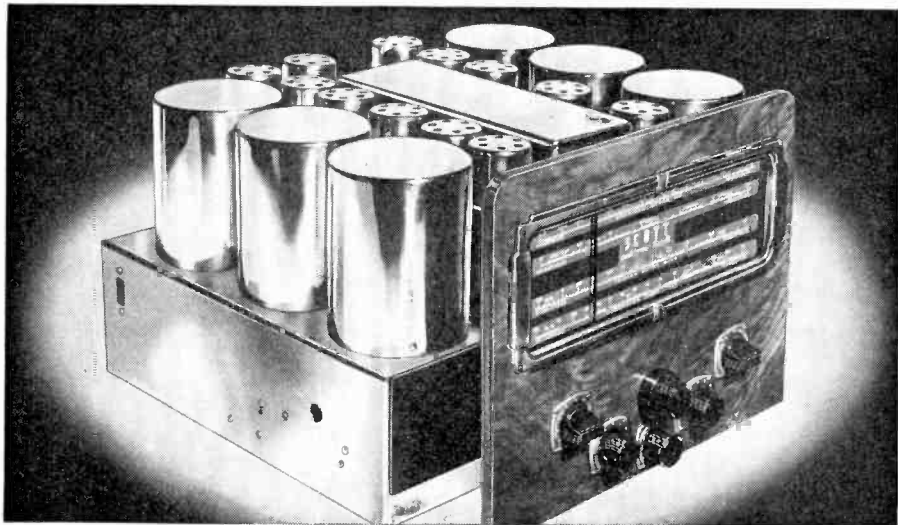
Also available in same style case in spring-driven model at \$4.95. We pay the postage.

**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 118 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 Goossens, 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 THIRD 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.

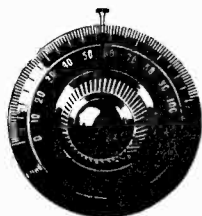
Name .....

Street .....

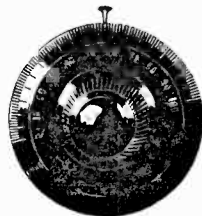
City ..... State.....

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, <i>by Ray LaRocque</i> .....	5
Leaves From a DXer's Scrapbook, <i>by Count de Veries</i> .....	11
Amateur Column, <i>QSA5-R9</i> .....	18
Amateur Calls Heard .....	20
Readers' Service Problems, <i>by B. Francis Dashiell</i> .....	22
SWL Trading Post .....	26
Covering the Shortwaves, <i>by E. Leisering, Jr.</i> .....	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 will not be returned unless accompanied by sufficient postage.

PRINTED IN THE U.S.A.

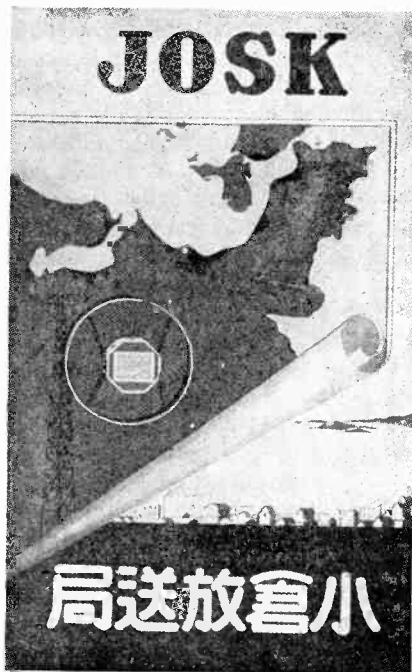
# ACROSS the Editor's DESK

**F**ROM 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 aeriels, 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-

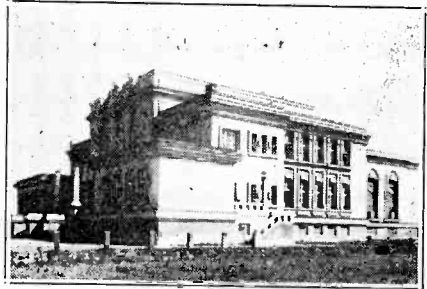
*(Please turn to page 95)*

# HIGH FREQUENCY HOOTS

• • • By RAY LA ROCQUE

**F**LYING 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 stations 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 ex-



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

perts and the hobby will prosper accordingly.

## 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 allotted 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 re-

ceivers, a fully equipped camera, and an exposure meter (light gauge they call it) are the prizes to be given the winners. Announcement of winners will 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 short-wave 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. Re-lays 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 ob-

ject 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. Gullivan*, 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 Erablissements 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 Mon-

day, 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)*



**C**OINCIDENTAL 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 tendency 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 interfering 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, Piscatawaytown, 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 tendency 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 receiver 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 Powlow, 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-absorbing 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 sea-coast, 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 device 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

THIS WILL ACKNOWLEDGE  
YOUR RECENT COMMUNICATION OR RECEPTION OF  
OUR STATION ON  
January 9, 1958  
WE APPRECIATE YOUR COMMENTS & HOPE WE MAY  
HEAR FROM YOU AGAIN

DES MOINES, IOWA  
U.S.A.

**WHO**

RCA Xmitter  
50.000 Watt

Clear Channel  
1000 Kcs.

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 and 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)*

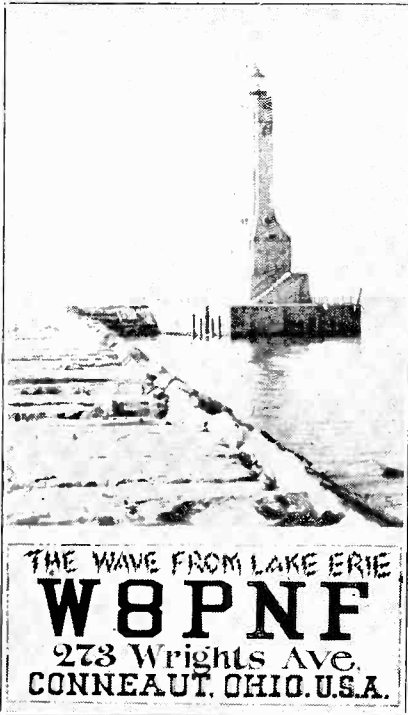
## QSA5 - R9

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 acknowledged, 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, F18AC, 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, Zamoral 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*); G12CC (*afll*); 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 (*aehlmm*); HH2X (*aclm*); HH3L (*ab*); HH4AS (*cl*); HH5PA (*abclmn*); HI2C (*en*); HI3N (*aceblmo*); HI5X (*akl*); HI7G (*almo*); HI7I (*klm*); HI9I (*bl*); HK1EF (*an*); HK3LDC (*cl*); HK5AR (*lo*); HP1A (*alm*); HR2A (*fl*); HR5C (*aeflm*); I1IT (*cgl*); KA1ME (*abl*); KA1ZL (*bl*); K4EJF (*acl*); K4ENT (*lno*); K4ENY (*al*); K6BNR (*acflbo*); K6OQE (*ac*); K7AOC (*bl*); LA1F (*akl*); LU1QA (*lo*); LU4BC (*klmo*); LU4CZ (*al*); LU7BK (*ab*); LU8AB (*lo*); LY1J (*lm*); NY2AE (*lmn*); OA4AI (*al*); OA4C (*bl*); OA4R (*ailmo*); ON4VK (*alm*); PAOAA (*al*); PAOUN (*cl*); PAOXF (*il*); PY5AQ (*lo*); SM5SD (*ac*); SP2HH (*cil*); SV1KE (*lo*); TG9AA (*abei*); TI2FG (*lo*); TI2LR (*ailm*); TI2RC (*almno*); VK2ADE (*al*); VK2CP (*ae*); VK3XJ (*afj*); VK4JU (*abl*); VK4TH (*ae*); VK4VD (*afll*); VK6MW (*ad*); VO2N (*cil*); VO6D (*cgl*); VO6J (*fl*); VP1BA (*befbklo*); VP1DM (*ln*); VP6LN (*mo*); VP6TR (*il*); VP6YB (*klo*); VP9L (*ln*); VP9R (*cklm*); VR6AY (*bfl*); W1OXAB (*achn*); XE1BT (*afll*); XE1GK (*cl*); XE1Q (*ao*); YL2BA (*gl*); YN1OP (*aclm*); YN3DG (*fln*); YR5AA (*ackl*); YR5KW (*gl*); YV1AA (*an*); YV1AP (*abkkmn*); YV1AQ (*mno*); YV5AB (*am*); YV5ABY (*bkm*); 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 farthest 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 Angeles, 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 correct 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 it 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 W8XX 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 it 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 other 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

**T**HE 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, south-west, 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

**B**ILLY 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 "radio-telephone." 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 radio-telephone, 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 television.

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 green-back 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 actresses, Alice Reinhart and Marion Barney, look for the nearest loud-speaker when a University of California game is broadcast. Don Ameche must find it difficult keeping tab on Marquette, Georgetown and Wisconsin. Howard Clancy and James Meighan never refuse odds on Carnegie Tech. Fred Utaal, 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 announcements 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

**J**UST 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 WEAFF 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 dependable 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 I2RO3 (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 kilocycles it broadcasts Mondays, Thursdays, and Saturdays, 11 a. m. to 11 p. m.; Wed-

nesdays 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 RADEX, 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	ZJZ	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
T14NRH	VK3ME	LRX	EAQ	YDB
EAQ	EAQ	OAX4J	LRA	ZRK
VPD2	T14NRH	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 pm.

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; 12:20 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; 8-9:50 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, 151220 kcs, Hilversum, Tuesday 12:30-2 am; 9:30-11:30 am.  
 PH12, 17770 kcs, Hilversum, Sunday 6:25-9:31 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, Sat, 9-10 pm.  
 TPA4, 11718 kcs, Paris, 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 OLR5A-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:

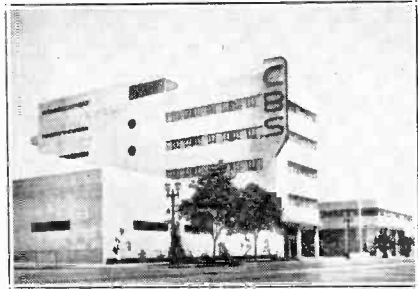
Czechoslovak Shortwave Station  
 Fochova Tr. 16,  
 Praha XII, Czechoslovakia

### The Frequencies

The frequencies employed are:

OK1MPT	5145	OLR4A	11840
OLR2A	6010	OLR4B	11760
OLR2B	6030	OLR5A	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

**O**N 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 president 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 discuss 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 should 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 broadcasting on a shared basis with the fixed and mobile 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 marvellous 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 programs 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 page 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  
B—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 KFSH KFYR KGA  
KGBX KGHF KGHJ KGIH KGNK  
KGO KGU KIDO KJR KLO KMA  
KMET KMJ KOA KOAM KOB  
KOIL KPFA KRQV KRIS KSEI  
KSO KSOO KTAR KTBS KTHS  
KTMS KVOO KWG KWK KXYZ  
WABY WAGA WALA WAVE  
WBAL WBOB WBRE WBZ WBZA  
WCOL WOSC WCSH WOAY WDSU  
WEAN WIBC WEBR WENR  
WFAA WIBC WFPA WFLW WFLA  
WGLA WGBF WHAM WHK WFA  
WTCO WTD WRE WIS WJAX  
WBO WDX WFTN WJZ WKY  
WLEU WLW WML WMPF WMP  
WMT WOL WOOD WORK WOWO  
WPT WREN WROL WRFD WSAJ  
WSGN WSM WSOC WSPD WUSN  
WVTR 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 WREN WCAE  
WCOL WCSH WDAF WDEL WFAF  
WIBC WFBR WGY WHO WIBA  
WIRE JAR WMAQ WNAO 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  
KPH WMBC KMOX KOMA KTLU  
WABC WBN'S WBRK WCAO  
WCAU WDRC WEEI WRIL WFBM  
WGAR WGR WIAS WIBC WIRX  
WJR WISY WJAS WOKO WORC  
WPIO 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  
CHM KPRC KSD KSTP KVVO  
KYW WBAF WBN WCAE WCOL  
WCSH WDEL WFAF WFBZ WFLA  
WGLA WGL WGY WIOD WJAR  
WJAX WLW WMAQ WMBG WNAO  
WQAI WORK WPTF WRC WSOB  
WSPD WTAG WTAM WTAR WTIC  
WWJ WWNC

E-6:30 pm, C-5:30, M-4:30, P-3:30  
C—Passing Parade; Oscar Bradley  
KIRA KLZ KRLD KTRH KTSB  
KTLU KWGH WABC WACO WADC  
WALA WYHG WBN'S WBRB WBT  
WCA WCAU WCOA WDAE WDBJ  
WDBO WDNC WDOD WDRS WEAN  
WRFL WFRM WFEA WGR WGST  
WHAS WHEC WHK WHP WIRX  
WITC WJAS WJR WJSV WKBN  
WVCC WLAC WLPZ WMAS WMBR  
WNAO WNOX WOKO WORC WQAM  
WREC WSRT WSFA WSJS WSMK  
WSPD WTOC WWL WWVA

E-7:00 p.m., C-6:00, M-5:00, P-4:00  
R—Charles McCarthy; Stroud Twins  
CFCF CRCT KDYL KFI KFYB

KGW KHQ KOA KOMO KPO KPRC  
KSD KSTP KTAR KTBS KVVO  
KYW WAVE WBN WCAE WCSH  
WDAF WDAY WFAF WIBC WFAA  
WFBR WFLA WGY WHO WIBA  
WIOD WIRE WIS WJAR WJAX  
WJDX WKY WLW WMAQ WMC  
WNAO WQAI WOW WPTF WRC  
WRVA WSB WSM WSMR WSOB  
WSTN 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  
WREN WCAE WCKY WCSH WDAF  
WDAY WFAF WIBC WERE WFAA  
WFBR WFLA WGY WHO WIBA  
WIOD WIRE WIS WJAR WJAX  
WJDX WKY WMAQ WMC WQAI  
WOW WPTF WRC WRVA WSB  
WSM WSMR WSOB 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  
KGD KHQ KOA KOMO KPO KPRC  
KSD KSTP KTBS KYW WAPI  
WAVE WBN WCAE WCSH WDAF  
WDAY WFAF WERC WERE WFAA  
WFBR WFLA WGY WHO WIBA  
WIOD WIS WJAR WJAX WJDX  
WKY WMAQ WMC WQAI WOW  
WPTF WRC WRVA WSAI WSB  
WSM WSMR WSOB 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 WFAF WFBR  
WGY WHO WIRE WJAR WLW  
WMAQ WNAO 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 WDAF WFBZ WGY WHO  
 WJAR WLW WNAW WRC WTG  
 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 WECB  
 WFDA WFBZ WGBF WGY WHO  
 WIBA WIRE WJAR WKY WMAQ  
 WNAC WOAI WOOD WOV WRC  
 WTG WTAM WTIC WTMJ

E-6:30 pm, C-5:30, M-4:30, P-3:30  
 M—The Lone Ranger  
 WFIL WNBZ 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  
 WBMM WBIG WBNS WBT WCAI  
 WCAU WCCO WCHS WDAE  
 WDBJ WDBO WDOD WDRC WEEI  
 WEOA WFAM WFBL WFBM WGAR  
 WGST WHAS WHEC WHIO WHP  
 WISN WJAN WJNO WJW WMBD  
 WKBH WKBN WKRC WLAC WMBD  
 WMBR WMFG WNAX WNOX WOC  
 WOKO WORC WQAM WRCR  
 WRVA WTAQ WWL WVVV

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

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

E-9:00 pm, C-8:00, H-7:00, P-6:00  
 C—Wayne King and Orchestra  
 KLB KERN KFAB KFHK KFPY  
 KFRC KGB KHJ KLZ KMBC KMJ  
 KMOX KOIN KOL KRNT KSL KVI  
 KWG WAAB WABC WADC WBBM  
 WFSN WBT WCAO WCAU WCCO  
 WDRC WEAN WFBL WFRM HAS  
 WHK WTBW WJAS WJR WJSV  
 WKBW WKRC WOKO WSPD WWL  
 R—Contented Program  
 CFCE CRCT KDYL KFI KGW KHQ  
 KOA KOMO KPO KPRC KSD KYW  
 WBEN WCAE WCSH WDAF WFAE  
 WEEL WFER WFLA WGY WHO  
 WIOD WIS WJAR WJAX WKY  
 WMAQ WMC WOAI WOV WPTF  
 WRC WRVA WSB WSM WTG  
 WTAM WTAR WTIC WWJ WNNC  
 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 WRAL  
 WBZ WIZA 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 WECB WFER WFLA WGY  
 WHO WIBA WIOD WIS WJAR  
 WJAX WJDX WKY WLW WMAQ  
 WMC WNAC WOV WPTF WRC  
 WRVA WSB WSM WSMB WSOC  
 WSUN WTG WTAM WTAR WTIC  
 WTMJ WWJ WNNC

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 WECB WEEI WFER WGY  
 WHO WHIO WIBA WIRE WJAR  
 WJDX WKY WMAQ WMC WOAI  
 WOV WRC WSB WSM WSMB  
 WTG 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 WFER  
 WGY WHIO WIRE WJAR WMAQ  
 WOV WRC WTG WTAM WTIC  
 WWJ

E-8:30 pm, C-7:30, M-6:30, P-5:30  
 C—Benny Goodman's Orchestra  
 KFAB KFHK KFPY KGKO KIRO  
 KLRA KLZ KMBC KMXX KNOW  
 KNN KOIN KOMA KOY KRLD  
 KRNT KSCJ KSFO KSL KTRH  
 KTSB KTLF KYI KVOR KWKH  
 WABC WACO WADC WALA WBBM  
 WBIG WBNS WBRB WIT WCAO  
 WCAU WCCO WCHS WDAE WDJJ  
 WDBO WDNC WDOD WDRC WEEI  
 WFBL WFBM WGAR WGST WHAS  
 WHEC WHIO WHP WIROW WIBX  
 WISN WJAS WJR WJSV WKBH  
 WKBN WKBW WKRC WLAC WLBZ

R—Voice of Firestone  
 CFCE CRCT KFYR KPRC KSD  
 KSTP KTBS KVOO KYW WAVE  
 WBEN WCAE WCSH WDAF WDAY  
 WEAF WECB WEEI WFDA  
 WFBZ WFER WFLA WGY WHO  
 WIBA WIOD WIRE WIS WJAR  
 WJAX WJDX WKY WMAQ WMC  
 WOAI WOV WPTF WRC WRVA  
 WSB WSM WSMB WSOC WTG  
 WTAM WTAR WTIC WTMJ WWJ  
 WNNC

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  
 WNBZ WNOX WOC WOKO WORC  
 WPG WPRO WQAM WREC WRVA  
 WSBT WSFA WSJS WTOG WWL

E-9:00 pm, C-8:00, M-7:00, P-6:00  
 R—Believe It Or Not  
 KANS KARK KDYL KELO KERN  
 KFBC KFDM KFI KFYR KGBX  
 KGNC KGW KHQ KMI KOA KOMO  
 KPO KPRC KSD KSTP KTAK  
 KTBS KTSM KVOO KWG KYW  
 WAVE WBEN WBRC WBRE WCAE  
 WCOL WCSH WDAF WDAY WDEL  
 WEAF WECB WFER WFLA WFLA  
 WGBF WGL WGY WHIO WIBA  
 WIOD WIRE WIS WJAR WJAX  
 WKY WLW WMAQ WMBG WMC  
 WNAC WOAI WOV WPTF WRC  
 WRC WROL WSAJ WSB WSM  
 WSMB WSOC WSPD WSUN WTG  
 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 WNBZ 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  
 WECB WFER WFLA WGY WHAM  
 WHO WIBA WIOD WIRE WIS  
 WJAR WJAX WJDX WKY WLW  
 WMAQ WMBG WMC WNAC WOAI  
 WOV WRC WSB WSM WSM  
 WSMB WSOC WSUN WSYR TAG  
 WTAM WTAR WTIC WTMJ WWJ  
 WNNC

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

E-9:00 pm, C-8:00, M-7:00, P-6:00  
 R—Kay Kysor's Orchestra  
 KANS KARK KDYL KERN KFBC  
 KFI KFYR KGBX KGLH KQIR  
 KGNC KGW 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 WESH WDAF WDAY WDEL  
 WEAF WEBC WFAP WFBC WFBR  
 WFBA WFLA WGL WGY WHO  
 WJAX WIOD WIRE WIS WJAR  
 WJAX WJDX WKY WLW WMAQ  
 WMBG WMC WNAC WQAI WOOD  
 WORL WOW WPTF WRC WSB  
 WSM WSMB WSOC WSTU WTAP  
 WTAM WTAR WTTIC 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  
 WBFB WBNS WCAO WCAU WCHS  
 WDRC WEEL WFBL WFBM WHAS  
 WHCZ WHIO WTRX WJAX WJIR  
 WKBW WKRC WMAS WNEP  
 WOC WOKO WORC WYFO

E-10:30 pm, C-9:30, M-8:30, P-7:30  
 C—Paul Whiteman's Orchestra  
 KDAL KPBB KFII KPZY KGAR  
 KGLD KGVO KIRO KLRA KLZ  
 KMOX KNOW KNX KOH KOIN  
 KOMA KOY KRLL KRNT KSCJ  
 KSFQ KSL KTRH KPSA KFUL  
 KVI KYOR KWKH WACO WAFI  
 WCCO WCOA WCOC WDDO WFBM  
 WHAS WHLW WJWV WNSN  
 WKBH WLAC WMLF WMBD  
 WNOX WOC WREC WSFA WTAQ  
 WWL

M—The Lone Ranger  
 KALE KDB KDON KPBC FFXM  
 KGB KGDG KJH 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 KV00 KYW  
 WAVE WBAP WBEN WBRC WCAE  
 WCSSH WDAF WDEL WEAF WEBC  
 WFAP WFBR WFLA WGY WHO  
 WJAX WIOD WIRE WIS WJAR  
 WKY WLW WMAQ WMBG WMC  
 WNAC WQAI WRC WSB WSM  
 WSMB WTAP WTAM WTTIC WTMJ  
 WWJ

E-8:00 pm, C-7:00, M-6:00, P-5:00  
 C—Major Bowes' Amateurs  
 CFRB CKAC KFAB KFBB KPZY  
 KGAR KLRA KLZ KMBC KMOX  
 KNOW NWX KOIN KOMA KOY  
 KRLD KRNT KSCJ KSFQ KSL  
 KTRH KPSA KFUL KVI KYOR  
 KWKH WABC WACO WADC WAFI  
 WBBM WBIG WBNS WBT WCAO  
 WCAU WCCO WCHS WCOA WDAE  
 WDBJ WDBO WDNC WDOU WDRC  
 WEEL WFOA WFBL WFBM WGAR  
 WGBI WGST WHAS WHCZ WHIO

WHP WIBW WIBX WISN WJAS  
 WJNO WJR WJSV WKBH WKBN  
 WKWB WKRC WLAC WLBY WNAS  
 WMBD WMHR WMMI WNAX  
 WNAF WNOX WOC WOKO WORE  
 WPAR WPG WPRO WQAM WREC  
 WRVA WSFA WSJS WTAQ WTOG  
 WWL

E-9:00 pm, C-8:00, M-7:00, P-6:00  
 R—Bing Crosby; Bob Burns  
 CBF CBL CDM KARK KDYL KFI  
 KGHJ KGR KGW KHQ KOA  
 KOMO KPFA KPO KPRC KSD  
 KSTP KTAR KTBS TBS KY00  
 KYW WAVE WBAP WBEN WBRC  
 WCAE WCSSH WDAF WDEL WEAF  
 WEBC WFSB WFBR WFLA WGY  
 WHAM WHO WJAX WJDX WKY  
 WLW WMAQ WMBG WMC WNAC  
 WQAI WQW WPTF WRC WR0L  
 WSB WSM WSMB WSOC WSYR  
 WTAP WTAM WTAR WTTIC WTMJ  
 WWJ

## FRIDAY

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

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

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—Cities Service Concert  
 CRCT CFYR KOA KPRC KSD  
 KSTP KTBS KTHS KV00 KYW  
 WBAP WBEN WCAE WCSSH WDAF  
 WDAY WEAF WEBC WEEL WFAP  
 WFBR WGY WHO WJAX WIOD  
 WJAR WKY WMAQ WQAI WQW  
 WRC WRVA WSAT WTAP WTAM  
 WTTIC WTMJ WWJ

E-8:00 pm, C-7:00, M-6:00, P-5:00  
 B—George Olsen's Orchestra  
 KDKA KFEL KLO KOIL KPRC  
 KSO WTAR WTBS KV00 KWK  
 WABY WAFB WHAL WBRC WBZ  
 WBZA WCSC WEAN WEBC WEBR  
 WFAP WFCB WFIL WFLA WJAM  
 WHK WICC WIOD WIS WJAX  
 WJDX WJZ WKY WLS WLW WMLA  
 WMC WMT WQAI WQW WPTF  
 WREN WR0L WRTD WSB WSM  
 WSMB WSOC WSPD WSTU WSYR  
 WTAR WTNC WWNC WXYZ  
 R—Frank Munn; Abe Lyman  
 KSD KYW WBEN WCAE WCSSH  
 WDAF WEAF WEEL WFBR WGY  
 WJAR WLW WMAQ WQW WRC  
 WTAP WTAM WWJ  
 E-8:30 pm, C-7:30, M-6:30, P-5:30  
 B—The March of Time  
 KDKA KECA KERN KFBC KFEL  
 KFSB KGA KGO KJR KLO KMJ  
 KOIL KSO KWG KWK KXYZ  
 WABY WAGA WBAL WBZ WBZA

WKTY WOOL WCSC WDSU WEAN  
 WEBR WFIL WHAM WHK WICC  
 WJZ WLS WMAL WMPX WMT  
 WREN WSPD WSYR WXYZ  
 B—Death Valley Days  
 KDKA KDYL KFL KGW KHQ KOIL  
 KOMO KPO KSO KWK WHAL WBZ  
 WBZA WFIL WGAR WHAM WJZ  
 WLS WLW WMLA WMT WREN  
 WSYR WXYZ

E-9:00 pm, C-8:00, M-7:00, P-6:00  
 R—First Nighter; Drama  
 KDYL KFI KPZY KGW KHQ KOA  
 KOMO KPO KPRC WSD KSTP  
 KTBS KTHS KYW WAVE WBEN  
 WCAE WCSSH WDAF WDAY WEAF  
 WEBC WFSB WFBR WFLA WGY  
 WHAM WHO WJAX WJDX WKY  
 WLW WMAQ WMBG WMC WNAC  
 WQAI WQW WPTF WRC WRVA WSB  
 WSM WSMB WSOC WTAP WTAM  
 WTAR WTTIC 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 WZZ

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 WAFI WAVE  
 WBAL WBAP WBZ WBZA WFIL  
 WFLA WHK WJAX WIOD WIRE  
 WIS WJAX WJDX WJZ WKY WLS  
 WMLA WMC WMT WQAI WOOD  
 WPTF WREN WRVA WSB WSMB  
 WSOC WSTU WSYR WTAR WWNC  
 WXYZ

C—Prof. Quiz  
 KDB KJRN KFAB KFBC KPZY  
 KPRC KGB KHJ KLRA KLZ KMBC  
 KMJ KMOX KOIN KOL KOMA  
 KRLL KRNT KSL KTRH KTS  
 KVI KWG WABC WBBM WBNS  
 WBT WCAO WCAU WCCO WDAE  
 WDBO WDRC WEAN WFBL WFBM  
 WJAX 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 KFBC KFH KEPY  
 KPRC KGB KGKO KGMH KJH  
 KLRA KLZ KMBC KMJ KMOX  
 KOH KOIN KOL KOMA KRLL  
 KRNT KSCJ KSL KTRH KTS  
 KUL KVI KYOR KWG KWKH  
 WABC WACO WADC WALA WBBM  
 WBIG WBNS WBRC WBT WCAO  
 WCAU WCCO WCOA WDAE WDBJ  
 WDBO WDNC WDOU WDRN  
 WFBL WFBM WFEA WGST WHAS  
 WHCZ WHK WHP WIBW WJAX  
 WICC WJDX WJAZ WJZ WJYS  
 WKBW WKRC WLAC WLZ WMAS  
 WMBD WMBG WMBR WNAS  
 WNAX WNOX WOC WOKO WORC  
 WPG WQAM WREC WSBT WSFA  
 WSJS WSPD WTOG 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 Day-light 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  
 WPFPT Portable in Ohio

WSPN Nantucket, Mass.  
 WSPQ Oak Bluffs, Mass.  
 ..... Yarmouth, Mass.

## 1674 kcs.

KGHK Palo Alto, Calif.  
 KGZT Santa Cruz, Calif.  
 KHFA Lees Summit, Mo.  
 KHFB Macon, Mo.  
 KHPC Kirkwood, Mo.  
 KHPD Springfield, Mo.  
 KHPE Poplar Bluff, Mo.  
 KHPF Jefferson City, Mo.  
 KIUK Jefferson City, Mo.  
 KSPH Hillsborough, Calif.  
 WKCP Watsonville, Calif.  
 WPSF Harrisburg, Pa.

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.

## 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.

## 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.  
 KGPO Honolulu, Hawaii  
 KGPR Fort Worth, Texas  
 KGZL Shreveport, La.  
 KGZQ Waco, Texas  
 KGZY San Bernardino, Calif.  
 KHAA Wahiawa, Hawaii  
 KHAB Kaneohe, 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.  
 WFDC Chicago, Ill.  
 WFDD 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.

## 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 Mountsville, W. Va.  
 WPWV Charleston, W. Va.  
 WSWV Shinnston, W. Va.

## 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.

## 1634 kcs.

KRNP Reno, Nev.  
 WPHF 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.

## 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.

## 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.  
 KGHV Centralia, Wash.  
 KGA 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.  
 KSON Merced, Calif.  
 WAKN Herkimer, N. Y.  
 WCK Detroit, Mich.  
 WMO Highland Park, Mich.  
 WMPF Waycross, Ga.  
 WPDA Tulare, Calif.  
 WPDJ Passaic, N. J.  
 WPDY Detroit, Mich.  
 WPDY Atlanta, Ga.  
 WPFH Baltimore, Md.  
 WPI 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.  
 WPDW 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.  
 WPD1 Columbus, Ohio  
 WDDM Dayton, Ohio  
 WPD5 St. Paul, Minn.  
 WPEK New Orleans, La.  
 WPDF 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 Connorsville, 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.  
 WPEC Muskegon, Mich.  
 WPEF Reading, Pa.  
 WPGF Jacksonville, Fla.  
 WFFT Lakeland, Fla.  
 WPEX Palm Beach, Fla.  
 WPFY Yonkers, N. Y.  
 WPFZ Miami, Fla.  
 WPGI 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.  
 KGHV 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.  
 WPK 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  
 KNEB 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.  
 WPF5 Asheville, N. C.  
 WPF6 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.  
 WPBM 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.

WMPK Fremont, Ohio  
 WPDG Philadelphia, Pa.  
 WPFQ Knoxville, Tenn.  
 WPFQ Swarthmore, Pa.  
 WPFSS Asheville, N. C.  
 WPGZ Johnson City, Tenn.  
 WPHY Elizabethton, Tenn.  
 WQFY Mansfield, Ohio  
 WRDQ Toledo, Ohio

KNFM Compton, Calif.  
 KNFX Ellenburg, Wash.  
 KNGA Goldendale, Wash.  
 KNCB 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 Huntington, 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.  
 WPDZ Kokomo, Ind.  
 WPDZ Fort Wayne, Ind.  
 WPPP 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.

**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.

**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

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

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

	100	5SE	Mount Gambier, S. A.	South Eastern Brdcastg. Co., Ltd., Waymouth St., Adelaide
	500	6GE	Geraldton, W. A.	Great Northern Broadcasters, Ltd., St. Georges Terrace, Perth
180	200	2GN	Goulburn, N. S. W.	Broadcasters (Australia) Ltd., Eagle St.
	100	4MK	Mackay, Qsld.	Goulburn Brdcastg. Co., Pty., Ltd. Mackay Brdcastg. Service, 64 Nelson St.
	100	6PM	Fremantle, W. A.	6PM Broadcasters, Ltd., St. Georges Terrace, Perth
1400	250	KHBC	Hilo, Hawaii	Honolulu Brdcastg. Co., Ltd., Box 595
	100	2PK	Parkes, N. S. W.	Parkes Brdcastg. Co., Pty., Ltd., 283 Clarinda St.
	100	4MB	Maryborough, Qsld.	Maryborough Brdcastg. Co., Ltd., 43 Adelaide St., Brisbane
	100	5AU	Port Augusta, S. A.	Port Augusta Brdcastg. Co., Ltd.
	100	7DY	Derby, Tas.	North East Tasmanian Radio Broadcasters, Paterson St., Launceston
1410	5300	2KO	Newcastle, N. S. W.	Newcastle Brdcastg. 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 Brdcastg. Co., Church and Edward Sts.
	1000	3ZB	Christchurch, N. Z.	Natl. Commercial Brdcastg. System
1440	100	2QN	Deniliquin, N. S. W.	Deniliquin Brdcastg. Co., Ltd., End St.
	100	4IP	Ipswich, Qsld.	Ipswich Brdcastg. Co., Pty., Ltd., Brisbane St.
1450	100	5MU	Murray Bridge, S. A.	Murray Bridge Brdcastg. 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 & Brdcastg. Co., Ltd., Commercial Road
	200	3CV	Charlton, Vic.	Mallee Broadcasters, Pty., Ltd.
	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.	Maranoa Brdcastg. 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 allotted 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 Zeppelin 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 listener'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.); 4YO, 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 proceeding 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-

tralian, 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.

"Although 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

**R**ECEPTION of overseas radio stations on the standard broadcast band is a feat 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 north-eastern 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 table 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	Australia
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 thirty per cent. increase in signal-noise ratio, accomplished mainly by eliminating feed-back and ground noise interference.

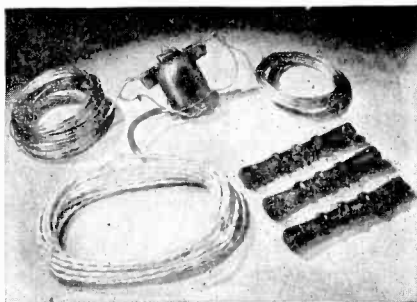
Instead of a separate lightning arrestor to be mounted and wired, the new kit incorporates the lightning arrestor directly in the aerial unit, thereby simplifying the installation work and reducing the installation time by an hour or two. A refinement in the antenna-ground circuit eliminates loss of 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 counter-poise 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



*Technical Appliance Corporation's new Master Antenna system.*

as stock number 9845, may be used on any radio.

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

### Dual-Purpose Victrola

The smallest self-contained electric Victrola ever built has been introduced 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 electro-dynamic 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 .....	Montana .....
Alaska .....	Nebraska .....
Arizona .....	Nevada .....
Arkansas .....	New Hampshire .....
California .....	New Jersey .....
Colorado .....	New Mexico .....
Connecticut .....	New York .....
Delaware .....	North Carolina .....
D. C. ....	North Dakota .....
Florida .....	Ohio .....
Georgia .....	Oklahoma .....
Hawaii .....	Oregon .....
Idaho .....	Pennsylvania .....
Illinois .....	Puerto Rico .....
Indiana .....	Rhode Island .....
Iowa .....	South Carolina .....
Kansas .....	South Dakota .....
Kentucky .....	Tennessee .....
Louisiana .....	Texas .....
Maine .....	Utah .....
Maryland .....	Vermont .....
Massachusetts .....	Virginia .....
Michigan .....	Washington .....
Minnesota .....	West Virginia .....
Mississippi .....	Wisconsin .....
Missouri .....	Wyoming .....



## The MONTH'S CHANGES in Station Data

New	
610	KFAR Fairbanks, Alaska. Midnight Sun Brdcastg. Co.
620	KWFT Wichita Falls, Tex. Wichita Falls Brdcastg. 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 Brdcastg. Co.
1310	KBND Bend, Ore. The Bend Bulletin
	KFTL 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 Brdcastg. 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 Brdcastg. 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.

# NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

## 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.

- |  |  |  |
|--|--|--|
| <p><b>Second Column Symbols</b></p> <p>a Verifies for return postage.<br/>b Verifies only occasionally.<br/>c Does not verify.<br/>d Verifies—no postage required.<br/>z No information available.</p> <p><b>Fourth Column Symbols</b></p> <p>A Status in doubt—in Court.<br/>B National "Blue" Network.<br/>C Columbia Network.<br/>D Daytime only.<br/>F Canadian Network.</p> | <p>G Assigned this frequency but using another under Special Authorization.<br/>H Assigned lower power but using this power under Special Authorization.<br/>M Mutual Network.<br/>N National "Red" and "Blue" Networks.<br/>P Has Construction Permit only.<br/>Q Station not in use.<br/>R National "Red" Network.</p> | <p>S Sundays only.<br/>Sy Synchronized.<br/>X Has Permit to change power.<br/>Y Has Permit to change location.<br/>Z Has Permit to change frequency.<br/>a-b-c Small letters show stations using same transmitter.<br/>1-2-3 Figures denote stations sharing time.<br/>... No information.</p> |
|--|--|--|

### 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 Brdstg. 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.

# NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

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

## 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.	Tarr Bldg.
TIPG	z	2000	625	San Jose, Costa Rica	Penn Albert Hotel
WFLA	a	1000	Na(5)	Tampa, Fla.	100 Main St.
WHJB	a	250	CD	Greensburg, Pa.	Recreation Pier
WLRZ	a	500	CM(1)	Bangor, Maine	333 W. State St.
WSUN	a	1000	Na(5)	St. Petersburg, Fla.	....
WTMJ	a	1000	N(5)	Milwaukee, Wis.	....

## 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	.....

## NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

### 640 kcs. (468.5 m.)

KFI	a	50000	R	Los Angeles, Calif.	1000 S. Hope St.
WGAN	z	500	DP	Portland, Me.	Port. Brdcastg. 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	National Bldg.
WSM	a	50000	MN	Nashville, Tenn.	

### 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.
CJ CJ	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.	.....

## NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

### 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	Homolulu, 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.)

CMFB	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	....	Carnaguey, 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 Brdctg. Corp.
WEAN	a	1000	BM(5)	Providence, R. I.	New Crown Hotel
WEAC	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.
WFAX	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.

## NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

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 Brdctg. 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.
WBQO	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.
KPNF	a	500	2X(1)	Shenandoah, Iowa	407 Svcamore St.
KFPY	a	1000	C(5)	Spokane, Wash.	Symons Bldg.
KUSD	a	500	2	Vermillion, S. Dak.	University of S. Dak.

## NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

WBAA	a	500	(1)	W. Lafayette, Ind.	Purdue University
WGST	a	1000	C(5)	Atlanta, Ga.	Anslcy Hotel
WJAR	a	1000	R(5)	Providence, R. I.	Weybossett St.
WMMN	a	500	CX(1)	Fairmont, W. Va.	Monongahela Valley Brdstg. 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 Brdstg. 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
WORLD	a	500	D	Boston, Mass.	Brdstg. 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
------	---	-----	---	-------------------	---------------

## NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

CMBC	z	1000	....	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 Brdcastg. Corp.

### 980 kcs. (306 m.)



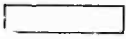
KDKA	b	50000	B	Pittsburgh, Pa.	Grant Bldg.
XEAC	a	1000	....	Tijuana, B. Cfa.	Av. Mexico 12
XEFE	z	250	Z	Nuevo Laredo, Tams.	Gonzales y Riva Palacio

### 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 Brdcastg. 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 Brdcastg. Co.
XEJ	a	1000	....	Juarez, Chih.	Av. Lerdo 309



## NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

### 1030 kcs. (291.1 m.)

CFCN	a	10000	F	Calgary, Alta.	Central Trust Bldg.
CJBR	z	1000	F	Rimouski, P. Q.	J. A. Brilliant
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.)

KRJD	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 Guerrerro
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	CI	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
------	---	-----	---	--------------	-----------

## NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

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. Catherine's 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
KFJO	a	100	D	Spokane, Wash.	Ziegler Bldg.
KFSG	a	500	a(2.5)	Los Angeles, Calif.	1100 Glendale Blvd.
KRKC	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.
WVOV	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.
WAFI	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
XFD	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.

## NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

KOB	a	10000	2N	Albuquerque, N. Mex.	Alb. Brdcastg. 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 Tulare-Kings Counties Assn.
KTKC	a	250	D	Visalia, Calif.	Box 135
VONF	a	500	1195	St. John's, Nfld.	47 Grand St.
WATR	a	100	DXZ	Waterbury, Conn.	1038 Navarro
WOAI	a	50000	N	San Antonio, Tex.	Box 729
WSAZ	a	1000	L	Huntington, W. Va.	

### 1200 kcs. (249.9 m.)

CFGF	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
KGFK	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 Brdcastg. 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 Brdcastg. 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 Brdcastg. 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.

## NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

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 Brcdstg. Co.
WVAE	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.
CKHK	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 Brcdstg. 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 Brcdstg. 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 Brcdstg. 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.
WGNV	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.
WJEF	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 Brcdstg. Co., Inc.
WJW	a	100	(.25)	Akron, Ohio	41 S. High St.
WKOK	a	100	L	Sunbury, Pa.	1150 N. Front St.
WMPG	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.

## NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

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
XEF	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 Brdscgt. 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.
KTWC	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.	Morelos 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	.....	Mandan, N. Dak.	404 W. Main St.
KLPM	a	250	1XZ	Minot, N. Dak.	Box 707
KTAT	a	1000	M	Fort Worth, Tex.	Tarrant Brdscgt. 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.	Cuahtemoc 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.	109 1/2 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 Brdscgt. 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"
------	---	-----	----	--------------	----------------

## NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

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 Brdctg. 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 Ircnt 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
WIBC	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.	.....
WBRR	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

## NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

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.	914 1/2 Broadway
KRIS	z	500	N	Corpus Christi, Tex.	Gulf Coast Brdctsg. Co.
KSCJ	a	1000	C(5)	Sioux City, Iowa	415 Douglas St.
WDRG	a	1000	C	Hartford, Conn.	750 Main St. - 9-23-38-3115 am
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 Brdctsg. Co.
WFEA	a	500	MN(1)	Manchester, N. H.	Carpenter Hotel - 9-23-38-3150 am
WSPD	a	1000	B(5)	Toledo, Ohio	The Fort Industry Co.
XEAP	z	50	....	Oregon, 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	Reperto 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.
CKCV	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 Brdctsg. Co.
KFGQ	a	100	D	Boone, Iowa	924 W. 2nd St.
KFJZ	a	100	(.25)	Fort Worth, Texas	502 Trinity Life
KPRO	a	250	D	Longview, Texas	Box 616
KGAR	a	100	C(.25)	Tucson, Ariz.	142 S. 6th Ave.
KGLF	a	100	4	Roswell, N. Mex.	507 N. Main St.
KGLK	a	100	(.25)	San Angelo, Texas	St. Angelus Hotel
KCKV	a	100	F	Quebec, P. Q.	254 Marguerite-Bourgeois
KAND	z	100	D	Corsicana, Tex.	State Natl. Bank Bldg.

# NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

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
KFPJ	b	100	(.25)	Dublin, Texas	Box 176
KFYO	a	100	(.25)	Lubbock, Texas	Box 1448
KGEZ	a	100		Kalispell, Mont.	Box 1
KGFVW	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
KROA	a	100		Santa Fe, N. Mex.	Box 985
KRRV	z	250	D	Sherman, Texas	Red River Vallej Corp.
KSRO	a	250	D	Santa Rosa, Calif.	Press-Democrat Pub. Co.
KSUB	a	100		Cedar City, Utah	El Escalante Hotel
KTFJ	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.	194 1/2 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.
WCMJ	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.
WFXL	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.
WIAC	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.
WSIS	a	100	C	Winston-Salem, N.C.	416 N. Marshall
WTAL	a	100	(.25)	Tallahassee, Fla.	Fla. Capitol Brdcstg.
WTFL	a	100	4	Philadelphia, Pa.	3701 N. Broad
WTIS	a	100	(.25)	Jackson, Tenn.	Sun Bldg.
WTRU	a	100	(.25)	Elkhart, Ind.	Hotel Elkhart
XEAG	z	10		Cordoba, Ver.	Av. "L" 135
XEFB	z	25		Irapuato, Gto.	Guerrero 26
XEFW	a	300		Tampico, Tams	Salvador Diaz Miron 6
XETB	a	125		Torreón, 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



## NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

KICA	a	100	4	Clovis, N. Mex.	Box 111
KIUP	a	100	....	Durango, Colo.	2800 Main St.
KIUF	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 Brdctg. 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 Brdctg. Co.
KTOK	a	100	MN	Oklahoma City, Okla.	1113 N. Broadway
KUI	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.	Wvo. Brdctg. Co.
KWYO	a	100	(.25)	Sheridan, Wyo.	Big Horn Brdctg. Co.
WABY	a	100	N(.25)	Alhany, 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.
WFOA	a	100	C(.25)	Evansville, Ind.	Fvansv 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.
WHBO	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 Brdctg. Co.
WIBM	a	100	(.25)	Jackson, Mich.	306 W. Michigan Ave.
WLLH	a	100	Sw	Lawrence, Mass.	Merrimac Brdctg. Co.
WLLH	a	100	MS(.25)	Lowell, Mass.	Box D
WMRR	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)	Mavaguez, 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 Brdctg. Co.
WSVS	a	50	2D	Buffalo, N. Y.	666 E. Delevan St.
WFCZ	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 kes. (217.3 m.)

CMCR	z	....	....	Havana, Cuba	Infanta 115
CMCX	z	150	....	Havana, Cuba	Calle Macco 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
WLBH	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 kes. (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. Brd. Co.
KRLC	a	250	....	Lewiston, Idaho	Lewis-Clarke Hotel

## NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

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 — 4:30pm - 9-24 38
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.
WEGI	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
KFIM	a	500	(1) Grand Forks, N. Dak.	University of N. Dak.
KGNC	a	1000	N(2.5) Amarillo, Texas	Plains Radio Brdc. Co.
KMID	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.
WSEA	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. Co.
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	..... 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.
KRIH	a	100	D Midland, Texas	Clarence Scharbaur
KTRI	z	100	P(.25) Sioux City, Iowa	Sioux City Brdcstg. Co.
KUMA	a	100	..... Yuma, Ariz.	Box 267
KVAK	z	100	DP Atchison, Kans.	.....
KWBG	a	100	..... Hutchinson, Kans.	W. N. Greenwald
KXL	a	100	P(.25) Portland, Ore.	Multnomah Hotel
WACO	a	100	..... 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.	208 1/2 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.
WFMI	z	100	DP Youngstown, Ohio	Wm. F. Maag, Jr.
WGPC	a	100	..... Albany, Ga.	Rylander Theater

K SAN

See from 1300 - 72

4:45pm - 9-24 38

## NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

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
WMBG	a	100	(.25)	Detroit, Mich.	7310 Woodward Ave.
WMBH	a	100	(.25)	Joplin, Mo.	1334 Roosevelt St.
WMSB	a	250	D	Uniontown, Pa.	Fayette Brdcastg. Corp.
WMEJ	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 Brdcastg. 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.
WHFC	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 Brdcastg. 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
------	---	------	---	----------------------	----------------

## NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

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

### 1490 kcs. (201.2 m.)

<u>KFBK</u>	a	10000	N	Sacramento, Calif.	708 Eye St.
<u>WKCY</u>	a	10000	N	Covington, Ky.	6th and Madison

### 1500 kcs. (199.9 m.)

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

### 1510 kcs. (198.6 m.)

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

### 1520 kcs. (197.3 m.)

<u>TGW</u>	d	1000	....	Guatemala City, Guat.	Ministerio de Fomento
------------	---	------	------	-----------------------	-----------------------

## NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

---

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

**T**HE 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 kilowatt 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 constructed 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		KLRA	1390	1000	C	KPO	680	50000	R	WDEL	1120	250	R				
WAPT	1140	5000	C	Pine Bluff		KSFO	560	1000	C	WILM	1420	100					
WBRC	930	1000	R	KOTN	1500	100		KYA	1230	1000	DISTRICT OF COLUMBIA						
WSGN	1310	100	B	Siloam Springs		KQW	1010	1000	M	Washington							
Decatur				CALIFORNIA						WJSV	1460	10000	C				
WMFO	1370	100		Bakersfield		KVOE	1500	100	M	WMAL	630	250	B				
Dothan				KERN	1370	100	N	Santa Ana		WOL	1310	1000	M				
WAGF	1370	250		KPMC	1550	1000	M	Santa Barbara		WRC	950	1000	R				
Gadsden				Berkeley		KRE	1370	100		FLORIDA							
WJBY	1210	100		KRE	1370	100		Beverly Hills		Daytona Beach							
Huntsville				KMPCC	710	500		Chico		WMFJ	1420	100					
WBHP	1200	100		KHSL	1260	250		El Centro		Gainesville							
Mobile				KXO	1500	100		Eureka		WRUF	830	5000					
WALA	1380	500	C	KIEM	1450	500	M	Fresno		Jacksonville							
Montgomery				KARM	1310	100	C	Glendale		WJAX	900	1000	N				
WSFA	1410	500	C	KMJ	580	1000	N	Hollywood		WMBR	1370	100	C				
Selma				KIEV	850	250		Los Angeles		Lakeland							
WHBB	1500	100		KFWB	950	1000		KECA	1430	1000	B	WLAK	1310	100			
Sheffield				KFOX	1250	1000		KEHE	780	1000		Miami					
WMSD	1420	100		KGER	1360	1000		KFAC	1300	1000		MIAMI BEACH					
Tuscaloosa				KFI	640	50000	R	KFEL	920	500	M	Orlando					
WJRD	1200	260		KFSG	1120	500		KFOA	830	50000	R	WDBO	580	1000	C		
ALASKA				KFVD	1000	1000		KPOF	880	1000		Pensacola					
Anchorage				KGJF	1200	100		KVOD	920	500	B	St. Augustine					
KFQD	780	250		KHJ	900	1000	M	Durango		KIUP	1370	100					
Fairbanks				KMTR	570	1000		Grand Junction		KJFX	1200	100					
KFAR	610	1000		KNX	1050	50000	C	Greeley		KFKA	880	500	M	St. Petersburg			
Juneau				KRCD	1120	500		La Junta		KOKO	1370	100		WSUN	620	1000	N
KINY	1310	100		Merced				Lamar		KIDW	1420	100		Tallahassee			
Ketchikan				Modesto				KIDW	1420	100			WTAL	1310	100		
KGBU	900	500		Monterey				Pueblo		KGHF	1320	500	B	Tampa			
ARIZONA				KDON	1210	100	M	Sterling		KGEK	1200	100		WDAE	1220	1000	C
Globe				Oakland				CONNECTICUT		WFLA	620	1000	N	West Palm Beach			
KWJB	1210	100		KLS	1280	250		Bridgeport		WJNO	1200	100	C	GEORGIA			
Jerome				KTX	880	1000		WICC	600	500	M	Albany					
KCRJ	1310	100		KROW	930	1000		Atlanta		WGPC	1420	100		Athens			
Lowell				Pasadena				Hartford		WGAU	1310	100		Atlanta			
KSUN	1200	100		KPPC	1210	100		WDRG	1330	1000	C	WAGA	1450	500	B		
Phoenix				Redding				WDTG	1040	50000	R	WATL	1370	100			
KOY	1390	1000	C	KVCV	1200	100		WHTT	1200	100	M	WGST	890	1000	C		
KTAR	620	1000	N	Sacramento				New Britain		WNBC	1380	250		WSB	740	50000	R
Safford				KFRK	1490	10000	N	New Haven		WELI	900	500		Augusta			
KGLU	1420	100		KROY	1210	100	C	New London		WNLC	1500	100	M	WRDW	1500	100	C
Tucson				KSAN	1210	100	C	Waterbury		WATR	1190	100		Columbus			
KGAR	1370	100	C	San Diego				WBRV	1530	1000	M	WRBL	1200	100			
KVOA	1260	1000		KFSD	600	1000	B	DELAWARE		WKEU	1500	100		Griffin			
Yuma				KGb	1330	1000	M	Wilmington		WMAZ	1180	1000	C	Macon			
KUMA	1420	100		San Francisco				DISTRICT OF COLUMBIA		WMAZ	1180	1000	C	WRSA	1500	100	
ARKANSAS				KFRC	610	1000	M	FLORIDA		Savannah				WWSA	1310	100	
Blytheville				KGGC	1420	100		DAYTONA BEACH		WTOC	1260	1000	C	Gainesville			
KLCN	1290	100		KGO	790	7500	B	JACKSONVILLE		Lakeland							
El Dorado				KJBS	1070	500		MIAMI BEACH		Miami							
KELD	1370	100		CALIFORNIA				ORLANDO		Orlando							
Port Smith				Bakersfield				PENSACOLA		Pensacola							
KFPW	1210	100		KERN	1370	100	N	ST. AUGUSTINE		St. Augustine							
Hot Springs				KPMC	1550	1000	M	ST. PETERSBURG		St. Petersburg							
KTHS	1060	10000	N	Berkeley				TALLAHASSEE		Tallahassee							
Jonesboro				KRE	1370	100		TAMPA		Tampa							
KBTM	1200	100		KMPCC	710	500		TUSCALOOSA		Tuscaloosa							
Little Rock				KHSL	1260	250		WASHINGTON		Washington							
KARK	890	500	N	KXO	1500	100		DAYTONA BEACH		Daytona Beach							
KGHI	1200	100		KIEM	1450	500	M	GAINESVILLE		Gainesville							

## NORTH AMERICAN B. C. STATIONS BY LOCATIONS

<p>Thomasville WPAX 1210 100 Waycross WAYX 1200 100</p> <hr/> <p style="text-align: center;"><b>HAWAII</b></p> <hr/> <p>Hilo KHBC 1400 250M Honolulu KGMB 1320 1000 C KGU 750 2500 N</p> <hr/> <p style="text-align: center;"><b>IDAHO</b></p> <hr/> <p>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</p> <hr/> <p style="text-align: center;"><b>ILLINOIS</b></p> <hr/> <p>Bloomington WBC 1200 100 Carthage WCAZ 1070 100 Champaign WDWS 1370 100 Chicago WAAF 920 1000 WBBM 770 50000 C WCB 1080 5000 WCFL 970 5000 N WCRW 1210 100 WEDC 1210 100 WENR 870 50000 B WGES 1360 500 WGN 720 50000M WJJD 1130 2000 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</p>	<p>Quincy WTAD 900 1000 Rockford WROK 1410 500 Rock Island WBBF 1210 100 Springfield WCSB 1420 100 WTAX 1210 100 Tuscola WDZ 1020 250 Urbana WILL 580 1000</p> <hr/> <p style="text-align: center;"><b>INDIANA</b></p> <hr/> <p>Anderson WIBU 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 WGR 1370 250 Richmond WKBV 1500 100 South Bend WPFM 1200 100 WSBT 1360 500 Terre Haute WBOW 1310 100 N West Lafayette WBAA 890 500</p> <hr/> <p style="text-align: center;"><b>IOWA</b></p> <hr/> <p>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</p>	<p>Mason City KGLO 1210 100 C Shenandoah KFNF 890 500 KMA 930 1000 B Sioux City KSCI 1330 1000 C KTRI 1420 100</p> <hr/> <p style="text-align: center;"><b>KANSAS</b></p> <hr/> <p>Abilene KFBI 1050 5000 Atchison ..... 1420 100 Coffeyville KGGF 1010 1000M Dodge City KGNO 1340 250 Garden City KIUL 1210 100 Great Bend KVCB 1370 100 Hutchinson KWGB 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</p> <hr/> <p style="text-align: center;"><b>KENTUCKY</b></p> <hr/> <p>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</p> <hr/> <p style="text-align: center;"><b>LOUISIANA</b></p> <hr/> <p>Alexandria KALB 1210 100 Baton Rouge WJBO 1120 500 B Lafayette KVOL 1310 100 Lake Charles KPLC 1500 100</p>	<p>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 KWVK 1100 10000 C</p> <hr/> <p style="text-align: center;"><b>MAINE</b></p> <hr/> <p>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</p> <hr/> <p style="text-align: center;"><b>MARYLAND</b></p> <hr/> <p>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</p> <hr/> <p style="text-align: center;"><b>MASSACHUSETTS</b></p> <hr/> <p>Boston WAAB 1410 500M WBZ 990 50000 B WCOP 1120 500 WEEI 950 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</p>
---	--	---	---

## NORTH AMERICAN B. C. STATIONS BY LOCATIONS

<p>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</p> <hr/> <p style="text-align: center;"><b>MICHIGAN</b></p> <hr/> <p>Battle Creek WELL 1420 100 Bay City WBCM 1410 500 Calumet WHDF 1370 100 Detroit WJBK 1500 100 WJR 750 50000 C WBMC 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</p> <hr/> <p style="text-align: center;"><b>MINNESOTA</b></p> <hr/> <p>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</p>	<p>Northfield WICAL 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</p> <hr/> <p style="text-align: center;"><b>MISSISSIPPI</b></p> <hr/> <p>Grenada WGRM 1210 100 Gulfport WGMG 1210 100 Hattiesburg WFOR 1370 100 Jackson WDXL 1270 1000 R WSLI 1420 100 Kosciusko WHEF 1500 100 Laurel WAML 1310 100 Meridian WCOG 880 1000 C Vicksburg WQBC 1360 1000</p> <hr/> <p style="text-align: center;"><b>MISSOURI</b></p> <hr/> <p>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 KFEO 680 2500 St. Louis KFUO 550 500 KMOX 1090 50000 C KSD 550 1000 R KWK 1350 1000 B KNOK 1250 1000 WEIV 760 1000 WIL 1200 100 Springfield KGBX 1230 500 N KWTO 560 5000</p> <hr/> <p style="text-align: center;"><b>MONTANA</b></p> <hr/> <p>Billings KGHL 780 1000 N</p>	<p>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</p> <hr/> <p style="text-align: center;"><b>NEBRASKA</b></p> <hr/> <p>Clay Center KMMJ 740 1000 Kearney KGFV 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 KGGY 1500 100</p> <hr/> <p style="text-align: center;"><b>NEVADA</b></p> <hr/> <p>Reno KOH 1380 500 C</p> <hr/> <p style="text-align: center;"><b>NEW HAMPSHIRE</b></p> <hr/> <p>Laconia WLNH 1310 100M Manchester WFEA 1340 500 N Portsmouth WHEB 740 250</p> <hr/> <p style="text-align: center;"><b>NEW JERSEY</b></p> <hr/> <p>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</p>	<p>Whippany W3XDD ... 50000 Zarephath WAWZ 1350 500</p> <hr/> <p style="text-align: center;"><b>NEW MEXICO</b></p> <hr/> <p>Albuquerque KGGM 1230 1000 KOB 1180 10000 N Carlsbad KLAH 1210 100 Clovis KICA 1370 100 Gallup KAWM 1500 100 Hobbs KWEV 1500 100 Roswell KGFL 1370 100 Santa Fe KRQA 1310 100</p> <hr/> <p style="text-align: center;"><b>NEW YORK</b></p> <hr/> <p>Albany WABY 1370 100 N WOKO 1430 500 C Auburn WUBO 1310 100 Binghamton WNBH 1500 100 C Brooklyn WARD 1400 500 WBBC 1400 500 WBBR 1300 1000 WCNW 1500 100 WLTH 1400 500 WFW 1400 500 Buffalo WBEN 900 1000 R WBNY 1370 100 WBR 1310 100 B WGR 550 1000 C WKBW 1480 5000 C WWSV 1370 50 Canton WCAD 1220 500 Elmira WENY 1200 250 WESG 850 1000 C Freeport WGBB 1210 100 Jamestown WJTN 1210 100 B Newburgh WGN 1210 100 New York WABC 860 50000 C WBIL 1100 5000 WBXN 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</p>
--	---	---	--



## NORTH AMERICAN B. C. STATIONS BY LOCATIONS

WVOV	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		
WAJR	1250	250
WSJ3	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	500000 N
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		
WPAV	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
KTKO	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		
CAST	1370	100
Bend		
KBND	1310	100
Corvallis		
KOAC	550	1000
Eugene		
KORE	1420	100M
Klamath Falls		
KFJJ	1210	100
La Grande		
KLBM	1420	100
Marshfield		
KOOS	1200	100
Medford		
KMED	1410	250 N
Portland		
KALE	1300	1000M
KBPS	1420	100
KEN	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		
WCB3	1440	500
WSAN	1440	500 N
Altoona		
WPBG	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
Hazleton		
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		
WTRP	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

<p>Vermillion KUSD 890 500 Yankton WNAX 570 1000 C</p> <hr/> <p style="text-align: center;"><b>TENNESSEE</b></p> <hr/> <p>Bristol WOPI 1500 100 Chattanooga WAPO 1420 100 WDOO 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</p> <hr/> <p style="text-align: center;"><b>TEXAS</b></p> <hr/> <p>Abilene KRBC 1420 100 Amarillo KGNC 1410 1000 N Austin KNOW 1500 100 C KTBC 1120 1000 Beaumont KPFDM 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 KGVV 1200 100 Houston KPRC 920 1000 R</p>	<p>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 K TSA 550 1000 C W OAI 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</p> <hr/> <p style="text-align: center;"><b>UTAH</b></p> <hr/> <p>Cedar City KSUB 1310 100 Logan KVN U 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</p> <hr/> <p style="text-align: center;"><b>VERMONT</b></p> <hr/> <p>Burlington WCAX 1200 100 Rutland WSYB 1500 100 St. Albans WQDM 1390 1000 Springfield WNBX 1260 500 C Waterbury WDEV 550 500</p>	<p style="text-align: center;"><b>VIRGINIA</b></p> <hr/> <p>Charlottesville WCHV 1420 100 Danville WB TM 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</p> <hr/> <p style="text-align: center;"><b>WASHINGTON</b></p> <hr/> <p>Aberdeen KXRO 1310 100M Bellingham KVOX 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 KPO 1500 100M Yakima KIT 1250 250M</p> <hr/> <p style="text-align: center;"><b>WEST VIRGINIA</b></p> <hr/> <p>Bluefield WHIS 1410 500 Charleston WCHS 580 500 C Clarksburg WBLK 1370 100</p>	<p>Fairmont WMMN 890 500 C Huntington WSAZ 1190 1000 Parkersburg WPAR 1420 100 C Wheeling WWVA 1160 5000 C</p> <hr/> <p style="text-align: center;"><b>WISCONSIN</b></p> <hr/> <p>Eau Claire WEAU 1050 1000 Fond du Lac KFIZ 1420 100 Green Bay WBHY 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 W HBL 1300 250 Stevens Point WLBL 900 5000 Superior WDSM 1200 100 Wausau WSAU 1370 100</p> <hr/> <p style="text-align: center;"><b>WYOMING</b></p> <hr/> <p>Casper KDFN 1440 500 Rock Springs KVR S 1370 100 Sheridan KWYO 1370 100</p>
			<p style="text-align: center;"><b>BAHAMAS</b></p> <hr/> <p>Nassau ZNS 540 400</p>
			<p style="text-align: center;"><b>CANADA</b></p> <hr/> <p style="text-align: center;"><b>ALBERTA</b></p> <hr/> <p>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</p>

## NORTH AMERICAN B. C. STATIONS BY LOCATIONS

<p>Grande Prairie CFGP 1200 100 Lethbridge CJOC 950 100 F</p> <hr/> <p><b>BRIT. COLUMBIA</b></p> <p>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 CKFK 1410 50 CKMO 1410 100 CKWX 1010 100 Victoria CFCT 1450 500</p> <hr/> <p><b>MANITOBA</b></p> <p>Brandon CKX 1120 1000 F Flin Flon CFAR 1370 100 Winnipeg CJRC 630 500 F CKY 910 15000 F</p> <hr/> <p><b>NEW BRUNSWICK</b></p> <p>Fredericton CFNB 550 500 F Moncton CKCW 1370 100 F St. John CHSJ 1120 500 F</p> <hr/> <p><b>N. W. TERRITORY</b></p> <p>Aklavik CJCU 1210 50</p> <hr/> <p><b>NOVA SCOTIA</b></p> <p>Glace Bay VAS 685 2000 Halifax CHNS 930 1000 F Sydney CJCB 1240 1000 F Wolfville CKIC 1010 50 Yarmouth CJLS 1310 100 F</p> <hr/> <p><b>ONTARIO</b></p> <p>Brantford CKPC 930 100 F Chatham CFCO 630 100 F</p>	<p>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 88C 1000 F CKCO 1010 100 F Owen Sound ..... 1370 100 Prescott CFLE 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</p> <hr/> <p><b>PRINCE EDWARD ISLAND</b></p> <p>Charlottetown CFCY 630 1000 F CHCK 1310 50 Summerside CHGS 1450 50 F</p> <hr/> <p><b>QUEBEC</b></p> <p>Chicoutimi CRCS 1120 100 F Hull CKCH 1210 100 F Montreal CBF 910 50000 N CBM 1050 5000 F CBFC 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</p>	<p>CRCK 950 1000 F Rimouski CJBR 1030 1000 F Sherbrooke CHLT 1210 100 Three Rivers CHLN 1420 100</p> <hr/> <p><b>SASKATCHEWAN</b></p> <p>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</p> <hr/> <p><b>COSTA RICA</b></p> <p>San Jose TIPG 625 2000 TIX 650 1000</p> <hr/> <p><b>CUBA</b></p> <p>Bayamo CKML 990 .... Caibarien CMHD 1270 250 Camaguey CMJA 1010 300 CMJC 1390 150 CMJE 1220 50 CMJF 1150 200 CMJK 780 250 CMJO 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</p>	<p>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 CMTP 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 ....</p> <hr/> <p><b>DOMINICAN REPUBLIC</b></p> <p>HIN 1090 740 Ciudad Trujillo HIT 1050 50 HIX 800 800</p> <hr/> <p><b>EL SALVADOR</b></p> <p>San Salvador YSS 640 500</p> <hr/> <p><b>GUATEMALA</b></p> <p>Guatemala City TGW 1520 1000 TG1 1305 ....</p> <hr/> <p><b>HONDURAS</b></p> <p>Tegucigalpa HRN 1250 50</p>
--	---	---	---

## NORTH AMERICAN B. C. STATIONS BY LOCATIONS

MEXICO		Villa Acuna		JALISCO		Nuevo Laredo		
<b>AGUASCALIENTES</b>		NEDH 1340	200	Guadalajara		NEBK 1080	100	
Aguascalientes		XERA 840	250000	NED 1160	2500	NEDF 810	100	
NEBI 1000 25		D. F.		Guzman		NEFE 980	250	
<b>BAJA CALIFORNIA</b>				XEBA 1080	20	XENT 910	150000	
Mexicali				MICHOCAN		Reynosa		
XEAA 750	200	Gral. Anaya		Morelia		XEAW 960	100000	
XEAO 660	250	NEDA 1220	200	NEI 1370		Tampico		
Rosarito Beach		Mexico City				XEFW 1310	300	
XERB 730	100000	XEAI 1250	500	NUEVO LEON		XES 990	250	
Tijuana		XEAL 660	1000	Monterrey		VERACRUZ		
XEAC 980	1000	XEB 1030	10000	NEFB 870		Cordoba		
XEAU 1320	...	XEBZ 810	100	XEG 1230		NEAG 1310		10
XEBG 820	1000	XEDP 1080	500	XEH 720		Jalapa		
XEC 1150	100	XEFO 940	5000	XET 690		XENB 1270		250
XELO 580	10000	XEJW 870	500	XEX 1310		XEND 1340		350
XEMO 860	5000	XEK 890	100	PUEBLA		Minatitlan		
XEOK 760	2500	XEL 1100	250	Puebla		XEDW 1150		20
CHIHUAHUA		XELZ 1370	100	NETH 1210		Veracruz		
Chihuahua		XEMX 1280	100	SAN LUIS POTOSI		NETF 1220		12
XEBU 1200	50	XEN 780	1000	San Luis Potosi		XEU 1010		250
XEFI 1440	250	XENC 860	50	NEC 1370		YUCATAN		
Juarez		NEW 890	50000	NEXH 1250		Merida		
XEF 1450	100	XEXM 610	500	SINALOA		NEFC 550		100
NEFV 1210	100	Tacuba		Mazatlan		NEME 1240		50
XEJ 1020	1000	XEFA 1180	500	XEBL 1220		NEZ 630		500
XEP 1160	500	Texcoco		SONORA		ZACATECAS		
Parral		XEXE 1270	17	Cananea		Zacatecas		
XEAT 1210	250	DURANGO		NEFQ 1010		XEAZ 1230		200
COAHUILA		Durango		Hermosillo		MIQUELON		
Piedras Negras		XEBP 1150	250	NEBH 930		St. Pierre		
XEMU 580	250	XEE 1210	50	Nogales		FQN 609		250
XEPN 730	100000	GUANAJUATO		XEAR 990		NEWFOUNDLAND		
Sabinas		Irapuato		Obregon		St. John's		
XEBX 640	250	XEBO 1310	25	NEAP 1340		VOAC 1065		40
Saltillo		Leon		TAMAULIPAS		VOCM 1006		200
XEAS 1160	100	NEFM 1160	20	Matamoros		VOGY 840		400
XELA 1240	50	NEKL 1240	500	XEAM 750		VONF 1195		500
Torreon						VOWR 681		500
XETB 1310	125							

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 musicians. 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 décollette 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	CHWK 780 100	CKOV 630 100
Montreal, P. Q.	Chilliwack, B. C.	Kelowna, B. C.
CBL 840 50000	CJAT 910 1000	CKPK 930 160
Toronto, Ont.	Trail, B. C.	Brantford, Ont.
CBM 1050 5000	CJBR 1030 1000	CKPR 730 100
Montreal, P. Q.	Rimouski, P. Q.	Fort William, Ont.
CBO 880 1000	CJCA 730 1000	CKSO 780 1000
Ottawa, Ont.	Edmonton, Alta.	Sudbury, Ont.
CBR 1100 5000	CJCB 1240 1000	CKTB 1200 100
Vancouver, B. C.	Sydney, N. S.	St. Catharines, Ont.
CFAC 930 1000	CJCI 690 100	CKUA 580 500
Calgary, Alta.	Calgary, Alta.	Edmonton, Alta.
CFAR 1370 100	CJCS 1210 50	CKWX 1010 160
Flin Flon, Man.	Stratford, Ont.	Vancouver, B. C.
CFCF 600 500	CJCU 1210 50	CKX 1120 1000
Montreal, Que.	Aklavik, N. W. T.	Brandon, Man.
CFCH 930 100	CJGX 1390 100	CKY 910 15000
North Bay, Ont.	Yorkton, Sask.	Winnipeg, Man.
CFCN 1030 10000	CJIC 1500 100	CMAB 1340 300
Calgary, Alta.	S. Ste. Marie, Ont.	Pinar del Rio, Cuba
CFCO 630 100	CJKL 1310 100	CMBC 950 10000
Chatham, Ont.	North Bay, Ont.	Havana, Cuba
CFCT 1450 500	CJLS 1310 100	CMBD 1260 500
Victoria, B. C.	Yarmouth, N. S.	Havana, Cuba
CFCY 630 1000	CJOC 950 100	CMBF 770 10000
Charlottetown, P.E.I.	Lethbridge, Alta.	Havana, Cuba
CFGP 1200 100	CJOR 600 500	CMBL 750 2500
Grande Prairie, Alta.	Vancouver, B. C.	Havana, Cuba
CFJC 880 1000	CJRC 630 500	CMBQ 680 5000
Kamloops, B. C.	Winnipeg, Man.	Havana, Cuba
CFLC 930 100	CJRM 540 1000	CMBS 1170 150
Prescott, Ont.	Regina, Sask.	Havana, Cuba
CFNB 550 500	CKAC 730 5000	CMBX 1070 500
Fredericton, N. B.	Montreal, Que.	Havana, Cuba
CFPL 730 100	CKBI 1210 100	CMBY 970 150
London, Ont.	Prince Albert, Sask.	Havana, Cuba
CFPR 580 50	CKCD 1010 100	CMBZ 1000 500
Prince Rupert, B. C.	Vancouver, B. C.	Havana, Cuba
CFQC 840 1000	CKCH 1210 100	CMC 1260 150
Saskatoon, Sask.	Hull, Que.	Havana, Cuba
CFRB 690 10000	CKCK 1010 1000	CMCA 1350 450
Toronto, Ont.	Regina, Sask.	Havana, Cuba
CFRC 1510 100	CKCL 580 100	CMCB 1230 150
Kingston, Ont.	Toronto, Ont.	Havana, Cuba
CFRN 960 100	CKCO 1010 100	CMCD 630 250
Edmonton, Alta.	Ottawa, Ont.	Havana, Cuba
CHAB 1200 100	CKCR 1510 100	CMCF 810 600
Moose Jaw, Sask.	Waterloo, Ont.	Havana, Cuba
CHCK 1310 50	CKCV 1310 100	CMCG 680 1000
Charlottetown, P.E.I.	Quebec, Que.	Havana, Cuba
CHGS 1450 50	CKCW 1370 100	CMCJ 1110 500
Summerside, P.E.I.	Moncton, N. B.	Havana, Cuba
CHLN 1420 100	CKFC 1410 50	CMCK 1030 5000
Three Rivers, P. Q.	Vancouver, B. C.	Havana, Cuba
CHLP 1120 100	CKGB 1420 100	CMCL 730 10000
Montreal, Que.	North Bay, Ont.	Havana, Cuba
CHLT 1210 100	CKIC 1010 50	CMCM 850 ....
Sherbrooke, P. Q.	Wolfville, N. S.	Havana, Cuba
CHML 1010 100	CKLW 1030 5000	CMCO 1200 250
Hamilton, Ont.	Windsor, Ont.	Havana, Cuba
CHNC 960 1000	CKMC 1210 50	CMCQ 1410 5000
New Carlisle, Que.	Cobalt, Ont.	Havana, Cuba
CHNS 930 1000	CKMO 1410 100	CMCR 1380 ....
Halifax, N. S.	Vancouver, B. C.	Havana, Cuba
CHRC 580 100	CKNX 1200 100	CMCU 1290 500
Quebec, P. Q.	Wingham, Ont.	Havana, Cuba
CHSJ 1120 500	CKOC 1120 500	CMCW 1140 500
St. John, N. B.	Hamilton, Ont.	Havana, Cuba

## NORTH AMERICAN B. C. STATIONS BY CALLS

CMCX 1380	150	CMKO 1280	....	KBPS 1420	100
Havana, Cuba		Holguin, Cuba		Portland, Ore.	
CMCY 570	5000	CMKR 1400	100	KBST 1500	100
Havana, Cuba		Santiago, Cuba		Big Spring, Texas	
CMGC 1400	150	CMKS 960	....	KBTM 1200	100
Matanzas, Cuba		Guantanamo, Cuba		Jonesboro, Ark.	
CMGE 1370	150	CMKW 1350	....	KCKN 1310	100
Cardenas, Cuba		Santiago, Cuba		Kansas City, Kans.	
CMGF 1120	250	CMKX 1190	....	KCMC 1420	100
Matanzas, Cuba		Santiago, Cuba		Texasarkana, Texas	
CMGH 790	500	CMOA 1440	150	KCMO 1370	100
Matanzas, Cuba		Havana, Cuba		Kansas City, Mo.	
CMHA 1070	50	CMOX 1320	200	KCRC 1360	250
Sagua la Grande, Cuba		Havana, Cuba		Enid, Okla.	
CMHB 1240	50	CMQ 600	25000	KCRJ 1310	100
Sancti Spiritus, Cuba		Havana, Cuba		Jerome, Ariz.	
CMHD 1270	250	CMW 880	1400	KDAL 1500	100
Caibarien, Cuba		Havana, Cuba		Duluth, Minn.	
CMHI 1210	150	CMX 920	1000	KDB 1500	100
Santa Clara, Cuba		Havana, Cuba		Santa Barbara, Calif.	
CMHJ 1160	175	CRCK 950	1000	KDFN 1440	500
Cienfuegos, Cuba		Quebec, Que.		Casper, Wyo.	
CMHK 1330	250	CRCS 1120	100	KDKA 980	50000
Cruces, Cuba		Chicoutimi, Que.		Pittsburgh, Pa.	
CMHM 1450	100	CRCY 960	100	KDLR 1210	100
Cienfuegos, Cuba		Toronto, Ont.		Devils Lake, N. D.	
CMHW 820	100	FQN 609	250	KDNC 1200	100
Santa Clara, Cuba		St. Pierre, Miquelon		Lewistown, Mont.	
CMHX 760	200	HIN 1090	740	KDNT 1420	100
Cienfuegos, Cuba		Ciudad Trujillo, D. R.		Denton, Texas	
CMJA 1010	300	HIT 1050	50	KDON 1210	100
Camaguey, Cuba		Ciudad Trujillo, D. R.		Monterey, Calif.	
CMJC 1390	150	HIX 800	800	KDTH 1340	500
Camaguey, Cuba		Ciudad Trujillo, D. R.		Dubuque, Iowa	
CMJE 1220	50	HP50 1440	....	KDYL 1290	1000
Camaguey, Cuba		Panama City, Panama		Salt Lake City, Utah	
CMJF 1150	200	HRN 1250	50	KECA 1430	1000
Camaguey, Cuba		Tegucigalpa, Hon.		Los Angeles, Calif.	
CMJH 1360	50	KABC 1420	100	KEEN 1370	100
Ciego de Avila, Cuba		San Antonio, Texas		Seattle, Wash.	
CMJI 1130	150	KABR 1380	500	KEHE 780	1000
Ciego de Avila, Cuba		Aberdeen, S. Dak.		Los Angeles, Calif.	
CMJK 780	250	KADA 1200	100	KELA 1440	500
Camaguey, Cuba		Ada, Okla.		Centralia, Wash.	
CMJO 1180	50	KALB 1210	100	KELD 1370	100
Ciego de Avila, Cuba		Alexandria, La.		El Dorado, Ark.	
CMJP 1430	75	KALE 1300	1000	KELO 1200	100
Camaguey, Cuba		Portland, Ore.		Sioux Falls, S. Dak.	
CMJQ 1080	200	KAND 1310	100	KERN 1370	100
Camaguey, Cuba		Corsicana, Texas		Bakersfield, Calif.	
CMJW 1340	300	KANS 1210	100	KEUB 1420	100
Camaguey, Cuba		Wichita, Kans		Price, Utah	
CMJX 830	500	KARK 890	500	KEX 1180	5000
Camaguey, Cuba		Little Rock, Ark.		Portland, Ore.	
CMK 720	3000	KARM 1310	100	KFAB 770	10000
Havana, Cuba		Fresno, Calif.		Lincoln, Neb.	
CMKC 1250	150	KASA 1210	100	KFAC 1300	1000
Santiago, Cuba		Elk City, Okla.		Los Angeles, Calif.	
CMKD 1050	250	KAST 1370	100	KFAM 1420	100
Santiago, Cuba		Astoria, Ore.		St. Cloud, Minn.	
CMKF 1460	250	KATE 1420	250	KFBB 1280	1000
Holguin, Cuba		Albert Lea, Minn.		Great Falls, Mont.	
CMKG 1160	....	KAWM 1500	100	KFBI 1050	5000
Santiago, Cuba		Gallup, N. Mex.		Abilene, Kans.	
CMKL 990	....	KBIX 1500	100	KFBK 1490	10000
Bayamo, Cuba		Muskogee, Okla.		Sacramento, Calif.	
CMKM 1120	200	KBND 1310	100	KFDM 560	500
Manzanillo, Cuba		Bend, Ore.		Baumont, Texas	

## NORTH AMERICAN B. C. STATIONS BY CALLS

KFDY 780 1000	KFYR 550 1000	KGLU 1420 100
Brookings, S. D.	Bismarck, N. D.	Safford, Ariz.
KFEL 920 500	KGA 1470 5000	KGMB 1320 1000
Denver, Colo.	Spokane, Wash.	Honolulu, T. H.
KFEQ 680 2500	KGAR 1370 100	KGNC 1410 1000
St. Joseph, Mo.	Tucson, Ariz.	Amarillo, Texas
KFGQ 1370 100	KGB 1330 1000	KGNF 1430 1000
Boone, Iowa	San Diego, Calif.	North Platte, Neb.
KFH 1300 1000	KGBU 900 500	KGNO 1340 250
Wichita, Kans.	Ketchikan, Alaska	Dodge City, Kans.
KFI 640 50000	KGBX 1230 500	KGO 790 7500
Los Angeles, Calif.	Springfield, Mo.	San Francisco, Calif.
KFIO 1120 100	KGCA 1270 100	KGU 750 2500
Spokane, Wash.	Decorah, Iowa	Honolulu, T. H.
KFIZ 1420 100	KGCI 1200 100	KGVL 1200 100
Fond du Lac, Wis.	Coeur d'Alene, Idaho	Greenville, Texas
KFJB 1200 100	KGCU 1240 250	KGVO 1260 1000
Marshalltown, Iowa	Mandan, N. D.	Missoula, Mont.
KFJI 1210 100	KGCX 1450 1000	KGW 620 1000
Klamath Falls, Ore.	Wolf Point, Mont.	Portland, Ore.
KFJM 1410 500	KGDE 1200 100	KGY 1210 100
Grand Forks, N. D.	Fergus Falls, Minn.	Olympia, Wash.
KFJZ 1370 100	KGDM 1100 1000	KHBC 1400 250
Fort Worth, Texas	Stockton, Calif.	Hilo, T. H.
KFKA 880 500	KGEK 1200 100	KHBG 1210 100
Greeley, Colo.	Sterling, Colo.	Oklmulgee, Okla.
KFKU 1220 1000	KGER 1360 1000	KHJ 900 1000
Lawrence, Kans.	Long Beach, Calif.	Los Angeles, Calif.
KFNF 890 500	KGEZ 1310 100	KHO 590 1000
Shenandoah, Iowa	Kalispell, Mont.	Spokane, Wash.
KFOR 1210 100	KGFF 1420 100	KHSL 1260 250
Lincoln, Neb.	Shawnee, Okla.	Chico, Calif.
KFOX 1250 1000	KGFI 1500 100	KHUB 1310 250
Long Beach, Calif.	Brownsville, Tex.	Watsonville, Calif.
KFPL 1310 100	KGFI 1200 100	KICA 1370 100
Dublin, Texas	Los Angeles, Calif.	Clovis, N. M.
KFPW 1210 100	KGFL 1370 100	KID 1320 500
Fort Smith, Ark.	Roswell, N. Mex.	Idaho Falls, Idaho
KFPY 890 1000	KGFW 1310 100	KIDO 1350 1000
Spokane, Wash.	Kearney, Neb.	Boise, Idaho
KFQD 780 250	KGFX 630 200	KIDW 1420 100
Anchorage, Alaska	Pierre, S. D.	Lamar, Colo.
KFRC 610 1000	KGGC 1420 100	KIEM 1450 500
San Francisco, Calif.	San Francisco, Calif.	Eureka, Calif.
KFRO 1370 250	KGGF 1010 1000	KIEV 850 250
Longview, Texas	Coffeyville, Kans.	Glendale, Calif.
KFRU 630 500	KGGM 1230 1000	KINY 1310 100
Columbia, Mo.	Albuquerque, N. M.	Juneau, Alaska
KFSD 600 1000	KGHF 1320 500	KIRO 710 1000
San Diego, Calif.	Pueblo, Colo.	Seattle, Wash.
KFSG 1120 500	KGHI 1200 100	KIT 1250 250
Los Angeles, Calif.	Little Rock, Ark.	Yakima, Wash.
KFUO 550 500	KGHL 780 1000	KITE 1530 1000
St. Louis, Mo.	Billings, Mont.	Kansas City, Mo.
KFVD 1000 1000	KGIR 1340 1000	KIUL 1210 100
Los Angeles, Calif.	Butte, Mont.	Garden City, Kans.
KFVS 1210 100	KGIW 1420 100	KIUN 1420 100
Cape Girardeau, Mo.	Alamosa, Colo.	Pecos, Texas
KFWB 950 1000	KGKB 1500 100	KIUP 1370 100
Hollywood, Calif.	Tyler, Texas	Durango, Colo.
KFXD 1200 100	KGKL 1370 100	KJBS 1070 500
Nampa, Idaho	San Angelo, Texas	San Francisco, Calif.
KFXJ 1200 100	KGKO 570 1000	KJR 970 5000
Grand Junction, Colo.	Fort Worth, Texas	Seattle, Wash.
KFXM 1210 100	KGKY 1500 100	KLAH 1210 100
San Bernardino, Calif.	Scottsbluff, Neb.	Calsbad, N. Mex.
KFYO 1310 100	KGLO 1210 100	KLBM 1420 100
Lubbock, Texas	Mason City, Iowa	La Grande, Ore.

## NORTH AMERICAN B. C. STATIONS BY CALLS

KLCN 1290 100	KOL 1270 1000	KRLH 1420 100
Blytheville, Ark.	Seattle, Wash.	Midland, Texas
KLO 1400 500	KOMA 1480 5000	KRMC 1370 100
Ogden, Utah	Oklahoma City, Okla.	Jamestown, N. Dak.
KLPM 1240 250	KOMO 920 1000	KRMD 1310 100
Minot, N. D.	Seattle, Wash.	Shreveport, La.
KLRA 1390 1000	KONO 1370 100	KRNR 1500 100
Little Rock, Ark.	San Antonio, Texas	Roseburg, Ore.
KLS 1280 250	KOOS 1200 100	KRNT 1320 1000
Oakland, Calif.	Marshfield, Ore.	Des Moines, Iowa
KLUF 1370 100	KORE 1420 100	KROC 1310 100
Galveston, Texas	Eugene, Ore.	Rochester, Minn.
KLX 880 1000	KOTN 1500 100	KROD 1500 100
Oakland, Calif.	Pine Bluff, Ark.	El Paso, Texas
KLZ 560 1000	KOVC 1500 100	KROW 930 1000
Denver, Colo.	Valley City, N. Dak.	Oakland, Calif.
KMA 930 1000	KOY 1390 1000	KROY 1210 100
Shenandoah, Iowa	Phoenix, Ariz.	Sacramento, Calif.
KMAC 1370 100	KPAB 1500 100	KRAQ 1310 100
San Antonio, Texas	Laredo, Texas	Santa Fe, N. Mex.
KMBC 950 1000	KPAC 1260 500	KRRV 1310 250
Kansas City, Mo.	Port Arthur, Texas	Sherman, Texas
KMED 1410 250	KPDN 1310 100	KRSC 1120 250
Medford, Ore.	Pampa, Texas	Seattle, Wash.
KMJ 580 1000	KPFA 1210 100	KSA 580 500
Fresno, Calif.	Helena, Mont.	Manhattan, Kans.
KMLB 1200 100	KPLC 1500 100	KSAI 1500 100
Monroe, La.	Lake Charles, La.	Salina, Kans.
KMMJ 740 1000	KPLT 1500 250	KSCJ 1330 1000
Clay Center, Neb.	Paris, Texas	Sioux City, Iowa
KMO 1330 1000	KPMC 1550 1000	KSD 550 1000
Tacoma, Wash.	Bakersfield, Calif.	St. Louis, Mo.
KMOX 1090 50000	KPO 680 50000	KSEI 900 250
St. Louis, Mo.	San Francisco, Calif.	Pocatello, Idaho
KMPCC 710 500	KPOF 880 1000	KSFO 560 1000
Beverly Hills, Calif.	Denver, Colo.	San Francisco, Calif.
KMTR 570 1000	KPPC 1210 100	KSL 1130 50000
Los Angeles, Calif.	Pasadena, Calif.	Salt Lake City, Utah
KNEL 1500 250	KPQ 1500 100	KSLM 1370 100
Brady, Texas	Wenatchee, Wash.	Salem, Ore.
KNET 1420 100	KPRC 920 1000	KSO 1430 500
Palestine, Texas	Houston, Texas	Des Moines, Iowa
KNOW 1500 100	KQV 1380 500	KSOO 1110 2500
Austin, Texas	Pittsburgh, Pa.	Sioux Falls, S. Dak.
KNX 1050 50000	KQW 1010 1000	KSRO 1310 250
Los Angeles, Calif.	San Jose, Calif.	Santa Rosa, Calif.
KOA 830 50000	KRBA 1310 100	KSTP 1460 10000
Denver, Colo.	Lufkin, Texas	St. Paul, Minn.
KOAC 550 1000	KRBC 1420 100	KSUB 1310 100
Corvallis, Ore.	Abilene, Texas	Cedar City, Utah
KOAM 790 1000	KREB 1420 100	KSun 1200 100
Pittsburg, Kans.	Bozeman, Mont.	Lowell, Ariz.
KOB 1180 10000	KRE 1370 100	KTAR 620 1000
Albuquerque, N. M.	Berkeley, Calif.	Phoenix, Ariz.
KOBH 1370 100	KRGV 1260 1000	KTAT 1240 1000
Rapid City, S. Dak.	Weslaco, Texas	Fort Worth, Texas
KOCA 1210 100	KRIC 1420 100	KTBC 1120 1000
Kilgore, Texas	Beaumont, Texas	Austin, Texas
KOCY 1310 100	KRIS 1330 500	KTBS 1450 1000
Oklahoma City, Okla.	Corpus Christi, Tex.	Shreveport, La.
KOH 1380 500	KRKD 1120 500	KTEM 1370 250
Reno, Nev.	Los Angeles, Calif.	Temple, Texas
KOIL 1260 1000	KRKO 1370 50	KTFI 1240 1000
Omaha, Neb.	Everett, Wash.	Twin Falls, Idaho
KOIN 940 1000	KRLC 1390 250	KTHS 1060 10000
Portland, Ore.	Lewiston, Idaho	Hot Springs, Ark.
KOKO 1370 100	KRLD 1040 10000	KTKC 1190 250
La Junta, Colo.	Dallas, Texas	Visalia, Calif.



## NORTH AMERICAN B. C. STATIONS BY CALLS

KTMS 1220 500 Santa Barbara, Calif.	KWK 1350 1000 St. Louis, Mo.	WABC 860 50000 New York, N. Y.
KTOK 1370 100 Oklahoma City, Okla.	KWKH 1100 10000 Shreveport, La.	WABI 1200 100 Bangor, Maine
KTRB 740 250 Modesto, Calif.	KWLC 1270 100 Decorah, Iowa	WABY 1370 100 Albany, N. Y.
KTRH 1290 1000 Houston, Texas	KWLK 780 250 Longview, Wash.	WACO 1420 100 Waco, Texas
KTRI 1420 100 Sioux City, Iowa	KWNO 1200 250 Winona, Minn.	WADC 1320 1000 Akron, Ohio
KTSA 550 1000 San Antonio, Texas	KWOC 1310 100 Poplar Bluff, Mo.	WAGA 1450 500 Atlanta, Ga.
KTSM 1310 100 El Paso, Texas	KWOS 1310 100 Jefferson City, Mo.	WAGF 1370 250 Dothan, Ala.
KTUL 1400 1000 Tulsa, Okla.	KWSC 1220 1000 Pullman, Wash.	WAGM 1420 100 Presque Isle, Me.
KTW 1220 1000 Seattle, Wash.	KWTO 560 5000 Springfield, Mo.	WAIM 1200 100 Anderson, S. C.
KUJ 1370 100 Walla Walla, Wash.	KWYV 1370 100 Sheridan, Wyo.	WAIR 1250 250 Winston-Salem, N. C.
KUMA 1420 100 Yuma, Ariz.	KXA 760 250 Seattle, Wash.	WALA 1380 500 Mobile, Ala.
KUOA 1260 5090 Siloam Springs, Ark.	KXL 1420 100 Portland, Ore.	WALR 1210 100 Zanesville, Ohio
KUSD 890 500 Vermillion, S. Dak.	KXO 1500 100 El Centro, Calif.	WAML 1310 100 Laurel, Miss.
KUTA 1500 100 Salt Lake City, Utah	KXOK 1250 1000 St. Louis, Mo.	WAPI 1140 5000 Birmingham, Ala.
KVCV 1200 100 Redding, Calif.	KXRO 1310 100 Aberdeen, Wash.	WAPO 1420 100 Chattanooga, Tenn.
KVEC 1200 250 San Luis Obispo, Cal.	KXYZ 1440 1000 Houston, Texas	WARD 1400 500 Brooklyn, N. Y.
KVGB 1370 100 Great Bend, Kans.	KYA 1230 1000 San Francisco, Calif.	WASH 1270 500 Grand Rapids, Mich.
KVI 570 1000 Tacoma, Wash.	KYOS 1040 250 Merced, Calif.	WATL 1370 100 Atlanta, Ga.
KVNU 1500 100 Logan, Utah	KYSM 1500 100 Mankato, Minn.	WATR 1190 100 Waterbury, Conn.
KVOA 1260 1000 Tucson, Ariz.	KYW 1020 10000 Philadelphia, Pa.	WAVE 940 1000 Louisville, Ky.
KVOD 920 500 Denver, Colo.	TGA 1450 . . . . Quezaltenango, Guat.	WAWZ 1350 500 Zarephath, N. J.
KVOE 1500 100 Santa Ana, Calif.	TGW 1520 1000 Guatemala City, Guat.	WAYX 1200 100 Waycross, Ga.
KVOL 1310 100 Lafayette, La.	TGI 1305 . . . . Guatemala City, Guat.	WAZL 1420 100 Hazelton, Pa.
KVOO 1140 25000 Tulsa, Okla.	TIX 650 1000 San Jose, Costa Rica	WBAA 890 500 West Lafayette, Ind.
KVOR 1270 1000 Colo. Springs, Colo.	VAS 685 2000 Glance Bay, N.S.	WBAL 760 2500 Baltimore, Md.
KVOS 1200 100 Bellingham, Wash.	VOAC 1065 40 St. John's Nfld.	WBAL 1060 10000 Baltimore, Md.
KVOX 1310 100 Moorhead, Minn.	VOCM 1006 200 St. John's Nfld.	WBAP 800 50000 Fort Worth, Texas
KVRS 1370 100 Rock Springs, Wyo.	VOGY 840 400 St. John's Nfld.	WBAX 1210 100 Wilkes-Barre, Pa.
KVSO 1210 100 Ardmore, Okla.	VONF 1195 500 St. John's Nfld.	WBBC 1400 500 Brooklyn, N. Y.
KWBG 1420 100 Hutchinson, Kans.	VOWR 681 500 St. John's Nfld.	WBBL 1210 100 Richmond, Va.
KWEW 1500 100 Hobbs, N. Mex.	WAAB 1410 500 Boston, Mass.	WBBM 770 50000 Chicago, Ill.
KWG 1200 100 Stockton, Calif.	WAAF 920 1000 Chicago, Ill.	WBBR 1300 1000 Brooklyn, N. Y.
KWJB 1210 100 Globe, Ariz.	WAAT 940 500 Jersey City, N. J.	WBZ 1200 100 Ponca City, Okla.
KWJJ 1040 500 Portland, Ore.	WAAW 660 500 Omaha, Neb.	WBCM 1410 500 Bay City, Mich.

## NORTH AMERICAN B. C. STATIONS BY CALLS

WBEN 900	1000	WCBM 1370	100	WDSM 1200	100
Buffalo, N. Y.		Baltimore, Md.		Superior, Wis.	
WBEO 1310	100	WCBS 1420	100	WDSU 1250	1000
Marquette, Mich.		Springfield, Ill.		New Orleans, La.	
WBHP 1200	100	WCCO 810	50000	WDWS 1370	100
Huntsville, Ala.		Minneapolis, Minn.		Champaign, Ill.	
WBIG 1440	1000	WCFL 970	5000	WDZ 1020	250
Greensboro, N. C.		Chicago, Ill.		Tuscola, Ill.	
WBIL 1100	5000	WCHS 580	500	WEAF 660	50000
New York, N. Y.		Charleston, W. Va.		New York, N. Y.	
WBLK 1370	100	WCHV 1420	100	WEAN 780	1000
Clarksburg, W. Va.		Charlottesville, Va.		Providence, R. I.	
WBLY 1210	100	WCKY 1490	10000	WEAU 1050	1000
Lima, Ohio		Covington, Ky.		Eau Claire, Wis.	
WENO 1200	100	WCLE 610	500	WEBC 1290	1000
New Orleans, La.		Cleveland, Ohio		Duluth, Minn.	
WENS 1430	1000	WCLO 1200	100	WEBQ 1210	100
Columbus, Ohio		Janesville, Wis.		Harrisburg, Ill.	
WBNX 1350	1000	WCLS 1310	100	WEBR 1310	100
New York, N. Y.		Joliet, Ill.		Buffalo, N. Y.	
WBNY 1370	100	WCMI 1310	100	WEDC 1210	100
Buffalo, N. Y.		Ashland, Ky.		Chicago, Ill.	
WBOQ 860	50000	WCNW 1500	100	WEED 1420	100
New York, N. Y.		Brooklyn, N. Y.		Rocky Mount, N. C.	
WBOW 1310	100	WCOA 1340	500	WEEI 590	1000
Terre Haute, Ind.		Pensacola, Fla.		WEEU 830	1000
WBRB 1210	100	WCOC 880	1000	Reading, Pa.	
Red Bank, N. J.		Meriden, Miss.		WELI 900	500
WBRC 930	1000	WCOL 1210	100	New Haven, Conn.	
Birmingham, Ala.		Columbus, Ohio		WELL 1420	100
WBRE 1310	100	WCOP 1120	500	Battle Creek, Mich.	
Wilkes-Barre, Pa.		Boston, Mass.		WEMP 1310	100
WBRK 1310	100	WCPO 1200	100	Milwaukee, Wis.	
Pittsfield, Mass.		Cincinnati, Ohio		WENR 870	50000
WBRY 1530	1000	WCRW 1210	100	Chicago, Ill.	
Waterbury, Conn.		Chicago, Ill.		WENY 1200	250
WBT 1080	50000	WCSC 1360	500	Elmira, N. Y.	
Charlotte, N. C.		Charleston, S. C.		WEOA 1370	100
WBTM 1370	100	WCSH 940	1000	Evansville, Ind.	
Danville, Va.		Portland, Me.		WESG 850	1000
WBZ 990	50000	WDAE 1220	1000	Elmira, N. Y.	
Boston, Mass.		Tampa, Fla.		WEST 1200	100
WBZA 990	1000	WDAF 610	1000	Easton, Pa.	
Springfield, Mass.		Kansas City, Mo.		WEVD 1300	1000
WCAD 1220	500	WDAH 1310	100	New York, N. Y.	
Canton, N. Y.		El Paso, Texas		WEW 760	1000
WCAE 1220	1000	WDAN 1500	250	St. Louis, Mo.	
Pittsburgh, Pa.		Danville, Ill.		WEXL 1310	50
WCAL 760	1000	WDAS 1370	100	Royal Oak, Mich.	
Northfield, Minn.		Philadelphia, Pa.		WFAA 800	50000
WCAM 1280	500	WDAY 940	1000	Dallas, Texas	
Camden, N. J.		Fargo, N. Dak.		WFAB 1300	1000
WCAO 600	500	WDBJ 930	1000	New York, N. Y.	
Baltimore, Md.		Roanoke, Va.		WFAM 1200	100
WCAP 1280	500	WDBO 580	1000	South Bend, Ind.	
Asbury Park, N. J.		Orlando, Fla.		WFAS 1210	100
WCAT 1200	100	WDEL 1120	250	White Plains, N. Y.	
Rapid City, S. Dak.		Wilmington, Del.		WFBC 1300	1000
WCAU 1170	50000	WDEV 550	500	Greenville, S. C.	
Philadelphia, Pa.		Waterbury, Vt.		WFBG 1310	100
WCAX 1200	100	WDGY 1180	1000	Altoona, Pa.	
Burlington, Vt.		Minneapolis, Minn.		WFL 1360	1000
WCAZ 1070	100	WDNC 1500	100	Syracuse, N. Y.	
Carthage, Ill.		Durham, N. C.		WFBM 1230	1000
WCBA 1440	500	WDOD 1280	1000	Indianapolis, Ind.	
Allentown, Pa.		Chattanooga, Tenn.		WFER 1270	500
WCBD 1080	5000	WDRS 1330	1000	Baltimore, Md.	
Chicago, Ill.		Hartford, Conn.			

## NORTH AMERICAN B. C. STATIONS BY CALLS

WFDF 1310	100	WHAM 1150	50000	WIBM 1370	100
Flint, Mich.		Rochester, N. Y.		Jackson, Mich.	
WFEA 1340	500	WHAS 820	50000	WIBU 1210	100
Manchester, N. H.		Louisville, Ky.		Poyntette, Wis.	
WFIL 560	1000	WHAT 1310	100	WIBW 580	1000
Philadelphia, Pa.		Philadelphia, Pa.		Topeka, Kans.	
WFLA 620	1000	WHAZ 1300	1000	WIBX 1200	100
Tampa, Fla.		Troy, N. Y.		Utica, N. Y.	
WFMD 900	500	WHB 860	1000	WICA 940	250
Frederick, Md.		Kansas City, Mo.		Ashtabula, Ohio	
WFMJ 1420	100	WHBB 1500	100	WICC 600	500
Youngstown, Ohio		Selma, Ala.		Bridgeport, Conn.	
WFOR 1370	100	WHBC 1200	100	WIL 1200	100
Hattiesburg, Miss.		Canton, Ohio		St. Louis, Mo.	
WFOY 1210	100	WHBF 1210	100	WILL 580	1000
St. Augustine, Fla.		Rock Island, Ill.		Urbana, Ill.	
WFTC 1200	100	WHBI 1250	1000	WILM 1420	100
Kinston, N. C.		Newark, N. J.		Wilmington, Del.	
WGAL 1500	100	WHBL 1300	250	WIND 560	1000
Lancaster, Pa.		Sheboygan, Wis.		Gary, Ind.	
WGAN 640	500	WHBQ 1370	100	WINS 1180	1000
Portland, Me.		Memphis, Tenn.		New York, N. Y.	
WGAR 1450	500	WHBU 1210	100	WIOD 610	1000
Cleveland, Ohio		Anderson, Ind.		Miami, Fla.	
WGAU 1310	100	WHBY 1200	100	WIP 610	1000
Athens, Ga.		Green Bay, Wis.		Philadelphia, Pa.	
WGBB 1210	100	WHDF 1370	100	WIRE 1400	1000
Freeport, N. Y.		Calumet, Mich.		Indianapolis, Ind.	
WGBF 630	500	WHDH 830	1000	WIS 560	1000
Evansville, Ind.		Boston, Mass.		Columbia, S. C.	
WGBI 880	500	WHDL 1400	250	WISN 1120	250
Scranton, Pa.		Olean, N. Y.		Milwaukee, Wis.	
WGCM 1210	100	WHEB 740	250	WJAC 1310	100
Gulfport, Miss.		Portsmouth, N. H.		Johnstown, Pa.	
WGES 1360	500	WHEC 1430	500	WJAG 1060	1000
Chicago, Ill.		Rochester, N. Y.		Norfolk, Neb.	
WGH 1310	100	WHEF 1500	100	WJAR 890	1000
Newport News, Va.		Kosciusko, Miss.		Providence, R. I.	
WGIL 1500	250	WHFC 1420	100	WJAS 1290	1000
Galesburg, Ill.		Cicero, Ill.		Pittsburgh, Pa.	
WGL 1370	100	WHIO 1260	1000	WJAX 900	1000
Fort Wayne, Ind.		Dayton, Ohio		Jacksonville, Fla.	
WGN 720	50000	WHIP 1480	5000	WJBC 1200	100
Chicago, Ill.		Hammond, Ind.		Bloomington, Ill.	
WGNV 1210	100	WHIS 1410	500	WJBK 1500	100
Newburgh, N. Y.		Bluefield, W. Va.		Detroit, Mich.	
WGPC 1420	100	WHJB 620	250	WJBL 1200	100
Albany, Ga.		Greensburg, Pa.		Decatur, Ill.	
WGR 550	1000	WHK 1390	1000	WJBO 1120	500
Buffalo, N. Y.		Cleveland, Ohio		Baton Rouge, La.	
WGRC 1370	250	WHKC 640	500	WJBW 1200	100
New Albany, Ind.		Columbus, Ohio		New Orleans, La.	
WGRM 1210	100	WHLB 1370	100	WJBY 1210	100
Grenada, Miss.		Virginia, Minn.		Gadsden, Ala.	
WGST 890	1000	WHLS 1370	250	WJDX 1270	1000
Atlanta, Ga.		Port Huron, Mich.		Jackson, Miss.	
WGTM 1310	100	WHN 1010	1000	WJEJ 1210	100
Wilson, N. C.		New York, N. Y.		Hagerstown, Md.	
WGVA 1050	1000	WHO 1000	50000	WJIM 1210	100
Indianapolis, Ind.		Des Moines, Iowa		Lansing, Mich.	
WGY 790	50000	WHOM 1450	250	WJJD 1130	20000
Schenectady, N. Y.		Jersey City, N. J.		Chicago, Ill.	
WHA 940	5000	WHP 1430	500	WJMC 1210	250
Madison, Wis.		Harrisburg, Pa.		Rice Lake, Wis.	
WHAI 1210	250	WIBA 1280	1000	WJMS 1420	100
Greenfield, Mass.		Madison, Wis.		Ironwood, Mich.	
WHAL 950	500	WIBG 970	100	WJNO 1200	100
Saginaw, Mich.		Glenside, Pa.		W. Palm Beach, Fla.	

## NORTH AMERICAN B. C. STATIONS BY CALLS

WJR 750 50000 Detroit, Mich.	WLNH 1310 100 Laconia, N. H.	WNAD 1010 1000 Norman, Okla.
WJRD 1200 250 Tuscaloosa, Ala.	WLS 870 50000 Chicago, Ill.	WNAX 570 1000 Yankton, S. D.
WJSV 1460 10000 Washington, D. C.	WLTH 1400 500 Brooklyn, N. Y.	WNBC 1380 250 New Britain, Conn.
WJTN 1210 100 Jamestown, N. Y.	WLVA 1200 100 Lynchburg, Va.	WNEF 1500 100 Binghamton, N. Y.
WJW 1210 100 Akron, Ohio	WLW 700 50000? Cincinnati, Ohio	WNBH 1310 100 New Bedford, Mass.
WJZ 760 50000 New York, N. Y.	WMAL 630 250 Washington, D. C.	WNBX 1260 500 Springfield, Vt.
WKAQ 1240 1000 San Juan, P. R.	WMAQ 670 50000 Chicago, Ill.	WNBZ 1290 100 Saranac Lake, N. Y.
WKAR 850 1000 East Lansing, Mich.	WMAS 1420 100 Springfield, Mass.	WNEL 1290 1000 San Juan, P. R.
WKAT 1500 100 Miami Beach, Fla.	WMAZ 1180 1000 Macon, Ga.	WNEW 1250 1000 New York, N. Y.
WKBB 1500 100 East Dubuque, Ill.	WMBC 1420 100 Detroit, Mich.	WNLC 1500 100 New London, Conn.
WKBH 1380 1000 LaCrosse, Wis.	WMBD 1440 1000 Peoria, Ill.	WNNY 1420 100 Watertown, N. Y.
WKBN 570 500 Youngstown, Ohio	WMBF 610 1000 Miami, Fla.	WNOK 1010 1000 Knoxville, Tenn.
WKBO 1200 100 Harrisburg, Pa.	WMBG 1350 500 Richmond, Va.	WNYC 810 1000 New York, N. Y.
WKBV 1500 100 Richmond, Ind.	WMBH 1420 100 Joplin, Mo.	WOAI 1190 50000 San Antonio, Texas
WKBW 1480 5000 Buffalo, N. Y.	WMBI 1080 5000 Chicago, Ill.	WOC 1370 100 Davenport, Iowa
WKBZ 1500 100 Muskegon, Mich.	WMBO 1310 100 Anburn, N. Y.	WOI 640 5000 Ames, Iowa
WKEU 1500 100 Griffin, Ga.	WMBR 1370 100 Jacksonville, Fla.	WOKO 1430 500 Albany, N. Y.
WKOK 1210 100 Sunbury, Pa.	WMBS 1420 250 Uniontown, Pa.	WOL 1310 1000 Washington, D. C.
WKRC 550 1000 Cincinnati, Ohio	WMC 780 1000 Memphis, Tenn.	WOLS 1200 100 Florence, S. C.
WKST 1250 250 New Castle, Pa.	WMCA 570 1000 New York, N. Y.	WOMI 1500 100 Owensboro, Ky.
WKY 900 1000 Oklahoma City, Okla.	WMEX 1500 100 Boston, Mass.	WOMT 1210 100 Manitowoc, Wis.
WKZO 590 1000 Kalamazoo, Mich.	WMFD 1370 100 Wilmington, N. C.	WOOD 1270 500 Grand Rapids, Mich.
WLAC 1470 5000 Nashville, Tenn.	WMFF 1310 100 Plattsburg, N. Y.	WOPI 1500 100 Bristol, Tenn.
WLAK 1310 100 Lakeland, Fla.	WMFG 1210 100 Hibbing, Minn.	WOR 710 50000 Newark, N. J.
WLAP 1420 100 Lexington, Ky.	WMFJ 1420 100 Dayton Beach, Fla.	WORC 1280 500 Worcester, Mass.
WLAW 680 1000 Lawrence, Mass.	WMFO 1370 100 Decatur, Ala.	WORK 1320 1000 York, Pa.
WLB 760 1000 Minneapolis, Minn.	WMFR 1200 100 High Point, N. C.	WORL 920 500 Boston, Mass.
WLBC 1310 100 Muncie, Ind.	WMIN 1370 100 St. Paul, Minn.	WOSU 570 750 Columbus, Ohio
WLBL 900 5000 Stevens Point, Wis.	WMMN 890 500 Fairmont, W. Va.	WOV 1130 1000 New York, N. Y.
WLBZ 620 500 Bangor, Me.	WMPC 1200 100 Lapeer, Mich.	WOW 590 1000 Omaha, Neb.
WLEU 1420 100 Erie, Pa.	WMPS 1430 500 Memphis, Tenn.	WOWO 1160 10000 Fort Wayne, Ind.
WLLH 1370 100 Lawrence, Mass.	WMSD 1420 100 Sheffield, Ala.	WPAD 1420 100 Paducah, Ky.
WLLH 1370 100 Lowell, Mass.	WMT 600 1000 Cedar Rapids, Iowa	WPAR 1420 100 Parkersburg, W. Va.
WLMU 1210 100 Middlesboro, Ky.	WNAC 1230 1000 Boston, Mass.	WPAX 1210 100 Thomasville, Ga.

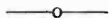
## NORTH AMERICAN B. C. STATIONS BY CALLS

WPAY 1370	100	Portsmouth, Ohio	WSAN 1440	500	Allentown, Pa.	WTAR 780	1000	Norfolk, Va.
WPEN 920	1000	Philadelphia, Pa.	WSAR 1450	1000	Fall River, Mass.	WTAW 1120	500	College Station, Tex.
WPG 1100	5000	Atlantic City, N. J.	WSAU 1370	100	Wausau, Wis.	WTAX 1210	100	Springfield, Ill.
WPIC 780	250	Sharon, Pa.	WSAV 1310	100	Savannah, Ga.	WTBO 800	250	Cumberland, Md.
WPRA 1370	100	Mayaguez, P. R.	WSAY 1210	100	Rochester, N. Y.	WTCN 1250	1000	Minneapolis, Minn.
WPRO 630	500	Providence, R. I.	WSAZ 1190	1000	Huntington, W. Va.	WTEL 1310	100	Philadelphia, Pa.
WPRP 1420	100	Ponce, P. R.	WSB 740	50000	Atlanta, Ga.	WTHT 1200	100	Hartford, Conn.
WPTF 680	5000	Raleigh, N. C.	WSBC 1210	100	Chicago, Ill.	WTIC 1040	50000	Hartford, Conn.
WQAM 560	1000	Miami, Fla.	WSBT 1360	500	South Bend, Ind.	WTJS 1310	100	Jackson, Tenn.
WQAN 880	500	Scranton, Pa.	WSFA 1410	500	Montgomery, Ala.	WTMJ 620	1000	Milwaukee, Wis.
WQBC 1360	1000	Vicksburg, Miss.	WSGN 1310	100	Birmingham, Ala.	WTMV 1500	100	East St. Louis, Ill.
WQDM 1390	1000	St. Albans, Vt.	WSIX 1210	100	Nashville, Tenn.	WTNJ 1280	500	Trenton, N. J.
WQXR 1550	1000	New York, N. Y.	WSJS 1310	100	Winston-Salem, N. C.	WTOC 1260	1000	Savannah, Ga.
WRAK 1370	100	Williamsport, Pa.	WSLI 1420	100	Jackson, Miss.	WTOL 1200	100	Toledo, Ohio
WRAW 1310	100	Reading, Pa.	WSM 650	50000	Nashville, Tenn.	WTRC 1310	100	Elkhart, Ind.
WRAX 920	1000	Philadelphia, Pa.	WSMB 1320	1000	New Orleans, La.	WTFW 1400	500	Brooklyn, N. Y.
WRBL 1200	100	Columbus, Ga.	WSMK 1380	200	Dayton, Ohio	WTVL 1200	100	Hammond, Ind.
WRC 950	1000	Washington, D. C.	WSNJ 1210	100	Bridgeton, N. J.	WWJ 920	5000	Detroit, Mich.
WRDO 1370	100	Augusta, Me.	WSOC 1210	100	Charlotte, N. C.	WWL 850	10000	New Orleans, La.
WRDW 1500	100	Augusta, Ga.	WSPA 920	1000	Spartanburg, S. C.	WWNC 570	1000	Asheville, N. C.
WREC 600	1000	Memphis, Tenn.	WSPD 1340	1000	Toledo, Ohio	WWRL 1500	100	Woodside, N. Y.
WREN 1220	1000	Lawrence, Kans.	WSPR 1140	500	Springfield, Mass.	WWSW 1500	100	Pittsburgh, Pa.
WRGA 1500	100	Rome, Ga.	WSUI 880	500	Iowa City, Iowa	WWVA 1160	5000	Wheeling, W. Va.
WRJN 1370	100	Racine, Wis.	WSUN 620	1000	St. Petersburg, Fla.	WXYZ 1240	1000	Detroit, Mich.
WRNL 880	500	Richmond, Va.	WSVA 550	500	Harrisonburg, Va.	W3XDD . . .	50000	Whippany, N. J.
WROK 1410	500	Rockford, Ill.	WSVS 1370	50	Buffalo, N. Y.	W3XJ 1060	100	College Park, Md.
WROL 1310	100	Knoxville, Tenn.	WSYB 1500	100	Rutland, Vt.	XEAA 750	200	Mexicali, B. C.
WRR 1280	500	Dallas, Texas	WSYR 570	1000	Syracuse, N. Y.	XEAC 980	1000	Guiana, L. C.
WRTD 1500	100	Richmond, Va.	WSYU 570	1000	Syracuse, N. Y.	XEAF 990	750	Nogales, Son.
WRUF 830	5000	Gainesville, Fla.	WTAD 900	1000	Quincy, Ill.	XEAG 1310	10	Cordoba, Ver.
WRVA 1110	5000	Richmond, Va.	WTAG 580	1000	Worcester, Mass.	XEAI 1250	500	Mexico City, D. F.
WSAI 1330	1000	Cincinnati, Ohio	WTAL 1310	100	Tallahassee, Fla.	XEAL 660	1000	Mexico City, D. F.
WSAJ 1310	100	Grove City, Pa.	WTAM 1070	50000	Cleveland, Ohio	XEAM 750	25	Matamoros, Tams.
WSAL 1200	250	Salisbury, Md.	WTAQ 1330	1000	Green Bay, Wis.	XEAO 660	250	Mexicali, B. C.

NORTH AMERICAN B. C. STATIONS BY CALLS

XEAP 1340 50	Obregon, Son.	XEF 1450 100	Juarez, Chih.	XEN 780 1000	Mexico City, D. F.
XEAS 1160 100	Saltillo, Coah.	XEFA 1180 500	Tacuba, D. F.	XENC 860 50	Mexico City, D. F.
XEAT 1210 250	Parral, Chih.	XEFB 870 200	Monterrey, N. L.	XENT 910 150000	Nuevo Laredo, Tams.
XEAU 1320 ....	Tijuana, B. Cfa.	XEFC 550 100	Merida, Yuc.	XEOJ ....	....
XEAW 960 100000	Reynosa, Tams.	XEFE 980 250	Nuevo Laredo, Tams.	XEOK 760 2500	Tijuana, L. C.
XEAZ 1230 200	Zacatecas, Zac.	XEFI 1440 250	Chihuahua, Chih.	XEP 1160 500	Juarez, Chih.
XEB 1030 10000	Mexico City, D. F.	XEFM 1160 20	Leon, Gto.	XEPN 730 100000	Piedras Negras, Coah.
XEBA 1080 20	Guzman, Jal.	XEFO 940 5000	Mexico City, D. F.	XERA 840 250000	Villa Acuna, Coah.
XEBG 820 1000	Tijuana, B. Cfa.	XEFQ 1010 50	Cananea, Son.	XERB 730 100000	Rosarito Beach, B. Cfa.
XEBH 930 500	Hermosillo, Sonora	XEFV 1210 100	Juarez, Chih.	XES 990 250	Tampico, Tams.
XEBI 1000 25	Aguascalientes, Ags.	XEFW 1310 300	Tampico, Tams.	XET 690 5000	Monterrey, N. L.
XEBK 1080 100	Neuvo Laredo, Tams.	XEG 1230 250	Monterrey, N. L.	XETB 1310 125	Torreón, Coah.
XEBL 1220 50	Mazatlan, Sin.	XEH 720 250	Monterrey, N. L.	XETH 1210 100	Puebla, Pue.
XEBO 1310 25	Irapuato, Guan.	XEI 1370 125	Morelia, Mich.	XEU 1010 250	Veracruz, Ver.
XEBP 1150 250	Durango, Dgo.	XEJ 1020 1000	Juarez, Chih.	XEW 890 50000	Mexico City, D. F.
XEBS 1340 200	Mexico City, D. F.	XEJP 1130 100	Mexico City, D. F.	XEX 1310 125	Monterrey, N. L.
XEBU 1200 50	Chihuahua, Chih.	XEJW 870 500	Mexico City, D. F.	XEXB 1270 250	Jalapa, Ver.
XEBX 640 250	Sabinas, Coah.	XEK 890 100	Mexico City, D. F.	XEXD 1340 350	Jalapa, Ver.
XEBZ 810 100	Mexico City, D. F.	XEKL 1240 500	Leon, Guan.	XEXE 1270 17	Texcoco, D. F.
XEC 1150 100	Tijuana, L. C.	XEL 1100 250	Mexico City, D. F.	XEXH 1250 250	San Luis Potosi, S.L.P.
XECZ 1370 100	San Luis Potosi, S.L.P.	XELA 1240 50	Saltillo, Coah.	XEXM 610 500	Mexico City, D. F.
XED 1160 2500	Guadalajara, Jal.	XELO 580 10000	Tijuana, B. Cfa.	XEXS 1310 100	Mexico City, D. F.
XEDA 1220 200	Gral. Anaya, D. F.	XELZ 1370 100	Mexico City, D. F.	XEXX 1170 1000	Mexico City, D. F.
XEDF 810 100	Nuevo Laredo, Tams.	XEME 1240 50	Merida, Yuc.	XEYO 610 500	Mexico City, D. F.
XEDH 1340 200	Villa Acuna, Coah.	XEMU 860 5000	Tijuana, L. C.	XEZ 630 500	Merida, Yuc.
XEDP 1080 500	Mexico City, D. F.	XEMU 580 250	Piedras Negras, Coah.	YSS 640 500	San Salvador, E. S.
XEDW 1150 20	Minatitlan, Ver.	XEMX 1280 100	Mexico City, D. F.	ZNS 540 400	Nassau, Bahamas
XEE 1210 50	Durango, Dgo.				

# The BROADCASTING STATIONS of NORTH AMERICA



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 repre-

sented 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, countless 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

**Back issues of RADEX available from September, 1930 (No. 41) to date, at 25c each; five for \$1.00; ten for \$1.75, or twenty for \$3.25.**

## INSURE YOUR RADIO ENJOYMENT

SEND THIS BLANK TODAY

The Radex Publishing Co.,  
289 Queen Anne Road,  
Teaneck, N. J.

Enclosed find \$..... for which send me postpaid my choice of your offers as checked below:

- One Radio World Map and Time Converter ..... 25c
- One copy of the next RADEX ..... 25c
- One year's subscription to RADEX, 10 issues..... \$1.75
- Two years.....\$3.25     Three years..... \$4.75

(Add 50c per year for foreign subscriptions)

Print Name Plainly .....

Street and Number .....

City and State .....

## Next Month in RADEX

**I**n 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 will be presented, in a complete listing, and Mr. Lord's column will be full of helpful 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.

## RADIO AMATEUR CALL BOOK

### LATEST EDITION

Lists over 40,000 amateurs in every country in the world, and complete lists of all the high frequency commercial stations. Every listener interested in amateur stations should have one. 292 pages.

We pay the postage.

**RADEX**  
289 Queen Anne Rd.,  
TEANECK, N. J.



**\$1.25**

## GET MORE DX WITH HEADPHONES

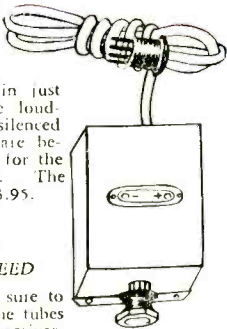


**W**E recommend the famous Trimm line of headphones for DX success. They are precision-built, and combine ultra-sensitivity with rugged construction.

The Trimm "Featherweights" weigh but 4¼ ounces complete. 24,000 ohms. ....	<b>\$8.50</b>
Trimm "Professional." 4000 ohms. ....	<b>4.00</b>
Trimm "Dependable." 2000 ohms. ....	<b>3.25</b>

## THE PERFECT PHONE ADAPTER

**M**AKES it easy to attach headphones to any radio set. Easily installed, without tools, in just a minute. The loud-speaker can be silenced while 'phones are being used. Ideal for the hard-of-hearing. The price is only \$3.95.



**FULLY  
GUARANTEED**

In ordering, be sure to give a list of the tubes used in the receiver.

## THE RADEX PUBLISHING CO.

289 Queen Anne Rd.  
TEANECK, N. J.



J. E. SMITH, President  
National Radio Institute  
Established 1914

# I WILL TRAIN YOU TO START A SPARE TIME OR FULL TIME RADIO SERVICE BUSINESS WITHOUT CAPITAL

## 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 Ties 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.

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 \$20, \$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. 810  
National Radio  
Institute,  
Washington,  
D.C.



## GOOD FOR BOTH 64 PAGE BOOK FREE SAMPLE LESSON FREE

J. E. SMITH, President, Dept. 810  
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.....