

RADIO IN DEX

The All-Wave Radio Log Authority

November 1939

No. 133

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FIFTEEN ARTICLES

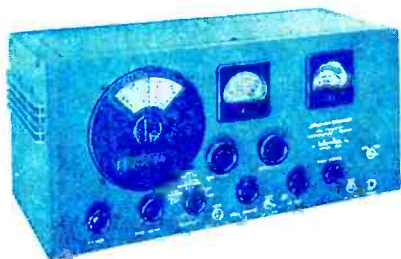
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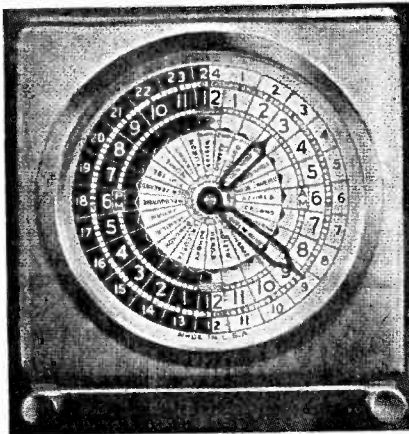
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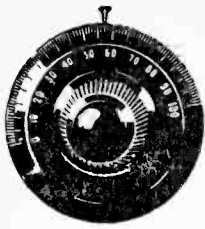
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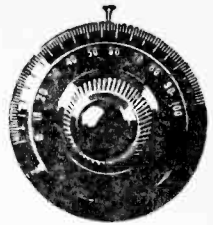
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TIME CLOCK

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RADIO INDEX

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SIXTEENTH YEAR

NOVEMBER 1, 1939

No. 133

Page Taylor, *Editor*

B. Francis Dashiell, *Technical Editor*

Ray LaRocque, *Eastern Editor*

Anthony C. Tarr, *Western Editor*

SOUTH AMERICA HO!

Now the radio spotlight moves to South America. The coming of winter naturally improves broadcast band reception so that many of the regular South American broadcasters can be heard, and also the winter time is the most ideal time for reception of the rather long shortwave lengths that the Latin Americans use. Since their time, too, is the same as ours, their evening programs are broadcast during our evening hours, enabling us to tune in on their best programs at our most convenient listening time.

This year, more than ever, interest should center on South America. With some of the major European nations at war, and others desperately trying to remain neutral, their radio programs now can hardly be called "entertaining." Heavy censorship, even in the "democratic" countries," colors the news broadcasts, and programs of an entertainment nature are frequently side tracked to make way for news or discussions. The South American stations, however, still present entertaining and lively programs. Some minor restrictions are in force, such as the one in Colombia which prohibits the use of a foreign language, but radio listeners, we are sure, will find plenty of music and plenty of DX if they point their aerials southward.

The language difficulty is the only one that American DXers have to contend with when listening to Latin Americans. These stations, broadcasting usually for only local listeners,

generally announce in Spanish only, but a knowledge of the Spanish language is not necessary for one to identify Spanish-speaking broadcasters. The names of the cities and countries, pronounced in Spanish, are similar to the English pronunciation. If the DXers will listen just a little more carefully when listening to Spanish announcements, he will nearly always be able to catch the name of the city and country. All the Spanish that is required, then, is the alphabet, which is easily learned. Knowing this, you are fully equipped to tackle any South American that may come along, except probably a Brazilian, since Portuguese is spoken in Brazil. Nevertheless, the Spanish and Portuguese languages are similar enough that the Spanish alphabet will do, in a pinch, even in Brazil.

Here is the Spanish alphabet:

A—ah	N—en-nay
B—ba y	O—oh
C—say	P—pay
D—day	Q—koo
E—ay	R—air-ray
F—ef-fay	S—ess-say
G—hay	T—tay
H—ah-chay	U—oo
I—ee	V—vay
J—ho-tah	W—doo-ble-vay
K—kah	X—ek-key
L—el-lay	Y—yay
M—em-may	Z—zed

The Spanish nuerals, also very important, are:

- | | |
|--------------|-------------|
| 1—oo-no | 6—sase |
| 2—dose | 7—say-tay |
| 3—trace | 8—oh-cho |
| 4—koo-ah-tro | 9—noo-ay-ve |
| 5—theng-ko | 10—deeyth |

There is your "open sesame" to South American catches. Take a fairly good radio, a good aerial, most any fall or winter night, mix them with your knowledge of the alphabet and a little careful tuning and careful listening, and you will turn up some good listening from interesting and romantic places, such as Uruguay, which will occupy our attention for a few moments.

The Banda Oriental

The smallest of the South American republics, slightly larger than the State of Oklahoma, is Uruguay, known to Uruguayans as Banda Oriental del Uruguay. The chances are that if you hear one of her radio stations, it will be announced simply as "Uruguay," pronounced OOR'-u-gwai.

The capital of Uruguay is Montevideo, and other important cities which have radio stations are Paysandu, Colonia, San Jose, Canelones, Minas, Duranzo, Salto, Mercedes, Florida, Rocha, Rivera, Tacuarembó, Melo, and Maldonado.

Montevideo was founded in 1726, and in 1727 it consisted of only two stone buildings and about forty shelters made of hides. Today it is one of the metropolises of South America, being third in importance of the cities east of the Andes, and to DXers, a city of the first rank, with its 24 broadcasting stations and 16 short-wave stations. Montevideo's stations will be found listed in the complete Uruguayan list which closes this article. The list has just been received by us from Sr. Eduardo Zubia, Minister of National Defense, Direccion de los Servicios Radiocomunicaciones, at Montevideo, and is, of course, the most accurate and complete that has been published up to this time.

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Readers who are interested in Uruguay can read about this most interesting country in the pleasantly-written and very informative book "Uruguay," by W. H. Koebel, published by Charles Scribner's Sons.

Republica Oriental del Uruguay
Official List of Broadcasting

Stations

- CX4. 610 kcs, 5 kw, Direccion de Agronomía, Uruguay 821, Montevideo. Daily except Sunday 9:30 am-12:30 pm; 4-5:30 pm.
- CX6. 650 kcs, 10 kw, Servicio Oficial de Difusion Radio Electrica, Mercedes 823, Montevideo. Daily 10:30 am-12:30 pm; 3:30-9:30 pm.
- CX8. 690 kcs, 500 w., Raymon Puyal, Cai-gua 3719, Montevideo. Daily 9:30 am-12:30 pm; 4:30-9:30 pm.
- CX10. 730 kcs, 1 kw, Ferrera, Gestoso y Cia., Avda. 18 de Julio 1275, Montevideo. Daily 6:30 am-10:30 pm.
- CX12. 770 kcs, 5 kw., Luis A. Artola, Olimar 1364. Daily 8:30 am-9:30 pm.
- CX14. 810 kcs, 5 kw "El Espectador Ltda.," Olimar 1364, Montevideo. Daily 9:30 am-9:30 pm.
- CX16. 850 kcs., 10 kw., "S. A. D. R. E. P.," Avda. 18 de Julio 928, Montevideo. Daily 7:30 am-9:30 pm.
- CX18. 890 kcs., 5 kw., "El Espectador Ltda.," Olimar 1364, Montevideo. Daily 9:30 am-9:30 pm.
- CX20. 930 kcs., 2 kw., Carlos L. Romay, Humberto I, 4033, Montevideo. Daily 9:30 am-1 pm; 2:30 pm-10:30 pm.
- CX22. 970 kcs., 1500 w., Harispiru Hnos., Avda. 18 de Julio 1092, Montevideo. Daily 7:30 am-10:30 pm.
- CX24. 1010 kcs., 2500 w., "S. A. D. R. E. P.," Avda. 18 de Julio 1092, Montevideo. Daily 7:30 am-10:30 pm.
- CX26. 1050 kcs., 2 kw., A. Canepa y Cia., Millan 2370, Montevideo. Daily 7:30 am-1 pm; 2:30-9:30 pm.
- CX28. 1090 kcs., 3 kw., Lorenzo Alberto Gori Salvo, Convencion 1379, Montevideo, Daily 9-15 am-9:30 pm.
- CX30. 1130 kcs., 1 kw., Silva y Larrea, Avda. 18 de Julio 1764, Montevideo. Daily 6:30 am-10:30 pm.
- CX32. 1170 kcs, 500 w., Bianchi y Patron, Plaza Libertad 1334, Montevideo, Daily 7:30 am-10:30 pm.
- CX34. 1210 kcs, 500 w., A. Canepa y Cia., Millan 2370, Montevideo. Daily 8:30 am-2:30 pm; 4:30-9:30 pm.
- CX36. 1250 kcs., 250 w., Vazquez y Walder, Olimar 1364, Montevideo. Daily 7:30 am-12:30 pm; 3:30-9:30 pm.
- CX38. 1290, kcs., 5 kw., Servicio Oficial de Difusion Radio Electrica, Mercedes 823, Montevideo. Daily 10:30 am-12:30 pm; 3:30-9:30 pm.
- CX40. 1330 kcs, 500 w., Julio I. Rabassa, Cuareim 1331, Montevideo. 6:30 am-midnight.
- CX42. 1370 kcs., 500 w., Hector Vernazza, Mercedes 1039, Montevideo. Daily 9:30 am-12:30 pm; 2:30-11:30 pm.
- CX44. 1410 kcs., 250 w., Julio I. Rabassa, Cuareim 1331, Montevideo. Daily 8:30 am-11:30 pm.
- CX46. 1450 kcs., 1500 w., Vitale y Bertacchi, Colonia 1193, Montevideo. Daily 8:30 am-10:30 pm.
- CX48. 1490 kcs., 1500 w., Vazquez y Cia., Millan 2370, Montevideo. Daily 8:30 am-2:30 pm; 4:30-10:30 pm.
- CX50. 1530 kcs., 300 w., Bernardino Avala, Ibicuy 1285, Montevideo. Daily 8:30 am-10:30 pm.
- CW35. 1240 kcs., 250 w., Buenaventura Mahler y Ordoqui, 18 de Julio 614, Paysandu. Daily 7:30-11:30 am; 3:30-8:30 pm.
- CW29. 320 kcs., 100 w., Miguel Penma, 18 de Julio entre Piedras y E. Rios, Paysandu. Daily 9-11 am; 3:30-9:30 pm.
- CW33A. 1200 kcs., 50 w., A. Canepa y Cia., Under construction in Paysandu.
- CW37. 1400 kcs., 4500 w., Josefina C. de Bernotti, Ricardo BerNotti y Paul Montellanos, Ituzaingo y Rivalavia, Coonia. Daily 9:30-11 am; 6:30-8:30 pm.
- CW41. 1360 kcs., 50 w., Juan J. Harispiru y Pedro Bruccoleri, Asamblea esq. Sarandi, San Jose. Daily 8:30 am-12:30 pm; 4:30-9:30 pm.
- CW47A. 1460 kcs., 100 w., Fassola Rios y Tiboni, 18 de Julio 677, San Jose. (Schedule not given).
- CW47. 1480 kcs., 300 w., Julio J. Rabassa, Jose Batlle y Ordonez 672, Canelones. Daily 6:30 am-10:30 pm.
- CW43. 1470 kcs., 100 w., Volante y Harispiru, Gray, de la Llana 500, Minas. Daily 9:30 am-noon; 6 pm-9:30 pm.
- CW25. 1430 kcs., 500 w., Artola, Evangelisti y Cia., Manuel Oribe 785, Durazno. Daily 8:30-11:30 am, 4:30-9:30 pm.
- CW31. 1120 kcs, 250 w., Salvador B. Pera, Brasil esq. Amorin, Salto. Daily 7:30 am-11 am; 1:30-6:30 pm.
- CW27. 680 kcs., 250 w., Ernesto Popelka, Avda. Jose Batlle y Ordonez 2320, Salto. Daily 6:30-7:30 am; 8:30 am-12:30 pm; 3:30-9:30 pm.
- CW41A. 1300 kcs., 50 w. A. Canepa y Cia., Under construction in Salto.
- CW29. 1980 kcs., 50 w., Pedro Telesca, Eusebio Gimenez 655, Mercedes. Daily 5:45-6:45 am; 10-11:30 am; 5-9 pm.
- CW40. 340 kcs., 50 w., A. Canepa y Cia. Under construction in Mercedes.
- CW33. 1200 kcs., 76 w., Omar P. Burreiro, Ituzaingo 355 Florida Daily 6:30-8 am; 9:30-10:30 am; 6:30-8:30 pm.
- CW2. 580 kcs., 500 w. days, 300 w. night, Rodolfo I. Carriols, 25 de Mayo 515, Florida. Daily 8:30 am-10:30 pm.
- CW19. 1340 kcs., 50 w., Juan I. Harispiru y Abel Machado, Plaza Independencia, Rocha. Daily except Sunday, 8:30-11:30 am; 4:30-9:30 pm.
- CW19A. 1340 kcs., 60 w., Jorge Downton Garcia, Ituzaingo 574, Rivera. Daily 6:30-10:30 am; 12:30-8:30 pm.
- CW46A. 1470 kcs., 250 w., Luis S. Dini, 18 de Julio 306, Tacuarembó. Daily 7:30-10:30 am; 11 am-10:30 pm.
- CW43B. 1200 kcs., 50 w., A. Canepa y Cia., Under construction in Tacuarembó.
- CW41B. 1360 kcs., 50 w., A. Canepa Y Cia., Under construction in Melo.
- CW2A. 580 kcs., 50 w., A. Canepa y Cia., Under construction in Maldonado.

The Shortwave Stations
(Montevideo)

- CXA30. 6000 kcs., 250 w., Silva y Larrea, Under construction.
- CXA3. 6075 kcs., 2500 w., Servicio Oficial de Difusion Radio Electrica, Mercedes 823, Daily 10:30 am-12:30 pm; 3:30-9:30 pm.
- CXA9. 9440 kcs., 250 w., Difusoras "El Espectador Ltda.," Under Construction.
- CXA5. 9485, kcs., 2500 w., A. Canepa y Cia., Undergoing tests,

CXA2. 9570. kes., 5 kw., Racine y Schmidt, Juan Carlos Gomez 1431. Daily 11 am-4 pm; 4:30-9:30 pm.
 CXA6. 9620 kes., 5 kw., Servicio Oficial de Difusion Radio Electrica, Mercedes 823. Daily 0:30 am-12:30 pm; 3:30-9:30 pm.
 CXA19. 11695 kes., 2500 w., Difusoras "El Encetador Ltda." Under construction.
 CXA7(11735 kes., 2500 w., A. Canepa y Cia., Undergoing tests.
 CXA19. 11895 kes., 2500 w., Servicio Oficial de Difusion Radio Electrica. Under construction.
 CXA18. 15300 kes., 2500 w., Servicio Oficial de Difusion Radio Electrica. Under construction.
 CXA16. 15380 kes., 2500 w., A. Canepa y Cia., Undergoing tests.
 CXA17. 17800 kes., 2500 w., A. Canepa y Cia., Under construction.
 CXA21. 26500 kes., 2500 w., Servicio Oficial de Difusion Radio Electrica. Under construction.
 CXA22. 29500 kes., 2500 w., Servicio Oficial de Difusion Radio Electrica. Under construction.
 CXA23 on 43500 kes and CXA24 on 58000 kes., both with 2500 w., are also under construction.
Shortwave Stations of Colonia
 CXA13. 6155 kes., 2500 w., Isaac Raisenvitz, ... Ecol de San Carlos. Under construction.
 CXA8. 9640 kes., 5 kw., Jaime Yankelovich, ... Real de San Carlos. Daily 7-9:30 am; ... 5:30-10:30 pm.

GSI—15260 kes Oceania, South and West Africa
 GSD—11750 kes Australia
 GSB—9510 kes Australia, New Zealand

12:57 am Announcements
 1:15 am Full News Bulletin
 2:15 am Supplementary News Bulletin
 3:00 am News Summary
 4:00 am Full News Bulletin
 5:00 am Supplementary News Bulletin
 5:15 am Close Down

Transmissions 2 and 3

Stations	Area Served
GSJ—21530 kes	India, Malaya and Australia (until 10:30 am).
GSJ—21530 kes	West Indies (Commencing at 10:30 am).
GSF—15140 kes	India, Malaya and Australia (Commencing at 10:45 am).
GSH—21470 kes	Africa
GSV—17810 kes	Far East
GSG—17790 kes	Canada and North America
GSG—17790 kes	India, Malaya and Australia
GST—21550 kes	South America

5:45 am Announcements
 6:30 am Full News Bulletin
 7:30 am News in German
 7:45 am News in Italian
 8:00 am News in Portuguese
 8:15 am Full News Bulletin
 9:00 am News in Spanish
 10:00 am Supplementary News Bulletin
 11:00 am Full News Bulletin
 11:30 am News in Afrikaans
 Noon Close Down

NEW BBC SCHEDULE

On September 4 a revised schedule of transmissions by the BBC short-wave stations at Daventry was announced, and will be maintained until further notice. The periods between the various news bulletins are filled with programs of music or topical talks.

With time given in Eastern Standard, the revised program is completely listed below.

Transmission 1

Stations	Area Served
GSI—15310 kes	Near East and East Africa

See Subscription Blank on Page 96.

Published monthly except July and August by

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362 Cedar Lane

Teaneck, New Jersey

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FOR SALE AT YOUR NEWSSTAND



A green and black card from WKBN, Youngstown, Ohio broadcasting station. (Courtesy of Merlin Steen).

Transmission 4 (a)

Stations	Area Served
GSI—15260 kcs	East Africa: Near East
GSD—11750 kcs	Africa
GSC—9580 kcs	Africa, commencing at 1:35 pm.
GSG—17790 kcs	Africa from 12:22-1:30 pm; Canada and N. America from 1:35 pm.
GSE—11860 kcs	Far East and New Zealand, after 1:45 pm.

- 12:22 pm Announcements
- 12:30 pm Full News Bulletin
- 1:45 pm News in Afrikaans
- 2:00 pm News Summary
- 2:15 pm News in French
- 2:30 pm News in German
- 3:00 pm Supplementary News Bulletin

Transmission 4 (b)

Stations	Area Served
GSP—15310 kcs	Canada and North America
GSO—15180 kcs	South America
GSF—15140 kcs	West Indies; Central America
GSD—11750 kcs	India, Malaya, Australia, New Zealand
GSC—9580 kcs	Africa

- 3:45 pm Announcements
- 3:50 pm News Summary
- 4:00 pm News in French
- 4:15 pm News in German
- 4:45 pm Full News Bulletin
- 5:15 pm News in Spanish
- 5:30 pm News in Portuguese
- 6:00 pm Close Down

Transmission 5

Stations	Area Served
GSD—15140 kcs	South America
GSD—11750 kcs	North America
GSC—9580 kcs	India, Malaya, Australia
GSB—9510 kcs	Canada, North America, West Indies, Central America

- 6:22 pm Announcements
- 6:30 pm News Summary
- 6:45 pm News in French
- 7:00 pm News in Portuguese
- 7:30 pm Full News Bulletin
- 8:00 pm News in Portuguese and Spanish
- 8:45 pm Supplementary News Bulletin
- 9:00 pm News in Spanish
- 9:15 pm Close Down

Transmission 6

Stations	Area Served
GSD—11750 kcs	Western Canada
GSC—9580 kcs	Western Canada
GSB—9510 kcs	Eastern Canada, North America, West Indies and Central America; South America

- 9:37 pm Announcements
- 9:45 pm News Summary
- 11:00 pm Full News Bulletin
- 12:15 am Supplementary News Bulletin
- 12:30 am Close Down.

Unless otherwise stated all news bulletins above are in English.

W2XDG on 38650 kcs. is heard here all day with an R9 signal. (Oskey—N. J.)

W2XDV on 31600 kcs. relaying the programs of CBS. Station heard daily and located in New York City. (Williams—R552, N. J.)

W2XHG on 4100 kcs. is also heard all day with an R9 signal. (Oskey—N. J.)

W4XA on 26150 kcs. is relaying the programs of WSM from 7:30 p.m. to 11 p.m. using 1000 watts power. (Dobbins—R672, Tenn.4)

W4XCA on 31600 kcs. at Memphis, Tenn. relays WMC daily from 9 a.m. to 5 p.m. They were heard (Wash.) at 3 p.m. with R6 signal. Average conditions on UHF poor. W4XCA requested reports from listeners. (Fern—R211, T.H.2; and Tarr—R274, Wash.)

LETTERS TO THE TECHNICAL EDITOR

R. W. M., of Rome, Ga., asks: "I have a Howard 430 receiver which has an outlet for a voltmeter or "R" meter that indicates volume of signals. However, can I use an ammeter instead of the voltmeter?"

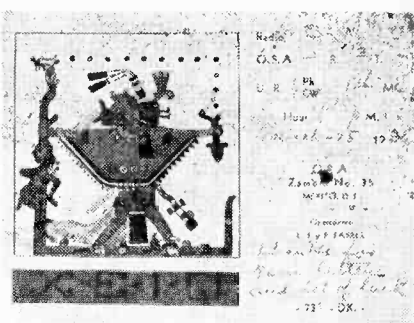
Answer: Provided you use a high resistance milliammeter instead of the normally high-resistance voltmeter, this can be done. You perhaps know, but most ammeters have very low resistances. The type of milliammeter to be used is a tuning meter and the resistance depends upon your set. These meters usually come in ranges from 5 to 15 milliamperes, the larger governed by the output current from the audio circuit of the receiver. Since this set has a four-prong socket the instructions accompanying the receiver will have a bearing upon the proper connections to be made. Ordinarily the meter would be attached to the B plus contact.

From J. N. R., Lachute, Can., comes: "Please send me the name and address of the makers of the Airline radio."

Answer: The Airline receiver is sold exclusively by the Montgomery Ward and Co. It is not manufactured by them, but all questions regarding these sets must be directed to the Radio Department (Service), at Chicago, Ill.

R. S. C., of Terminal Is., Calif., writes: "I am moving into a new home this winter. I don't like a big outside aerial. Will a neat vertical type work well, and how about inside aerials? I have a 1937 Philco 116X."

Answer: This 11-tube set has sufficient tube power to operate nicely on small aerials, such as those that can be placed indoors or looped on the back of the set itself. However, in any case, the larger outdoor antenna is the most efficient and satisfactory, and any deviation from that means certain losses. A vertical antenna consisting of a bare wire supported vertically from an offset arm and about 20 to 30 feet in length from



A six-color veri card from amateur station XEIQ in Mexico City. (Courtesy of Russell Fieberg).

the set will do. However, noise-reduction will not be so satisfactory. You can buy a vertical aerial for the roof. It is about 12 feet high, has a support and 40 feet of leadin wire and lightning arrester. Then there is a more expensive 25-foot vertical type to be mounted on a ground post and used with noise-reducing coupling unit, such as RCA Magic-Wave with transmission line placed underground of any length up to 500 feet.

A plea from C. D. C., of Wichita, Kans., begs: "Tell me who makes the Mercury, Tone Value, and Sargent radios."

Answer: Sargent is made by E. M. Sargent Co., 212 Ninth Street, Oakland, Calif. Perhaps some of our readers can help C. D. C. further about the Mercury and Tone Value receivers which we can not find listed.

An honest question is asked by G. A. C., of North Plainfield, N. J.: "What is the best low-priced short-wave receiver I can buy that will cover all the bands perfectly?"

Answer: We wish we could give such a brief reply. But we have to refrain from recommending this or that set; there are many good ones. However, we suggest that you look over the literature in the short-wave amateur field and select the one that

suits your pocketbook. The standard all-wave set brings in many short-wave stations, but it can never perform like a communications receiver and still maintain high-fidelity tone reproduction. You lose some of that in the professional set, because you have to sacrifice something to get the sharp selectivity you need for unlimited short-wave reception. There are such makes as Hammarlund, Howard, Hallicrafters, RME, and National. They cover the entire price range to suit many individuals. Their products are excellent. Prices range from about \$30 to \$300.

E. M. W., has a Super Skyrider set, and asks: "How can I get the utmost performance from this set by using the most efficient antenna? I am using a Philco doublet aerial just now. Shall I make a change?"

Answer: The doublet being used is very good, but this 13-tube set does not require much of an aerial. Why not try a good vertical type with noise reducing leadin and coupling. However, as in all cases, the manufacturer's recommendations should always be your guide. Their years of experimentation have provided data that the individual can seldom obtain by himself.

R. B., of Minneaplis, Minn., complains: "My receiver is an RCA C13-2, and it gives a great deal of double-spot trouble, and readjustments have not helped but have put the intermediate band out of operation. I get repeats as many as 100 times on the broadcast band."

Answer: It appears that you certainly have trouble. However, a good realignment and careful adjustment is your only salvation. This set, with its 13 tubes, is a good one. Image-frequency trouble ought not be a source of annoyance. We suggest you see your local RCA distributor (there is only one) and get his recommendations as to a satisfactory servicing organization. Evidently you failed to put your set into good

hands, for in this age aligning a set is quite easy if one has the apparatus and knows how.

R. C. S., up in Verdun, Quebec, writes: "Just got 10 new tubes and now my Northern Electric set has a hum that vanishes when the volume is turned up full."

Answer: New tubes should not hum. Evidently the trouble was there previously and new tubes tend to bring it out. Have your condenser and filtering system checked if practicable. Are you certain the tubes are exactly the same kinds (not by make) as the ones replaced? Sometimes this form of trouble calls for a new volume control unit.

From J. R., of Newark, N. J., comes this: "I built a short-wave receiver but when I added another 6V6 audio tube the set motor-boated loudly. Why is this?"

Answer: Without seeing the circuit there is little we can advise except to say that the cathode biasing and all other grid resistors and condensers should be checked. Perhaps a little more or less negative biasing will solve this trouble. The values of these parts in the audio circuit must be balanced and carefully worked out.

J. E. L., of Flushing, L. I., writes: "A catalog shows a 12-tube set at \$29 and a 9-tube set at \$28; both table models. Why such similar prices for 5-band sets of the same make? Which would be the best buy? Do you think the 12-tube set has dummy tubes?"

Answer: There is no accounting for some of the things we see in radio catalogs. Certainly there should be more difference in price when 3 tubes are concerned. The value of the tubes alone should make a greater difference than \$1. However, much depends upon how hard the sets are to sell and whether the dealer is anxious to part with them at a loss. At any rate a 12-tube 5-band set for \$28 is a bargain if it is well made and efficiently adjusted. We doubt wheth-

er there are any dummy tubes in a set of this size. If the concern making the offer is reliable, we think you might do well, but suggest you enter into correspondence with them first.

An interesting question sent in by C. P., of Quebec, Can.: "Is it possible to attach an amplifier to my commercial 12-tube all-wave set and get a richer tone, less static and more selectivity?"

Answer: By "amplifier" we feel certain you mean a "pre-amplifier" or "pre-selector" and not an additional stage of audio amplification. The principle of pre-amplification is to boost up the radio signal that comes in from the aerial, tune it somewhat roughly and send it to the receiver as an amplified and partially tuned signal. The result is you will get a louder signal and one that tunes sharper with easier rejection of interfering signals. Static cannot be reduced, and the tone of the signal cannot be improved; the latter depends upon the audio circuits of the radio receiver and type of speaker. We think that any good 12-tube commercial all-wave set will be helped but little with an additional stage of radio-frequency amplification. If your set has two stages of r. f. amplification do not add an amplifier. If it has one stage, or even none, as some sets are now made, a pre-amplifier will help in getting more selective signals and more DX-ing.

S. E. Y., of West Linn, Oreg., is puzzled: "I read where a directional antenna towards the south overcame a dearth of signals in one direction, but a radio man told me a broadcast antenna must be 1,000 feet long before it becomes directional. Do these people with directional antennas really use that much length? What can I do without moving into the country so as to get so much space?"

Answer: The principle of radio transmission of energy is such that all receiving antennas are directional when hung in horizontal positions. Length, no doubt, has some bearing on the matter. However, any wire, when pointed towards a radio station, receives best from that station and not so well from an equally powerful station located the same distance away but at right angles to the aerial wire. The small sets now using built-in loop antennas are perfect examples of this. Turning the set around its position changes the plane of the loop aerial and varies the intensity of the signals being received. Any wire, of any length, has directional qualities. Your aerial, therefore, can be of a length that can conveniently hang in the space available when pointed toward some particular direction. A "T" type aerial is best for this purpose, while a vertical antenna receives equally well from all directions.

Here is a big order from W. M. D., of New Orleans, La.: "I want to get a set that will bring in all short-wave signals from any point in the world, regardless of the strength of the station. What do you recommend, or can you give me plans for building such a set?"

Answer: If there was such a set we would unhesitatingly recommend it. This is simply one of those things that can't be done. Don't try to build a set to accomplish even a part of this feat. If you can, buy a good commercial short-wave set having from 12 to 18 tubes, ranging in price from \$150 to \$300. The latter should have at least 2 stages of tuned r. f. amplification, 4 stages of i. f., and crystal selectivity. Good sets of this kind will give you about all the short-wave tuning you can take care of at nights.

FOR SWL'S ONLY

● Have you any QSL'S from ultra high frequency stations? A list of these stations is on page 52. You don't need expensive receiving equipment. You can buy a guaranteed UHF converter designed to work on an all-wave super-heterodyne radio, complete and postpaid, for 50c! This is not a plan.

● Ingersoll's watch made the dollar famous; Our product will bring the half dollar equal fame.

● Send your order to PRINCETON RADIO, 15889 Princeton, Detroit, Michigan.

VUM-2 card is new and evidently right off the press! XTJ took an even four months en route according to postmark. It was posted Hankow and mailed just eight days before the fall of city. (By Al Bartholomew) . . . George A. McDermott is the recipient of the first verification in Spatari from 2RO in Rome. Excerps from the letter: "We are sending you a verification made out in Spatari and this should be quite a collective item. Since it is the first to be issued by the Italian shortwave station." . . . SP-19's veri card is brown, red, and white, with map of Poland in white and call in Red. W-10XAB—OX2QY are still verifying belated reports. . . . EAJ-43 sends a white, red, orange, and blue card with photo of Franco on it. . . . EAR's card bears a war scene. Three photos are contained on the TFJ card. The Telephone Building (Broadcasting), The Radio Choir, and Interior of transmitter are pictured. The Icelandic Flag is in the upper right corner. . . . HC1GQ's card is red, white, and green showing "El Nariz del Diable" (Devil's Nose), a mountain!

RADEX is pleased to announce the Radex Readers Shopping Service, a service specially designed so you may obtain selected, recommended communications receivers through your favorite radio magazine.

The Editors of RADEX will buy your receiver for you from the most reliable stores in New York City or Chicago, and will arrange easy deferred payments if you wish.

The receivers offered this month are fully described in our advertising pages. All the sets are highly recommended for amateur work or for shortwave broadcast reception. The prices quoted are the lowest at which these first quality receivers can be bought anywhere.

You will pay no more if you buy your set through the Radex Readers Shopping Service, but the Service will benefit you because it will benefit your magazine.

YUA on 6100 kcs. verify with a booklet and schedule with many pictures. DJP, Germany relays their program on 11850 kcs. Reports may be sent to either station. . . . J. G. Leitch signs verifications for WCAU, Philadelphia. I also have ultra high W3XIR (relaying WCAU) verified on 41000 kcs. No permanent schedule as yet. . . . TG2 on 6190 kcs. has a pretty QSL card. On the front side is a quetzal bird perched on scroll which rests on crossed guns and sabers in a wreath of coffee branches. These are all in color. On the information side is native scene in blue and brief history of Guatamala City. They also send booklet entitled "Best Coffee in the World."

Radexing With The Radexers

By Ray LaRoque

Comes meeting time, and once again the great RADEX clan gathers, through the medium of this department, for discussion of the news of the month. When you read this month's RADEX, the DX season will be well on it's way toward the mid-season peak. So, stop putting off your entry into the funfest. Another month's waiting and you will have missed a very nice slice of DX reception weather which will never return.

By the time we are ready for the next issue of RADEX, we expect to have a magazine-full of actual reports of foreign reception by our readers here in the East. By reports of foreign we mean TP's as well as TA's, for we wouldn't for a minute want to

think that all of our eastern DXers are content with Europeans. West coast fans aren't the only ones who can hear TP's, you know. It has been proven that early in the morning, just before sun-up, many an Australian or New Zealander has been logged—even way over here on the Eastern shores.

THIS 'N' DATA

A copy of the Montreux Wavelength plan has been forwarded to us from England by Richard Wright. All changes were shown in parenthesis in the September RADEX. Most of the changes are merely frequency changes, but there are a few outstanding ones. Spain has never had any stations on the medium waves which reached any degree of impor-

ORDER FORM

Radex Readers Shopping Service
362 Cedar Lane
Teaneck, N. J.

Please buy for me the following articles for which I enclose remittance in U.S. funds of

\$..... in full payment, or \$..... as a part payment.

QUANTITY	NAME OF ARTICLE	MODEL NO.	PRICE EACH	TOTAL
.....
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.....
.....

Material is to be sent express collect from New York or Chicago, depending upon cheapest route. Where part payment is made it is understood that order is subject to acceptance of supplier. (Time payments apply to U.S. only).

Name Street Address

R.F.D. Box No. Post Office

State Please give shipping point if different from

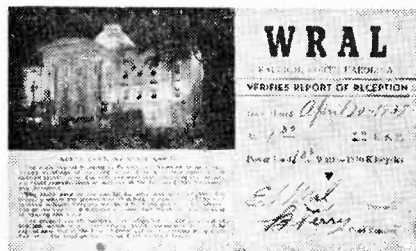
Post Office State County

tance. Under the new plan, Spain will have a 120 kw. Madrid station on 589 kcs. Lithuania comes down into the medium waves with a station on 635 kcs.—a clear channel in Europe. With conditions in Europe as they are at present, it is doubtful if the plan will go into effect as anticipated. Anyhow, it will be interesting to watch for developments.

Jack Varner of Roanoke, Va. wants to know how many DXer's remember the super peeewe stations KFPM and IOBQ! Jack has veries from both. . . . NNRC "Parades Across Ohio" in October, and does the same across Indiana in November. See the DX Calendar. "My greatest distance on the broadcast band", says E. W. Coney, R380, of San Francisco, "is WJR—2300 miles and I also have KFOY, KOBH and KLPM." . . . The World DX Alliance and the Globe Circler's DX Club extend an invitation to all DXers to join this club. Bulletins are issued semi-monthly during the DX season and once a month in the Summer season. Sample bulletins can be had by writing to P. O. Box 422, Perth Amboy, N. J.

POST OFFICE BOX R9

Hagerstown, Maryland—Hubert L. Martz, 22 N. Potomac Street: "During the Summer I heard two stations using Spanish on 900 and 1030 kcs.,



An extra large-sized veri card, 4x7 inches, issued by WRAL of Raleigh, N. C. The picture on the left is the North Carolina State Capitol. (Courtesy of Roy Shaffar).

and neither was Cuban or Mexican. Has anyone any idea where they are located?"

Philadelphia, Pennsylvania—Sidney Tallis, R1271: "I would like to become a member of the RADEX Club. I have been DXing on the broadcast band for six months and have 112 stations logged and 107 verified. Previous to this, I was strictly a shortwave DXer. I have been reading RADEX for two years."

Romney, West Virginia—Jim Walker: "I have heard 898 stations of which 832 are verified. Delinquents are mostly Cubans and Mexicans, and CX18, YV1RA, YV1RF, HJ1-ABH, HJ1ABN, LR3 Poste Parisien, Lille, Rennes, and Belfast CFCT, and WKAT. The latter station has been reported six times. Return postage was sent twice and typed veri cards twice but still no verification. Will someone please tell me how to get a verification from WKAT."

Swarthmore, Pennsylvania—Richard Wright, Swarthmore College: "You might mention in your column some time in answer to Desmond Callan of Readville, Mass., that I have a veri from WSYU as well as from WSYR on an FCC test."

Rochester, Pennsylvania—A. G. Schleiter: "I started DXing all over again on June 28th and in a little over one month I have 190 stations including 51 of the frequency checks. Of course, I expect to hear around 900 or more by January 1st when the weather gets colder. I get more pleasure out of radioing in the U.S. than trying for foreign stations."

West Hamburg, Pennsylvania—Nicholas Evangelista, R557: "Here are some of the best stations which I verified last winter. KWJB, KCRJ, KVEC, KRE, KSAN, KGFJ, KPFA, KGFL, KICA, KSUB, KWYO, KQRS, CJCJ, CMKE, CMKM, CMHJ, CMJW, CMHP, TIPG, TG-1, XEDH, XEFC, LRA, LS-11, LR5, PRF3, HJ1ABN, JOAK-1, JOBK-1, JOCK-2, 4BU, 1YA, 3YA, 4YA, 2YC,

Radio Normandie, Radio Toulouse, and Radio Lyons."

East Chicago, Indiana—Frank Sorenson: "I have been DXing on the broadcast band since last November and my log now stands at 310 stations—286 in the United States, 13 in Canada, 9 in Mexico and one each in Cuba and Guatamala. Lately, I have started to send for verifications and eight stations have verified: KLUF, KWOS, WBNY, WCOU, WPIC, WRTD, WSIX, and WW-SW."

East Vassalboro, Maine—Joseph T. Lippincott: "It seems to me that long wave DX has been too long neglected. I have heard 15 countries on this band and know that it is possible to do some fine DXing. For this reason I am starting a contest as follows: At present prizes will be 20 IRC's and 10 IRC's with hope that much interest will be shown and more prizes added.

1.—Anyone living in North America is eligible.

2.—Veries must be obtained but will not be called for until the end of contest.

3.—All stations eligible except strictly CW.

4.—Points as follows: Five (5) for each country verified, three (3) for each veri outside the U.S. and Canada, and one (1) for each veri in the United States and Canada.

5.—Stations must be heard between 1/9/39 and 1/5/40. All reports must be in by 1/6/40.

6.—Contestants must write directly to J. Lippincott, E. Vassalboro, Maine at least once a month.

7.—There is no entrance fee, but those desiring late list of long wave TA's may have same by sending 10c."

VERI SIGNERS

Additional verification signatures are furnished this month by George Hotton, R1224, Milwaukee, Wisconsin: WEEU—M. Leonard Savage, Engineer, KITE—Wayne J. Hatchett; KOAM—R. L. Jones; WILL—A. James Ebel, Ch. Engineer; KTHS

—Mary F. Floyd, Secretary; KOTN—B. J. Parish, Mgr.; WLAP—Sanford Helt; KPO—W. Woodward; WSIX—Jim Turner; WJSV—Clyde A. Hunt; WJJD—J. L. Allabough; WOC—Allen R. Richter.

COVERING THE CONTINENTS

Domestic Dialings

FORECAST: November means that the DX season is definitely here and the only obstacles the DXer will encounter in domestic DX this month are local atmospheric disturbances. We suggest you start listening to those frequency checks now if you want a real big list of domestic stations this season. There are many new ones which were not there last season.

Komments from the "K" District: KSL now broadcasts its Thursday morning tip program weekly. KSL's 50000 watts on 1130 kcs. make it easily heard all over the nation at the hour of 2:45 a.m. (RI.)

W's in the East: WELI is now on 930 kcs. (Robert Trubee, R671, Brentwood, N.Y.)

WJAG will conduct their annual DX program this season on Friday morning Dec. 8, from 1:30-7:30 a.m. This program, an annual event at WJAG is well worth hearing and provides an opportunity for listeners in the East to hear a station that is not too easily logged otherwise. WJAG is also on frequency checks from 1:30-2 a.m. on the second Friday of each month. (RX)

WGNC at Gastonia, N. C. is running 250 watts full time now and has an application in for 500 watts. All reports sent to the chief engineer, Vernon Upton, Jr., will be promptly verified if correct and return postage is enclosed! Arrangements have been made with Mr. Upton for dedication of the October and November FCC tests to the RADEX Club and if he receives a reasonable number of reports he has promised to put on a three hour program for the club. (Frank Billingsley, Jr., Ellenboro, N.C.)

WRGA on 1500 kcs. has made some changes in its operation. A telegram from the FCC authorized the use of 250 watts full time instead of changing to 100 watts at local sunset and it has already been put into effect. Schedule is now from 7 a.m. to midnight. This is announced by the FCC as a temporary measure, but the engineer assures me it probably will be permanent. (Robert May, R689, Rome, Ga.)

The audio station for television station W2XBS was heard on approximately 1602 kcs. The reception was during the afternoon in late August. No interval or identification signal used. (Irwin Schon, R1069, Woodside, N.Y.)

Early a.m. sign on times of some New England stations are listed in the following: WCOP—7:00, WEEI—6:30; WHDH—7:00, WMEX—8:00, WAAB—7:00, WBZ-WBZA—6:00, WNAC—6:00, WORL—7:00, WSAR—7:30, WHAI—7:00, WLAW—7:00, WNBH—7:30, WLLH—7:30, WHEB—7:00, WRDO—8:00, WLBZ—8:00, WCOU—6:00, WCSH—7:30, WGAN—6:30, WCAX—7:30, WSYB—8:30, WQDM—6:00, WNBX—7:00, WDEV—6:00, WEAN—6:00, WPRO—6:00, WJAR—7:30, WICC—6:00, WDRC—7:00, WTHT—7:00, WTIC—6:00, WNBC—7:00, WELI—7:00, WNLC—7:30, WBRY—8:30, and WATR—8:00. (Desmond Callan, R987, Readville, Mass.)

Canada: CBL in Toronto sends a neat verification card to all correct reporters. It is a cream colored card with red and black writing. A radio tower is shown on the left side of the card. . . . CKLW on 1030 kcs. comes in very clearly around 2 a.m. They verify any correct report with a blue and white card. (Phillipe Bates, R1231, Philadelphia, Penna.)

CHSJ and CFCY were visited while on trip to St. John, N.B. and Charlottetown, P. E. I. At CHSJ, I found out that the man who announces the early morning weather re-



Broadcasting station KGGM, "The High Fidelity Voice of New Mexico," verifies listeners' reports with this card. (Courtesy of Merlin Steen).

ports at 5:00 a.m. is a night watchman and stops in at the station on his way home from work. Incidentally, the announcer on regular programs said that he had never seen the weather report announcer. . . . At CFCY it was learned that they had bought out CHCK and now use it only on occasions in order to hold the license. CFCY is officially listed by the CBC as the Canadian National Hotel, but reported to be in Brace Block, Queen St. (Robert E. Base, Baltimore, Md.)

Latin America

Argentina: LR-1, LR3, LR5, LR6, and LS2 are heard with strong signals when conditions are good. LR-1 has been heard several times with a stronger and better signal than short-wave LRX. (Robert Skyten, R786, E. Brookfield, Mass.)

Costa Rica: TIEP of San Jose, heard on 830 kcs. in the evening. (Robert L. Martz, Hagerstown, Md.)

Cuba: CMCY and all of the following were heard during the summer months with good signals, CMCY, CMCD, CMCR, CMBG, CMK, CMBL, CMCU, CMCF, CMX, CMKD, CMCK, CMCP, CMBZ, CMCP, CMBF, CMBH. (Hubert L. Martz, Hagerstown, Md.)

CMHI on 830 kcs. at Santa Clara is now using 10000 watts. . . . CMJX is in Ciego de Avila now, not Camaguey. . . . CMHJ on 1160

kcs. will broadcast two DX programs this season with Enrique Hidalgo at the "mike" and directing the answering of DX mail. The programs will be on January 14 and February 18, 1940 from 2-6 a.m.. Ten cents in coin is required for the stations's verification. . . . CMHO is now in Cienfuegos and operating on 1000 kcs. with 200 watts, having moved from Sagua la Grande. This station and CMHJ, along with CMHM are the only stations in the "Pearl of the South", as Cienfuegos is known. (CMHX evidently has been deleted.) Cuba has three networks in operation. They are:

Cadena Crusellas (Crusellas Network): CMQ (key station), CMJK, CMJA, CMKD, and shortwave stations COCQ and COKG.

Cadena Azul (Blue Network): CMHI (key station) along with CMCF (occasionally used as key station on programs from Havana), CMKQ, and shortwave stations COHI and COCH.

Radio Cadena Nacional (National Radio Network): CMK (key station), CMHW, CMGF, CMAR, CMKR, CMJC, and shortwave station COGF. (Enrique Hidalgo, Cienfuegos, Cuba)

Guatamala: TGW comes in fine every night when there is not too much interference. They have been verified. (Jack Varner, Roanoke, Va.)

TGW heard about 11 p.m. on Sept. 6 using a bedspring for an antenna and no ground. Now use an RCA doublet and will try for the FCC checks soon. Previously, my DXing was confined to the amateur bands. (Winship Haylor, Baltimore, Md.)

TG-1 will broadcast a special DX program for the World DX Alliance and Globe Circlers DX Club on Sunday morning October 15th. from 1-2 a.m. and again on November 12th at the same time. Verifications from TG-1 and TG-2, which will also carry the program, are now printed in the Spatari Radio Language.

Mexico: XEAW in Reynosa, Tamps., comes in clear at midnight

on 960 kcs. (Philippe Bates, R1231, Philadelphia, Penna.)

Tuning the TA's

FORECAST: November will bring about a near peak on reception of trans-Atlantic stations. Keep an ear out for the Europeans all through the month and you may be rewarded with a log-full of TA's.

Great Britain: Just after few items last month had been written, explaining radio and how it operates in England, news comes that due to the war in Europe, all transmitters except the following have been closed down: Westerglen and Burghhead on 767 kcs., Moorside Edge on 668 kcs., and Brookman's Park, Moorside Edge, and Westerglen on 1149 kcs. . . .

767 and 668 kcs. are in parallel and operate as the "Home Service station. That is the new call. 1149 kcs. broadcast in parallel with Daventry on all its transmissions and is as usual announced as "London Calling." The schedule for the Home Service stations is from 2 a.m. to 6:15 p.m. (7 a.m. to 12:15 a.m. in London). This will give the boys over here a chance to hear England this winter as the British stations will be signing on much earlier than in previous seasons. Bow bells sometimes followed by time signal (six pips) is the interval signal for "Home Service" stations. (Richard Wright, R23, Swarthmore, Penna.)

France: Most of the stations in France came on the air at 1:45 or 2 a.m. last season, and this country was, by far, the most easily logged of all European countries. Try for Rennes on 1040 kcs., and Poste Parisien on 959 kcs., as well as all of the other superpower French stations. (RL)

Union of South Africa: Kimberley on 1380 kcs. relaying Johannesburg on 645 kcs. is a new station (Mrs. R. S. Roche, Aliwal North, South Africa)

(Please turn to Page 83)



TURNER DIAL SAYS:

It's time to clean up.

Dust out the radio. The cleaning tool of a vacuum cleaner will suck out most of the dirt. Be careful of delicate parts. A soft paint brush also is a big help. Polish tubes and other parts with a soft cloth.

Are you buying a set?

Readers want to know what set to buy. RADEX leans backward from recommending radio receivers. But there are consumer research organizations that make it their business to tell people these things. For a small consideration they will call names. Buyers' guides and a year's subscription brings discussions about recommended and tested and faulty radios, as well as other things people buy.

Put new tubes in old sets.

Time for new tubes. Reliable makes predominate the market, and metal-glass replacements instead of some older glass types often work nicely. Your service man can make the necessary socket and grounded alterations. And new life in the oscillator works wonders when DX-ing on short waves.

I wonder why they don't think.

Newspapers reported that radio big-shots sent shortwave signals toward Mars when it paid a recent visit. They hoped the waves would be reflected back to Earth. Why don't they experiment by aiming at the Moon? Its closer by. I figure that experimental signals reflected from the Moon would return to Earth in 2½ seconds instead of 6½ minutes from tiny Mars. Certainly the Moon offers greater possibilities in this line.

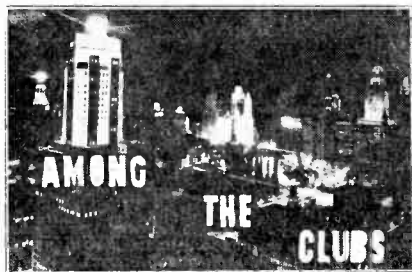
Have you heard 10 meters?

All-wave sets will receive interesting local 5-meter and world-wide 10-meter stations by using a small converter that utilizes 3 tubes and plug-in coils. Tuning is done by the converter dial.

New sockets often help.

In old sets noise and signal cutting might be due to worn tube sockets. Replacements are inexpensive. Soldering and fitting is easy. Keep wires from becoming mixed. Radio people use rosin-core solder, but acid-core solder is best for novices. As it is corrosive, a bit of alcohol will brush off remaining acid after solder cools.

Tune slowly and patiently for short waves.



The October issue of "QSA5", official bulletin of the DXer's International Exchange Club, Dryden, Wash., appeared in the form of a printed 12 page magazine, which added considerable attraction to its varied contents. The club plans to issue it in this form every three months, interspersed with the regular mimeographed bulletins the other eight months of the year, until such time as their rapidly growing membership reaches the point where monthly printed bulletins will be feasible. A limited number of these October editions is available to serious DXers or hobby fans, and may be obtained by addressing the DNIEC Secretary, Merton M. Hiatt, Box 7, Dryden, Wash.

The Australian DX Radio Club was inaugurated in 1933, and in these past six years it has become a well-known organization throughout the Commonwealth of Australia. The

Maxine Gray, famous singing tele-star featured on the Don Lee Television Station. (Photo by Maurice Seymour, courtesy of Don Lee System).

membership is gradually approaching the thousand mark, and official representatives are located in many overseas countries. Membership in this club is open to anyone who is interested in DX. Overseas members may join by sending 24 stamps, each equal to the first class mail rate (5c each in U.S.A.). In return they will receive a club certificate and number, and the next twelve issues of the club bulletin. Communications concerning this club should be addressed to Graham D. Hutchins, 10 Ordnance Quarters, Maribyrnong W3, Vic., Australia.

Plans for the contest sponsored by the National Radio Club are complete, and can be obtained from headquarters at 317 E. Tenth St., Erie, Pa. Among the worth-wide prizes



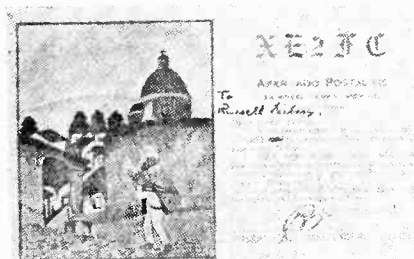
VIDEO VARIETIES

Television's first season of intercollegiate football broadcasts is now in full swing. The first game was televised on September 30, when Fordham University met Waynesburg College at Randall's Island. The National Broadcasting Company, over W2XBS, also broadcast the Manhattan-St. Bonaventure game on October 7, and during the month of November, televiewers will see C. C. N. Y. play St. Joseph's on the 18th, and Long Island University versus Catholic University on Nov. 23.

The director of outside telecasts for NBC, Burke Grotty, believes that some big-time contests will be televised, and he also announces that there is a possibility of one or more professional football contests being telecast.

Words

Television's own glossary of slang designates a blonde as "blizzard head," a brunette as a "dark angel" and a redhaired actress as a "problem child."



Mexican amateur station XE2FC, in Tampico, acknowledges correct reports with this multi-colored card. (Courtesy of Russell Fieberg).

**THE IMPROVED RADEX
WILL HELP YOUR FRIENDS
TOO!
WILL YOU PLEASE HELP BY
TELLING THEM ABOUT IT?
—The Editor**

When all three are booked on the same program it means a lot of headaches for the studio lighting crew, according to Thomas S. Lee, president of the Mutual Don Lee System, and owner of W6XAO, the only television station in the west.

A brunette's hair absorbs light, whereas a blonde head reflects light. Because auburn hair is in between, tests must be made to determine the degree of lighting required. Hence the owner of red tresses is called a "problem child."

Other terms used are:

Spot: a lighting unit capable of throwing a narrow, intense beam of light on a particular object.

Washed Out: is a term applied to a person's face when too much light causes the features to become indistinct. Too much light overloads the camera tube and shows clothing and hair floating around by themselves because wearer's face and hands are "washed out."

Truck Back: action by the camera when it is moved back for a long shot. To "truck up" is the movement forward for a closeup.

Reports

Some reports received from viewers of the Don Lee television station in Los Angeles:

Roger A. Howell, one of the best known television experimenters in the southwest, is perhaps the most consistent reporter to this station. He has reported, at times, that pictures are received with almost perfect detail and contrast. A resident of Los Angeles, six miles from the transmitter; reports especially good reception of W6XAO since they started using the new Type "D" antenna structure; no fading of the video signal has been noticed, but a little difficulty has been encountered in keeping the oral channel properly tuned in. He uses a Hallicrafter 5-10 Sky rider for sound. This experimenter employs a 14-inch black and white cathode ray tube.

THE RADEX CLUB



At the first fall meeting of the Brooklyn-Metropolitan Chapter of The Radex Club the following officers were elected: George Nahas, president; Robert Blanchard, vice-president; John DeRosa, secretary; Arthur Johnson and Robert Mellor, technical advisors. A membership committee of three was also appointed, Fred Lisanti, Herbert Frenkel and Victor Samardza. Sixteen members were present at this meeting, nearly every part of New York being represented. Eleven of the members were Brooklynites, three from the Bronx, one from Manhattan, and one from Staten Island (Tottenville).

The Irvington Chapter of The Radex Club enrolled two new members at its first fall meeting, and four days later started the season off very auspiciously by entertaining about fifty guests at a card party. While all the members joined in making this affair a success, the efforts of Evelyn Carpenter, Catherine Bosset, Margaret Bossett, John Howe and John Mauris deserve special mention.

Discussions of interest to DXers, demonstrations of communications receivers, instruction and assistance in technical matters, as well as refreshments and social activities mark the meetings of the Radex Club Chapters. Any DXer living in the New York Metropolitan area, or in the vicinity of Irvington-Newark, N. J., is welcome to attend the meetings of these chapters. The Brooklyn-Metropolitan Chapter meets on the last Friday of

every month, usually at the home of George Nahas, 6637 Ovington Court, Brooklyn. The Irvington Chapter meets on the first Monday of every month at the home of the Bossetts, at 870 Sanford Ave., Irvington, N. J.

Membership in The Radex Club is available to anyone who is interested in DXing. There is no charge, and no obligation. Whether you are a subscriber or a newsstand reader, you can become a member of this club simply by making application on a postal card.

V. A. C.

The VAC awards of The Radex Club are "different." A series of six plaques, each different, suitable to hang on the wall of the radio den, is awarded to listeners who verify all continents. But (and herein they are different from other awards), the plaques may be obtained one at a time. If you have verified only one continent, you may get a plaque for that continent. Any DXer who hears a radio station can qualify for at least one of these awards, and they are available whether you tune the broadcast band, the shortwave bands or the amateur bands. And the nominal charge of ten cents each just covers the cost of mailing them to members and returning the verifications which are submitted as required.

To get these VAC plaques, one verification from each continent is required, except that three veries from the continent on which you live are required for your own continent's plaque. Thus, members living in North America can send one verification for Europe, Asia, Africa, South America or Oceania, and three for North America. The three veries from your own continent must be from three different countries.

The Continents

NORTH AMERICA: Includes the countries of Canada, Newfoundland, Greenland, The United States, the Territory of Alaska and all the Aleutian Islands, the countries of Central America, Bermuda, all the countries of the West Indies, i. e., the

Bahamas, the Greater Antilles, the Lesser Antilles, the French West Indies, the British West Indies, but not the Netherland Antilles. In the Pacific Ocean, the Cocos and Clipperton Islands are included in the continent. Through the Bering Sea to the North Pole the continental boundary follows the International Date Line.

SOUTH AMERICA: Includes the entire mainland, and the Netherland Antilles to the north. In the Atlantic Ocean the several islands belonging to Brazil are included, as are the Falkland Islands. In the Pacific Ocean, the Galapagos and the several islands belonging to Chile are included.

EUROPE: Includes, to the north, Novaya Zembla, Spitzbergen and Iceland. In the Atlantic Ocean, the Azores are included. In the Mediterranean Sea, the following islands are considered as European: Sardinia, Balearics, Corsica, Malta and Crete. The eastern boundary of Europe starts in Kara Bay, continues southward through the Obdorsk Mountains, the Ural Mountains and the Ural River, to the Caspian Sea, then through the Caucasus Mountains to the Black Sea.

AFRICA: Includes none of the Mediterranean Islands. In the Atlantic Ocean, it includes the Madeiras, the Canaries, the Cape Verdes, Ascension and St. Helena. In the Indian Ocean, Madagascar, the Seychelles, Reunion, Mauritius, and Rodriguez. Africa's eastern boundary goes through the Suez Canal, the Red Sea and the Gulf of Aden.

ASIA: The western boundary of Asia is the same as the eastern boundaries of Europe and Africa. All the islands in the Arabian Sea are included in Asia, as well as those in the Bay of Bengal. Asia's eastern frontier includes all of Japan, the island of Taiwan and Hong Kong Island. From Taiwan the boundary passes through the South China Sea to Singapore, then through the Malacca Straits to the Bay of Bengal.

(Please turn to Page 34)

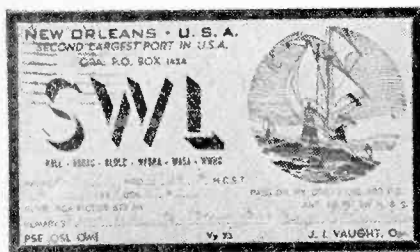
DXer's Picture Gallery



On a recent visit to the Atlantic Coast, Merlin Steen of Decorah, Iowa, visited DXers in every part of the east. He is shown here, on the left, with Jim Walker of Romney, W. Va.



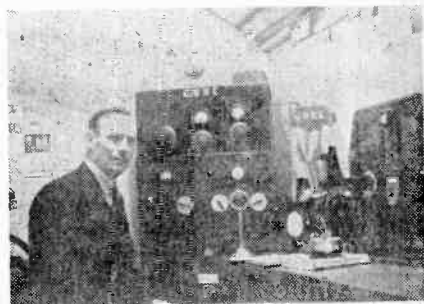
Nicholas Woytan, Syracuse, N. Y., shown with a few of his many veri cards. The cards are from broadcast band and shortwave stations, and amateurs on both phone and CW.



The pretty two-color SWL card of J. I. Vaught of New Orleans. Commencing with this one, we shall print one attractive SWL card each month.



The neat listening post of Ar. Albion of Niagara Falls. The Howard Receiver and the essential RADEX are shown.



This English ham, GRBK, suggests an anecdote (see this month's Ham Hounding), if you don't like his picture. We like it.

ON THE WEST COAST

• • • By ANTHONY C. TARR

As we prepare to write this column for the third month, we are gratified by the increasing number of reports that are being received from RADEX, readers and their swell comments on the column. There seems little doubt but that the West Coast readers have been waiting a long time for something like this and now that RADEX has taken the initiative they are generous with their praise.

Our reporter asked us, "Is the Radex Club only for shortwave DX-ers?" By no means! Anyone interested in radio as a hobby is welcome to join, whether they do their DX-ing on the ultra short waves or the broadcast band or anywhere in between! All that is necessary is to apply to the RADEX editor and you will be enrolled promptly. And please use your membership number when reporting to this column, will you?

ALL TIMES P.S.T. BROADCAST BAND

We are giving the BCB "top billing" this month because it has easily proven to be the "surprise band" of the season thus far. Early one morning in mid September we thought we'd see if the TP's were beginning to break through, and so donned our trusty earphones at about three o'clock preparing to battle the usual high noise level we experience in our location.

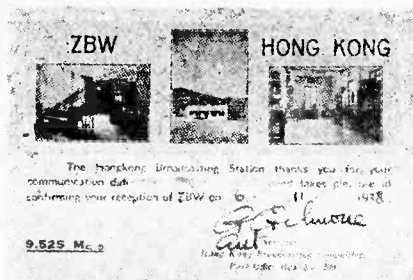
Hardly a sound was to be heard! The almost entire lack of static seemed incredible and we actually thought our receiver was at fault until we fished around for some stations. To our amazement, the band seemed literally crowded with signals from the Aussies and Zedders, many of them pushing the R meter up past the R7 mark at times. To make a

Reporters in the mountain Standard and Pacific Standard Time Zones may send their reports direct to
Anthony C. Tarr
909 W. Lee St., Seattle, Wash.

long story short, the result was about 25 TP signals heard in the space of little more than an hour!

Our most important discovery was 2FC, Sydney, operating with an R7 plus signal on 850 kcs., having apparently moved recently from 610 kcs., on which frequency we never had logged them. Their station announcement was very clearly heard. The most remarkable signal, considering past experience, was an R7 signal from 2WG, Wagga on 1150 kcs., where they have never before been more than a barely intelligible whisper. Our complete list of stations heard follows below, and shows the time each was tuned in (P.S.T.) and the signal strength at that particular moment. Naturally, fading might have been at its peak or its lowest depth on some of the stations when we tuned in, but here they are:

Time	Station	Freq.	Q/R report
3:04	4BC	1120	4/6-7
3:06	2NR	700	5/7
3:06	3YA	720	4/6
3:07	2CO	670	4/6
3:08	2CA	1050	3/4
3:15	4AK	1220	3/4
3:20	3LK	1090	5/7
3:21	4BH	1380	4/5
3:22	2UW	1110	4/6
3:24	2CH	1190	3/4
3:26	3SR	1260	3/4
3:31	3HA	1010	4/5
3:34	4YA	790	4/5
3:35	4QG	800	5/7 plus
3:35	2BL	740	4/6
3:36	3GI	830	5/7 plus
3:38	2FC	850	5/7 plus
3:40	2NC	1230	5/7
3:55	2KY	1020	4/6 plus
3:58	3LO	770	5/7 plus
4:07	4RK	910	4/5
4:09	2GB	870	4/5
4:10	1YA	650	4/6



The Hong Kong broadcasting station ZBW verifies shortwave listeners' reports with this card which shows views of a studio, the transmitter and the aerial. (Courtesy of Jerry Habn).

From the above, we feel fairly safe in predicting that this may prove to be an unusually favorable season for DX. Be sure to keep us posted on what you hear. We are especially anxious to receive reports on South and Central American BCB reception on the West Coast.

Delete the following New Zealand stations: 4ZM, Dunedin, 1010 kc. 4ZC, Cromwell, 1280 kc. (Alan Hutchinson, R 1180, NZ 2).

A letter from CJGX, Yorkton, Sask., asks us to correct their listing in accordance with their official advice that the station operates on 1430 kc. with 1 kw. power. Their schedule on this regional channel is 7:30 am to 11:30 pm daily, and 11:00 am to 11:00 pm Sundays, Central Standard Time.

KTOH, Lihue, Hawaii, will be on the air before February 1, 1940, on 1500 kc. The address will be Box 1748, Lihue, Kauai, Hawaii. Through our reporter, C. J. Fern, Jr., whose father holds the construction permit, they invite ideas for DX programs. Here is a station that will be the most friendly toward DXers of any in the Islands. Let's all show our appreciation by sending in reports!

A query from Victor West, (R 673), San Rafael, Calif., asks why the

veri card from WCKY, Covington, Ky., gives their slogan as "Voice of Cincinnati", and was mailed from that city. It puzzled us for a moment, too, until we looked at our map. The two cities are just across the state line from each other and undoubtedly WCKY derives the greater part of their commercial support from sponsors in the larger city of Cincinnati, where their coverage is greatest. Mr. West also reports verifications received from JOIK, JOAK-1, and 2FC.

Thos. C. Roberts, (R-1139, Wyo. 4), Casper, Wyo., reports on the reception of domestic stations in his locality. Among the calls recently heard were KIRO, KOMO, KFWB, KJR, KIDO, KGER, WIBW, XEAC, NEAF, and KOOS. He inquires about KTW, a station in Seattle operated by the First Presbyterian Church, which seems to be a tough one for DXers. All your editor can say is that they usually sign off at 10 pm, PST, operating only on Sundays and Thursdays. While we understand they do verify reports fairly regularly they have not so far been receptive to suggestions for a DX program which is hardly surprising considering the type of station which this is. Their signal at our location here in Seattle is weaker than any other local station.

RADEXERS REMARKS

"For a long while" remarks L. E. Yarnes, West Linn, Ore., "I've wished someone would pay a little attention to West Coast DXers. I realize that the success of your column depends to a considerable degree on the reports you receive from the West Coasters themselves. I read RADEX regularly and expect to continue to do so."

"I am glad that someone has been appointed to handle the West Coast and hope that you have luck with the column," pens Victor West, (R-673), San Rafael, Calif.

All the old time DXers will remem-

ber Eric Butcher, Cokeville, Wyo., who turned to the Merchant Marine some time ago for fields of adventure. "I am now back in the States again", he advises, "having been in Puerto Rico and Venezuela, but am leaving again shortly. I have a new RME-70 with DB preselector and like it fine." We hope you'll soon return, Eric!

"It is with a great deal of genuine sorrow that my DX-ing days will have to come to a close", writes Warren E. Winkley, Modesto, Calif. "The hobby has been fascinating but the pitter-patter of baby feet make it necessary for me to go to sleep at regular hours—but I'll be back some day!" Warren recalls many of his experiences in years of successful DX-ing and sends his regards to all his old friends. Looks like we'll soon have two DXers down in Modesto!

C. J. Fern, Jr., (R 211, TH 2), Lihue, Hawaii, writes that he now has the amateur call K6RRA. "But", he adds, "I will not devote myself to 'hamming' exclusively as my father wants me to write a DX column for the 'Garden Island', his newspaper."

ULTRA-HIGH

W9XPD, St. Louis, Mo., now on 25.9 mc. with one kilowatt. W2XQO Flushing, N. Y. on 25.5 mc. W8XUJ, Crosely facsimile station on 26 mc. heard well. KQAO, Long Beach, Calif., on 32.1 mc. verifies through the Chief of Police, using 100 watts. Sgt. Henri Kirby, San Jose, Calif. Police Department, Chief Radio Technician, advises the cars of San Jose, Watsonville, Alameda County and Sacramento Police Departments operate on 35.22 mc. with control station KQBR, 31.6 mc. KQBR, Alameda, and WQKB, Evansville, Ind., contact each other daily at noon, PST, on 31.6 mc. (Fern, R 211 TH 2, Hawaii).

Midland Broadcasting Co., Kansas City, Mo. now using W9XER on 42.46 mc. relaying KMBC. W9XYH, Superior, Wisc., intended for service on 26.30 mc. will instead operate on

43.00 mc. with 1 kw power and will begin tests about Dec. 1st. (QSA5, Dryden, Wash)

SHORTWAVES

Australia

The new shortwave station at Perth, Western Australia, will operate on the following frequencies: VLW, 6130; VLW-2, 9560; VLW-3, 11830 kcs. It is anticipated that programs will commence in December. (Honda—Calif.)

Canada

CFVP, Calgary, is now back on the air on 6030 kcs. signing off at 11 pm. (Honda)

Japan

A new station that may be added to the list given in September RADEX is JVZ-2, 11825 kcs. They were heard testing irregularly around 10 pm. (Honda) According to a verification letter received, JIB, 7295 kc. and JFO, 9630 kc. relay JFAK, 750 kc. The message states that they present English news "nightly at 11:55 pm our time." (Equivalent to 6:55 am, PST). They also sent four scenic cards in a beautiful folder. (Harold Satterthwaite—Calif.)

Manchukuo

A new station made its appearance on the air just too late to be included in last month's column. It's MTCY, Hsingking, operating on 11780 kcs., although announcing 11775 kcs. Reports are requested giving full details of your receiver, antenna, comments on programs, etc. The program is directed to the West Coast and Hawaii, they announce, and is heard nightly from 10:30 to 11:20 pm. On some nights they are R8 but on others are practically unintelligible. (RT, and Victor West, R-673, San Rafael, Calif.) They are also on from 6:50 to 7:55 am. (Honda).

New Zealand

The National Broadcasting System plans six new 500 watt stations at Wellington to operate as follows: ZL-1, 6080; ZL-2, 9540; ZL-3, 11780; ZL-4, 15280; ZL-5, 17770; and ZL-6.



A photograph of the transmitter building is sent to reporters as a verification of reception of KTKC in Visalia, California. This attractive building is in typical southwest "adobe" style, with roof beams protruding all around. (Courtesy of Merlin Steen).

25800. (Honda). Station ZZX is reported to be operating on 6060 kc. with 180 watts but your editor has thus far been unsuccessful in logging them.

Philippines

At this writing, none of our reporters are quite sure of the correct call of the Manila station heard nightly on 6140 kcs. It has been definitely established that they are owned and operated by the same company operating KZRM on 9570 kcs., and inasmuch as this is announced during station breaks, it has given rise to reports that such is their call on 6140 kcs. The Quixote Radio Club reports the call as KZRF, and we are inclined to believe this is correct, but that tantalizing last letter still eludes us amid untimely bits of static or fading.

KZ1B, also in Manila, has shifted slightly to 9507 kcs. They were heard at one a.m. broadcasting a basketball game. (Honda).

Thai

That's the new name for Siam, in case you've forgotten, and as such is used by HS6PJ during their Monday morning programs from 5 to 7 am on 19020 kcs. (Honda).

During our first three months of conducting this column, we are deeply

grateful for reports and letters from the following RADEX readers:

THE REPORTERS

RT: Your West Coast Editor
 R21, Sask. 1: Paul Sampson, Regina, Sask.
 R211, I.H.2: C. J. Fern, Jr., Lihue, Hawaii
 R289: Warren E. Winkley, Modesto, Calif.
 R839: William Cunningham, Pasadena, Calif.
 R590: Eric Butcher, Cokeville, Wyo.
 R673: Victor West, San Rafael, Calif.
 R1180, N.Z.2: Alan Hutchinson, Dunedin, N. Z.
 R1213: H. H. Crow, Jr., Sacramento, Calif.
 R1203: D. C. Morrison, Berkeley, Calif.
 R1220, N.Z.3: Arthur T. Cushen, Invercargill, N. Z.
 R1245: L. E. Yarnes, West Linn, Ore.
 Harry Honda, Los Angeles, Calif.
 Graham D. Hutchins, Marybrynong, Australia
 Arthur Mills, Engineer of CJGX, Yorkton, Sask.
 Harold Satterthwaite, Los Angeles, Calif.
 R1139, Wyo. 4: Thomas C. Roberts, Casper, Wyo.

WWV of the National Bureau of Standards verified and also sent a copy of "Radio Publications." . . . HAT-4 at Budapest, after five months, verified with a card of white, printed in red, green, and black. Card is in English, call in large red letters at bottom, and in center of card is a red outlined square with a candid picture of HAT-4 directional antenna. Signals are a good R8. Program consists of classical music, news in English . . . "Radio National" at Salamanca, now at Burgos, on 10370 kcs. verifies by card of solid chocolate color with a picture in white showing Don Quixote heard during the DX contest along with 163 other foreign stations which were logged in a period of 28 hours.) and windmill. "Radio Nacional" printed in chocolate across middle of card. They also send a booklet "Social Help." . . . W9XHW confirms with a typed postcard signed M. A. Guldin . . . A dandy card is issued by OAX4J. It is a double card, borders in red and print in black. Towers and antenna in red on one card bearing call and print in black, and on the other a llama in red poses gracefully as a background for the verification message in black.

HAM HOUNDING

By HUGH HUNTEM



Since we last convened for a session with Hugh Huntem, a war has descended upon this world—nowhere are the effects more noticeable than on the ham bands.

Once the Canadians fought with the Australians and the G stations for clear QSO's. Now all that can be heard is Spanish, as the South American, Central American and Mexican hams find themselves almost sole possessors of the foreign frequencies.

Only an occasional English voice is heard of some lonesome American stuck on one of the small islands in the West Indies, or of some mining engineer down in Chile. How long, must this thing be?

England, France, Canada, Australia, and New Zealand have placed a temporary ban on amateur radio. In fact, all of the British Empire hams have been closed down with the exception of South Africans and in a few minor districts.

T. O. Rocheford, operator of VP6-TR, a ham on the British island of Barbados, tells us that amateur radio was banned there Sept. 1, and that VP6YB is being used as a local broadcast station by the government.

The station is on about 6:15 p.m. every evening on 4.2 and 3.7 megs. Reports will be welcome, advises VP-6TR. More about him later.

From "Radio Amateur", official publication of the Radio Club of Cuba, we note that members are advised to send QSL's under cover if

Those who have this QSL card of Aurora de Franco, who is XE1LK, will probably say that it is the most beautiful they have ever seen. The color is blue, in several varying shades, and the call letters are yellow.

writing to hams in Curacao, Surinam, Yugoslavia, Bulgaria, Ethiopia, Italy, Honduras, or Salvador. The same item states that PJ3CO in Curacao was forced to pay a fine and that stations YU7GL, LZ7VN, YT7KP, and 17AA have been closed down by their governments.

We might also add that there is still a ban on the Palestine stations and reports to them should also be sent under cover.

Conditions have been rather uncertain the past month, but every indication points to better reception from now on. But before we outline the DX situation, let's take a look at a few personalities in the amateur radio field.

VK2AGU—Two brothers operate this well-known Australian station, heard often on 20 meters when there is no war. Their names are Harry and Ken Hatton, and their QSL card is pictured here. The antenna and the rig are shown on the novel QSL. To date the brothers have worked 68 countries on phone, the latest being EA7BA.

The shack is located seven miles from the center of Sydney, where the lowest recorded temperature last winter was about 40 degrees (and he's

not a member of the chamber of commerce, hi-hi's Ken). We thought it got cold down there.

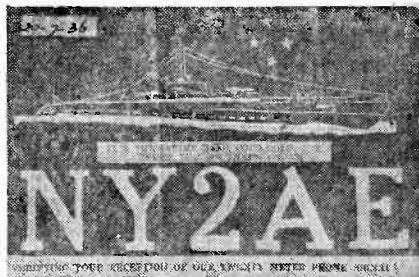
XE1LK—Aurora de Franco is one of the few woman amateurs in Mexico of whom we know. Perhaps being a woman accounts for the fact that she has one of the most beautiful QSL cards that we have ever seen. By all means get her card and inclose postage in your request to make sure that you won't be overlooked. We do not know whether she QSL's for SWL's or not, but her card is worth a couple of tries. It is all blue, with various shades, except the letters, which are a bright yellow. We have reproduced it in this section.

NY2AE—The boys at the submarine base at Coco Solo, Panama Canal Zone, have not been on the air as much as they were a few years ago when they issued the card that is also shown on these pages. Looking through our collection the other day we ran across it and we are still impressed with the novel design.

G8BK—Glen Ottley, operator, is the manager of a radio servicing department that covers half of the west of England. Since he was once an SWL he will answer all SWL reports—providing, of course, that postage is sent. With his photo he penned these words: "I enclose a photograph of my handsome countenance and shack. If it upsets you, have a large whiskey on me!" And although it didn't upset us, we had the large whiskey, anyhow!

Glen's choice of receiver, Philco and Hammarlund. He thinks that our cheaper sets suffer too much from image interference, a great deal of which can be reduced, he believes, by incorporating an IF filter in the aerial circuit.

Because of the cost of printing the QSL cards and because of the great number of reports received by those hams in foreign countries, Bireley Ross, of Austin, Texas, thinks that SWL's should send three interna-



The U. S. Submarine Base at Coco Solo, Panama Canal Zone, is the QRA of NY2AE. The boys send this novel QSL.

tional reply coupons when asking for a QSL!!! He thinks that one should be for the postage, one for the card, and the other for the trouble.

All well and good, Bireley, but how about we poor unfortunates who groan every time we hand out nine cents for just ONE coupon? Let's not speak too loudly of this. It may give the amateurs some mighty bad ideas!!!

Now for a review of the continents. We'll begin with Eurpe, since there isn't much doing over there in the way of ham radio.

EUROPE

While the ham stations of major countries are off the air, some fine DX catches may be made from Sweden, Norway, Hungary, Esthonia, Switzerland, Spain, Portugal, and other smaller European nations still neutral.

Recently WI's were heard calling ES4G and LA6X, both of whom were on 20 meter fone. The QRA of the Esthonian station is not known, but LA6X is Carl Clementz, Solbraaten, Mo pr. Sandefjord, Norway.

YL2CD will again be on the air for SWL's this month. This time he will broadcast on 28.08 megs. at 10 to 10:10 a.m., EST. on Nov. 12 and again on Nov 19 Be on the lookout for him. Should the band be all right you will hear him. His QRA once

more: A. Vitolin, Miera Isla 52-5, Riga, Latvia.

LXISI is reported by many to be on the air nearly every night between 11 p.m. and 3a.m. EST. The QRA is: M. Schiltz, rue de Belval 55, Esch Alz., Luxembourg. He will QSL but SWL's must send international reply coupons.

"Will SVIKL and E12L QSL?" asks Richard Daneker (R1122). He has had reports out to them since the contests in March.

Not many CT stations have been reported, although listeners are still hearing CT2BP in the Azores on 14.13 megs. CT1QA in Portugal was heard recently with good volume.

NORTH AMERICA

VP6TR, mentioned previously, has been on the air since 1934, officially licensed in 1935. Regulations governing VP6's had not been framed in 1934, and he and a few other hams down there were operating with tentative permission.

One day, he relates, the local gendarmes swarmed down on the boys and they were hailed before whatever tribunal they have and fined the staggering sum of \$2.40 apiece. That was the last gesture of law enforcement, however, for immediately afterward the VP6's were granted their licenses.

Rocheford's big thrill of radio came in 1922 when he logged WWJ in Detroit, Mich., and received a verification. It was the first time that any radio broadcast had been verified for an inhabitant of the island of Barbados.

Incidentally, VP6TR reads Radex, and writes that he thinks it a fine business publication. Tnx, T.O.

Down in the Canal Zone there is much agitation for private amateur stations, which are not allowed by the United States government. Only army radio training stations are on the air, operated by members of army and navy and under supervision of signal officers.

Probably the reasons are the spy scares and interference with naval

stations. Although not in the strict sense of the word amateur stations, those government stations follow as closely as possible amateur regulations.

Furthermore, no photographs of these stations are allowed to be sent at present outside of the zone because of the war scare. We don't know whether that rule applies to QSL cards or not, but we have had some reports out to C.Z. stations for a long time—with no QSL's in the few answers we have received. There are about two dozen stations down there with many operators to a station. For example, there are seven ops at K5AG: Sgt. Fuller, Sgt. Hale, Sgt. Poiesez, Sgt. Dubose, Corp. O'Neal, Private Earle, and Private Boynton.

Motto of K5AG is "always on from dusk to dawn." The station belongs to the Radio Section Headquarters' Battery, First Battalion, Second Field Artillery. An average of ten QSO's per day since 1933 is a conservative estimate. Last Christmas, seasons' greetings to relatives and friends of the personnel of Fort Clayton sent numbered over 350. The boys QSL only when postage is enclosed—and then 100 percent.

You may have noticed that Cuban hams have been off the air for some time. The war is not the reason. The answer is furnished by a friend of



The much sought-after card of K6OJI, amateur station in Honolulu. DXers who hear this station must send a dime to get Lani's picture. (Courtesy of Weston Richards).

our's on the island whose name must remain unmentioned, since he and his fellow hams are very much incensed over the ban.

Behind the ban is Cuban Radio Director Juan V. Govea, and although our informant did not give us the reasons behind the move, he did say that the director was hostile to hams, being unfamiliar with the ideals behind their great fraternity. He even thinks that U.S. hams have too many rights!

Our friend cites many grievances: only Americans are allowed to operate since the ban; recent prohibitions on broadcasts banned comments on religion and politics; maximum power allowed is 200 watts to the final;

Cuba is the only country where CW and phone hams have different prefixes (cw hams have the prefix CM; phone hams are CO); and of 25 American countries, Cuba is the only one where a ban is in effect.

Our friend also points out that most of the radio equipment sold in Cuba is manufactured and imported from the United States into the island. He claims that all the hams in Cuba are very bitter because of the ban and have combined forces to fight what they declare is a downright intrusion as far as natural rights are concerned.

Have the tuners on 10 meters heard the two Puerto Rican women amateurs? Last month we printed the QSL card of K4EZR. There is one other regular on the ten-meter band, K4FOW. Her name is Jenny L. Ramirez, and her QRA: 46 Bellavista, Santurce. She is the XYL of K4FAB.

HI6Q has been heard quite frequently on 20 meter fone.

Others heard more or less often in the islands are: VP5AJ, HH2B, HH5PA, HI3N, K4FAY, VP7NH, and VP9L. Some of these are silent now because of the war.

Many have reported that VP7NS has not QSL'ed. About five months ago he told us that he had not ob-

tained any QSL cards as yet but was going to do so and that he would then send everyone he had QSO'ed a card. So either he has not yet obtained any cards or else he is not sending cards to SWL's.

T13AV was heard R9 calling CQ on 40 meter fone. Many of the southern hams are turning to this band for their QSO's.

SOUTH AMERICA

There are two Uruguay stations heard nearly every evening on 20 meter fone: CX2CO and CX2BK. Both roll into the States with an R9 signal when the band is the least bit open. Both are located in Montevideo. Whether they QSL or not is as yet unknown.

CE1BC is being logged again. Many Chilean stations are on 20 meter fone, although not quite as many are being heard this month as last.

The mystery station, SX4C, has finally been identified by a few listeners as being on a ship in the South Atlantic when heard last month. More than that we do not know. If anyone can tell us the name of the ship and operator we would appreciate it very much.

Another station that has bothered ham hounders for some time is ZX4M. This station, we are advised by Victor Samardza of the Bronx, is a portable-mobile unit operated by amateur W9AM, on board an oil tanker which is now returning, or perhaps by this time has returned from the Antarctic, where they obtained whale oil. The station runs a power of 15 watts in the aerial.

OA4AI, OA4AW, and OA4R used to be the regulars in Peru but now OA4C is coming in rather consistently. VP3CO was on the air from Demerara, British Guiana, but we do not know whether the war forced him off the air or not.

LU2BG, Luis Lefevre, states that Argentina prohibits more than 100 watts input to the final, but he has



Rig and 41-foot antenna of VK2AGU, operated by Harry and Ken Hatton, seven miles from sunny Sydney.

worked fine DX with his rig using that much power. He has worked 42 countries on fone, including French Indochina, Japan, Philippines, Australia, Sweden, and Greece. He will gladly QSL providing return postage accompanies the SWL's request.

Has anyone heard a Bolivian station recently? There are only five or six in the country and we know of only one on 20 meters—CP1AA, on 14.00 megs. There are only four stations in French Guiana, but we doubt whether any of the four are on 20 meter fone. We would like some dope concerning this data.

The usual number of Colombian and Venezuelan stations have been heard. HC2HP is the most consistent Ecuador phone, located in the high part of the 14 meg. band.

AFRICA

If you happen to combine the hobbies of stamp collecting and ham hunting, you will certainly profit by writing a Morocco ham. We have received three from that country, and each letter was covered with stamps. There were eight, seven of them different, on the last letter we received, mailed to us by CN8BB. The other easily heard North African ham in this country is CN8BA, who is the brother of French F8VC. Pierre lives in Rabat and brother Jean lives in Paris.

There are six amateurs in Rabat,

writes, CN8BA. Amateurs are regulated from France. There is one broadcast station, "Radio Maroc," on 500 and 25.42 meters.

EK1AF is still being heard frequently.

FQ8AB, Gabriel Duval, may be logged on 10 meters, since he puts a good signal into the United States. He was having a QSO with K4EZR and was evidently heard on the west coast since a W6 called him immediately after K4EZR lost him via the fadcut route.

His QRA is Agent des Chargeurs Reunis, Port Gentil (Gabon), French Equatorial Africa. He is the only ham in this African country.

From the WDXA bulletin we learn that VQ2CM in Northern Rhodesia is on the air every evening at 6 p.m. He is not on very long since it is 2 a.m. over there when it is 7 p.m. here. His QRA: C. Miller, Luanshya, Northern Rhodesia. ZE1JA in Salisbury, Southern Rhodesia, is reported on 14.05 megs.

The South African stations are still on the air. ZS6CJ and ZS6AJ have been heard quite often during the past month.

The South Africans report that ZS4P, the only amateur in Basutoland, will soon be on 20 meter fone, although operating at present on 40 meter cw.

ASIA

UX1AA is the call of a legitimate expedition in the heart of frozen Siberia. C. J. Fern, Jr., of Lihue, Hawaii, informs us. The frequency is approximately 14.09 megs.

Try listening for MX1AM in Manchuokuo. Fern reports that he heard KA1ME calling him a short while ago. Although VS1AE is not in the Callbook, it is believed that he is a legitimate station, since many of the KA's have worked him and have passed him along to some of the W6's, says Fern.

This wide-awake Hawaiian DX-er also reports that J8CI keeps putting a O5R8 signal into the islands. The

Japanese station QSL'ed in five weeks, sending both a card and a photo. The rig, says Fern, is a 6L6, 865, 203A, running 80 watts into a 40-meter Zepp antenna modulated by a 6L6 in Class B.

Reports concerning Asiatic reception in the middle west and east are few and far between. We would like to remind all SWL's that if they log any of the Asiatics let us hear about it. We still are determined to put up another antenna beamed on Asia to see if we can hear some of those elusive catches.

J8CA on 14.396 megs. is reported heard around 8 a.m. by an eastern listener, although it is believed he was using only 20 watts. His antenna is a rotary beam—turned to the United States.

XU8RB in Shanghai is still on the air. He can be heard best between 6:45 and 7:15 a.m., calling K or W stations. The well-known Indian station, VU2CQ, should be logged every Saturday night when the band is right. He is on from 8:30 to 10 p.m., calling America. Reports should be sent to H. Mozoomber, India Radio & Cable Co., Ltd., Radio House, Apollo Bunder, Bombay, India.

FN1C is on every morning at 8 a.m. on 20 meters with a power of 100 watts.

OCEANIA

Now that the New Zealand and Australian hams are off the air, the Hawaiian and Philippine amateurs are heard best. And if you hear K6OJI by all means write him for his QSL card. He charges a dime for it but it is certainly worth those ten pennies. He calls his card "local interference" and it's a breath of old Hawaii!

KA1MM on 14.13 megs. is the station of the 28th Bombardment Squadron at Clark Field, Fort Stattenburg, Philippines, furnished by C. J. Fern, Jr.

Fern also tells one on KF6QKH, heard on 28.55 megs. occasionally.

It seems that he took a tuxedo along when he was stationed on the island, and that there were only four Americans there. All they ever wore were swimming trunks! So they dubbed him "The Mayor of Baker Island."

VK4NK in Port Moresby, Papua, is heard in Hawaii on 14.05 and 14.30 megs.

VR6AY went back on the air Sept. 15, according to a W2USA QST broadcast to amateurs.

KB6OCL in Guam has been reported on 20 meter fone.

* * *

CHATTER: Robert May, even with his new Howard receiver, says that ten meters has been "lousy", but has heard 57 stations in the past two months. . . . NUOA heard in Hawaii from 4-10:30 a.m., EST, but who in the U.S. has heard this station? . . . W2USA broadcasts dope to amateurs from 8:45 to 9 p.m. on Fridays. . . . Winship Taylor (R962) used a bedspring for an aerial and no ground to log TGW on the broadcast band and Bill Wells used a cellar clothesline to log a flock of 20 meter Dx.

Amateur Calls Heard

The calls are listed under the time zones in which they are heard. The names and addresses of persons reporting the stations are indicated by small letters following the call signs. Key to the small letters is given at the end of the column.

EST—10 Meters

K4EZR, K4FAY and XE2AS, by (1).

EST—20 Meters

CE1AC (m); CE1AG (m); CE1AH (m); CE1AM (km); CE1AO (m); CE1AR (m); CE1AS (m); CE3AA (k); CE4AC (k); CN8AM (k); CN8BB (cm); CN8MI (m); CP1BA (k); CT1AY (k); CT1PM (m); CT1PW (k); CT1QA (km); CT1QG (1); CT1QN (k); CT2BP (kl); CX1AA (m); CX1AG (k); CX2BK (k); CX2CO (km); EA7BA (m); ET2L (k); EK1AF (km); HB9AJ (m); HB9DE (c); HB9DO (k); HC1FG (k); HC2CC (k); HC2HP (k); HH2B (kl); HH2HB (k); HH5PA (kl); HI3N (k); HI4O (k); HI5X (k); HI7C (k); HI7G (1); HK1AA (k); HK1AG (1); HK1AK (k); HK3CG (1); HK4DF (1);

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HP1A (1); I1PB (m); I1SM (m); I1TKM (k); K4AOP (k); K4DSE (k); K4EJF (1); K4EMG (k); K4ENT (kl); K4FAB (1); K4FAY (kl); K4FKC (kl); K4FSP (k); K4SA (k); K4UG (kl); K6BNR (k); K6LEJ (k); K6OJI (k); LA1F (k); LU1BA (k); LU1QA (k); LU2AW (kl); LU2HA (k); LU3HA (1); LU4BD (k); LU5CZ (k); LY1J (km); LY1S (k).

NY2AE (k); ON4AM (k); ON4AU (k); ON4BG (1m); ON4DI (cm); ON4HS (m); ON4OU (m); ON4MZ (m); ON4SC (m); ON4UC (m); ON4US (m); OQ5ZZ (k); OZ5BW (k); PA0AD (k); PA0BE (m); PA0DR (km); PA0EO (k); PA0FB (k); PA0GN (k); PA0MQ (m); PA0MZ (km); PK6XX (akl); PY2AC (k); PY2BH (k); PY2DA (k); PY2GC (k); PY2KT (k); PY3DZ (k); PY7AE (k); SM5KP (k); SM6VE (k); SU1ME (km); SU1RD (k); SV1CA (k); SV1KE (k); TG5JG (k); TG9AA (k); TG9BA (k); VK2ABG (j); VK2ADE (k); VK2ADT (1); VK2ADU (k); VK2AEN (k); VK2AGD (1); VK2-AKK (k); VK2NS (k); VK2UC (kl); VK2YO (1); VK3BZ (1); VK3DG (k); VK1IG (1); VK3KU (1); VK3KX (KL); VK3VP (1); VK4CW (k); VK4JP (1); VK4KH (1); VK4KO (1); VK4KS (k); VK4VJ (k); VK5BF (1); VK5CS (j); VK5GS (1); VK5RQ (1); VK7CL (j); VPIWB (1); VP2LC (1); VP3CO (ackl); VY3LF (k); VP5PZ (1); VP6FO (kl); VP6LN (ckl); VP6MY (k); VP6TR (1); VP6YB (kl); VP7NH (k); VP7NS (kl); VP7NU (kl); VP9L (1); VR6AY (a); YN11P (kl); YR5AA (k); YV1AP (1); YV1AQ (kl); YV3AQ (kl); YV4AA (k); YV4AE (kl); YV4AL (k); V5BF (akl); YV5(BQ) (kl); YV5AE (1); YV5AJ (kl); ZS4H (k); ZS5BZ (k); ZS6AJ (m); ZS6BW (m); ZX4M (k).

CST—Ten Meters

K4EZR (f); K4FOW (ef); K6MVV (ef); K6OOM (e); K6PIZ (f); K6POR (f); K6QLG (e); K6QNX (e); K6RVG (e); T12FG (f); VP5(J) (f); VP6YB (f); YN-3DG (f); ZL4IR (f).

CST—Twenty Meters

CE1AC (d); CE1AR (e); CE3AG (f); CE3DW (e); CT1PK (f); EA9G (f); EK1AF (ef); HC1FG (f); HC2HP (f); HH2B (de); HH5PA (f); H13N (ef); HK1AG (f); HK3CG (f); IK3CK (d); HK4DC (de); IIP1A (f); KA1HF (f); KA1LJ (f); KA1ME (d); K4EJF (d); K4FAY (f); K4FKC (e); K6BNR (d); K6IAE (e); K6IIV (e); K6LCV (e); K6LEJ (e); K6NYD (f); K6OJI (e); K6PTV (e); K6QMT (e); LU1QA (ef); OH2QN (f); ON4BO (f); PA0MV (f); PA0MZ (d); PK6XX (f); SX4C (f); T1G9BA (f); T12GC (e); T12PG (f); T12RC (d); T14AC (e); VK2ADU (d); VK4JU (f); VK4KH (f); VP1WB (f); VP5PZ (d); VP7NH (f); VP9L (f); YN11P (f); YVAC9 (f); YV1AP (e); YV1AQ (e); YV4AE (de); YV5ABF (f).

MST—Twenty Meters

HC1FU, KA1FB, KA1JM, KA1ME, KA-20V, KA4IL, KA7EF, K7AOC, K7GSC, T12FC, VK3WA, all reported by (g).

PST—Twenty Meters

K4FAY, TG5JG, TG9BA, VK2IG, VK3-JF, VK4JP, VPIWB, reported by (b). VK3XN, VK3ZT, VK4AB, VK4FN, VK4-GG, VK4GS, VK4HG, VK4RJ, VK4SA, VK4VD, VK4VJ, VK4WS, VK5BF, VK5BG, VK6WO, YV4AE, ZE1JX, ZS2-AH, ZS2AV, XS2BI, ZS4H, ZS4L, ZS5AG, ZS5AW, ZS5BJ, ZS5Q, ZS6AD, ZS6AJ, ZS6DJ, all reported by (i).

The Reporters

- (a) Robert Blanchard, Brooklyn, N. Y.
- (b) Elwyn C. Covey, Napa, Calif.
- (c) Richard Dancker, Lansdale, Pa.
- (d) Lewis Hill, Maywood, Ill.
- (e) Ralph Kastner, New Braunfels, Texas
- (f) Robert W. May, Rome, Ga.
- (g) Ken Munn, Albuquerque, N. Mex.
- (h) George Nahas, Brooklyn, N. Y.
- (i) William Pieper, Los Angeles, Calif.
- (j) Bertram Podall, Gilman, Vt.
- (k) Winship Taylor, Baltimore, Md.
- (l) Walter E. Welch, Lynn, Mass.
- (m) Wm. Wells, Hamilton, Ont., Canada

You'll Want These Issues

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This Hobby Called DXing, in Jan. 1939.

When Radio Sets See Spots, and what to do about, March 1939.

When Radios Get The Jitters, and their cure, June 1939.

Television is Here, in June, 1939.

Canada's Friendly Station - CFCO

By JACK BEARDALL

If there is a truly Community Radio Station anywhere in the Dominion of Canada, officials of the Canadian Broadcasting Corporation would probably direct your attention to CFCO at Chatham, Ontario, which has been built up to become one of the finest local stations in the dominion through the guidance and development of Jack Beardall, a radio enthusiast whose activities in radio date back to 1922.

It was in the fall of 1928 when Mayor Milo J. Smith first gave public utterance to the splendid work being carried on in an experimental and community way by Jack Beardall and suggested in the council meeting that recognition should be given to these excellent efforts by a modest financial grant, and the council on that night voted a \$50.00 grant to help defray some of the expense and to pay the government license to carry on the experimental work which was attracting widespread interest in Western Ontario. From that time to the present, CFCO has received an annual grant from the city Council, the only station in the dominion to receive such a continuous favour from a civic body.

The first experiments were conducted in 1922 when an amateur experimental license was granted under the call letters of VE-3AEO. The transmitter operated under this license was very modest, being a 201-A tube with 6 volts on the filament and 45 volts on the plate and messagess were sent to nearby neighbours which caused a great thrill in the city.

In recognition of the experiments conducted by young Mr. Beardall a special experimental license was issued in his favour by the department in 1925, known as VE9AT, which in those days carried with it a special privilege to broadcast experimentally on 275 metres (at that time all broadcasting was done on 360 and 400 metres). However, in 1926 by international agreement, the broadcast spectrum was reallocated to its present form and the 275 metre length was allotted for commercial use; therefore young Beardall's experiments on 275 metres were withdrawn and an amateur broadcasting license on 250 metres replaced the privilege surrendered on 275, and the new form of license known as 10BT was organized as a radio club known as "The Western Ontario — Better Radio Club", of which Mr. Beardall was the president and mechanical head. Two other local gentlemen, Mr. Con E. Shea who acted as secretary-treasurer and Mr. Victor R. Weatherhead as musical and program director assisted the president. The club continued to grow year by year until in 1929 it became the largest radio club ever organized in the dominion, with over 2000 paid-up members, not only from South Western Ontario but a large number were included from the States of Michigan, Pennsylvania and Ohio. One of the main features of the club was its regular Sunday morning broadcasts which varied as time went on from 9.00 to 11.00 a.m. for a one hour period during which the president read mail from the radio fans and answered questions relative to radio problems and as a result received newspaper recognition in all the principle newspapers in Western Ontario because of the excellent service rendered to rural listeners who at times got into difficulty with their radio equipment and because



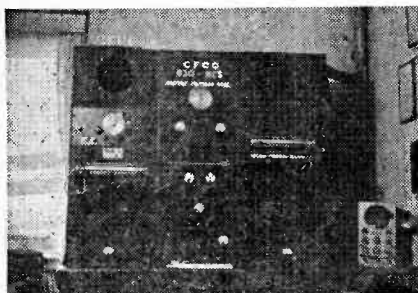
John Beardall conducting one of the regular Radio Club broadcasts over CFCO, from "B" studio, during which RADEX is often quoted.

of the lack of radio service men, were able to adjust many of their troubles by following advice given over the air. These radio club broadcasts are still carried on to this day during the period of the year when standard time is observed, the summer months being taken advantage of for vacation purposes. The Chatter Period has now passed it's 14th Anniversary of continuous operation and is one of the oldest programs on the Canadian airwaves.

In November 1927 the station broadcast the first Salvation Army Open Air Service ever broadcast in Canada. Just ten minutes before the announced time of the open air service, a terrific rain storm began but so enthusiastic were the Salvationists as well as the radio club officials, that the service was carried on in the pouring rain, completely drenching those who took part. The microphone which at that time was an ordinary telephone mouthpiece had to be placed in a waterproof box.

The real commercial expansion of the station began in 1928 with the station surrendering its amateur broadcasting license in favour of the present commercial license known as CFCO, with a power of 15 watts. Soon after that, a studio of the early type was erected in the basement of young Beardall's home but things began to grow and in 1929 the station moved into the spacious William Pitt Hotel where it still occupies dignified quarters consisting of a main studio on the mezzanine floor and a "B" studio, transmitting room, business office and news department on the fourth floor of the hotel. On top of the hotel can be seen for some considerable distance, the two sixty-foot masts which hold the aerial and are 110 feet above ground level.

CFCO's network connections date back to 1929 when it was first added to Canada's



Main input panels and amplifiers used in connection with VE9HU, in control and transmitter room in William Pitt Hotel. Shortwave receiving equipment is also shown.

pioneer network, the Canadian National Railway's chain of stations. In 1929 the station became a member of the Canadian Association of Broadcasters and has been active ever since in that organization and in 1937 Mr. Beardall was elected one of the six directors of the Association, which is Dominion-wide, as representative of the 100 Watt or local stations.

During the next five years the station progressed steadily and conducted each winter, DX programs which ran from midnight until sunrise, in an effort to ascertain the efficiency of the station's equipment and the response of the audience. Out of some ten or twelve DX programs which were held about six weeks apart the mail often exceeded 2,000 letters per broadcast. Reports were consistently received as far away as New Zealand and the prize for the most distant report was a \$5.00 gold piece which went to New Zealand on every occasion. The station still has over 20,000 letters received during these broadcasts which are contained in a bathtub in the transmitting room on the fourth floor of the hotel.

When the Canadian Radio Commission was first formed, CFCO was one of the Charter Members of the network and as such has carried all the Christmas Day speeches and Empire Broadcasts of King George V, and all royal broadcasts including those of the present King's tour in Canada and the United States. The most important broadcast which has ever been carried by the station was its participation in the CBC's special Christmas Day broadcast in 1937 when CFCO furnished a seven and one-half minute program of "How the People of this District Spend Their Christmas Day," which was not only fed to the National network of the CBC from the Atlantic to the Pacific but which was also relayed by shortwave to the BBC in the British Isles and to all parts of the British Empire, a distinct honour which is enjoyed by only a very few privately owned stations in the dominion.

In 1932 the station installed remote control broadcast equipment in the city council chambers and broadcast the inaugural ceremonies and address by the incoming mayor and from that time to the present, CFCO

performs this civic duty each year. During the municipal election period each year, the station permits every candidate to present his views briefly, without charge, and on election night, December 1st, the station is turned over to the civic authorities for the announcing of the voting results and brief speeches by both the victors and the vanquished. The same procedure is also carried out when the county council holds its election on New Year's Day.

Considerable time has also been devoted to local sports including the broadcasting of hockey games, baseball, basketball, tennis, curling and lawn bowling. The station has often been quoted as the "Sports Station of Western Ontario."

CFCO also works in close conjunction with the city and provincial police and during the past twelve months has given out fifty police notices, rendering valuable assistance in the capturing of criminals and locating missing persons.

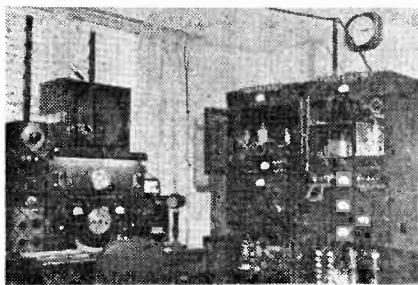
CFCO is one of the few stations which at present devotes ninety percent of its time on Sunday to religious organizations at low rates. The station has its own wire system around town and has permanent wires into eleven churches and in thirteen other public places, the total comprising more than ten miles of lines.

Today CFCO operates eleven hours daily and devotes a lot of its time to the particular interest of the rural listeners and has the oldest Farm Hour Program in Canada, running from 12.00 to 1.30 daily, during which time farm hints, government bulletins on agriculture, and hillbilly music are featured. The station carries Transradio World-wide Press Service and has its own local news editor giving four local and world newscasts daily. The Dominion Meteorological Department telegraphs the official weather report twice a day to the station for the farmers of South Western Ontario. The station is closely connected with the CBC's National network as well as the newly formed Subsidiary network of private stations supervised by the CBC. The station's mechanical equipment is of the very latest order and operates at 100 Watts on a frequency of 630 Kcs. and has duplicate speech input equipment capable of handling four different programs at one time. CFCO was one of the first 100 Watt stations in the dominion to operate actively an up-to-date mobile shortwave broadcast unit which is often seen in uptown sections of the city broadcasting street scenes, community undertakings and fraternal and social activities. The special licenses for this portable transmitter is VE-9HU and has four different wavelengths which can be used according to circumstances and conditions surrounding the broadcast. This special license was granted by the Department of Transport two years ago.

In 1925 the Department realized the necessity of having a Dominion Governmental Part-Time Radio Inspector to serve Chatham and the surrounding district and Mr. Beardall received the appointment a position which he has continuously held for the past fifteen years.

During the hours of recreation, Mr. Beardall puts in most of his time at his home where he has one of the finest amateur transmitting and receiving stations in Western Ontario and since the experimental license VE9AT was not required for broadcasting purposes after the commercial licenses were

issued, the use of VE9AT has been devoted to amateur activities and today the voice of VE9AT is a familiar one in the twenty metre band and has created many good friends in such far away places as Australia, New Zealand, South Africa, the British Isles, Portugal, France, Hawaiian Islands, British West Indies, Brazil, Argentina, Chile, Peru and many other foreign countries as well as from coast to coast in Canada and the United States. A special radio room at Mr. Beardall's residence contains the 20 metre transmitter capable of an input up to 1 KW and a second transmitter which has just been completed for operation in the 80 metre phone band with 200 Watts input. The receiving equipment consists of a Super Skyrider SX17, a Hallicrafter frequency standard Type HT-7, a Triplett 1295 modulation and phase shift metre and the latest type coaxial vertical antennae which is mounted on top of a sixty-nine foot hydro pole. All the equipment is of the very finest type and is partly responsible for the excellent results obtained through its operation. Both transmitters are remote control operated and all equipment is automatic, being controlled by relays, and all metres on both transmitters are illuminated and housed in standard nineteen inch racks, six feet high. The walls of the radio room are adorned with certificates, maps and charts of special design for radio use, and over three hundred QSL cards received from some forty different countries with whom conversations have been held and twenty out of forty world DX zones, worked exclusively on twenty metre phone. Hundreds of SWL cards have also been received from Australia, South Africa, British Isles and South America, all of which have received a VE-9AT QSL card in return.



VE9AT, 14 megacycle amateur phone station owned by Jack Beardall of Chatham, Ontario. This equipment is all of the very latest design, and the station is one of the best known amateurs on the continent.

Back to DXing

"I have been more or less active in DXing since 1934," indicates Ken Smith, Portland, Ore. "In 1935 I was a member of the Canadian Radio Club. From the latter part of 1936 to last fall, I was working away from home and didn't have a chance to do much listening. When I started up again last fall, I bought a 1938 9-tube Zenith, and with this I have built up a log of 371 stations. Best of these were WKNEL, WKAQ, WLAK and WNLC. Latest verie to be received is from CFGP, Grand Prairie, Alta., and it certainly is a nice confirmation for my file."

Cleveland's Police Radio

The largest and most modern two-way police radio system in the world has been installed by the Cleveland Police Department to provide communication facilities for all parts of the city and for the police departments of its 56 suburbs, covering an area of 600 square miles. The system, consisting of RCA equipment, will include three powerful transmitters, and two-way equipment in nearly every police car in the area. With Cleveland and its suburbs all connected by one radio system, all incoming calls can be handled immediately without going through several intermediate communication channels, and in many cases a police car is dispatched before a telephone caller hangs up his receiver. As a patrol car is within three eighth of a mile of any point in the city at all times, it takes but a few seconds to summon cars to emergency or routine assignments at any time of the day or night.

HIGH FREQUENCY GLOBE TROTTING

By Ray La Rocque

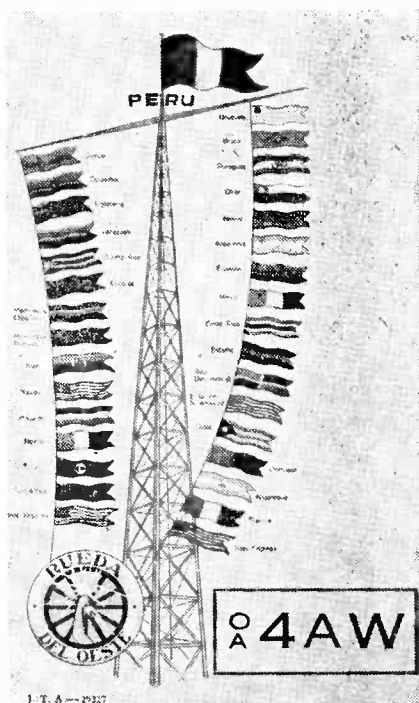
G. R. Jewell Jr.	100%
Robert Skyten	39%
Jack Wells	25%
Mrs. R. S. Roche	24%
Enrique Hidalgo	10%

You'll find the Alabama contingent of our RADEN Club back in action this month with the result that Bob Skyten finished second to Radexer Jewell of Alabama. Jack Wells, who also does his DXing in Alabama finished third, not too far behind Bob. The rest of the meter, this month, is made up of representatives from outside the U.S.A. Mrs. Roche of South Africa and Senor Hidalgo of Cuba occupy the other two choice spots.

NEWS IN ENGLISH

R. W. Davis, West Allis, Wisconsin: "In view of the chaotic state of world affairs today the news in English broadcasts from the several countries of the world is especially important, realizing, of course, that each nation in general dresses the broadcast to suit its own propaganda. By listening to the broadcasts from the several important nations of the world the listener can arrive at a fairly accurate overall estimate of the facts in spite of the censorship imposed by the several governments. I believe, therefore, you would be contributing much to the proper interpretation of world news and events if you would list news broadcasts as radioed from short wave stations in all important countries."

With the war in Europe going into its third month, broadcasting conditions in the various countries involved is becoming more stabilized and a schedule of newscasts in English can be depended upon with a little more assurance than previously. We have compiled a list of news programs in English from several coun-



A Rueda del Oeste card, from O4AW of Peru. The Rueda del Oeste cards are all identical, except that the flag of the country from which it comes is always on top. Thirty-three countries are represented on this card, with their flags all in natural colors. (Courtesy of W. O. Richards).

tries from the reports of various DXers and from the stations themselves.

FRANCE—"Paris Mondial" on 9680 kcs. at 12:30 a.m.

"Paris Mondial" on 15243 kcs. at 1 p.m.

"Paris Mondial" on 11885 kcs. at 10 p.m.

GERMANY—DJD on 11770 kcs. and DJB on 15200 kcs. at 6 and 8:15 p.m.

DJL on 15110 kcs.
and DXB on 9610 kcs. at 4:15 p.m.

GREAT BRITAIN—GSD on 11750
kcs. at 11 a.m. and 8:15 p.m.

ITALY—12RO-3 and 12RO-4 on
9630 and 11810 kcs. at 1:19 p.m.
12RO-9 on 17820 kcs. at
6:16 p.m.

CHINA—XGX on 11900 kcs. at
6:15 p.m.

XGOY on 11950 kcs. at
6:15 a.m.

FR. INDO CHINA—"Radio Sai-
gon" on 6166 kcs. at 6 a.m.

YUGOSLAVIA — YUG on 9505
kcs. at 4:15 p.m.

U.S.S.R.—RAN on 9600 kcs. at 7
p.m.

HUNGARY—HAT-4 on 9625 kcs.
at 7:30 p.m.

It must be remembered that any of
these schedules can be and often are
changed upon a moment's notice. We
thank the following for the above
items: Jack Wells, Robert Skyten,
George Jacobs.

ASK US ANOTHER

Matthew Leshner, R757, 181 Bailey
St., Lawrence, Mass., asks about the
new German station heard just below
2RO-3 at 8:15 p.m. States R757, "I
was unable to get the call or any
particulars other than that they gave
news in Spanish followed by musical
selections. Then came news in Ger-
man." (The station is DXB, appar-
ently an experimental Berlin frequ-
ency—RL) "Is JIE on 7290
kcs. still on the air, and who is heard
with Oriental music on 7500 kcs.?"
This is the query of Mrs. R. S.
Roche, 81 Smith St., Aliwal North,
South Africa. . . . Bob Wilson, 69
Grant St., Portland, Maine wants to
know who the GS station is on 17000
kcs. in the evening with R9 signals?

In answer to Dick Neller, 8655 Ri-
vershore Drive, Niagara Falls, N.Y.,
we'd like to say that the station heard
just above DJQ broadcasting Hindu
music was actually broadcasting that
type of music. It was VUD-4 at
Delhi on 15290 kcs. . . . J. R.
Hahn, 108 S. Balch St., Akron, Ohio
asks, "As a favor to an old corres-
pondent and contributor to your mag-
azine, can you help me in indentifying
a station in Caracas, Venezuela
that is nearly driving me nuts. My
call book lists WWV at 5000 kcs.
with the standard frequency trans-
missions. This one in Caracas comes
in just above 5000 and should be
about 5002 or 3. The first part of the
call is YV5R (?) but it is impossible
to catch the last letter." (YV5RK is
the station—RL)

"Is the station on an announced
frequency of 6116 kcs. Radio Praha?"
That is the puzzler sent by Jim Wal-
ker of Romney, West Virginia who
states that it was heard at 6 a.m.
with the latest news in English and
American tunes. . . . Robert Sky-
ten, Podunk Rd., East Brookfield,
Mass., would like someone to identify
an unidentified Chinese station on ap-
proximately 7960 kcs. heard around 6
a.m. with fairly strong signal but
with very poor quality.

QUOTE AND UNQUOTE

Frank Gravely, Martinsville, Vir-
ginia: "I read RADEX as often as
I can get a copy. My best catches
include at least 100 U.S. stations,
two Mexicans and three Canadians.
My best foreign catches include
EAQ, VLR, PCJ, HP5G, ZNS,
TIPG, and London, Rome, Paris Ber-
lin Warsaw, and Guatamala."

ULTRA HIGH

W1XKA 42220 kcs. in Boston is
operating with frequency modulated
signals. They have a decidedly dis-
torted signal on ordinary type receiv-
ers. (Simpson—R1253, Mass., and
Horton, Mass.)

W1XOJ on 43000 kcs. in Paxton,
Mass., heard on this channel. Signal

strength is high but very distorted as is to be expected on a standard receiver from a frequency modulated type of broadcast. (Simpson—R1253, Mass.)

W1XZR on 31220, 25620, 37020, 39620 kcs. are used as relay stations by WLAW in Lawrence, Mass. 31220 kcs. was used to broadcast the raising of the Squalus, but W1XRZ was not the call used. (Leshner—R757, Mass.)

NOT SO SHORT WAVES

CZ71 and CZ7J heard on 2250 kcs. recently. Can anyone supply the type of service and QRA of these stations? (Schwartz—Bronx, N.Y.) CZ71 is at Tareau, P.Q. on 2238 kcs. and CZ7J at Shawinigan Falls, P. Q. on 2014 kcs. Both are owned by Shawinigan Water and Power Co.—Editor

The following coast guard stations work on 2662 kcs: NMD at Cleveland, Ohio; NMW at Grays Harbor, Wash.; NMV at Jacksonville, Fla.; NMG at Mobile, Ala. NMN at Princess Anne, Va.; NMY at Rockaway, Pt. N. Y.; NMC at San Francisco; NMH at Washington, D.C.; NMP at Wilmette, Ill.; NMF at Winthrop, Mass.; NOB at Buffalo, N.Y.; NOV at Cape May, N.J.; NOL at Ft. Lauderdale, Fla.; NOY at Galveston, Tex.; NNO at Honolulu, T.H.; NNS at Los Angeles; NOU at New London, Conn.; NOQ at New Orleans; NNJ at Oakland, Calif.; NOJ at Pt. Vicente, Calif.; and NNW at Seattle, Wash. (Schwartz—R1109, N.Y.)

WYFF and WYFG on 2738 kcs., two Army stations, were heard and believed to be operating portable in Oswego, N.Y. They were heard at 10:09 p.m. calling WYFS "Gulf Stream" and at 12:45 a.m. calling WYFG and E.

VCCI) the "Alberta" and VGQT the "Athabasca" on 2182 kcs. heard at 8:45 p.m.

NZMCP on 3385 kcs., the navy blimp "TG-14", 11 miles south of New Haven heard at midnight in contact with NEL at Lakehurst,

N.J. who were on the same frequency.

Coast Guard stations "Mahoney" and Cutter "Nansemond" and "Walnut" heard on 2670 kcs.

On 2738 kcs. the following ships were heard: KFKW, yacht "Spray III"; KJCI "S.S. Back Bay"; KJMN "Henry Steers"; KLON yacht "Elinor"; KLSK yacht "Dawn III", WDGT dredge "Indiana" and WM-BC "Olive K." (All above from Roman—III.)

SHORTWAVES IN REVIEW

Argentina

LRA on 9695 kcs. is putting in a signal of R7-8 nightly. Very good orchestra music.

LRX on 9660 kcs. is being heard again with a much stronger signal. Address: Radio El Mundo, Calle Maipu 555, Buenos Aires. They verify by card (Jewell—R834, Ala.)

LRU on 15290 kcs. excellent this month from 9 a.m. (Roche—South Africa)

Australia

VK3ME on 9500 kcs., and VK2ME on 9590 kcs., as well as VK6ME on 9590 kcs. have not been heard since the start of the war in Europe. (Skyten—R786, Mass.)

VLR on 9580 kcs. at Melbourne is still being heard daily with a strong signal. They now verify by card which is white with black lettering. Mailing address: Australian Broadcasting Commission, G. P. O. Box 1686, Melbourne, Australia. Robert C. McCall is Mgr. (Skyten—R786, Mass.; Wells—Ala.; and Jewell, Ala.)

VLW, a new station to be located at Wanneroo, Western Australia, will operate throughout the day (Australia Time) on the following three frequencies: 11830 kcs., 9560, and 6130 kcs. with 2000 watts. VLW will relay, for the most part, programs from station 6WN. Station is scheduled to come on the air in four months according to the March issue of the Broadcaster. (Walker—W. Va.) (VLW was officially scheduled to go on the air May 4, 1939—Editor).

Brazil

PSH on 10220 kcs. at Rio de Janeiro using 12000 watts is still coming through with R7-8 signals each Monday with their half hour English program. Program consists of Brazilian popular music and talks of Brazil and news. Program opens and closes with the Brazilian National Anthem. Mondays from 8-8:30 p.m. Address: Cia. Radio International do Brasil, Caixa Postal 709, Rio de Janeiro.

PRA-8 on 6010 kcs. at Pernambuco verifies by blue and white card. Signal is about R-4. Address: Radio Club of Pernambuco S.A., Pernambuco, Brazil. (Jewell—R834, Ala.)

British Guiana

VP3BG on 6130 kcs. at Georgetown broadcasts daily from 10:30-11:30 a.m. and from 4-8 p.m. VP3BG puts in a fair signal—usually about R5. Address is British Guiana United Broadcasting Co., Ltd., P. O. Box 11, Georgetown, British Guiana. Verifies promptly with black and white card. (Jewell—R834, Ala.)

British Honduras

ZIK-2 on 10600 kcs. at Belize was heard on that frequency for the first time in several months on Sept. 21 with R7 signal. (Jewell—R834, Ala.)

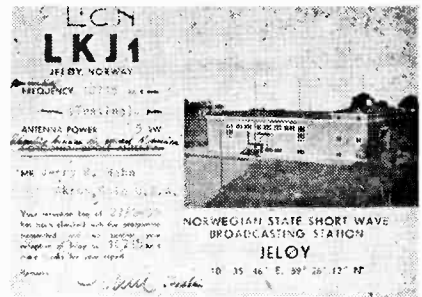
Canada

CHNX on 6130 kcs. at Halifax, N.S. is on the air with a mail bag program twice every Sunday at 4 and 9 p.m. Address is: The Maritime Broadcasting Co., Ltd., Lord Nelson Hotel, Halifax, N.S. Verification card is peach and black.

CJRX on 11720 kcs. at Winnipeg is a 2000 watt station owned by James Richardson and Sons, Ltd. Has an R7 signal. Verifications are black and white and signed by M. Mitchell. (Jewell—R834, Ala.)

Chile

CB960 on 9600 kcs. at Santiago has been heard as early as 6 p.m. somewhat off the published schedule. During the recent heavy magnetic storms, CB960 was regularly R9 at 6:30 p.m., while the nominally louder



A verification from the Norwegian shortwave station. (Courtesy of Jerry Hahn).

Europeans were weak and fading. (Wells—Ala.)

China

XGX on 11900 kcs. at Yunnan (not Chungking) is the new call and location for XGOY. They come on the air at 5:30 a.m. with news in English at 6:15 a.m. They announce as "This is Yunnan, China, operating on 25.2 meters, 11.9 megacycles." (Skyten—R786, Mass.)

NMHA on 11855 kcs. heard very weakly. They are better from 9 a.m.

NPSA on 7010 kcs. are heard with good signal from 10 a.m. (Roche—South Africa)

Colombia

HJ3CAX on 6012 kcs. at Bogota operates officially from 10:30 a.m. to 2 p.m., 5:30-11:30 p.m. Sundays from noon to 1:30 p.m. and 6-11 p.m. Signal is R7-8. Colombian and popular American music are featured. Address: "La Voz de Colombia", Apartado 26-65, Bogota. Verifies by card in red, white, and blue with Statue of Liberty on the face of the card. Sign off with the "Indian Love Call." (Jewell—R834, Ala.)

Costa Rica

TJPG on 9610 kcs. is broadcasting an English hour every Wed. and Sat. from 9-10 p.m. called "The Hour of Costa Rica." TJPG puts in a very strong signal. Programs are also

worth hearing. Address: La Voz de La Victor, Box 225, San Jose.

TI2XD on 11920 kcs. issues an attractive veri of peach printed in black and red call. Card is signed by Sr. Carlos E. Rodriguez—"La Vox de Radio Pilot", P. O. Box 1729. (Jewell—R834, Ala.)

TI4NRH on 9690 kcs. at Heredia frequently tests with 20 meter amateurs at 1 a.m. and plays phonograph records. (Wells—Ala.)

Cuba

COCE on 12230 kcs now, and COCX is on 11753 kcs. and COCA on 9700 kcs. after recent changes.

COHI on 11800 kcs., or somewhere close to that frequency, will be a new station in Santa Clara, Cuba using 5000 watts and relaying broadcast band CMHI (Hidalgo—Cuba).

Denmark

OZF on 9520 kcs. at Skamlebak is a 6000 watt station located 50 miles northwest of Copenhagen. They are heard with R8 signal from 9:30-11 p.m. They sign off with town clock striking 5 a.m. Program consists of classical music and talks. Verifies by white card with Denmark printed in red. (Jewell—R834, Ala.)

Fiji Islands

VPD-2 on 9535 kcs. at Suva went off the air at the beginning of the war along with the Australian stations. VPD-2 is operated by Amalgamated Wireless. (Skyten—R786, Mass.)

Finland

OFD on 9500 kcs. at Lahti is often heard in the afternoon with strong signal over-riding XEWW, Mexico City until sign off at 5 p.m.

OIE on 15190 kcs. at Lahti, was heard with program in English at 4:30 p.m. Station identification for all stations announced as: "Lahti, Soumi." Other Finnish stations are: OFE—11780 kcs., OIH—17800 kcs., OII — 21550 kcs. (Skyten — R786, Mass.; and Jewell—R834, Ala.)

France

Latest official schedule:

TPA-4 on 11718 kcs. from 8:30-11

p.m. (No. and Cent. America) and 6-8:15 p.m. (So. America)

TPA-2 on 15243 kcs. from 5-10 a.m. (East and Far East).

TPB-3 on 17850 kcs. from 8:30-10 a.m. (East and Far East).

TPB-6 on 15130 kcs. from 1-4 a.m. (East and West Africa)

TPB-11 on 7280 kcs. from 10:15 a.m. to 12:45 p.m. and 1-5:15 p.m. (East and West Africa)

TPB-11 on 11885 kcs. from 8:30-11 p.m. (No. and Cent. America)

TPB-12 on 11885 kcs. from 6-8:15 p.m. (South America)

(RX)

"Paris Mondial" on 9680 kcs. is one of the first 100 kw. transmitters to go on the air. The signal is excellent. They broadcast for South America from 6-7:45 p.m. and then to North America from 8 p.m. along with TPB-11 and TPA-4. (Skyten—R786, Mass.; Jewell—R834, Ala.; and Wells—Ala.)

French Indo China

"Radio Saigon" on 6166 kcs. heard daily at 6 a.m. with news in English announced by a lady. The signal is very strong.

"Radio Saigon" on 11780 kcs. is heard quite regularly with good signal from 6:30-6:45 a.m. with program in English. Reports sent to "Radio Saigon", P. O. Box 412, Saigon, Fr. Indo China. (Skyten—R786, Mass.)

Germany

DXB on 9610 kcs. at Berlin heard daily at 4:15 p.m. with news in English. Also heard in the evening. Another DJ station on 9700 kcs. heard in the evening near 7 p.m. broadcasting to Latin America and using Spanish only. (Podall—R946, Vt.; Skyten—R786, Mass.; and Wells—Ala.)

Great Britain

GST on 21550 kcs., "T for Transmitter", at Daventry is heard mornings until noon, along with GSH on 21470 and GSJ on 21530 kcs. on the 13 meter band. (Skyten — R786, Mass.)

GSW on 7230 kcs. at Daventry is a new BBC station being used lately in the first transmission. (Jewell—R834, Ala.)

Guatemala

TGWA on 9685 kcs. broadcasts a special concert dedicated to the people of the United States and Canada from 10-11:30 p.m. every Monday, Tuesday, Thursday, and Saturday. On the first and third Sunday morning of each month from 1-3:30 a.m. a special DX program is conducted for all listeners. Besides on the above programs, English announcements are made every day including Sunday from 12:45-1:45 p.m., and Sunday only from 7:45-10:30 p.m. (RX)

TGWB on 6480 kcs. now, having moved from 6490. (Jewell—R834, Ala.)

Honduras

HRN on 5875 kcs. at Tegucigalpa signs off at 11:20 p.m. with Ted Lewis' Goodnight Song. Since IRC's are not redeemable in Honduras, 10c in coin should be sent when requesting a veri from Honduran stations. (Wells—Ala.)

Hungary

HAT-4 on 9125 kcs. is now heard daily. They come on the air using an identifying chime five minutes before the program starts. Daily 7-8 p.m. and Sat. 6-7 p.m. Announcements in several languages. They have a strong signal. Address: Radiolabor of Royal Hungarian Post, Budapest. (Jewell—R834, Ala.)

Iceland

TFJ on 12235 kcs. at Reykjavik is heard on Sundays from 1:40-2:30 p.m. with weak signal. TFJ uses 7 kw. and can be addressed. Iceland State Broadcasting Service, Reykjavik. They verify promptly by card. Very important that every detail in report be correct. (Jewell—R834, Ala.)

India

VUD-2 on 9590 kcs. of All India Radio at Delhi now comes on the air at 6:30 a.m. with chimes and

clock striking the hour. From 6:27-6:29 a.m. a series of notes is sounded on a native flute. At 6:30 an interval signal consisting of soft-toned chimes sounds, then the news in English follows, read by a male announcer. Newscast in Hindustani begins at 6:35 a.m. Music of the typical nature follows. (Wells—Ala.; Skyten—R786, Mass.)

VUM-2 on 4920 kcs., VUB-2 on 4880 kcs., and VUC-2 on 4840 kcs. are all heard at 11 a.m., but uninteresting except for news. (Roche—South Africa)

VUD-4 on 15290 kcs. at Delhi has begun coming in again with weak signal about R4. Programs from 8-10:30 p.m. (Jewell—R834, Ala.)

Ireland

"Irish S.W. Station" on 17840 kcs. heard with a signal that compares favorably with the best of them. They are heard from 5-6 p.m. broadcasting news bulletin with a female commentator. (Horton—Mass.)

Italy

Official schedule for all short wave stations: remains the same as published last month except for:

IQA on 14795 kcs. from 4:30-4:55 a.m.

IQY on 11673 kcs. from 5:20-5:40 a.m., 1:50-2:30 p.m.

IRF on 9835 kcs. from 5:20-5:40 a.m., 12-1 p.m., 1:50-2:30 p.m. and 6-9 p.m.

IAC on 6355 kcs. from 3-3:55 p.m. (RX)

I2RO-6 on 15300 kcs. at Rome heard signing off at 1:32 p.m. with news in English. At 1:37 p.m. it signed on the same frequency with a program for Spanish listeners. Closed with chimes and playing of the Royal Facist March. (Billingsley—N.C.)

Japan

Complete Schedule of all stations:

JZI on 9535 kcs. from 4:30-5:30 p.m. (South America)

JZJ on 11800 kcs. from 7-9:30 a.m. (China and So. Seas) and 2-4 p.m. (Europe).

JZK on 15160 kcs. from midnight to 1:30 a.m. (Pacific Coast of No. America and Hawaii), and 7-9:30 a.m. (China and So. Seas) and 2-4 p.m. (Europe).

JZL on 17785 kcs. from 4:30-5:30 p.m. (So. America) and 8-9 p.m. (Eastern No. America). (RX)

JFO on 9636 kcs. is heard with good signal from 8:30-9:30 a.m. (Roche—South Africa)

Java

PLP on 11000 kcs. at Bandoeng is putting in a good signal reaching its best at 7:45 a.m. (Heard till 10:30 a.m. sign off in South Africa). Other NIROM stations operating in parallel with PLP are: PMN on 10260 kcs., YDB on 9550 kcs., YDC on 15150 kcs., PMY on 5140 kcs., and a new one at Batavia on 4875 kcs. The latter two stations not reported heard in the U.S.A. Address: The Netherlands India Broadcasting Co., Ltd., Batavia, Java. (Jewell—R834, Ala., and Roche—South Africa)

Luxembourg

"Radio Luxembourg" on 11782.5 kcs. verified by a letter in 22 days despite the war, enclosing a schedule of transmissions. (Skyten — R786, Mass.)

Madagascar

"Madagascar" on 5800 kcs. since Sept. 8 and still troubled with a muffle. Heard from 10-11 a.m. They usually operate on two wave lengths, but I have unable to find the other as it is neither of the two old channels. (Roche—South Africa)

Manchukuo

MCCY on 11775 kcs. at Shinkyo testing and asking for reports, heard at 10:30 a.m. till 11:10 a.m. (Roche—South Africa)

Mauritius

New station on 7190 kcs. heard from 9:30-10:30 a.m. with weak signal at beginning and gradually increasing to an excellent signal at closing I have written for information and will forward reply. (Roche—South Africa)

Mexico

EXXA on 6132 kcs. "Cadena Radio-difusora Dapp" at Mexico City broadcasts an English program every Friday at 11 p.m. with an R7 signal. Veri in form of letter signed by Sr. Jose Rivera. (Jewell—R834, Ala.)

Mozambique

CR7BH on 11718 kcs. and CR7BA on 6020 kcs. are heard with good signal daily from 4:30-7 a.m., but they fade out on other transmissions. (Roche—South Africa)

Netherlands

PCJ-2 on 15220 kcs. at Huizen was heard Sept. 25 at 3:30-4:30 p.m. in direct contact with RCA in New York. Announcer Eddie Startz announced the special program for WEB. (Jewell—R834, Ala.)

New Caledonia

FK8AA on 6122 kcs. heard at 2:45 a.m. asking for reports. (Horton—Mass.)

Norway

LLG on 9610 kcs. is being heard with fair signals after 11 p.m. LKC on 9530 kcs. is also heard with about an R6 signal. Reports should be sent to: "Norsk Rikskringkasting Shortingagaten 28, Oslo. Verification by card. (Jewell—R834, Ala.)

Panama

HP5K on 6005 kcs. at Colon is being heard with fair signal, but is badly QRM'd at times. Veri is red, white, and blue card. Address: "La Voz de la Victor", Aptdo. 33, Colon. (Jewell—R834, Ala.)

Paraguay

ZP-14 on 11720 kcs. at Villarica heard from 8-9 p.m. with R7 signals. They verify promptly with a gray card and blue print. Address: Estacion ZP-14, Friedmann Hermanos, Villarica (Wells—Ala.; and Jewell—R834, Ala.)

Philippine Islands

KZIB verifies with a carbon copy letter signed by A. L. Naftaly Studio, Mgr. The station relays KZIB on 900 kcs. Transmitter is located at Novaliches, studio is atop the Crystal

Arcade Bldg. in Manila. Power output is 1 kw. and station changes are being planned. Plans call for the use of another frequency, as yet undetermined. Postal Address: I. Beck, Inc., P. O. Box 440, Manila. (Wells—Ala.)

KZRM on 9570 kcs. is heard with good signals from 8-10 a.m. (Roche—South Africa)

Poland

SPW, SPD, SP19, and SP25, the Polish short wave stations went off the air soon after the beginning of the war. (Skyten — R786, Mass.; Green—R1207, Ohio; Wells—Ala.; and Jewell—R834, Ala.)

Salvador

YSM on 11710 kcs. at San Salvador verifies by card of yellow, blue, red, and black. (Jewell—R834, Ala.)

Spain

"Radio Malaga" on 14440 kcs. at Malaga is still in operation. It is heard irregularly at 7 p.m. with Spanish music and talks. Uses both male and female announcers. (Wells—Ala.)

EAO on 9860 at Madrid heard with R8 signal. Sign off was at 8:45 p.m. with playing of the National Anthem. (Jewell—R834, Ala.)

Strait Settlements

ZHP on 9690 kcs. at Singapore is being heard early mornings from 5:30-6 a.m. with fair signals. QRM has become rather bad lately. Send reports to: "Malaya Broadcasting Co., Ltd., Broadcasting House, Thomas Rd., Singapore. Reports are welcomed and a beautiful card is sent for verification. (Jewell—R834, Ala.)

Sweden

SM5SX on 15155 kcs. at Stockholm heard best on Sundays from 9 a.m. to 5 p.m.

SBP on 11705 kcs. is being heard with a program to North America on Weds. and Sat. from 8-9 p.m. with a good signal. (Jewell—R834, Ala.)

SBT on 15155 kcs. is heard till 4:15 p.m. and SBU on 9535 kcs. from that time until 5 p.m. Both are new Swedish stations working in parallel with

SBP and SBO respectively. (Simpson—R1253, Mass.)

Switzerland

HBO on 11402 kcs. was heard on Sunday Sept. 23 with a Swiss musical program. Their signal was a good R9. from 7-7:45 p.m.

HBL on 9345 kcs. and HBP on 7797 kcs. are broadcasting simultaneously to North America with strong signals from 7:30-8 p.m. Address: Radio Nations, 12, Quai de la Poste, Geneva. (Jewell—R834, Ala.)

Turkey

TAP on 9460 kcs. in Ankara, Turkey will conduct a special program in English on October 21st, 1939 in order to commemorate the tenth anniversary of the founding of the International Short Wave Club of East Liverpool Ohio. The program will start at 4:15 p.m. and last forty minutes. (ISWC)

Union of South Africa

ZRK on 60975 kcs. at Capetown is heard in the late afternoon until 4 p.m. when they sign off with clock striking 11 p.m. and playing of "Die Stem Van Suid Afrika" and "God Save the King." (Skyten — R786, Mass.)

ZRL on 9696 kcs. at Capetown is now being heard with their regular programs from 11:45 p.m. to 12:50 a.m. At midnight you hear the town clock strike the hour of 7 a.m. The signal is a bugle call followed by setting up exercise, news, market reports and music. Address: P. O. Box 4559, Johannesburg. (Jewell—R834, Ala.)

ZRO on 6140 kcs. and 4820 kcs. at Durban is on the former frequency days and the latter nights. The latter frequency is a recent change. (Roche—South Africa)

U.S.S.R.

RAN on 9600 kcs. has been QRM'd very badly for the past few weeks. This QRM has also ruined PCJ and GSC reception. RAN comes on at 4:00 and continues till 9:15 p.m. daily.

RKI on 15080 kcs. is being heard

from 7:30-8 p.m. with an English program using both male and female announcers.

RV-96 on 15180 kcs. is also being heard in parallel with RKI with the English program. All reports to Radio Center, Moscow. Veri cards are all actual photographs. (Jewell—R834, Ala.)

RNE on 12000 kcs. heard daily from 7-8:50 p.m. with English program to North America. Program also broadcast over RV-96, RKI, and RAN. (Skyten—R786, Mass.)

U.S.A.

WBOS on 9570 kcs. is the Boston outlet on the shortwaves for the networks. (Horton—Mass.)

WCAB (formerly W3XAU and WCAI) in Philadelphia operates on following schedule:

15270 kcs. from 1-6 p.m. daily (South America)

6060 kcs. from 7:30 p.m. to midnight (Europe) (RX)

WCBX (formerly W2XE) complete schedule:

17830 kcs. daily 8:15-10 a.m. and 1-6 p.m., Sat. 8:15-6 p.m. and Sunday 8 a.m. to 6 p.m. (Europe)

15270 kcs. daily 6:30-8:30 p.m. including Sat. and Sun. (So. America).

11830 kcs. daily including Sat. and Sun. 9-11:30 p.m. (So. America)

6120 kcs. (October and December) or 6170 kcs. (November) from midnight to 1 a.m. daily including Sat. and Sun. (Europe) (RX)

W3XAL now uses the call WRCA and W3XL uses WNEI (Trubee—R671, N. Y.; and Simpson—R1253, Mass.)

WPIT complete official schedule:

21540 kcs. from 6:30-10 a.m. (Europe)

15210 kcs. from 10 a.m. to 3 p.m. (Europe and So. America)

11870 kcs. from 3-8 p.m. (Europe and So. America) and 8 p.m. to midnight (So. America only)

6140 kcs. from 12-1 a.m. (So. America) (RX).

W9XPD on 6425 kcs. testing. Station in St. Louis, Mo. and relays KSD. They were heard Sept. 23 at 11:45 p.m. with R9 signal. (Jewell—R834, Ala.)

Yugoslavia

YUC on 9505 kcs. at Belgrade is heard daily until 5:30 p.m. with news in English at 4:15 p.m. Program also transmitted over YUA on 6100 kcs. Closes with National Anthem. (Skyten—R786, Mass.)

YUG on 15240 kcs. of Belgrade is heard daily in parallel with YUA on 6100 kcs. from 7:30-9 p.m. or later. Broadcasts alternate nights for North and South America. Official word from Belgrade gives the following available channels for Belgrade: 19.96 meters, 31.56 meters, 25.56 meters, and 49.18 meters. Reports are requested and verified promptly. (Carl and Anne Eder—R184-5, Minn.; and Skyten—R786, Mass.)

RADEX REPORTERS

RL: Your Shortwave Editor, Worcester, Mass.

- RX: Official News Item
- R185: Anne Eder, Willmar, Minn.
- R185: Anne Eder, Millmar, Minn.
- R519: George Jacobs, Cincinnati, Ohio
- R622, La.3: A. V. Deterly, Baton Rouge, La.
- R671: Robert Trubee, Brentwood, N. Y.
- R757: Matthew Leshner, Lawrence, Mass.
- R786: Robert Skyten, E. Brookfield, Mass.
- R834: G. R. Jewell, Jr., Montgomery, Ala.
- R884: F. T. Coradetti, New York, N.Y.
- R946: Bertram Podall, Gilman, Vt.
- R1109: Joseph Schwartz, Bronx, N.Y.
- R1207: Bob Green, Dayton, Ohio
- R1224: George Hotton, Wilwaukee, Wis.
- R1253: Ralph Simpson, Wollaston, Mass.
- Haigis Bedrosian, Careyville, Mass.
- Frank Billingsley, Jr., Ellenboro, N.C.
- Renato Brossa, Chieri, Italy (I-1BAG)
- Warren Dame, Saxonville, Mass.
- Frank Gravely, Martinsville, Va.
- R. W. Davis, West Allis, Wis.
- J. R. Hahn, Akron, Ohio
- Carl Horton, Athol, Mass.
- Enrique Hidalgo, Cienfuegos, Cuba
- Hubert L. Martz, Hagerstown, Md.
- Albert Pickering, West Medway, Mass.
- Mrs. R. S. Roche, Alhwal North, South Africa.
- Chester Roman, Chicago, Ill.
- Walter V. Scholz, 2nd, Webster Groves, Mo.
- Jim Walker, Romney, W. Va.
- Jack Wells, Phenix City, Ala.
- Bob Wilson, Portland, Me.

NOTE: If you have a RADEX CLUB indicia, please use it always when writing. Otherwise you may find yourself listed with non-members.

The SHORTWAVE STATIONS

● The shortwave list, arranged by frequencies in kilocycles, gives the schedules of the shortwave broadcasting stations. When requesting verifications from radio stations, return postage should always be sent. Return postage to foreign countries can be sent in the form of an International Reply Coupon, available at any post office at 9c each. Unused postage stamps from many foreign countries, which can be sent instead of Reply Coupons, are available from the Return Postage Bureau, 85 Francisco Ave., Rutherford, N. J.

Time is Eastern Standard.

Subtract 1 hour for Central, 2 hours for Mountain and 3 hours for Pacific.

2320 TGWC	Guatemala City, Guat. 1 kw. See TGWA. Sun. 10:30 am-5:15 pm; 7 pm-midnight. Other days, 7:45-9 am; 12-45:3-45 pm; 7:30 pm-12:15 am.	4810 YV1RU	Maracaibo, Venez. "Radio-difusora Maracaibo," Luis Mantrellini II.
2340 HOA	Panama City, Panama. "Ron Dalley," Salvador Graziani, Box 1121. (6-10 pm).	4815 HJ2BAB	Cucuta, Colombia. 600 w. Relays HJ2BAC, "La Voz de Cucuta."
2437 HRN	Tegucigalpa, Honduras. 500 w. Noon-1:30 pm; 7-10:30 pm. "La Voz de Honduras."	4820 YV3RN	Barquisimeto, Venez. "Radio Barquisimeto," Amilcar Segura.
3400 YV5RW	Caracas, Venez. "Radio Turmerito," Cesar Banuls.	4825 IJ5EAD	Cali, Colombia. 720 w. "La Voz del Valle."
3450 YV6RC	Barcelona, Venez. Gobierno Edo Anzoategui.	4830 YV5RH	Caracas, Venez. Relays YV5RG, "Ondas Populares," Gonzalo V eloz Mancera, Aptdo. 1931.
3480 YV3RF	Acarigua, Venez. "La Voz del Llano," Pausides Sigala.	4835 IJ1ABE	Cartagena, Colombia. 525 w. Relays HJ1ABF, "La Voz de los Labs. Fuentes," Apartado 31.
3480 2ZB	Wellington, New Zealand. 200 w. At 7 am.	4840 VUC2	Calcutta, India. 10 kw. 7:30 am-1 pm. All-India Radio.
3488 XZZ	Rangoon, Burma. 50 w. W. J. Byrnes, Burma Independent Wireless Sub-Division, Strand Road. (Sun, 8:30-10:30 pm; Daily 5:30-9 am; 8:20-10:30 pm).	YV4RX	Maracay, Venez. "Radio Maracay," Luis Croquer.
3490 CR7AB	Lourenco Marques, Mozambique. Sun. 5-7 am; 10 am-2 pm; Weekdays, midnight to 1 am; 4:30-6:53 am; 9:30-11 am; noon-4 pm. Radio Club de Mocambique, Box 594.	4845 HJ3CAD	Bogota, Colombia. 720 w. "Nueva Granada."
3500 YV5RV	La Guaira, Venez. "Emisora Vargas," Gonzalo V eloz Mancera.	4850 YV1RZ	Trujillo, Venez. "Radio Valera," L. Febres Jelambi.
4002 CT2AJ	Ponta Delgada, Azores. Wed, Sat, 5-7 pm.	4860 YV1RL	Maracaibo, Venez. 300 w. Relays YV1RK "Radio Popular," sign off "National Emblem March." Jose A. Higuera, Apartado 247. (6-11 pm).
4107 HCJB2	Quito, Ecuador. 1 kw. 7-8:15 am; 11:30 am-2:30 pm; 2:45-10:15 pm. "Broadcasting Provincial," Clarence W. Jones, Casilla 691.	4865 IJ2BAJ	Santa Marta, Colombia. 751 w. 10:30 am-2 pm; 5-11 pm. "La Voz de Santa Marta."
4273 RV15	Khabarovsk, U.S.S.R. 20 kw. 4-10 am. Miss Rowena Meyer, Radio Committee.	4870 YV2RN	San Cristobal, Venez. "La Voz del Tachira," Jesus Diaz Gonzalez.
4300 4ZB	Dunedin, New Zealand. 30 w. At 6 am.	4875 HJ6FAI	Armenia, Colombia. 600 w. 9 am-2 pm; 6-11:30 pm. "La Voz de Armenia."
4770 YV1RT	Maracaibo, Venez. "La Voz de la Fe," Pedro A. Bermudez V.	4878 ZTD	Durban, Union of S. Africa. See "Johannesburg." (11:45 pm-12:50 am).
4775 HJGAB	Bucaramanga, Colombia. 750 w. 6-10:45 pm. "Radio Santandar."	4880 VUB2	Bombay, India. 10 kw. 8 am-1 pm. All-India Radio.
4780 YV1RO	Trujillo, Venez. "Radio Trujillo," Pedro J. Torres.	YV6RU	Ciudad Bolivar, Venez. "Ecos del Orinoco," E. Torres Valencia.
4785 HJ1ABB	Barranquilla, Colombia. 600 w. Relays HJ1ABA, "La Voz de Barranquilla," Apartado 715. Interval signal, 3 chimes.	4885 HJ4DAI	Medellin, Colombia. 501 w. Relays HJ4DAQ. 9 am-2 pm; 7 pm-midnight. "Emisora Claridad."
4790 YV5RY	Caracas, Venez. "La Voz de la Esfera," Edmundo Suegart.	4890 YV1RX	Maracaibo, Venez. "Ondas del Lago," Nicolas Vale Quintero.
4795 HJ3CAF	Bogota, Colombia. 750 w. La Voz de Bogota.	4895 HJ3CAH	Bogota, Colombia. 720 w. "La Voz de la Victor." Relays IJ3CAI. Almacenes Victor, Aptdo 565.
HJ6FAI	Ibaguac, Colombia. 501 w. "Ecos del Combeima."	4900 YV6RT	Ciudad Bolivar, Venez. "Radio Bolivar," Miranda & Behrens.
4800 YV1RV	Maracaibo, Venez. "Ecos del del Zulia," Luis Garcia.	4910 YV1RY	Coro, Venez. "Radio Coro," Roger Leyba.
4805 HJ6FAB	Manizales, Colombia. 501 w. "Radio Manizales."	4920 VUM2	Madras, India. 10 kw. 7:30 am-1 pm. All-India Radio.

	YV5RU	Caracas, Venez. "Estudios Universo," Mario Garcia Arocha.		6000 CXA2	Montevideo, Uruguay. 5 kw. Cia. de Radio Publicidad Continental, J. C. Gomez 1431. 10 am-10 pm.
4930	YV4RP	Valencia, Venez. "Radio Valencia," Luis Croquer.		HH2S	Port-au-Prince, Haiti. Societe Haitienne de Radiodiffusion, Box 103. (7-10 pm).
4940	YV5RO	Caracas, Venez. "La Voz de Venez. Marquis y Linares.		RV59	Moscow, U.S.S.R. 7-9:15 pm.
4950	YV4RO	Valencia, Venez. "La Voz de Carabobo," Herrman Degwitz.		XEBT	Mexico City, D. F. 500 w. Interval signal, cuckoo calls, and sign off with "Liebestraume." El Buen Tono, S. A. Apartado 79-44. 11 am-1 am.
4960	VUD2	Delhi, India. 10 kw. 7:30 am-1 pm. All-India Radio.		6005 CFCX	Montreal, P. Q. 75 w. Relays CFCF. Canadian Marconi Co., Ltd., Box 1690. Sun, 10 am-11:15 pm. Weekdays 8:45 am-2 am.
	YV5RS	Caracas, Venez. "Radio Libertador," Victor M. Soto.		HP5K	Colon, Panama. 200 w. Relays HOK, "La Voz de La Victor, Apartado 33. Noon-2 pm; 6 am-midnight.
4975	YV1RJ	Coro, Venez. "Radio Falcon," J. A. Mendoza.		6007 XYZ	Rangoon, Burma. 1500 w. Burma Independent Wireless Sub-Division, W. J. Byrnes, Strand Road. Sun, 8:30-10:30 pm; Daily 5:30-9 am; 8:20-10:30 pm).
4980	YV5RT	Caracas, Venez. "Gobierno Nacional."		ZRH	Pretoria, Union of So. Africa. 5 kw. See "Johannesburg." Sat, 9:30 am-4:45 pm; Sun, 8:40 am-noon; 12:15-3:15 pm; Other days, 9:30 am-3:30 pm; 11:45 pm-12:50 am.
4990	YV3RX	Barquisimeto, Venez. "La Voz de Lara," Arturo Ramos Maggi.		6010 CJCX	Sydney, N. S. 1 kw. Relays CJCB. Eastern Broadcasters, Ltd., Radio Bldg. Sun, noon-1:30 pm; Weekdays 9 am-2:30 pm.
5000	YV5RK	Caracas, Venez. Gobierno Nacional.		PRA8	Recife, Brazil. 5 kw. "A Vox do Norte," Radio Club do Brasil, Avenida Cruz Cabuga 394. Time signals at Noon and 7 pm Brazil Time. Sign off with national anthem. 9 am-noon; 1-3 pm; 4-9 pm.
5010	YV5RM	Caracas, Venez. "Radiodifusora Venez." Degwitz y Sibletz.		6015 HI3U	Santiago de los Caballeros, D. R. 100 w. "La Voz del Comercio," Fernando Bertran, Apartado 23. Sign off "Mario la O" on organ and national anthem. 7:15-9 am; noon-2 pm; 4:45-8 pm.
5020	YV4RQ	Puerto Cabello, Venez. Radio Pto. Cabello," Rafael A. Segura.		XEW1	Mexico City, D. F. 400 w. Institucion Muncial de la V. I., Mina 56.
5040	YV5RN	Caracas, Venez. Radio Caracas, "Almacan Americano.		6020 DJC	Berlin, Germany. 50 kw. See "Berlin." 11:30 am-4:25 pm.
5146	PMY	Bandoeng, Java, N. E. I. 1 kw. Sat, 8 pm-3:30 am. Sun, 5:30 am-noon. Other days, 5:30 am-noon; 7 pm-3 am.		XEUW	Veracruz, Ver. C. 20 w. "El Eco de Sotavento desde Veracruz." Av. Independencia 98. Veries for 3c USA stamp. 8 am-midnight.
5300	ZIK3	Belize, Brit. Honduras. (8:30-8:50 pm).		6025 HI1J	San Pedro de Macoris, D. R. 100 w. Fausto M. Donastorg, Apto. 204.
5713	TGS	Guatemala City, Guat. 200 w. Wed, Thur, Sat, 6-9 pm. Radiotransmisora de la Casa Presidencial."		6030 CFVP	Calgary, Alta. 100 w. Voice of the Prairies, Ltd., Toronto General Trusts Bldg. (Thur, 9 am-1 am; Sun, noon-midn't).
5824	TIGPH	San Jose, Costa Rica. 1 kw. "Alma Tica," Gonzalo Pinto H., Apto. 800. (7 pm-midn't).		HP5B	Panama City, Panama. 100 w. Estacion Radiodifusora Miramar de la Radio Panama, Apartado 910. 5-10 pm. 500 w. Las Juntas, C. Rica. 500 w. "La Voz del Guanacasto," Ruben Venegas M.
5875	HRN	Tegucigalpa, Honduras. 500 w. "La Voz de Honduras," Mr. Paul John. Interval, notes from national anthem, and signs off with "Goodnight Waltz." 8 pm-midnight.			
5880	ZEA	Salisbury, Southern Rhodesia. 325 w. Gen'l. P. O., Station Sec'y., Box 792. Sun, 3-5 am.			
5940	PJC1	Willemstad, Curacao. 150 w. "Radio Curon," Curacaosche Radio Vereeniging, Emmastad, Curacao. 7:45-9:35 pm.			
5945	TG2X	Guatemala City, Guat. 200 w. "Policia Nacional." Tue, Wed, Fri, 11 am-1 pm. Sat, 11 am-3 pm.			
5975	CS2WD	Lisbon, Portugal. 250 w. Radio Renascenca, Rua do Capelo 5-2 esq.			
	OAX4P	Huancayo, Peru. 250 w. "Radio Andina Junin," J. Alberto Maduana, Cuzco 25.			
5980	VONG	St. John's, Newfoundland. Newfoundland Brdscstg. Corp. Relays VONF. 8:30 am-12:30 pm; 4:30-9:30 pm.			
5984	HJ4DAG	Quibdo, Colombia. 150 w. "La Voz del Choco.			
5995	VUD2	Delhi, India. 10 kw. All-India Radio. 7:30 am-12:30 pm.			

- 6035 XEQQ Mexico City, D. F. Sign off. Ravel's "Bolero."
- 6040 WSLA Boston, Mass. 20 kw. See WSLA.
- WDJM Miami, Fla. 5 kw. 10 pm-1 am. Relays WIOD, Ruth Richardson, Isle of Dreams Broadcasting Corp.
- YDA Tandjong Priok, N.E.I. 10 kw. NIROM. Sign off, "End of a Perfect Day."
- 6042 HJ1ABG Barranquilla, Colombia. 600 w. Relays HJ1AB11. "Emisora Atlantico," Aptdo. 445
- 6044 ZP14 Villarrica, Paraguay. 1 kw. "Radio Cultura."
- 6045 XETW Tampico, Tams. 100 w. Relays XEFW, Flores y Martinez, Francisco I, Madero 204 Ote. Sun, 10 am-4 pm. Weekdays, 10 am-10 pm.
- 6053 VK9MI M. V. "Kanimbla." 50 w. Sign off "God Save the King." McIlwraith & McCacharn, Ltd., Melbourne, Australia. (7:15 am).
- 6054 HJ6FAB Pereira, Colombia. 501 w. "La Voz de Pereira."
- 6055 Bern, Switzerland. 25 kw. See eBrn."
- 6060 VQ7LO Nairobi, Kenya. Cable & Wireless, Ltd., Box 777. 11 am-2:30 pm.
- 6060 WCAB Philadelphia, Pa. 10 kw. See "WCAB." (Sun, 6:30-11 pm, Tu, F, 6:30-11 pm; Wed, 6:30-8:30 pm).
- WLWO Cincinnati, Ohio. 10 kw. See "WLWO".
- 6065 SBO Stockholm, Sweden. 500 w. 5:15-5 pm. Telegrafverket Tjanstebrev 5.
- 6070 CFRX Toronto, Ont. 1 kw. Sun, 10:30 am-midnight. Weekdays 7:30 am-midnight. Relays CFRB. Rogers Radio Broadcasting Co., 622 Fleet St.
- 6079 DJM Berlin, Germany. 50 kw. See Berlin."
- 6080 CKFX Vancouver, B. C. 10 w. Relays CKFC Standard Brdcastg. Sys., 1504 Sun Bldg. 2 pm-midnight.
- HP5F Colon, Panama.
- WCBI Chicago, Ill. 500 w. See "WCBI".
- 6082 OAX4Z Lima, Peru. 10 kw. Radio Nacional." Relays OAX4A, Av. Petit Thouars 447.
- 6090 ZNS Nassau, Bahamas. Superintendent of Telegraphs, Box 48 (No postage required for veries).
- 6097 ½ ZRJ Johannesburg, Union of So. Africa. 200 w. See "Johannesburg." Sat, midnight to 12:50 am; 3:15-7 am; 8:30-11:30 am; Sun, 3:30-4:30 am (or 4-5 am); 5:30-7 am; 8:40-11:30 am; Other days, 3:15-7 am; 9 am-1:30 pm; 11:45 pm-12:50 am.
- ZRK Capetown, Union of So. Africa. 5 kw. See "Johannesburg." Sun, 3:30-4:30 am (or 4-5 am); 5:30-7 am; 9 am-11:45 am; noon-3:20 pm; Weekdays, 3:20-7:20 am; 9-11:45 am; noon-4 pm; 11:45 pm-12:50 am.
- 6100 W9XF Chicago, Ill. 10 kw. Relays NBC-WENR. Audience Mail Dept., NBC, Inc., Merchandise Mart. Sat, 1:05-2 am; 4-5:30 pm; Sun, 1-5:45 pm; Other days, 1:05-2 am; 4-5:45 pm.
- YUA Belgrade, Yugoslavia. 1 kw. 12:45 am-5:30 pm. "Radio Beograd," Bureau Central de Presse, Poste Emetteur a Ondes Courtes. Announce in Serbian, Italian, English, German, Turkish, Hungarian, Albanian, and Greek. (12:45 am-5:05 pm).
- 6105 HI3C La Romana, D. R. 30 w. A. Herrero Hernandez.
- 6110 GSL London, Gt. Britain. "L for Liberty." See "London."
- XEGW Mexico City, D. F. 250 w. Jose G. Garza Fox, San Juan de Letran 81.
- 6116 Saigon, Fr. Indo-China. "Radio Saigon." (6 am).
- 6120 WCBX New York, N. Y. 10 kw. See "WCBX." (Midnight-2 am).
- 6122 HI8T San Cristobal, D. R. 30 w. Raul Henriquez.
- 6122 FK8AA Noumea, New Caledonia. Relays FJP. Announces, "Ici Noumea," and signs off with Marseillaise. 44 rue de l'Alma. Tues, Sat, 2:30-3:30 am.
- IJ3CAZ Bogota, Colombia. 750 w. Relays HJ3CAZ, La Voz de Colombia, Aptdo 772.
- TGWB Guatemala City, Guat. 1 kw. Sun, 10:30 am-5:15 pm; 7 pm-midnight. Weekdays, 7:45-9 am; 12:45-3:45 pm; 7:30 pm-12:15 pm. See TGWA.
- 6130 CHNX Halifax, N. S. 500 w. Sat, 8 am-11:30 pm; Sun, noon-11:15 pm; other days, 7 am-11:15 pm. Maritime Broadcasting Co., Lord Nelson Hotel
- COCD Havana, Cuba. 250 w. Relays CMCD. "La Voz del Aire," S. A., Sr. J. Benitez, Aptdo. 2294.
- LKJ Oslo, Norway, 5 kw. See "Oslo."
- 6132 VP3BG Georgetown, British Guiana. Mexico City, D. F. 100 w. Depto. de Publicidad y Propaganda, Sr. Jose Rivera.
- 6137 OR7AA Lourenco Marques, Port. East Africa. Radio Club de Mocambique, Caixa Postal 594. Sun, 5-7 am; 10 am-2 pm; Weekdays, midnight-1 am; 4:30-6:30 am; 9:30-11 am; noon-4 pm.
- 6140 KZRM Manila, Philippines.
- WP1T Pittsburgh, Pa. 40 kw. See "WP1T." (11 am-noon).
- 6145 HJ4DAE Medellin, Colombia. 700 w. "La Voz de la Antioquia."

- 6147½ ZRD Durban, Union of So. Africa. 200 w. See "Johannesburg." Sat. 3:30-7:30 am; 9-11:15 am; Sun. 5:30-7 am; 9-11:16 am; Weekdays, 11:45 pm-12:50 am.
- 6150 CJRO Winnipeg, Man. 2 kw. James Richardson & Sons, Ltd., 157 Royal Alexandra Hotel.
- 6150 TIEMC San Jose, C. Rica. 250 w. "Radio El Mundo." Rafael Iline Ch.
- 6165 TILS San Jose, Costa Rica. 2 kw. "Para Ti." Luis Saenz Mata, Apto. 3.
- 6165 Bern, Switzerland. 25 kw. See "Bern."
- 6170 HI4V San Francisco de Macoris, D. R. 100 w. Luis R. Betances R.
- 6174 XEXA Mexico City, D. F. Relays XEXM, Departamento Autonomo de Prensa Publicidad (DAPP). Sign off, "March of the Toys." 8:30 am-midnight.
- 6182 HI1A Santiago de los Caballeros, D. R. 75 w. "La Voz del Yaque." Rafael Western. (Weekdays, 8-10 pm).
- 6190 HVJ Vatican City. 15 kw. Mon, Thur, Sat, 2-3 30 pm; Tues, Fri, 2-3 pm; Wed, 2-2:30 pm; 3-3:30 pm. See HVJ.
- 6190 KGEI San Francisco, Calif. 20 kw. See "KGEI."
- 6190 TG2 Guatemala City, Guat. 200 w. "Radio Morse." Director General of Electrical Communications. (Sat, 7:30-9 am; 6 pm-1 am; Sun, 7:30-11 am; 3-8 pm; Other days, 7:30-9 am; 6-11 pm).
- WGEO Schenectady, N. Y. 40 kw. See "WGEA."
- Athlone, Ireland.
- 6200 COKG Santiago de Cuba. 1200 w. Relays CMKG. "Ask For Bacardi." Sres. Grau y Caminero, Apto. 137. Daily exc. Sat, 9 am-11 pm.
- XEXS Mexico City, D. F. 100 w. Departamento de Salubridad Publica.
- ZGE Kuala Lumpur, F.M.S. Institute of Medical Research. Sun, Tue, Fri, 6:40-8:40 am. Saigon, Fr Indo-China. "Radio Boy-Landry," Establishments Boy-Landry. 5:30-9 am.
- 6235 IIRD2 La Ceiba, Honduras. 250 w. 8-11 pm. "La Voz de Atlantida."
- 6243 HI1N Trujillo, D. R. 700 w. Weekdays, noon-2:30 pm; 5:45-10 pm. Sign off national anthem. Relays HI1N. J. M. Bonetti Burgos.
- 6280 HI1G Trujillo, D. R. 200 w. Relays HI1G. Andres Cordero Puello.
- 6282 COHB Sancti-Spiritus, Cuba 150 w. Relays CMHE, V. E. Wiess y O. Ramirez, Calle Independencia 33. 9-11 pm.
- 6295 OAX4G Lima, Peru. 400 w. Relays OAX4B, "Radio Grellaud." Roberto Grellaud y Cia., Sen Abencay 915-23 (7-9:30 pm). Villarica, Paraguay, 1 kw. "Radio Cultura."
- 6312 ZP14 Trujillo, D. R. 100 w. Relays HI1Z. Frank Hatton.
- 6330 COCW Havana, Cuba. 7 am-midnight. Relays CMW. "La Voz de las Antillas," Apartado 130.
- 6335 OAX1A Chiclayo, Peru. 200 w. "La Voz de Chiclayo." Elias Aguirre 171, Casilla 9. Sign off, "Good Night Waltz." (Sat, 10 pm-midnight; Other days, 8-11 pm).
- 6340 HI1X Trujillo, D. R. 900 w. Relays HI1X. J. R. Saladin. (Tues, Fri, 8-10 pm).
- 6351 HRP1 San Pedro Sula, Honduras. 100 w. 12:30 pm-12:30 am. "El Eco de Honduras."
- 6355 IAC Rome, Italy. See "Rome." (3-3:35 pm).
- 6380 ZIZ Basseterre, St. Kitts. (Reported on 6384). Daily 4-5 pm; Wed, 7-7:30 pm.
- 6383 HI9B Santiago, D. R. 200 w. Jacinto L. Sanchez, Apto. 95.
- 6420 HI1S Santiago de los Caballeros, D. R. 200 w. "La Voz de La Hispaniola." Generoso Sarnelli. (6-11 pm).
- TGQA Quezaltenango, Guat. 200 w. Relays TGQ. "La Voz de Quezaltenango." Director General of Electrical Communications. (Sat, 10 pm-1 am; Sun, 1-3 pm; Other days, 9-11 pm).
- 6480 HI1L Santiago, D. R. 100 w. "Emisora Nacional." Maria J. Tavarez, Calle Pres. Trujillo 97. (6:30-8 am; 5:30-7 pm; 8-9:45 pm).
- 6425 W2XGB Hicksville, N. Y. 10 kw. Press Wireless, Inc.
- 6490 TGWB Guatemala City, Guat. 1 kw. (Reported on 6495). See TGWA.
- 6500 HI1L Trujillo, D. R. 60 w. J. C. Teixido, Apto. 623.
- 6550 TIRCC San Jose, C. Rica. 500 w. Accion Catolica, Prbo. Carlos Borge, Apto. 1064.
- 6565 HI5P Puerto Plata, D. R. 30 w. J. M. Modesto.
- 6590 COCU Havana, Cuba. Jorge Garcia Serra, Estrada aPima 25, Vibora. (Sun, 6:55 am-midnight; Weekdays, 6:55 am-1 Trujillo, D. R. 100 w. Emilio Garden, Jr.
- 6622 PRADO Rio Bamba, Ecuador. Fabrica de Tejidos de "El Prado," Apto. 98. (Thur, 9-11 pm).
- 6630 HIT Trujillo, D. R. 100 w. "La Voz de La RCA-Victor," F. A. Sanabria, Apto. 1105. Interval, bells; sign off, national anthem. (Sun, 10:45 pm-12:45 am; Weekdays, 5:45-8:45 pm).
- 6638 HC2RL Guayaquil, Ecuador. 200 w. "Quinta Piedad," Dr. Roberto Levi, Casilla 759. Interval, "Hello, America," sign off.

- national anthem. (Sun, 5:30-7:30 pm; Tues, 9-11 pm).
 6660 HI6Y Trujillo, D. R. 30 w. Alfonso Cuervo.
 6675 HBQ Geneva, Switzerland. "Radio Nations." (Sun, 1:45-2:45 pm).
 6690 VK8SK Broken Hill, Australia. At 2:30 am. Australian Aerial Medical Service.
 6700 TIEP San Jose, C. Rica. 1 kw. "La Voz del Tropico." Eduardo Pinto H., Aptdo. 257. (4-11 pm).
 6710 PMH Bandoeng, Java, N.E.I. 1500 w.
 6780 HHH San Pedro de Macoris, D. R. 250 w. "La Voz de Higuanamo." Domingo Dominguez.
 6800 PZII Paramaribo, Surinam.
 6960 ZZB Wellington, New Zealand. 200 w.
 7000 to 7300 Amateurs.
 7006 FETI Valladolid, Spain. 7:30 am-5:30 pm.
 7010 XPSA Kweiyang, China. 10 kw. (Reported on 6970 and 7140). (5:30-10:55 am).
 7088 PI1J Dordrecht, Netherlands. 50 w. Technical College. (Sat, 10 am-12:50 pm).
 7090 FO8AA Papeete, Tahiti. Radio Club Oceanien. (Tues, Fri, 11 pm-midnight).
 7100 EA9BJ Spanish Morocco.
 7177 CR6AA Lobito, Angola. (Wed, Sat, 2:45-4:30 pm).
 7200 EA8AE Las Palmas, Canaries. (Reported on 7150).
 7220 I2RO11 Rome, Italy. 100 kw. See "2RO."
 7222 YV9AB In Venezuela on Guiana-Brazil Border. Expedicion Tecnico de Minería y Geología. Ministerio de Fomento, Caracas.
 7260 FET8 Spanish Morocco. (5-7 pm).
 7270 EA8AS Teneriff, Canaries. Relays EAJ43. (Wed, 4-5 pm).
 7300 VIG Port Moresby Papua. Relays 4 pm. A call sign, not time.
 7310 Madrid, Spain. "Radio Nacional."
 7380 XECR Mexico City, D. F. 20 kw. Secretaria de Relaciones Exteriores. (Sun, 6-8 pm).
 7435 FG8AH Pointe-a-Pitre, Guadeloupe. "Radio Guadeloupe," Box 125. (6-7:30 pm).
 7500 EAJ43 Santa Cruz de Tenerife, Canaries. Relays "Radio National of Burgos. (8-9 am).
 7510 JVP Tokyo, Japan. 50 kw. See "Tokyo" at end of list.
 7797 HBP Geneva, Switzerland. "Radio Nations." (Sat, 5:30-6:30 pm).
 7894 YSD San Salvador. Relays YSS, "Alma Cuscatleca." Director General de Telegrafos, Telefonos, y Radio Nacionales.
 8650 HJ4DAU Medellin, Colombia. 250 w. Universidad Antioquia.
 8664 COJK Camaguey, Cuba. 1 kw. 11:30 am-12:30 pm; 8-10 pm. (Reported on 8660 and 8680). Relays CMJK, "Radio Zenith," Jones Castillon y Cie., Finlay #3.
 8700 COCO Havana, Cuba. 1 kw. Relays CMCK, Luis Casas Romero, Aptdo 98.
 8820 HCJB Quito, Ecuador. 1 kw. "La Voz de los Andes," Clarence
 8830 COCQ Havana, Cuba. 1 kw. Relays CMQ. "De La RCA-Victor." Calle 25 No. 225. (Reported on 8850).
 9030 COBZ Havana, Cuba. 250 w. Relays CMBZ, "Radio Salas," Aptdo. 866. Opens, nightingales and canaries; interval, 4 chimes; closes, national anthem. (6:45 am-1 am).
 9100 COBX Havana, Cuba. Relays CMBX. Alberto Alvarez, San Miguel 194.
 9125 HAT4 Budapest, Hungary. 20 kw. Sun, Wed. 7-8 pm; Sat, 6-7 pm. Radiolabor, Kiserleti Allomasa, Gyali-ut 22, Budapest IX.
 9125 HC2CW Guayaquil, Ecuador. "Ondas del Pacifico." Aptdo 1166.
 9163 HC1GQ Quito, Ecuador. "Radiodifusora Nariz del Diablo." Sign off. "Blue Danube Waltz." Guayaquil & Quito R. R. Co., Aptdo. 159. (8:30-11 pm).
 9234 Bucaresti, Romania. 2 kw. "Radio Experimental." Societatea Romana de Radiodifuziune, Str. Gral. Berthelot 60, Trujillo, D. R. 200 w. Relays HIG. Andres Cordero Puello.
 9295 XTC Shanghai, China. (8-9 am).
 9350 HS8PJ Bangkok, Thailand (formerly "Siam"). Post and Telegraph Dept.
 Fort de France, Martinique. "Radio Fort de France."
 9363 COBC Havana, Cuba. Relays CMBC. "El Progreso Cuhano." Aptdo 132. (6:55 am-midnight). (Reported on 10000).
 9400 Saigon, Fr. Indo-China. 10 w. "Radio Michel Robert." (Weekdays, 7-8:30 am).
 9415 PJC2 Willemstad, Curacao. "Radio Curon." Enmastad.
 9415 PLV Bandoeng, Java, N.E.I. 80 kw. Governments Radio-Dienst.
 9437 COCH Havana, Cuba. 5 kw. Cadena Azul de Radio, Prado 63. (Sun, 8 am-10 pm; other days, 8 am-midnight).
 9465 TAP Ankara, Turkey. 20 kw. 11:30 am-5 pm. See "Ankara."
 9490 KZIB Manila, P. I. I. Beck, Inc., Box 440. (Sat through Thurs, 8:30 pm-2:45 am).
 9500 OFD Lahiti, Finland. 1 kw. See "Lahiti." (Weekdays, 5-6:30 am; 10 am-5 pm.)
 9500 PRF5 Rio de Janeiro, D. F., Brazil. 12 kw. "A Voz do Brasil." Cia. Radio Internacional do Brasil, Marapicu, D. F. (4:45-5:45 pm).
 XEWW Mexico City, D. F. 10 kw. 8:55 am-midnight. "La Voz de la America Latina desde

- Mexico." Aptdo. 2516. Relays NEW. Cadena Radio-difusora Mexicana.
- XGOY Lungtso, China.
- 9510 CXA8 Colonia, Uruguay. 2500 w. Relays LR3. "Real de San Carlos." (6 am-10 pm).
- 9510 GSB London, Gt. Britain. 20 kw. "B for Broadcasting." See "London." (1:30-3:50 am; 6:20-9:15 pm; 9:40-11:30 pm).
- HS8PJ Bangkok, Thailand (formerly "Siam"). Opening and interval signals, 3 ascending chimes. Post and Telegraph Dept., Col. Phra Aram.
- VK3ME Melbourne, Australia. 5 kw. Weekdays, 4-7 am. Amalgamated Wireless. (A/sia), Ltd., 167 King St.
- 9520 OZF Copenhagen, Denmark. 6 kw. 2-6 pm; 10-11 pm. Stats-radiofonien, Heibergsgade 7.
- XEDQ Guadalajara, Jal. 100 w. "Hablando a los Continentes desde Guadalajara." Relays XED. Aptdo. 197. Interval, 4 chimes; sign off, "Jarabe Tapatio."
- 9523 ZRG Pretoria, Union of So. Africa, 5 kw. See "Johannesburg." (Sat. 5-7 am; 9:30 am-4:45 pm; 11:45 pm-12:50 am; Sun. 5:30-7 am; 8:30 am-noon; 12:15-3:15 pm; Other days, 5-7 am; 9:30 am-3:30 pm; 11:45 pm-12:50 am).
- 9524 Luxembourg. "Radio Luxembourg." (11 am-1 pm).
- 9525 ZBW3 Hong Kong. 2500 w. Hong Kong Broadcasting Committee, Box 200.
- 9530 KGEI San Francisco, Calif. 20 kw. See "KGEI." (3-9 am).
- 9530 LKC Oslo, Norway. 5 kw. See "Oslo."
- VUFC2 Calcutta, India. 10 kw. 2:30-4:30 am. All-India Radio.
- WGEO Schenectady, N. Y. 40 kw. See WGEA.
- 9535 JZ1 Tokyo, Japan. 20 kw. See "Tokyo." (4:40-5:30 pm).
- Bern, Switzerland. 25 kw. See "Bern."
- 9536 VPD2 Suva, Fiji. 2 kw. Amalgamated Wireless. (A/sia), Ltd. (5:30-7 am).
- 9540 DJN Berlin, Germany. 50 kw. (12:05-2:30 am; 4:50-10:50 pm). See "Berlin" at end of list.
- 9544 HH2S Port-au-Prince, Haiti. Societe Haitienne de Radio-diffusion, Boite Postal 103.
- 9550 HVJ Vatican City. 15 kw. Wed, 2:30-3 pm; Sun. 5-5:30 am. See HV1.
- TPR11 Paris, France. 25 kw 11:15 pm-6 pm. See "Paris" at end of list.
- VUB2 Bombay, India. 10 kw. 12:30-4 am. 5-7:30 am; 10-11 pm. All India Radio.
- WGEO Schenectady, N. Y. 25 kw. See "WGEA."
- 9560 DJA Berlin, Germany. 50 kw. See "Berlin." (6:30-10:30 pm).
- 9562 OAX4T Lima, Peru. 10 kw. "Radio Nacional." Relays OAX4A. (Reported on 9560). Peruvian Gov't., Av. Petit Thouars 447. (7-8 am; 11:30 am-1:30 pm).
- 9570 WBOS Springfield, Mass. 10 kw. Relays NBC-WBZ-WBZA. Westinghouse Electric & Mig. Co.
- WPIT Pittsburgh, Pa. 40 kw. See "WPIT."
- 9580 GSC London, Gt. Britain. 20 kw. "C for Corporation." See "London." (1:30-4 pm; 4:20-6 pm; 6:25-9:20 pm; 9:40-11:30 pm).
- VLR Melbourne, Vic., Australia. 2000 w. 3:15-9:45 am. See VLR.
- 9585 KZEH Manila, Philippines. Box 119.
- 9590 HP5J Panama City, Panama. 1 kw. (Reported on 9610). 6:30-11 pm "La Voz de Panama." Apartado 867.
- PCJ Huizen, Netherlands. 60 kw. See "Hilversum." (Sun, 1:40-3 pm; 7:15-9:50 pm; Tu, 1:45-3:30 pm; 7-10:15 pm; W, 7:15-8:40 pm; F, 8-9 pm).
- VK2ME Sydney, Australia. 20 kw. Sun. 1-3 am; 5-11 am. Signature laughing notes of kookaburra. Amalgamated Wireless. (A/sia), Ltd., 47 York St. (Sun, midn't-2 am; 4:30-8:30 am; 11:30 am-1:30 pm).
- VK6ME Perth, Australia. 5 kw. Weekdays, 6-8 am. Amalgamated Wireless. (A/sia), Ltd.
- VUD2 Delhi, India 10 kw. 2-4:15 am; 8 am-1 pm; 10 pm-midnight. All-India Radio.
- VUD3 Delhi, India 5 kw. 8 am-1 pm. All-India Radio.
- 9590 WCAB Philadelphia, Pa. 10 kw. See "WCAB." (M. Th. Sat. 6:30 pm-2 am; Wed. 9 pm-2 am).
- WLWO Cincinnati, Ohio. 10 kw. See "WLWO."
- 9595 HRL Geneva, Switzerland. 20 kw. "Radio Nations."
- 9600 XEYU Mexico City, D. F. (9-11 pm).
- 9606 ZRL Capetown, Union of So. Africa. 5 kw. See "Johannesburg." (Sun. 3:30-4:30 am (or 4-5 am); 5:30-7 am; 9:11-45 am; noon-3 pm; Weekdays, 3:20-7:20 am; 9:11-45 am; noon-4 pm; 11:45 pm-12:50 pm).
- 9615 TIPG San Jose, C. Rica. 2 kw. "La Voz de la Victor." Claudia Martinez. (Reported on 9610). (7 am-11:30 pm; English hour Wed, Sat, 9-10 pm).
- 9616 HJ1ARP Cartagena, Colombia. 608 w. 4:30-10:30 pm. "Radio Cartagena." Aptdo 37.
- 9620 HAD Budapest, Hungary. (6-9 pm).
- 9630 HJ7GAD Bucaramanga, Colombia. 650 w. Relays HJ7GAE. "Radio Bucaramanga."
- 12RO3 Rome, Italy. 100 kw. See 9635 12RO3
- 9635 12RO3 Rome, Italy. 100 kw. See 1:01-2:55 pm; 5:30-9 pm).

- 9645 HH3W Port-au-Prince, Haiti. 30 w. 1-2 and 7-8 pm. C. Ricardo Widmaier, Box A-117.
- 9645 JLT2 Tokyo, Japan. See "Tokyo." (8-8:30 pm).
- 9650 IABA Addis Ababa, Ethiopia. 1 kw. E. I. A. R. (Sun, 3:30-3:55 am).
- 9650 WCBX New York, N. Y. 10 kw. See "WCBX." (10:30-11:30 pm).
- 9660 CR6AA Lobito, Angola.
IIVJ Vatican City. 15 kw. Wed, 2:30-3 pm; Sun, 5-5:30 am. See IIVJ.
- 9670 I2RO9 Rome, Italy. 100 kw. See "Rome." (12:40-5:30 pm; 6-6:30 pm).
- 9675 DJX Berlin, Germany. 10:35 am-4:25 pm. See "Berlin" at end of list.
- 9685 TGWA Guatemala City, Guat. 10 kw. See "TGWA." (Sun, 7 pm-midnight; Weekdays, 7:30 pm-12:15 am).
- 9690 HMF Baghdad, Iraq. Qasr-El-Lahoor Brdcstg. Station. (3 pm).
- 9692 TI4NRH Heredia, Costa Rica. 750 w. Sun, 7-8 am; Tu, Th, Sat, 9-10 pm. Amando Cespedes Marin, Apartado 40.
- 9700 "Radio Martinique." Fort de France, Martinique 1500 w. 1:15-2:45 pm; 6-10 pm. Sign off with Marseillaise. Poste Seri. Boite 136.
- 9730 CB970 Valparaiso, Chile. (Reported on 9710). 6:30-11 pm.
- 9755 ZRO Durban, Union of So. Africa. 200 w. See "Johannesburg." (Sat, 3:30-7:30 am; 9-11:15 am; 11:20 am-4 pm; Sun, 5:30-7 am; 9-11:15 am; 11:20 am-3:20 pm; Other days, 3:30-7:30 am; 9-11:15 am; 11:20 am-3:45 pm).
- 9835 IRF Rome, Italy. 20 kw. See "Rome." (5:20-5:40 am; noon-12:25 pm; 12:40-1 pm; 1:50-2:30 pm; 6-9 pm).
- 9860 EAQ Madrid, Spain.
- 9925 JDY Dairen, Kwantung. 10 kw. 7-8 am. Manchuria Telephone and Telegraph Co.
- 9985 COCM Havana, Cuba. 1 kw. Relays CMCM, "Trans Radio Columbia." 23 No. 1113, Vedado.
- 10220 PSH Rio de Janeiro, Brazil. 12 kw. Relays PRF4; signs off with Brazilian National Hymn. Cia. Radio Internacional do Brasil, Caixa Postal 709. (Weekdays, 6-7 pm; M, 8-8:30 pm; F, 7-7:30 pm).
- 10330 ORK Brussels, Belgium. 11 kw. 1:30-3 pm.
- 10660 JVN Tokyo, Japan.
- 10740 JVM Tokyo, Japan.
- 11402 HBO Geneva, Switzerland. "Radio Nations." Sun, 7-7:45 pm.
- 11650 COCX Havana, Cuba. 1 kw. (Reported on 11740). Sun, 6-9 pm; Weekdays, 8 am-midnight. Relays CMX, "Casa Lavin," Box 32, Tokyo, Japan.
- 11660 JVL Tokyo, Japan.
- 11673 IQY Rome, Italy. See "Rome." (5:20-5:40 am; 12:07-12:56 pm; 1:50-2:30 pm).
- 11700 HP5A Panama City. 300 w. Sun. 9 am-1 pm; 6-10 pm. Weekdays, 11:45 am-1 pm; 6-10 pm. "Radio Teatro Estrella de Panama." Sign off with "Anvil Chorus." Radio Teatro, Aptdo. 954.
- 11705 JLG3 Tokyo, Japan. See "Tokyo." (8-8:30 pm).
- 11705 SBP Stockholm, Sweden. 500 w. Sun, 1:15-4:15 pm; Wed, Sat, 8-9 pm; Daily 1-4:15 pm. Telegrafverket Tjanstebrev 5.
- 11718 CR7BH Lourenco Marques, Port. E. Agric. 200 w. Radio Club de Mocambique. Caixa 594. (Sun, 5-7 am; 10 am-12 pm; Weekdays, midn't-1 am; 4:30-6:30 am; 9:30-11 am; noon-4 pm).
- 11718 TPB6 Paris, France. 7-9:15 pm. See "Paris."
- TPA4 Paris, France. 7-9:15 pm; 9:30 pm-midnight. See "Paris."
- 11720 CJRX Winnipeg, Man. 2 kw. James Richardson & Sons, 157 Royal Alexandra Hotel.
- 11721 ZP14 Villarrica, Paraguay. "Radio Cultura." (7:07-9:07 pm).
- 11730 PHI Huizen Netherlands. 23.6 kw. See Hiversum.
- WSLA Boston, Mass. 20 kw. See "WSLA."
- 11730 WSLR Boston, Mass. 20 kw. See "WSLA."
- 11735 LKQ Oslo, Norway. 5 kw. See "Oslo." (11 am-2 pm).
- 11740 HVJ Vatican City. 15 kw. Tues. 8:30-9 am. See HVJ.
- 11750 GSD London, Gt. Britain. 20 kw. "D For Daventry." See "London." (1:30-3:50 am; 12:35-4 pm; 4:20-6 pm; 6:20-9:15 pm; 9:40-11:30 pm).
- 11760 TGWA Guatemala City, Guat. 10 kw. Sun. 12:45-5:15 pm; Weekdays, 12:45-1:45 pm. See TGWA.
- 11770 DJD Berlin, Germany. 50 kw. 11:30 am-4:30 pm; 4:50-10:50 pm. See "Berlin."
- 11770 MTCY Hsingking, Manchukuo.
- 11780 HP5G Panama City, Pan. 750 w. "Ron Dalley." Opens, closes, with Prelude from "Traviata." Salvador Graziani, Box 1121. (6-10 pm).
- 11780 Saigon, Fr. Indo-China. "Radio Saigon." (6 am).
- 11790 WSLA Boston, Mass. 20 kw. See "WSLA."
- 11800 JZJ Tokyo, Japan. 50 kw. See "Tokyo." (7-9:30 am; 2:30-4 pm).

- 11801 DJZ Vienna, Germany. 50 kw. See "Berlin." (4:50-10:50 pm).
- 11810 I2RO4 Rome, Italy. 100 kw. See "Rome." (4:30-4:55 am; 5-7:25 am; 7:30-8:45 am; 10 am-3 pm; 6-9 pm).
- 11820 GSN London, Gt. Britain.
- 11830 WCB1 Chicago, Ill. 500 w. See "WCB1."
- 11830 WCBX New York, N. Y. 10 kw. See "WCBX." (Sun, 3-6 pm; Daily exc. Sun, 4-6 pm; Daily 6:30-10 pm).
- 11840 OLR4A Prague, Bohemia. 35 kw. "Radio Podedbrady." (M, Tu, W, Th, F, 8-10:30 am; Sun, 7:15-9:55 pm).
- 11850 HAD Budapest, Hungary. (2-6 pm).
- 11870 VUM2 Madras, India 10 kw. 4-4:30 am. All-India Radio.
- 11870 WPIT Pittsburgh, Pa. 40 kw. See "WPIT." (2-11 pm).
- 11880 VLR3 Melbourne, Australia. 1-3 am. See V.L.R.
- 11885 TPA3 Paris, France. 25 kw. 2-5 am; 11:15 am-6 pm. See "Paris."
- TPB7 Paris, France. 25 kw. 9:30 pm-midnight. See "Paris."
- 11900 I2RO13 Rome, Italy. 100 kw. See 2RO.
- 11900 XGOY Chungking, China. Central Brdcstg. Station. (5:30-10:30 am; 11-11:30 am; 4-6:30 pm).
- 11900 XMHA Shanghai, China. 445 Racecourse Road. (Reported on 11840 and 11857) (6 am).
- 11900 Hanoi, Fr. Indo-China. "Radio Hanoi 11." 20 rue de la Pepiniere. (Sat, 8:30-10:30 pm; Sun, 12:01-9:30 am; Other days, 12:01-2:30 am; 6-9:30 am).
- 11930 PPH Rio de Janeiro, Brazil. (5:30 am).
- 11960 HI2X Trujillo, D. R. 900 w. Relays H1X. J. R. Saladin, Gobierno Dominicano. (Sun, 7:40-10:40 am).
- 12230 COCE Havana, Cuba. "La Voz del Transporte." Prado 18. (8 am-midn't.)
- 12235 TFF Reykjavik, Iceland. 7500 w. Sun, 1:45-2:30 pm Icelandic State Broadcasting Service, Box 547.
- 12460 HCJB Quito, Ecuador. (Reported on 12450). Clarence W. Jones, Casilla 691. (Daily exc. Mon, 10-11 pm).
- 12900 YN3DG Leon, Nicaragua. (Verifies for 10c). (Sat, Sun, 10 pm).
- 14125 YV9AB In Venezuela on Guiana-Brazil Border. Expedicion de la Gran Sabana, Ministerio de Fomento, Caracas.
- 14795 IQA Rome, Italy. See "Rome." (4:30-4:55 am).
- 14935 PSE Rio de Janeiro, Brazil. W, 4-4:10 pm; Th, Sat, 3-3:30 pm).
- 15110 DJL Berlin, Germany. 50 kw. 12:05-2 am; 8-9 am; 10:35 am-4:25 pm. See "Berlin."
- 15120 HVJ Vatican City. 15 kw. Tues, 10:30-11 am; Sun, 1-1:30 pm. See HVJ.
- 15130 TPB11 Paris, France. 25 kw. 2-5 am. See "Paris."
- WSLA Boston, Mass. 20 kw. See "WSLA."
- 15130 WSLR Boston, Mass. 20 kw. See "WSLA."
- 15140 GSF London, Gt. Britain. 15 kw. "F For Fortune." See "London." (5:45-8:50 am; 9 am-noon; 4:20-6 pm; 6:20-9:15 pm).
- 15160 JZK Tokyo, Japan. 50 kw. See "Tokyo." (Midnight-1:30 am; 7-9:30 am; 2:30-4 pm).
- VUD3 Delhi, India. 5 kw. 2-4:15 am; 10 pm-midnight. All-India Radio.
- XEWV Mexico City, D. F. 10 kw. "La Voz de la America Latina desde Mexico," Aptdo. 2516.
- 15170 LKV Oslo, Norway. 5 kw. See Oslo.
- 15170 TGWA Guatemala City, Guat. 10 kw. See "TGWA." (Sun, 12:01-1 am; 10:30 am-5:15 pm; Weekdays, 7:45-9 am; 12:45-3:45 pm).
- 15180 GSO London, Gt. Britain. "O For Ocean." See "London." (4:20-6 pm; 6:25-9:20 pm).
- 15195 TAQ Ankara, Turkey. 20 kw. Turkish Brdcstg. System. Daily 5:30-7 am.
- 15200 DJB Berlin, Germany. 8 kw. See "Berlin." (5-11 am; 4:50-10:50 pm; Sun, 11:10 am-12:25 pm).
- 15210 WPIT Pittsburgh, Pa. 40 kw. See "WPIT." (9 am-2 pm).
- 15220 PCJ2 Hilversum, Netherlands. 60 kw. See "Hilversum." (Sun, 7:40-9:05 am; M, Th, 7:40-9 am; Tu, 1-2:30 am; W, 9:30-11:30 am; Tu, W, F, Sat, 7:40-8:45 am).
- 15240 CR7BD Lourenco Marques, Mozambique. Radio Club de Mocambique, Box 594. (Sun, 5-7 am; 10 am-2 pm; Other days, midn't-1 am; 4:30-6:30 am; 9:30-11 am; noon-4 pm).
- 15243 TPA2 Paris, France. 25 kw. 6-11 am. See "Paris."
- 15260 GSI London, Gt. Britain. "I For Island." See "London." (1:30 am-3:50 am; 12:25-4 pm).
- 15270 WCBX New York, N. Y. 10 kw. See "WCBX." (Sun, 1-2:30 pm; Other days, 1-3:30 pm).
- 15280 DJQ Berlin, Germany. 50 kw. Daily, 12:05-11 am; 4:50-10:50 pm. See "Berlin."
- 15280 HI3X Trujillo, D. R. 900 w. (Reported on 17400). Relays H1X. Secretaria de Comunicaciones y Obras Publicas. (Tu, F, 8:10-10:10 pm; Sun, 7:40-9:40 pm).
- LRU Buenos Aires, Argentina. 5 kw. 8 am-1 am. "Radio El Mundo," Calle Maipu 555.

- 15300 I2RO6 Rome, Italy. 100 kw. See "Rome." (4:10-4:55 am; 10 am-12:06 pm; 1:40-2:30 pm; 3-5:30 pm; 7:30-9 pm).
- 15300 LYZ4 Kaunas, Lithuania. (Reported on 15130). (Sun, 1 pm).
- 15310 GSP London, Gt. Britain. "P For Progress." See "London." (12:17-1:15 pm; 1:15-4 pm; 4:20-6 pm).
- 15330 KGEI San Francisco, Calif. 20 kw. See "KGEI." (1-4 am; 5-8 am; 12:30-8 pm).
- 15340 DJR Berlin, Germany. 50 kw. See "Berlin." (4:55-10:50 pm).
- 15410 Bucuresti, Romania. 50 kw. "Radio Bucuresti." (9-10:15 pm).
- 17760 DJE Berlin, Germany. 50 kw. See "Berlin." (12:05-5:50 am; 6-7:45 am; 8-11 am; 11:10 am-12:25 pm; 4:55-9 pm).
- 17770 PH12 Huizen, Netherlands. 23.6 kw. See "Hilversum." (Sun, 6:40-10:05 am; M, Th, 7:40-9 am; Tu, W, F, Sat, 7:40-8:45 am).
- 17785 JZL Tokyo, Japan. See "Tokyo." (4:30-5:30 pm; 8-8:30 pm).
- 17790 GSG London, Gt. Britain. 5:45-8:50 am; 9 am-noon; 12:20-4 pm. See "London."
- 17800 TGWA Guatemala City, Guat. 10 kw. See "TGWA."
- 17810 GSV London, Gt. Britain. 5:45-8:50 am; 12:20-4 pm. See "London."
- 17840 HVJ Vatican City. 15 kw. See HVJ.
- 21470 GSH London, Gt. Britain. 5:45-8:50 am; 9 am-noon. See "London."
- 21520 WCAB Philadelphia, Pa. 10 kw. See "WCAB." (Noon-6 pm).
- 21530 GSJ London, Gt. Britain. 5:45-8:50 am. See "London."
- 21540 WPIT Pittsburgh, Pa. 40 kw. See "WPIT." (5:30-9 am).
- 21565 DJJ Berlin, Germany. 6-7:50 am. See "Berlin."
- 21570 WCBX New York, N. Y. 10 kw. See "WCBX." (8 am-12:30 pm).
- 21680 IAD Budapest, Hungary. (11 am-2 pm).
- 25950 W8XNU Cincinnati, Ohio. 1 kw. Crosley Corp. (Sun, 8 am-1 am; Other days, 7 am-1 am).
- 26050 W9XH South Bend, Ind. 100 w. South Bend Tribune. (Week-days, 1:30-5:30 pm).
- 26300 W3XJI Newark, N. J. (WOR). (Sat, 4-4:45 pm).
- 26500 W9XTA Harrisburg, Ill. 500 w. Schenert Radio Service. (Ham Forum Saturday at 2:15 pm).
- 30660 W3XAB Camden, N. J. RCA Mfg. Co.
- 30820 W9XEG Aurora, Ill. 6 w. Martin R. O'Brien.
- 31100 W3XIW Reading, Pa.
- 31600 W1XEQ Fairhaven, Mass. WNBH.
- W1XER Boston, Mass. The Yankee Network.
- W1XKA Boston, Mass. WBZ.
- W1XKB Springfield, Mass. WBZA.
- W1XOE Boston, Mass. CBS.
- W2XDG New York, N. Y. WEAFF-WJZ.
- W2XDV New York, N. Y. WABC.
- W2XHG Bound Brook, N. J. WJZ.
- W3XES Baltimore, Md. WCAO.
- W3XEX Norfolk, Va. WTAR.
- W3XEY Baltimore, Md. WFBR.
- W3XIR Philadelphia, Pa. WCAU.
- W3XKA Philadelphia, Pa. KYW.
- W4XBW Chattanooga, Tenn. WDOO.
- W4XCA Memphis, Tenn. WMCA.
- W5XAU Oklahoma City, Okla. WKY.
- W5XD Dallas, Texas.
- W5XGB Pasadena, Texas, Houston Lighting & Power Co.
- W5XGC Humble, Texas. Houston Lighting & Power Co.
- W6XAS San Francisco, Calif. KJBS.
- W6XNT Portable. Press Wireless, Ltd.
- W8XAI Rochester, N. Y. WHAM.
- W8XH Buffalo, N. Y. WBEN.
- W8XKA Pittsburgh, Pa. KDKA.
- W8XNT Cleveland, Ohio. WGAR.
- W8XOY Akron, Ohio. WADC.
- W8XWJ Detroit, Mich. WWJ.
- W9XBS Chicago, Ill. WENR.
- W9XER Kansas City, Mo. KMBC.
- W9XHW Minneapolis, Minn. WCCO.
- W9XLA Denver, Colo. KLZ.
- W9XOK St. Louis, Mo.
- W9XPD St. Louis, Mo. KSD.
- W9XUY Omaha, Nebr.
- 42460 W9XER Kansas City, Mo. 500 w. Midland Brdcstg. Co., Inc.
- 300000 W4XFM Nashville, Tenn. Nat'l. Life and Accident Ins. Co.

The Addresses were given in the October issue, and will be printed again in December.

DXer's Appointment Calendar

The time shown in this Calendar is EST. For CST, subtract 1 hour; for MST, subtract 2 hours; for PST, subtract 3 hours; for GMT, add 5 hours.

Clubs: Newark News Radio Club (NNRC); Universal Radio DX Club (URDXC); Cleveland Radio Club (CRC).

Oct. 27, 8 pm, meeting of Brooklyn-Metropolitan Chapter, The Radex Club, 6637 Ovington Court, Brooklyn, N. Y.

Oct. 29, 1-2 am, WCPO, Cincinnati, Ohio, 1200 kcs., "Parade Across Ohio" for NNRC.

Oct. 29, 1-2 am, TG1 on 1310 and TG2 on 6190 will dedicate a special program to RADEX, arranged by Prof. Carlo Spatari. This station verifies free of charge. Address Col. Eduardo Perez F., Director General of Communications, Radio Morse, Guatemala City, Guat.

Oct. 31, 3-5 am, LS11, La Plata, Argentina, 30 kw., 1310 kcs. Send IRC for verities to Radio Provincia. (Arranged by Wm. Cunningham for URDXC).

Nov. 2, 1:30-2 am, WLW on 700 and WLWO on 6060 kcs., Cincinnati, Ohio, for National Lutheran Radio Week. Reports to Pastor Barth, c/o WLW.

Nov. 6, 8 pm, meeting of the Irvington Chapter of The Radex Club, at 870 Sanford Ave., Irvington, N. J.

Nov. 8, 4:30-4:45 am, WEOA, Evansville, Ind., 1370 kcs., "Parade Across Indiana," for NNRC.

Nov. 9, 4:25-4:40 am, WGBF, Evansville, Ind., 630 kcs., "Parade Across Indiana" for NNRC.

Nov. 12, 10-10:10 am, YL2CD, 28080 kcs. Send reports to A. Vitohus, Miera-iela, 52-5, Riga, Latvia. (Arranged by J. E. Gardner, for CRC).

Nov. 13, 3:30-3:45 am, WQDM, 1390 kcs., St. Albans, Vt. Talks on ham radio.

Nov. 15, 4-6 am, ZP15 on 700 kcs. and ZP14 on 11721 kcs., Villarrica, Paraguay. Arranged by Wm. Cunningham for URDXC.

Nov. 18, 2-5 am, WGNC, Gastonia, N. C., 1420 kcs. (NNRC).

Nov. 19, 10-10:10 am, YL2CD, 28080 kcs. Send reports with IRC to A. Vitohus, Miera-iela, 52-5, Riga, Latvia. Arranged by J. E. Gardner for CRC.

Nov. 24, 8 pm, meeting of Brooklyn-Metropolitan Chapter, The Radex Club, 6637 Ovington Court, Brooklyn, N. Y.

Nov. 24, 2-3 am, WGRC, New Albany, Ind., 1370 kcs., "Parade Across Indiana," for NNRC.

Dec. 8, 1:30-5:30 am, WJAG, 1060 kcs., Norfolk, Nebr.

Regular DX Programs

First day of month, 4-4:30 am, WPAY, 1370 kcs., Portsmouth, Ohio.

Last day of month, 3-5 am, KWSC, 1220 kcs., Pullman, Wash.

Every Saturday, 2:30-2:45 am, KLS, 1280 kcs., Oakland, Calif.

Every Saturday, 10:15-10:30 am, WEEU, 830 kcs., Reading, Pa.

Every Saturday at 10 pm, YN3DG, 13900 kcs., Leon, Nicaragua. (Spatari—10c for verities).

Every Saturday, 4:15-4:45 pm, W2XJI, 26300 kcs., Newark, N. J. (NNRC ups).

Every Saturday, 10 pm, YN3DG, 13900 kcs., Leon, Nicaragua. (Spatari program).

Every Sunday, 2-2:30 am, TG1 on 1310 and TG2 on 6190 kcs., Guatemala City, Guat.

Every Sunday, 10:15-10:45 am, CFCC, 630 kcs., Chatham, Ont.

Every Sunday, 3-5 am, XEAC, 980 kcs., Tijuana, B. Cia.

Every Sunday, 12:30-1 am, TGQA on 6400 and TGQ on 1450 kcs., Quezaltenango, Guatemala. (Spatari program, all reports verified free).

First Sunday, at 1 am, YN3DG, 13900 kcs., Leon, Nicaragua. (Spatari program).

First and Third Sunday, 2-4 am, WJBO, 1120 kcs., Baton Rouge, La.

Every Tuesday, 11:45 am-noon, W9XA, 26450 kcs., Kansas City, Mo.

Every Wednesday, 12:30 am, KOY, 1390 kcs., Phoenix, Ariz.

First and Third Wednesday, 1:45-2 pm, WTAR, 780 kcs., Norfolk, Va.

Every Thursday, 2:45-3 am, KSL, 1130 kcs., Salt Lake City, Utah. (Spatari announcements).

1st to 7th, midnight to 6 am, KPAB, 1500 kcs., Laredo, Tex. (Mexico Tourist Program; Mexican souvenirs sent to reporters).

8th to 14th, midnight to 2 am, KPAB; 1500 kcs., Laredo, Tex. (Mexico Tourist Program; Mexican souvenirs sent to reporters).

15th to 31st, midnight to 6 am, KPAB, 1500 kcs., Laredo, Tex. (Mexico Tourist Program; Mexico souvenirs sent to reporters).

Second Friday, 12:30-1 am, WJAG, 1060 kcs., Norfolk, Nebr.



Verification from "Radio Morse," Guatemala City, with message printed in the Spatari Radio Language. The picture is green, the printing blue and the wireless decoration on the top is gold. (Courtesy of Erick R. Johnson).

The WORLD'S Radio Stations

(Continued From October Issue)

A complete listing of the radio stations of
the world, from 500 kcs to 500,000 kcs.

The addresses and broadcasting schedules of the shortwave broadcasting stations are not shown in this list. Readers are referred to The Shortwave Broadcasting Station List for this information.

2500	KNKA	C	....	Grand Canyon, Ariz. (North Rim)
	XEXP	B	30	Monterrey, N. L. Presidencia Municipal.
2506	KLH	..	....	San Rafael, Calif. Pacific Teleg. & Telephone Co.
	WOU	..	....	Marshfield, Mass. New England Telephone & Teleg. Co.
2512	KGJK	S	....	"Jeannette E." Skinner & Eddy Corp.
	KGM	..	....	Ketchikan, T. A. Same as KGJK.
	KGNM	S	....	"Doris E." Same as KGJK.
	KGXN	S	....	"Yes Bay." Same as KGJK.
	KIAO	..	....	Rose Inlet, T. A. Alaska Pacific Salmon Co.
	KIAP	..	....	Rose Inlet, T. A. Same as KIAO.
	KIAP	..	....	Port Althrop, T. A. Same as KIAO.
	KIAW	..	....	Port Althrop, T. A. Same as KIAO.
	KIAX	..	....	Ketchikan, T. A. Same as KIAO.
	KIAY	..	....	Ketchikan, T. A. Same as KIAO.
	KIAZ	..	....	Kake, T. A. Same as KIAO.
	KIBA	..	....	Kake, T. A. Same as KIAO.
	KLB	..	....	Port Althrop, T. A. Same as KIAO.
	KLC	..	....	Kake, T. A. Same as KIAO.
	KLE	..	....	Rose Inlet, T. A. Same as KIAO.
	WDEM	S	....	"Wm. T. Muir." Same as KGJK.
	WFER	S	....	"Frances E." Same as KGJK.
	WIDL	S	....	"Leonine." Same as KGJK.
	WIDM	S	....	"Sally S." Same as KGJK.
	WIDN	S	....	"Virginia E." Same as KGJK.
	WNFM	S	....	"Alco." Same as KGJK.
2514	WCY	CHT	400	West Dover, Ohio. (600 w. days). Radiomarine Corp.
	WDR	CHT	400	Miami Beach, Fla. Southern Bell Te. & Teleg. Co.
2515	KAKL	C	....	Kasaan, T. A. Pacific American Fisheries, Inc.
	KIDB	T	....	Kasaan, T. A. Same as KAKL.
	KZS	CH	....	Kasaan, T. A. Same as KAKL.
2520	KNJB	F	....	Yellowstone Nat'l. Park, Wyo.
	KNKP	F	....	Rocky Mt. Nat'l. Park. Colo.
2522	KOW	T	....	Edmonds, Wash. Pacific Telephone & Teleg. Co.
	WOO	T	....	Ocean Gate, N. J. Am. Tele. & Teleg. Co. Long Lines Dept.
2530	WCT	CHT	400	San Juan, P. R. Radio Corp. of P. R.
	WOX	C	....	St. George, S. I., N. Y. New York Telc. Co.
2538	KALG	..	....	Squaw Harbor, T. A.
	KALI	..	....	Lazy Bay, T. A.
	KALJ	..	....	King Cove, T. A.
	KDK	..	....	Wrangell, T. A. A. R. Brueger.
	KFC	CH	50	Hood Bay, T. A. Hood Bay Canning Co.
	KILD	..	....	Cordova (Eyak River) T. A.
	KLU	..	....	Sitka, T. A. Pyramid Packing Co.
	KMK	CH	10	Seldovia, T. A. Cook Inlet Packing Co.
	WOMW	S	....	"Minniehaha."
	WOMX	S	....	"Empress."
	WOMY	S	....	"Glenwood."
	WOPE	S	....	"Admiralty."
2542	KLH	T	....	San Francisco, Calif. Pacific Tele. & Teleg. Co.
2550	WAD	CHC	....	Pt. Washington, Wis. Lorain County Radio Corp.
	WAS	CH	400	Duluth, Minn. Same as WAD.
	WAY	CHT	400	Lake Bluff, Ill. Thorne Donnelley.
	WMI	CHC	500	Lorain, Ohio. Same as WAD.
2558	WAK	CC	400	Port Sulphur, La. Southern Bell Telc. & Teleg. Co.
2566	KADY	T	40	Petersville, T. A. W. N. Cuddy.
	KFF	..	....	Union Bay, T. A. Nakat Packing Corp., Dexter Horton Bldg., Seattle, Wash.
	KGFO	S	....	"A & P Nakeen." Same as KFF.

	KHV	..	....	Nakeen, T. A.	Same as KFF.
	KIBZ	T	....	Waterfall, T. A.	Same as KFF.
	KICC	..	....	Nakeen, T. A.	Same as KFF.
	KLA	..	....	Waterfall, T. A.	Same as KFF.
	KLD	..	....	Hilden Inlet, T. A.	Same as KFF.
	KOU	..	....	Wilmington, Calif.	Southern Calif. Tele. & Teleg. Co.
	KOO	CH	25	Platinum, T. A.	Alaska Traders.
	WFFW	S	....	"Ruth B."	Same as KFF.
	WFFF	S	....	"Genevieve H."	Same as KFF.
	WIDQ	S	....	"Rudolph N."	Same as KFF.
	WIDR	S	....	"Hazel Robb."	Same as KFF.
	WIDS	S	....	"Barron F."	Same as KFF.
	WIDT	S	....	"Sacco."	Same as KFF.
	WNFN	S	....	"Lummi Bay."	Same as KFF.
	WOFJ	S	....	"Superior."	Same as KFF.
	WOFL	S	....	"Quaker Maid."	Same as KFF.
	WRBR	S	....	"Frederick C."	Same as KFF.
	WRBS	S	....	"Petrel."	Same as KFF.
	WSBM	S	....	"Nakeen."	Same as KFF.
2572	WCY	CHT	400	West Dover, Ohio.	(600 w. days). Radiomarine Corp.
2590	KOU	T	....	Wilmington, Calif.	Southern Calif. Tele. Co.
2600	KNIA	F	....	Glacier Nat'l Park, Mont.	
2604	WVD	T	500	Seattle, Wash.	Alaskan Tele. Co., 517 Federal Office Bldg.
	WXA	T	400	Juneau, T. A.	U. S. Signal Corp.
	WXH	..	....	Ketchikan, T. A.	
2608	KNCI	FA	....	Monroe, La.	Aeronautical Radio, Inc.
	KNCT	FA	....	Dallas, Texas.	Same as KNCI.
	KNCY	FA	....	Shreveport, La.	Same as KNCI.
	WAJD	FA	....	Jackson, Miss.	Same as KNCI.
	WAJE	FA	300	Birmingham, Ala.	(600 w. days). Same as KNCI.
	WARG	FA	45	Augusta, Ga.	Same as KNCI.
	WEEA	FA	....	Atlanta, Ga.	Same as KNCI.
	WEFC	FA	....	Charleston, S. C.	Same as KNCI.
	WEFF	FA	....	Spartanburg, S. C.	Same as KNCI.
	WEEG	FA	....	Greensboro, N. C.	Same as KNCI.
	WEEJ	FA	....	Jacksonville, Fla.	Same as KNCI.
	WEEK	FA	....	S. Washington, Va.	Same as KNCI.
2612	KGTF	FA	....	Ft. Worth, Tex.	Aeronautical Radio, Inc.
	KGUA	FA	....	El Paso, Texas.	Same as KGTF.
	KGUG	FA	....	Big Spring, Tex.	Same as KGTF.
	KGUP	FA	....	Phoenix, Ariz.	Same as KGTF.
	KGUQ	FA	....	Indio, Calif.	Same as KGTF.
	KGUR	FA	....	Glendale, Calif.	American Airlines.
	KGUS	FA	....	Blythe, Calif.	Same as KGTF.
	KGUT	FA	....	Robertson, Mo.	Same as KGTF.
	KIOO	FA	....	Oklahoma City, Okla.	Same as KGTF.
	KIOS	FA	....	Springfield, Mo.	Same as KGTF.
	KIOT	FA	....	Tulsa, Okla.	Same as KGTF.
2616	KAEB	T	40	Hydaburg, T. A.	Territory of Alaska.
	KAED	T	40	Atgoon, T. A.	Same as KAEB.
	KAEF	T	40	Jack Wade, T. A.	Same as KAEB.
	KAEH	T	....	Kake, T. A.	Same as KAEB.
	KAEP	T	....	Tenakee, T. A.	Same as KAEB.
	KAEW	T	....	Umnak, T. A.	Same as KAEB.
	KAGI	T	50	Hood Bay, T. A.	Hood Bay Canning Co.
	KAJJ	T	....	Aika, T. A.	Same as KAEB.
	KAJU	T	....	Attu, T. A.	Same as KAEB.
	KAKJ	T	....	Yakuat, T. A.	Same as KAEB.
	KAMY	..	50	Port Oceanic, T. A.	Oceanic Fisheries Co.
	KAQF	T	....	Unala-ka, T. A.	Same as KAEB.
	KBNO	T	10	Haycock, T. A.	Wien Alaska Airlines, Inc.
	KGXW	T	....	Port Alexander, T. A.	Karl Hansen.
	WGML	FA	50	Middleriver, Md.	Aeronautical Radio, Inc.
	WGLN	FA	50	Portable on crash boat.	Same as WGLM.
2630	KYZA	G	....	El Paso, Tex.	U. S. Immigration Border Patrol.
	KYZF	G	....	Alpine, Tex.	Same as KYZA.
	KYZG	G	....	Tucson, Ariz.	Same as KYZA.
2632	KAMY	..	50	Port Oceanic, T. A.	Oceanic Fisheries Co.
	KANA	..	50	Port Williams, T. A.	Washington Fish & Oyster Co.
	KAPO	C	....	Carmel, T. A.	Alaska Red Salmon Packers, Inc.
	KAQI	..	50	Ouzinskie, T. A.	O. L. Grimes.
	KAYM	T	50	Noonah, T. A.	Icy Straits Salmon Co.
	KBMQ	T	84	Nulato, T. A.	(Kqiyuh Mining District). Three Miners, Inc.

	KFA	CH	50	Hoonah, T. A. Same as KAYM.
	KIJP	T	....	Uganik Bay, T. A. San Juan Fishing & Packing Co.
	KIJW	..	50	Shearwater Bay, T. A. Kadiak Fisheries Co., 412 Lowman Co., Seattle, Wash.
	KIJX	..	....	Kodiak Island, T. A. Same as KIJW.
	KIMA	..	....	Port Hobron, T. A. American Pacific Whaling Co., Bellevue, Wash.
	KIOC	..	10	Port Wakefield, T. A. Apex Fish Co.
	KIOD	T	50	Nellie Juan, T. A. Copper River Packing Co.
	KIOH	T	50	Iron Creek, Raspberry Straits, T. A. Southwestern Herring Co., 2212 Pacific Ave., Everett, Wash.
	KIOI	..	50	Akutan, T. A. Same as KIMA.
	KKAC	T	50	Zachar Bay, T. A. Chatham Strait Fish Co.
	KSZ	T	50	Zachar Bay, T. A. Same as KKAC.
2640	KNBJ	FA	....	Dallas, Texas. Aeronautical Radio, Inc.
	KNBK	FA	....	Brownsville, Tex. Same as KNBJ.
	KNBM	FA	....	Okahoma City, Okla. Same as KNBJ.
	KNBN	FA	....	Houston, Tex. Same as KNBJ.
	KNBO	FA	....	Kansas City, Mo. Same as KNBJ.
	KNBP	FA	....	Wichita Falls, Tex. Same as KNBJ.
	KNBQ	FA	....	Amarillo, Tex. Same as KNBJ.
	KNBR	FA	....	Corpus Christi, Tex. Same as KNBJ.
	KNBS	FA	....	Austin, Tex. Same as KNBJ.
	KNBU	FA	....	San Antonio, Tex. Same as KNBJ.
	KNBV	FA	....	Ft. Worth, Tex. Same as KNBJ.
	KNKS	F	....	Yosemite Park, Calif.
	KNKU	F	....	Yosemite Nat'l. Park, Calif.
	KNKW	F	....	Yosemite Nat'l. Park, Calif.
	KNKY	F	....	Devil's Post Pile Nat'l. Monument, Calif.
	KNLO	F	....	Death Valley, Calif.
2644	KGSK	FA	....	Billings, Mont. Aeronautical Radio, Inc.
	KNCV	FA	400	Miles City, Mont. Same as KGSK.
	KNWA	FA	....	St. Paul, Minn. Same as KGSK.
	KNWB	FA	....	Fargo, N. Dak. Same as KGSK.
	KNWD	FA	....	Bismarck, N. Dak.
	WAEH	FA	....	Milwaukee, Wis.
	WSDS	FA	....	Chicago, Ill.
2670	NMC	G	200	San Francisco, Calif. Treasury Dept. The Commandant, U. S. Coast Guard, Washington, D. C.
	NMD	G	200	Cleveland, Ohio. Same as NMC.
	NMF	G	....	Winthrop, Mass. Same as NMC.
	NMG	G	200	Mobile, Ala. Same as NMC.
	NMH	G	200	Washington, D. C. Same as NMC.
	NMN	G	200	Princess Anne (Virginia Beach), Va. Same as NMC.
	NMP	G	200	Wilmette, Ill. Same as NMC.
	NMV	G	200	Jacksonville Beach, Fla. Same as NMC.
	NMW	G	200	Westport, (Grays Harbor) Wash. Same as NMC.
	NMY	G	200	Rockaway Beach, N. Y. Same as NMC.
	NNO	G	200	Honolulu, T. H. Same as NMC.
	NOB	G	200	Buffalo, N. Y. Same as NMC.
	NOC	G	200	Charleston, S. C. Same as NMC.
	NOF	G	200	St. Petersburg, Fla. Same as NMC.
	NOI	G	200	San Pedro (Point Vicente), Calif. Same as NMC.
	NOL	G	200	Fort Lauderdale, Fla. Same as NMC.
	NOM	G	200	Miami, Fla. Same as NMC.
	NOP	G	200	New York (Floyd Bennett Field), N. Y. Same as NMC.
	NOO	G	200	New Orleans, La. Same as NMC.
	NOR	G	200	San Diego, Calif. Same as NMC.
	NOS	G	....	Salem, Mass. Same as NMC.
	NOU	G	....	New London, Conn. Same as NMC.
	NOV	G	200	Cape May, N. J. Same as NMC.
	NOW	G	200	Port Angeles, Wash. Same as NMC.
	NOX	G	200	Biloxi, Miss. Same as NMC.
	NOY	G	200	Galveston, Tex. Same as NMC.
	NRGA	GS	....	U.S.C.G. "Aurora" Same as NMC.
	NRGP	GS	....	U.S.C.G. "Perseus." Same as NMC.
	NRID	GS	....	U.S.C.G. "Taboe" Same as NMC.
	NRXV	GS	....	U.S.C.G. "CG254." Same as NMC.
	NRYA	GS	....	U.S.C.G. "CG250" Same as NMC.
	NRYR	GS	....	U.S.C.G. "CG260." Same as NMC.
	WWAK	LH	....	Anacapa Island, Calif.
	..	S	....	S. S. "Velasco,"
2698	KCBO	LH	....	Tillamook Rock, Ore.

	NMC	G	....	San Francisco (Pt. Bonita), Calif. Treasury Dept., The Commandant, U.S. Coast Guard, Washington, D. C.
	NMW	G	....	Westport (Grays Harbor), Wash. Same as NMC.
	NOJ	G	....	San Pedro (Point Vincente), Calif. Same as NMC.
2710	KYZM	G	....	Lynden, Wash. U. S. Immigration Border Patrol.
	WVMA	G	....	Detroit, Mich. Same as KYZM.
	WVMC	G	....	Marine City, Mich. Same as KYZM.
2720	KAFH	FA	500	Burbank, Calif. Aeronautical Radio, Inc.
	KCTH	FA	....	Salt Lake City, Utah. Same as KAFH.
	KGTJ	FA	....	Las Vegas, Nev. Same as KAFH.
	KSI	FA	....	Glendale, Calif. Same as KAFH.
	KST	FA	....	Kansas City, Mo. Same as KAFH.
	KSX	FA	....	Albuquerque, N. Mex. Same as KAFH.
	WAEF	FA	....	Newark, N. J. Same as KAFH.
	WAFQ	FA	....	Chicago, Ill. Same as KAFH.
	WHG	FA	....	Columbus, Ohio. Same as KAFH.
2726	KAGJ	SEM	250	Shreveport, La. Root Petroleum Co.
	KAGK	SEM	250	El Dorado, Ark. Same as KAGJ.
	KAIV	SEM	50	Perris, Calif. State of Calif. Dept. of Natural Resources, Div. of Forestry.
	KAIV	SEM	50	Yucaipa, Calif. Same as KAIV.
	KAIX	SEM	....	Portable. Same as KAIV.
	KAMB	SEM	50	Alhambra, Calif. Southern Calif. Edison Co.
	KASY	SEM	100	Salt Lake City, Utah. Telegram Pub. Co.
	KASZ	SEM	....	Portable—Salt Lake City. Same as KASY.
	KATA	SEM	50	Grass Valley, Calif. Idaho Maryland Mines Corp.
	KATR	SEM	50	Forbestown, Calif. Same as KATA.
	KATR	SEM	53	Mt. Shasta City, Calif. Same as KAIV.
	KAWJ	SEM	500	Norden, Calif. Southern Pacific Co.
	KAWK	SEM	50	Emigrant Gap, Calif. Same as KAWJ.
	KIIW	SEM	175	Los Angeles, Calif. L. A. County Flood Control District, 205 So. Broadway. L. A.
	KIIV	SEM	400	Los Angeles, Calif. Same as KIIW.
	KINT	SEM	....	Los Angeles, Calif.
	KIPI	SEM	50	Beatrice, Nebr. Natural Gas Pipeline Co. of America, Box 486.
	KIPN	SEM	100	Pacoima Dam, Calif. Same as KIIW.
	KIPO	SEM	100	San Gabriel Dam, Calif. Same as KIIW.
	KIPP	SEM	50	Los Angeles County, Calif. Same as KIIW.
	KIQO	SEM	50	Beatrice, Nebr. Same as KIPI.
	KIPR	SEM	50	Red Oak, Iowa. Same as KIPI.
	KIPT	SEM	50	Truro, Iowa. Same as KIPI.
	KIPU	SEM	50	Harper, Iowa. Same as KIPI.
	KIPW	SEM	100	Tujunga Dam, Calif. Same as KIIW.
	KNAA	....	....	Forbestown, Calif.
	KNAB	....	....	Grass Valley, Calif.
	KODK	SEM	50	Downieville, Calif. Rattlesnake Placer Mine.
	KODL	SEM	20	8 miles n. of Downieville, Calif. Same as KODK.
	WAGE	....	500	Portable-Mobile. Lakeside Radio Club.
	WAGG	SEM	5	Portable. Superior Pine Products Co.
	WAGI	SEM	100	Shamrock, Fla. Fla. State Board of Forestry.
	WAGU	....	200	Lake City, Fla. Same as WAGI.
	WAGO	SEM	50	Geneseo, Ill. Same as KIPI.
	WAGZ	SEM	100	De Leon Springs, Fla. Same as WAGI.
	WAIV	SEM	50	Portable. Am. Tel. and Teleg. Co.
	WAIV	SEM	50	Portable. Same as WAIV.
	WAIN	....	100	Portable in Fla. Same as WAGI.
	WAIV	G	30	Guayana, P. R.
	WAIV	G	40	Mayaguez, P. R.
	WALC	SEM	250	Brunswick, Ga. Ga. Coastal Plains Timber Protective Ass'n.
	WANB	SEM	100	Dismore, Fla. Same as WAGI.
	WEIT	....	50	Portable. Edward L. Thompson.
	WOPX	....	500	Portable in Ill. State of Ill. Dept. of Public Works and Bldgs.
	WQPY	....	....	Portable in Ill. Same as WOPX.
	WRCO	SEM	50	Portable. Chesapeake & Potomac Tel. Co. of Baltimore.
	WRCS	SEM	50	Portable. Same as WRCO.
	WRCT	SEM	50	Portable. Chesapeake & Potomac Tel. Co. of W. Va.
	WRCU	SEM	50	Portable. Same as WRCT.
2736	WAGG	....	10	Portable-Mobile. Superior Pine Products Co.
2738	KBEP	F	....	Patrol Boat "Ranger 7" in Alaska.

	KBFM	F	....	Patrol Boat "Ranger 9" at Juneau, T. A.
	KBFN	F	....	Patrol Boat "Ranger 8" at Petersburg, T. A.
	KBFO	F-SS	....	Juneau, T. A.
	KFSH	S	....	"Stranger."
	KJJB	S	50	S. S. "Elizabeth River." Philadelphia & Norfolk S. S. Co.
	KJLY	S	50	S. S. "Hampton Roads." Same as KJJB.
	KLGU	S	50	Tug "Mamo." Wm. G. Anderson, Young Bros., Pier 21, Honolulu, T. H.
	KLQE	S	50	S. S. "Caroline." (In vicinity of San Pedro), Jos. M. Schenck, 20th Century-Fox Film Corp., Beverly Hills, Calif.
	KLAVY	S	....	Yacht "Gipsy."
	KMKH	S	....	Yacht "Samona."
	KMKK	S	....	S. S. "Isamorada." John D. Reilly.
	KMYA	F	....	Patrol Boat "Forester" in Alaska.
	KMYB	F	....	Patrol Boat "Ranger 10" in Alaska.
	VGBO	S	....	Yacht "Sevelyn."
	WCEK	S	50	S. S. "Bluffin." State of Calif., Dept. of Natural Resources.
	WCY	CHT	400	West Dover, Ohio (600 w. days), Radiomarine Corp.
	WDFL	S	....	Yacht "El Ferrito."
	WDFY	S	....	Yacht "Content."
	WDFY	S	50	Tug "Mikioi." Same as KLGU.
	WDOI	S	....	S. S. "Maliko." Matson Nav. Co., 215 Market St., San Francisco, Calif.
	WIFA	S	....	Tug "Lorna Foss."
	WIFI	S	....	"Cadrew."
	WIDM	S	....	Yacht "Sartarsia."
	WJFD	S	....	Yacht "Migrator."
	WJG	CHT	25	Memphis, Tenn. Warner & Tremble Radio Service.
	WOGK	S	100	Yacht "Mako." Thorne Donnellev.
	WOKQ	S	350	Cruiser "Kenova." S. M. Stody. Whittier, Calif.
	WPKS	S	30	S. S. "Aleksander I." Pete Damaría.
	WPMP	S	30	S. S. "J. B. Edwards." Ole J. Edwards.
	WPPC	S	50	S. S. "North Star." Sam Loneró.
	WQBM	S	50	S. S. "Albacore." Same as WCEK.
2748	KAZV	FA	100	Fairbanks, T. A. Harold Gillam.
	KBRN	FA	3000	Brownsville, Tex. Aeronautical Radio, Inc.
	KAIH	RB	50	Richmond, Va. Richmond Radio Corp.
	WAHY	FA	1000	Memphis, Tenn. Same as KBRN.
	WOET	FA	1000	Charlotte, N. C. Same as KBRN.
	WJSM	FA	400	Tampa, Fla. Same as KBRN.
2752	CJD	F	....	Campbell River, B. C. Minister of Lands for B. C.
2758	KAIH	RB	25	Portable. Earle C. Anthony, Inc.
	KBTA	RB	10	Duluth, Minn. Red River Brdcastg. Co., Inc.
	WAAO	RB	100	Bloomington, Ill. A. M. and D. C. McGregor.
	WAFY	RB	25	St. Paul, Minn. Minn. Brdcastg. Corp.
	WAHE	RB	50	Norfolk, Va. WTAR Radio Corp.
	WAHF	RB	50	Norfolk, Va. Same as WAHE.
	WAOE	RB	50	Aurora, Ill. Martin R. O'Brien.
	WDAJ	RB	40	Tampa, Fla. Tampa Times Co.
	WFYA	RB	100	Syracuse, N. Y. Central N. Y. Brdcastg. Corp.
	WGTO	RB	25	Wilson, N. C. WGTM, Inc.
	WHPA	RB	40	Harrisburg, Pa. WHP, Inc.
	WIEW	RB	25	New York City. NBC, Inc.
2760	CZ4B	F	....	Armstrong, Ont. Ont. Dept. of Lands & Forests.
	CZ5C	T	....	Basswood, Ont. Same as CZ4B.
2764	WXMA	...	....	Columbus, Ohio. Ohio Nat'l Guard, 7th Ave. Armory, 1368 N. High St.
	WXMD	...	....	Toledo, Ohio. Ohio Nat'l Guard.
	WXME	...	....	Akron, Ohio. Same as WXMD.
	WXMF	...	....	Youngstown, Ohio. Same as WXMD.
	WXMG	...	....	Dayton, Ohio. Same as WXMD.
	WXMH	...	....	Columbus, Ohio. Same as WXMA.
	WXMI	...	....	Toledo, Ohio. Same as WXMD.
	WXMM	...	....	Cleveland, Ohio. Same as WXMD.
	WXMO	...	....	Columbus, Ohio. Same as WXMA.
	WXMP	...	....	Wooster, Ohio. Same as WXMD.
	WXMS	...	....	Shreve, Ohio. Same as WXMD.
	WXMT	...	....	Canton, Ohio. Same as WXMD.
	WXMV	...	....	St. Mary's, Ohio. Same as WXMD.
	WXMW	...	....	Elyria, Ohio. Same as WXMD.
	WXMX	...	....	Galion, Ohio. Same as WXMD.

	WXMY	...	....	Piqua, Ohio. Same as WXMD.
	WXMZ	...	....	Caldwell, Ohio. Same as WXMD.
2770	WXNA	...	....	Portsmouth, Ohio. Same as WXMD.
	WWMD	G	....	Derby Line, Vt. U. S. Immigration Border Patrol.
	WWME	G	....	Chateaugay, N. Y. Same as WWMD.
	WWMO	G	....	Ogdensburg, N. Y. Same as WWMD.
	WWMP	G	....	Rousses Point, N. Y. Same as WWMD.
	WWMR	G	....	Richford, Vt. Same as WWMD.
2775	WWMH	G	....	Highgate Springs, Vt U. S. Immigration Border Patrol.
2776	KRR	C	....	Boinas, Calif.
2790	KAAR	RB	40	Denver, Colo. KLZ Brdstg. Co.
	KAOE	RB	50	Shenandoah, Iowa. KFNF, Inc.
	KAOF	RB	50	Shenandoah, Iowa. KFNF, Inc.
	KBOL	RB	20	Omaha, Nebr. Woodmen of the World.
	KDAC	RB	25	Fresno, Calif. George Harm.
	KDEA	RB	40	Kansas City, Mo. KANS.
	KDJB	RB	125	Mason City, Iowa. Globe-Gazette.
	WAHL	RB	40	Paducah, Ky. Paducah Brdstg. Co.
	WAIH	RB	50	Chicago, Ill. WGN, Inc.
	WAIS	RB	100	Akron, Ohio. Allen T. Simmons.
	WAUT	RB	50	Evansville, Ind. WEOA.
	WAXE	RB	500	Richmond, Va. Havens & Martin, Inc.
	WBAO	RB	2	Newark, N. J. Bamberger Brdstg. Serv., Inc.
	WBAQ	KB	30	Newark, N. J. Same as WBAO.
	WDAC	RB	10	Madison, Wis. Univ. of Wis.
	WGHB	RB	40	Tampa, Fla. Fla. West Coast Brdstg. Co.
	WIIMB	RB	10	Anniston, Ala. Harry M. Ayers, WHMA.
	WNYK	RB	50	New York City. Municipal Brdstg. System.
	WNYL	RB	50	New York City. Same as WNYK.
	WNYN	RB	3	New York City. Same as WNYK.
	WNYO	RB	3	New York City. Same as WNYK.
	WRDI	RB	100	Danville, Ill. Northwestern Pub. Co.
	WTHB	RB	40	Tampa, Fla. WFLA.
	WTNK	RB	40	Trenton, N. J. WOAX, Inc.
2804	KGHP	MP	....	Lawton, Okla. City of L.
	KGHZ	ZP	100	Little Rock, Ark. City of L. R.
	KHPF	ZP	500	Jefferson City, Mo. State of Mo. Highway Patrol.
	KHPG	ZP	200	Kirkwood, Mo. Same as KHPF.
	KNFE	ZP	500	Duluth, Minn. City of D.
	KOHM	ZP	....	State of Ore., Police & Highway Depts.
	KQBX	ZP	50	Mobile. State of Wash.
	WPGG	ZP	300	Findlay, Ohio. State of Ohio.
	WPGQ	ZP	....	Columbus, Ohio. State of Ohio.
	WPHC	ZP	300	Massillon, Ohio. Same as WPGG.
	WPHK	ZP	300	Wilmington, Ohio. Same as WPGG.
	WPHN	ZP	500	Tampa, Fla. City of T.
	WPHT	ZP	300	Cambridge, Ohio. Same as WPGG.
	WQMG	ZP	50	Pontiac, Mich. City of P.
	WQPJ	ZP	250	French Village, Ill. State of Ill.
2808	KGIX	ZP	....	Santa Ana, Calif. Orange County.
	KGPJ	ZP	500	Beaumont, Tex. City of B.
	WQPJ	ZP	250	French Village, Ill. State of Ill. Dept. of Pub. Works & Bldgs. Div. of Highways.
	WQPZ	ZP	19	Portable in Ill. Same as WQPJ.
2812	KGIX	ZP	....	Santa Ana, Calif. Orange County.
	KGHZ	ZP	100	Little Rock, Ark. City of L. R.
	KGPI	ZP	500	Beaumont, Tex. City of B.
	KHPF	ZP	500	Jefferson City, Mo. State of Mo.
	KNFE	ZP	500	Duluth, Minn. City of D.
	KOHM	ZP	....	State of Ore. Police & Highway Depts.
	WPGQ	ZP	....	Columbus Ohio. State of Ohio.
	WPHN	ZP	500	Tampa, Fla. City of T.
2822	WWMB	G	....	Buffalo, N. Y. U.S. Immigration Border Patrol.
2830	KAOG	RB	8	Los Angeles, Calif. Don Lee.
	KFMA	RB	25	Shenandoah, Iowa. May Seed Co.
	KNEB	RB	10	Tacoma, Wash. Puget Sound Brdstg. Co.
	KNSR	RB	100	Sacramento, Calif. McClatchey Brdstg. Co.
	WAUR	RB	40	Nashville, Tenn. WSIX.
	WAUO	RB	50	Syracuse, N. Y. Onondaga Radio Brdstg. Corp.
	WRAC	RB	2	Portable. N. J. Brdstg. Corp.
	WEVB	RB	50	Cincinnati, Ohio. CBS, Inc.
	WIRA	RB	250	Detroit, Mich. WJR, the Good Will Station.
2854	FNCI	FA	....	Monroe, La. Aeronautical Radio, Inc.
	KNCI	FA	....	Dallas, Tex. Same as KNCI.
	KNCY	FA	....	Shreveport, La. Same as KNCI.

	WAID	FA	....	Jackson, Miss.
	WAJE	FA	300	Birmingham, Ala. (600 w. days). Same as KNCL.
	WAIF	FA	....	Daytona Beach, Fla. Same as KNCL.
	WAIG	FA	....	Murfreesboro, Tenn. Same as KNCL.
	WAII	FA	....	Indianapolis, Ind. Same as KNCL.
	WAJI	FA	....	Vero Beach, Fla. Same as KNCL.
	WAJY	FA	400	St. Petersburg, Fla. Same as KNCL.
	WARG	FA	45	Augusta, Ga. Same as KNCL.
	WAZM	FA	40	Madison, Wis. Same as KNCL.
2870	KGJW	FA	....	Brownsville, Tex. Aeronautical Radio, Inc.
	KGUA	FA	....	El Paso, Tex. Same as KGJW.
	KGUG	FA	....	Big Spring, Tex. Same as KGJW.
	KGUN	FA	....	Douglas, Ariz. Same as KGJW.
	KGUR	FA	....	Glendale, Calif. Same as KGJW.
	KNCH	FA	....	El Paso, Texas. Same as KGJW.
	WKDL	FA	1000	Miami, Fla. Pan American Airways, Inc.
	WMDU	FA	....	San Juan, P. R.
	KAFH	FA	500	Burbank, Calif. Aeronautical Radio, Inc.
	FBKD	FA	100	Portable. Same as KAFH.
	KGSV	FA	....	Great Falls, Mont. Same as KAFH.
	KGSW	FA	400	Helena, Mont. Same as KAFH.
	KGTA	FA	....	Winslow, Ariz. Same as KAFH.
	KGTD	FA	....	Wichita, Kans. Same as KAFH.
	KGTH	FA	....	Salt Lake City, Utah. Same as KAFH.
	KGTI	FA	....	Las Vegas, Nev. Same as KAFH.
	KGTL	FA	....	Kingman, Ariz. Same as KAFH.
	KGTR	FA	....	Robertson, Mo. Same as KAFH.
	KGTY	FA	....	Pocatello, Idaho. Same as KAFH.
	KGTY	FA	....	Butte, Mont. Same as KAFH.
	KNCS	FA	....	West Yellowstone, Mont. Same as KAFH.
2912	KAIH	...	20	Anchorage, T. A. Libby McNeill & Libby.
	KAMP	...	100	Craig, T. A. Same as KAIH.
	KAMS	...	100	Taku, T. A. Same as KAIH.
	KAMT	...	50	Kenai, T. A. Same as KAIH.
	KANA	...	50	Port Williams, T. A. Washington Fish & Oyster Co.
	KANM	...	10	Burnett Inlet, T. A. Burnett Inlet Salmon Co.
	KANQ	...	20	Caribou Creek, T. A. Lester B. Walbridge.
	KAST	C	20	Kantishna, T. A. Morris P. Kirk & Son.
	KBME	T	20	Caribou Creek, T. A. Mortimer I. Stevens.
	KBNC	T	20	Feldergale, T. A. Felder, Gale, Inc.
	KBNE	T	20	American Creek, T. A. Ted C. Mathews.
	KBNM	T	25	Platinum, T. A. Alaska Traders.
	KNBI	FA	....	Dallas, Texas. Aeronautica Radio, Inc.
	KNBK	FA	....	Brownsville, Texas. Same as KNBJ.
	KNBO	FA	....	Kansas City, Mo. Same as KNBJ.
	KNBP	FA	....	Wichita Falls, Tex. Same as KNBJ.
	KNBQ	FA	....	Amarillo, Texas. Same as KNBJ.
	KNBR	FA	....	Corpus Christi, Tex. Same as KNBJ.
	KNBS	FA	....	Austin, Tex. Same as KNBJ.
	KNBU	FA	....	San Antonio, Tex. Same as KNBJ.
	KNBV	FA	....	Fort Worth, Texas. Same as KNBJ.
	KNCE	...	100	Ekuk, Bristol Bay, T. A. Libby, McNeill & Libby.
	KNCF	...	100	Egegik, T. A. Same as KNCE.
	KNGS	...	70	Keggiung, T. A. Same as KNCE.
2922	KAZV	FA	100	Fairbanks, T. A. Harold Gillam.
	KBIC	FA	50	Corpus Christi, Tex. Aeronautical Radio, Inc.
	KBOF	FA	50	Rainy Pass District, T. A. Star Air Lines, Rhon River Emergency Field.
	FBRN	FA	3000	Brownsville, Tex. Same as KBLC.
	FBRC	FA	30	Valdez, T. A. Lyle Airways.
	KUCFI	A	30	NC-552-N. Peck & Rice Airways, Bethel, T. A.
	KUCIS	A	30	NC-10795, Star Air Lines.
	WAHV	FA	1000	Memphis, Tenn. Same as KBLC.
	WAHZ	FA	50	Birmingham, Ala. Same as KBIC.
	WAPS	FA	50	Muscle Shoals, Ala. Same as KBLC.
	WFEL	FA	50	Beaumont, Tex. Same as KBIC.
	WGSA	FA	50	Greenville, S. C. Same as KBLC.
	WSIM	FA	400	Tampa, Fla. Same as KBLC.
2946	KBIC	FA	50	Corpus Christi, Tex. Aeronautical Radio, Inc.
	KBPN	FA	3000	Brownsville, Tex. Same as KBLC.
	KCTF	FA	....	Fort Worth, Texas. Same as KBLC.
	KCTV	FA	....	Beaumont, Calif. Same as KBLC.
	KCVN	FA	....	Douglas, Ariz. Same as KBLC.
	KCVO	FA	....	Tucson Ariz. Same as KBLC.
	KGUO	FA	....	Indio, Calif. Same as KBLC.

	WAHY	FA	1000	Memphis, Tenn. Same as KBLC.
	WAHZ	FA	50	Birmingham, Ala. Same as KBLC.
	WARS	FA	50	Muscle Shoals, Ala. Same as KBLC.
	WATE	FA	200	Tallahassee, Fla. Same as KBLC.
	WATF	FA	200	Tallahassee, Fla. Same as KBLC.
	WEEL	FA	50	Beaumont, Tex. Same as KBLC.
	WGS A	FA	50	Greenville, S. C. Same as KBLC.
	WSJM	FA	400	Tampa, Fla. Same as KBLC.
2952	KBAZ	F	....	Boise, Idaho.
	KBCP	F	....	Boise, Idaho.
	KBCQ	F	....	Boise, Idaho.
	KBDF	F	....	Boise, Idaho (Boise Forest).
	KBDK	F	....	Susanville, Calif. Supply Depot.
2986	KAFW	FA	....	Panair VI-P. Pan American Airways Co.
	KAGN	T	50	Portable. Alaska Aeronautics & Communications Commission.
	KAGO	T	10	Portable. Same as KAGN.
	KAMX	C	40	Utopia Creek, T. A. L. McGee.
	KAMY	...	50	Port Oceanic, T. A. Oceanic Fisheries Co.
	KANF	...	40	Folger, T. A. E. Odin Strandberg.
	KBLC	FA	50	Corpus Christi, Tex. Aeronautical Radio, Inc.
	KBMJ	...	50	Drier Bay, T. A. Northwestern Herring Co.
	KBNC	T	20	Feldergale, T. A. Felder, Gale, Inc.
	KBNM	T	25	Platinum, T. A. Alaska Traders.
	KBRN	FA	3000	Brownsville, Tex. Same as KBLC.
	KEXO	T	50	Portable. Same as KAGN.
	KEXP	T	50	Portable. Same as KAGN.
	KGQ	...	50	Todd, T. A. Peril Straits Packing Co., Stacey St. and E. Waterway, Seattle, Wash.
	KIFM	FA	....	Fairbanks, T. A.
	KIMF	...	....	Todd, T. A. Same as KGQ.
	KINH	...	....	Ketchikan, T. A.
	KINL	FA	....	Juneau, T. A.
	KINZ	FA	....	Skagway, T. A.
	KNCQ	FA	....	Launch "Guam." Same as KAFW.
	WAHY	FA	1000	Memphis, Tenn. Same as KBT C.
	WAHZ	FA	50	Birmingham, Ala. Same as KBT C.
	WARS	FA	50	Muscle Shoals, Ala. Same as KBLC.
	WEEL	FA	50	Beaumont, Tex. Same as KBLC.
	WGS A	FA	50	Greenville, S. C. Same as KBLC.
	WSJM	FA	400	Tampa, Fla. Same as KBLC.

To Be Continued in December Issue

Explanation of the Third Column Symbols:

A—Aircraft.	SEM—Special emergency.
B—Broadcast.	MF—Marine fire.
C—Commercial Telegraph.	MR—Marine Relay.
F—Forestry.	PR—Press relay.
G—Government.	RB—Relay broadcast.
P—Police.	FAC—Facsimile.
S—Ship.	TV—Television video.
T—Radio Telephone.	TA—Television audio.
FA—Aeronautical (ground).	NCE—Non-commercial educational.
GEO—Geophysical.	CC—Coastal Telegraph.
RC—Circular radiobeacon.	CH—Coastal harbor.
RD—Directional radiobeacon.	CHC—Coastal harbor telegraph.
RG—Direction finding station.	CHT—Coastal harbor telephone.
LH—Lighthouse.	E } Experimental.
RR—Radio range station.	E1 }
MP—Municipal police.	E2 }
SP—State police.	GE—General Experimental.
ZP—Zone police.	SE—Special Experimental.
EM—Emergency.	E3 }

All the Mobile and Portable-Mobile police stations installed in police automobiles bear the same call letters as the Fixed police broadcast station to which they report, and in many cases they work on the same frequency. We list herewith the Fixed station, and in parentheses we show the number, and the power of the Portable and Portable-Mobile units attached to that station, as for example:

WRHD MP 250 Louisville, Ky. (2 units-12 w).

Applications to the FCC

CP—Construction permit.

mod.—modification.

lic.—license.

ltd.—limited time.

unltd.—unlimited time.

S. H.—specified hours.

KALC, San Antonio, CP 630 kcs. 1000(5) unltd.

KDON, Monterey, CP 500(1), 1440 kcs.

KEEN, Seattle, CP 1370 kcs. to 1420 kcs.

KERN, Bakersfield, CP 1380 kcs., 1000 w.

KEX, Portland, CP 1160 kcs. unltd.

KFBB, Great Falls, mod. of lic. for 900 kcs., 5 kw.

KFIO, Spokane, CP 950 kcs., 1 kw. unltd.

KFNF, Shenoandoah, mod. of CP to move to Council Bluffs.

KFPW, Ft. Smith, CP 1370 kcs.

KFRU, Columbia, to 1370 kcs., 250 w. unltd.

KFYO, Lubbock, to 1380 kcs., 500(1).

KGDM, Stockton, 1530 kcs., 1 kw. unltd.

KGMB, Honolulu, CP 590 kcs. 1000(5) unltd.

KMAC, San Antonio, CP 930 kcs., 1000 w. unltd.

KOH, Reno, CP 630 kcs., 1 kw. unltd.

KOVC, Valley City, CP 1340 kcs., 500(1).

KOY, Phoenix, mod. of lic. for 550 kcs.

KRMC, Jamestown, CP 900 kcs., 1 kw.

KROC, Rochester, CP 920 kcs., 500(1) unltd.

KRRV, Sherman, CP 880 kcs., 1 kw. unltd.

KSD, St. Louis, CP 630 kcs.

KSEI, Pocatello, CP 600 kcs., 1 kw. unltd.

KSHS, Shreveport, CP 620 kcs., 1000(5) unltd.

KTRH, Houston, to 710 kcs., 10 kw. unltd.

KTTA, Salt Lake City, CP 570 kcs., 1 kw.

KWK, St. Louis, CP 630 kcs.

KXL, Portland, CP 730 kcs., 10 kw. unltd.

KXOK, St. Louis, CP 630 kcs., 1000(5).

WABI, Bangor, CP 560 kcs., 1 kw. unltd.

WAPI, Birmingham, CP 1070 kcs., 50 kw. unltd.

WCAD, Canton, CP Watertown, N. Y.

WCOL, Columbus, to 1200 kcs., 250 w. unltd.

WDAE, Tampa, mod. of lic., 780 kcs.

WGRF, Evansville, CP 1250 kcs., 1000(5) unltd.

WGRC, New Albany, CP 880 kcs., 250 w. unltd.

WHA, Madison, CP 670 kcs. 50 kw. unltd. (facilities of WMAQ).

WKAQ, San Juan, CP 620 kcs. 5 kw.

WLAP, Lexington, CP 1270 kcs. 1 kw. unltd.

WMBC, Detroit, CP 600 kcs. 250 w. unltd.

WMBR, Jacksonville, CP 1120 kcs. 500(1) unltd.

WMFF, Plattsburg, CP 1240 kcs. 1 kw.

WNBX, Springfield, CP Keene, N. H., 1 kw. unltd.

WPG, Atlantic City, CP New York (facilities WBIL and WOV).

WREN, Lawrence, CP Kansas City.

WROL, Knoxville, CP 620 kcs. 500(1).

WSRT, South Bend, CP 930 kcs. 500 w. unltd.

WSFA, Montgomery, CP 1410 kcs. 1 kw. unltd.

WSPR, Springfield, mod. of lic. for 1240 kcs. 250 (.5) unltd.

WTCN, Minneapolis, CP 710 kcs. 10 kw. unltd.

Applications for New Stations

Albemarle, N. C., Albemarle Brdcastg. Station, 1370 kcs. 100 w. days.

Asiland, Wis., WJMS, Inc., 1370 kcs. 100 w. unltd.

Asheville, N. C., Publix-Bamford Theaters, Inc., 1430 kcs. 1 kw. unltd.

Atlantic City, N. J., Atl. City Brdcastg. Co., 1100 kcs. 5 kw. sharing with WBIL.

Atlantic City, N. J., Neptune Brdcastg. Corp., 1420 kcs. 100(25).

Bellingham, Wash., Bell Brdcastg. Co., Inc., 1200 kcs. 100(25).

Birmingham, Ala., B. News Co., 590 kcs. 1 kw. unltd.

Boston, Mass., Mayflower Brdcastg. Corp., 1410 kcs. 500(1).

Bridgeport, Conn., Chas. Greenblatt, 1190 kcs. 250 w. ltd.

Bridgeport, Conn., Harold Thomas, 1310 kcs. 100(25) unltd.

Brown City, Mich., Thumb Brdcastg. Co., 880 kcs. 1 kw. days.

Brownwood, Tex., Brown County Brdcastg. Co., 990 kcs. 1 kw. days.

Burlington, Iowa, Burlington Brdcastg. Co. Cedar Rapids, Iowa, The Gazette Co., 1420 kcs. 100 w. unltd.

Cheyenne, Wyo., Western Brdcastg. Co., 1210 kcs. 100(25).

Cleveland, Ohio, Cuyahoga Valley Brdcastg. Co., 1500 kcs. 100 w. days.

Clinton, Iowa, Clnton Brdcastg. Corp. Columbus, Miss., Birney Imes, 1370 kcs. 100(25) unltd.

Cordele, Ga., Cordele Dispatch Pub. Co., 1500 kcs. 100(25).

Ely, Wyo., Eastern Nev. Brdcastg. Co., 1500 kcs. 100 days.

Erie, Pa., Presque Isle Brdcastg. Co., 1500 kcs. 100(25) unltd.

Everett, Wash., Cascade Brdcastg. Co., 1420 kcs. 100(25) unltd.

Fremont, Nebr., Nebr. Brdcastg. Corp., 1370 kcs. 100(25) unltd.

Grants Pass, Ore., Ore. Brdcastg. System, 370 kcs. 100(25).

Grants Pass, Ore., Southern Ore. Brdcastg. Co., 1310 kcs. 100 unltd.

Hambal, Mo., Courier Post Pub. Co. Hickory, N. C., Catawba Valley Brdcastg. Co., 1370 kcs. 100(25).

Jacksonville, Ill., Stephenson, Edge & Korsmeyer, 1370 kcs., 250 unltd.

Las Vegas, Nev., Las Vegas Brdcastg. Co., 1420 kcs. 100(25).

Las Vegas, Nev., Nev. Brdcastg. Co., 1370 kcs. 100(25) unltd.

Lawton, Okla., Carver, Williams & Ross, 1420 kcs. 100 unltd.

Logan, W. Va., Frey and Greever, 1200 kcs. 100 days.

Louisville, Ky., Gateway Brdcastg. Co., 880 kcs. 500 unltd.

Martinsville, W. Va., M. Brdcastg. Co., 1420 kcs. 250 days.

Martinsville, W. Va., Patrick Henry Brdcastg. Co., 1420 kcs. 100(25).

Marysville, Calif., Yuba-Sutter Broadcasters, 1320 kcs. 250 unltd.

Minneapolis, Minn., Independent Merchants Brdcastg. Co., 1300 kcs. 1 kw. unltd.

Monterello, Calif., Bureau of Education, 1420 kcs. 100 days (request contingent upon move of KECA to San Diego).

Norfolk, Va., Colonial Brdcastg. Corp., 1370 kcs. 100(26).

North Sacramento, Calif., Grant Union High School District, 1370 kcs. 100 days.

Ogdensburg, N. Y., St. Lawrence Brdcastg. Corp., 1310 kcs. 100(25).

Olney, Ill., Olney Brdcastg. Co., 1210 kcs. 100(25) unltd.

(Please turn to Page 95)

The Month's Changes in Station Data

New	
1100	WCAR Pontiac, Wash.
1200	WSOO Sault Ste. Marie, Mich.
1210	KYUM Yuma, Ariz.
1240	NECW Cordoba, Ver. C.
1260	WILD Niagara Falls, N. Y.
1270	XESM Mexico City, D. F.
1340	XEBJ Victoria, Tams.
1370	KVFD Ft. Dodge, Iowa.
1370	WFTL Ft. Lauderdale, Fla.
1370	WMAN Mansfield, Ohio.
1420	WLPM Suffolk, Va.
1500	WGTC Greenville, N. C.
1500	XEQK Mexico City, D. F.
1500	WMOG Brunswick, Ga.
1530	WAKR Akron, Ohio.
Frequency	
830	XERC Mexico City, D. F., from 870.
830	CMHI Santa Clara, Cuba, 10,000 from 200.
1200	KMLB Monroe, La., 250 from 100(.25).
1200	WIL St. Louis, 250 from 100(.25).
1200	WJBC Bloomington, Ill., 250 from 100(.25).
1210	WMFG Hibbing, Minn., 250 from 100(.25).
1210	WRAL Raleigh, N. C., 250 from 100(.25).
1210	WSIX Nashville, Tenn., 250 from 100(.25).
1210	WTMA Charleston, S. C., 250 from 100(.25).
1310	KOME Tulsa, Okla., 250 from 100(.25).
1310	KRMD Shreveport, La., 250 from 100(.25).
1310	KSRO Santa Rosa, Calif., 250 from 100(.25).
1310	WAML Laurel, Miss., 250 from 100(.25).
1310	WTRC Elkhart, Ind., 250 from 100(.25).
1370	KLUF Galveston, Tex., 250 from 100(.25).
1370	WEOA Evansville, Ind., 250 from 100(.25).
1370	WHLB Virginia, Minn., 250 from 100(.25).
1470	WSAU Wausau, Wis., 250 from 100(.25).
1420	KCMC Texarkana, Tex., 250 from 100(.25).
1420	WCHV Charlottesville, Va., 250 from 100(.25).
1420	WEED Rocky Mount, N. C., 250 from 100(.25).
1420	WGNC Gastonia, N. C., 250 from 100(.25).
1420	WSLI Jackson, Miss., 250 from 100(.25).
1490	CMKQ Santiago, Cuba, 1000 from 200.
1500	KPLT Paris, Tex., 100(.25) from 250 days.
1500	KPQ Wenatchee, Wash., 250 from 100(.25).
1500	WDNC Durham, N. C., 250 from 100(.25).
1500	WKBZ Muskegon, Mich., 250 from 100(.25).
1500	WRGA Rome, Ga., 250 from 100(.25).
1500	WSTP Salisbury, N. C., 250 from 100(.25).

Network			
830	CMHI Santa Clara, Cuba, Cadena Azul.		
1310	WCMI Ashland, Ky., new MBS.		
1380	WING Dayton, Ohio, new NBC.		
1420	WLAP Lexington, Ky., new MBS.		
1490	CMKQ Santiago, Cuba, Cadena Azul.		
1490	WCKY Covington, Ky., new CBS.		
Call Letters			
780	KECA Los Angeles, Calif., from KEHE.		
1200	WDLF Panama City, Fla., from WRSR.		
1240	KFJZ Fort Worth, Texas, from KTAT.		
1500	WKNY Kingston, N. Y., from WKIN.		
Delete			
660	XEAL Mexico City, D. F.		
1340	XEND Orizaba, Ver. C.		
1370	KFJZ Fort Worth, Texas.		
Owner			
690	CJGJ Calgary, Alta., Albertan Publishing Co., Ltd.		
810	CMCF Havana, Cuba, Cadena Azul de Radio, Prado 63.		
Permit to Change Power			
590	WKZO Kalamazoo, to 250(1).		
630	WPRO Providence, to 1000(5).		
760	KXA Seattle, to 1000.		
770	KFAB Lincoln, to 50000.		
850	WKAR E. Lansing, to 5000.		
880	WRNL Richmond, to 1000.		
890	KFNF Shenandoah, to 1000(5).		
900	KGBU Ketchikan, to 1000.		
900	WELI New Haven, to 250(.5).		
920	KFEL Denver, to 1000.		
920	KVOD Denver, to 1000.		
940	WICA Ashabula, to 500.		
1190	KTKC Visalia, to 1000.		
1250	KIT Yakima, to 500(1).		
1250	WKST New Castle, to 1000.		
1350	KWK St. Louis, to 5000.		
1350	WMBG Richmond, to 1000(5).		
1370	KFRO Longview, to 1000.		
1370	WPRM Mayaguez, to 1000(2.5).		
1380	WALA Mobile, to 1000 untd.		
1430	KINY Juneau, to 1000.		
1430	WHP Harrisburg, to 1000(5).		
1460	KSTP St. Paul, to 50000.		
1460	WJSV Washington, to 50000.		
1490	WCKY Covington, to 50000.		
1500	KSAL Salina, to 500(1).		
Permit to Change Location			
1050	KFBI Abilene, to Wichita, Kans.		
1200	WHBY Green Bay to Appleton, Wis.		
1210	WGRM Grenada to Greenwood, Miss.		
1500	WKBB E. Dubuque, to Dubuque, Iowa.		
Permit to Change Frequency			
770	KFAB Lincoln, Nebr., to 1080.		
900	WELI New Haven, to 930.		
920	KVOD Denver, to 630.		
1190	KTKC Visalia, to 890.		
1200	WJBL Decatur, to 1310.		
1260	KPAC Port Arthur, to 1220.		
1310	WBOW Terre Haute, to 1200.		
1320	KGMB Honolulu, to 590.		
1370	KFRO Longview, to 1340.		
1370	WPRM Mayaguez, to 780.		
1450	KTBS Shreveport, to 620.		
1500	KSAL Salina, to 1120.		
Stations Using Special Frequencies			
Call	City	Assigned	Using
KIRO	Seattle	650	710
KTHS	Hot Springs	1040	1060
KWKH	Shreveport	850	1100
WTTG	Hartford	1060	1040

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 and daytime power is shown in parentheses in kilowatts. Thus: (.25) indicates 250 watts. Exact frequencies, when not multiples of ten are shown in the second column.

- Second Column Symbols**
- A—Status in doubt.
 - B—National "Blue" Network.
 - C—Columbia Network.
 - D—Daytime only.
 - E—Minor Network.
 - F—Canadian Network.
 - H—Assigned another frequency using this one under Special Authorization.
 - J—Assigned lower power but using this power under Special Authorization.
 - K—Licensed for facsimile.
 - L—Limited time.
 - M—Mutual Network.
 - N—National "Red" and "Blue" Networks.
 - P—Has Construction Permit only.
 - Q—Station not in use.
 - R—National "Red" Network.
 - S—Sundays only.
 - Sy—Synchronized.
 - X—Has Permit to change power.
 - Y—Has Permit to change location.
 - Z—Has Permit to change frequency.
 - a-b-c—Small letters show stations using same transmitter
 - 1-2-3—Figures denote stations sharing time
 - ?—Reported but not officially confirmed.
 - ...—No information.
 - Fourth Column Symbols**
 - a—verifies for return postage.
 - b—Verifies only occasionally.
 - d—Verifies for government postal card
 - f—Verifies for 10 cents.
 - g—Card for postage, verify stamp for 10c
 - z—No information available.

NORTH AMERICAN BROADCASTING STATIONS BY FREQUENCIES WITH SATURDAY'S TIME ON THE AIR

Time is Eastern Standard. Subtract 1 hour for Central, 2 hours for Mountain and 3 hours for Pacific. Add 5 hours for GMT. SS is "Sunset" and LS is "Local Sunset"

540 kcs. (552.2 m.)

CBK F 50000

a Watrous, Sask.

Noon to midnight

550 kcs. (545.1 m.)

CFNB F 1000
 CMW ... 1400
 KFUD 2 500(1)

a Fredericton, N. B.
 a Havana, Cuba.
 a St. Louis, Mo.

7 am to 11 pm
 7:55 am to 1230 am
 8-9 am; 10:30-10:45 am; 4-4:45 pm
 8 am to 1 am
 Noon to midnight
 9-10:30 am; 10:45 am-1:15 pm; 145-4 pm

KFYR N 1000(5)
 KOAC ... 1000
 KSD 2R 1000(5)

a Bismarck, N. Dak.
 a Corvallis, Ore.
 a St. Louis, Mo.

KTSA C 1000(5)
 WDEV D 1000
 WGR C 1000(5)
 WKRC 1000(5)
 WSWA D 500

a San Antonio, Texas
 a Waterbury, Vt.
 a Buffalo, N. Y.
 a Cincinnati, Ohio
 a Harrisonburg, Va.

6 am to LS
 7 am-midnight
 6:30 am-2 am.
 6:30 am-5 pm

560 kcs. (535.4 m.)

KFDM N 500(1)
 KLZ C 1000(5)
 KSFO C 1000(5)
 KWTO D 5000
 WFIL BM 1000
 WIND C 1000(5)
 WIS N 1000(5)
 WQAM C 1000

a Beaumont, Texas
 a Denver, Colo.
 a San Francisco, Calif.
 a Springfield, Mo.
 a Philadelphia, Pa.
 a Gary, Ind.
 a Columbia, S. C.
 a Miami, Fla.

8:30 am-2 am
 10 am-4 am
 7 am-LS
 7 am-12:30 am
 6 am-4 am
 7 am-midnight
 6:45 am-midnight

570 kcs. (526 m.)

KGKO N 1000(5)
 KMTR ... 1000
 KVI C 1000(5)
 TISCV 575 100
 WKBN C1 500(1)
 WMAM DP 250
 WMCA ... 1000
 WNAX C 1000(5)
 WOSU I 1000
 WSYR Ba 1000
 WSYU Qa 1000
 WWNC C 1000

a Fort Worth, Tex.
 a Los Angeles Calif.
 a Tacoma, Wash.
 z Alajuela, Costa Rica
 a Youngstown, Ohio
 a Marquette, Wis.
 a New York, N. Y.
 a Yankton, S. Dak.
 a Columbus, Ohio.
 a Syracuse, N. Y.
 a Syracuse, N. Y.
 a Asheville, N. C.

7 am-?
 8 am-2 am
 9 am-3 am

 7 am-?
 7 am-11 pm
 7 am-1 am

 7:30 am-1 am

580 kcs. (516.9 m.)

CFPR	...	50
CHRC	...	100
CKCL	...	100
CKPR	F	1000
CKUA	F	500
KMJ	KN	1000
KSAC	2	500(11)
WCHS	C	500(11)
WDBO	C	1000(5)
WIBW	C2	1000(5)
WILL	D	5000
WTAG	R	1000
XEMU	...	250

- a Prince Rupert, B. C.
- a Quebec, P. Q.
- a Toronto Ont.
- a Fort William Ont.
- b Edmonton, Alta.
- a Fresno Calif.
- a Manhattan Kans.
- a Charleston, W. Va.
- a Orlando, Fla.
- a Topeka, Kans.
- a Urbana Ill.
- a Worcester, Mass.
- z Piedras Negras, Coah.

- 8 am-midnight
- 8 am-midnight
- 8 am-midnight
- 9 am-11 pm
- Silent
-
- 10:30 am-6:30 pm
- 6 am-1 am
- 7 am-midnight
- 5:30-10:30 am; 11:30 am-1:30 pm; 3:30 pm-1 am
- 9 am-SS
- 7:30 am-1 am
-

590 kcs. (508.2 m.)

CMCY	...	15000
KHO	R	1000(5)
WFEI	C	1000(5)
WKZO	BDX	1000
WOW	R	1000(5)

- a Havana, Cuba.
- a Spokane, Wash.
- a Boston, Mass.
- a Kalamazoo Mich.
- a Omaha, Nebr.

- 8 am-10 pm
- 9:45 am-3 am
- 6:30 am-1 am
- 7 am-5:15 pm
- 7 am-3:30 am

600 kcs. (499.7 m.)

CFCF	BF	500
CFOC	F	1000
CJOR	...	500
FON	609	250
KFSD	B	1000
TIGPH	605	1000
WCAO	C	500(11)
WICC	BM	500(11)
WMT	BM	1000(5)
WREC	C	1000(5)

- a Montreal, P. Q.
- a Saskatoon, Sask.
- a Vancouver, B. C.
- a St Pierre, Miquelon
- a San Diego, Calif.
- a San Jose, Costa Rica
- a Baltimore, Md.
- f Bridgeport, Conn.
- a Cedar Rapids, Iowa
- a Memphis, Tenn.

- 7:45 am-1 am
-
- 7:45 am-1 am
-
- 10 am-3 am
-
- 7 am-midnight
- f am-1 am
- 6:30 am-1 am
-

610 kcs. (491.5 m.)

CHNC	F	1000
KFAR	P	1000
KFRC	M	1000(5)
WCLE	DM	500
WDAF	R	1000(5)
WIOD	Na	1000
WIP	...	1000
WMBF	Qa	1000

- a New Carlisle, P. Q.
- z Fairbanks, Alaska
- b San Francisco, Calif.
- a Cleveland, Ohio
- a Kansas City, Mo.
- a Miami, Fla.
- a Philadelphia, Pa.
- a Miami, Fla.

- 7:30 am-11 pm
-
-
- 7 am-SS
- 7:30 am-1 am
- 7 am-midnight
- 7 am-1 am
-

620 kcs. (483.6 m.)

KGW	R	1000(5)
KTAR	N	1000
KWFT	C	250(1)
TIPG	625	5000
WFLA	Na	1000(5)
WHJB	CD	250
WLBZ	MN	500(11)
WSUN	Na	1000(5)
WTMJ	N	1000(5)

- a Portland, Ore.
- a Phoenix, Ariz.
- z Wichita Falls, Tex.
- b San Jose, Costa Rica
- a Tampa, Fla.
- a Greensburg, Pa.
- a Bangor, Maine
- a St Petersburg, Fla.
- a Milwaukee, Wis.

- 9 am-2 am
- 9 am-1:15 am
-
- Silent
- 8 am-5 pm
- 8 am-2
- 7:55 am-1 am
- 7 am-1:30 am

630 kcs. (475.9 m.)

CFCO	F	100
CFCY	F	1000
CJRC	F	1000
CKOV	F	1000
CMCD	...	15000
KFRU	i	500(11)
KGFX	D	200
WGBF	N1	500(11)
WMAL	B	250(5)
WPRO	CX	500(11)
XEZ	...	500

- a Chatham, Ont.
- a Charlottetown, P. E. I.
- a Winnipeg, Man.
- a Kelowna, B. C.
- a Havana, Cuba
- a Columbia, Mo.
- a Pierre, S. Dak.
- a Evansville, Ind.
- a Washington, D. C.
- a Providence, R. I.
- a Merida, Yuc.

- 8 am-10:30 pm
- 9 am-11 pm
- 8:30 am-2 am
- 7 am-11 pm
- 9 am-10:30 pm
- Silent
-
- Silent
- 7 am-2 am
- 6 am-1 am
- 11 am-2:30 pm; 7:15-11 pm

640 kcs. (468.5 m.)

HOK	...	5000
KFI	R	5000

- z Colon, Panama
- * Los Angeles, Calif.

- Noon-2 pm; 6 pm-midnight
- 9:43 am-3 am

VONF	...	12500	a	St. John's, Nfld.	8:30 am-12:30 pm; 4:30-9:30 pm
WGAN	CL	500	a	Portland, Maine	7 am-SS on Pacific Coast
WHKC	LM	500	a	Columbus, Ohio	6:30 am-8:15 pm
WOI	D	5000	a	Ames, Iowa	7:30 am-LS
XEBX	...	250	z	Sabinas, Coah.	.....
YSS	...	500	a	San Salvador, E. S.	.....

650 kcs. (461.3 m.)

TIGPH	P	...	z	San Jose, C. R.	.....
WSM	KN	50000	a	Nashville, Tenn.	.....

660 kcs. (454.3 m.)

CMOA	...	200	z	Havana, Cuba	.....
KOWH	D	500	a	Omaha, Nebr.	7 am-SS
WEAF	R	50000	a	New York, N. Y.	7:30 am-1 am
XEAO	...	250	a	Mexicali, B. Cfa.

670 kcs. (447.5 m.)

WMAQ	R	50000	b	Chicago, Ill.	7 am-1 am
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680 kcs. (440.9 m.)

CMHW	...	200	f	Santa Clara, Cuba
KFEQ	...	500(2.5)	a	St. Joseph, Mo.	7 am-LS
KPO	R	50000	a	San Francisco, Calif.	11 am-3 am
VAS	685	2000	f	Glace Bay, N. S.	Noon and 11 pm
WLAW	D	1000	a	Lawrence, Mass.	7 am-LS
WPTF	JN	5000	a	Raleigh, N. C.	6:30 am-11 pm

690 kcs. (434.5 m.)

CFRB	C	10000	a	Toronto, Ont.	7:30 am-midnight
CJCJ	F	100	a	Calgary, Alta.	9:30 am-1 am
CMBC	...	200	z	Havana, Cuba	6:55 am-midnight
TIGH	...	1000	b	San Jose, Costa Rica	.....
XET	...	5000	a	Monterrey, N. L.	5:30-9 pm

700 kcs. (428.3 m.)

VOWR	...	500	b	St. John's, Nfld.	.....
WLW	KMN	50000	a	Cincinnati, Ohio	5:45 am-2 am
WSXO	Exp	50000	a	Cincinnati, Ohio	.....

710 kcs. (422.3 m.)

CMKS	...	200	a	Guantanamo, Cuba	.....
KIRO	CHJ	1000	a	Seattle, Wash.	Until 8 am
KMPC	L	500	a	Beverly Hills, Calif.	9 am-8 am
WOR	KM	50000	a	Newark, N. J.	6:25 am-1:30 am

720 kcs. (416.4 m.)

CMK	...	200	a	Havana, Cuba	.....
TI4NRH	725	750	f	Heredia, Costa Rica	.....
WGN	KM	50000	b	Chicago, Ill.	.....
XEH	...	250	a	Monterrey, N. L.	.....

730 kcs. (410.7 m.)

CFPL	F	100	a	London, Ont.	9 am-3 am
CJCA	F	1000	a	Edmonton, Alta.	9 am-2 am
CKAC	C	5000	a	Montreal, P. Q.	7:30 am-1 am
XELO	...	50000	a	Tijuana, B. Cfa.	.....
XEPN	AQ	100000	a	Piedras Negras, Coah.
XEQ	...	50000	a	Mexico City, D. F.

740 kcs. (405.2 m.)

CMJX	...	200	z	Camaguey, Cuba
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KMMJ L 1000
 KTRB D 250
 WHEB D 250
 WSB R 50000

a Grand Island, Nebr.
 a Modesto, Calif. 9 am-8:30 pm
 a Portsmouth, N. H. 7 am-LS
 a Atlanta, Ga. 6:55 am-1 am

750 kcs. (399.8 m.)

CMBL ... 200
 KGU LN 2500
 TING ... 375
 WJR C 50000
 XEAA ... 200
 XEAM ... 25

a Havana, Cuba
 a Honolulu, Hawaii 11:30 am-4:30 am
 z San Jose, Costa Rica
 a Detroit, Mich. 5:30 am-2 am
 a Mexicali, B. C'fa.
 z Matamoros, Tam.

760 kcs. (394.5 m.)

KXA X 250(.5)
 WBAL BHMSy 2500
 WCAL D2 5000
 WEW D 1000
 WJZ BSy 50000
 WLB D2 5000

a Seattle, Wash. Until 6 am
 a Baltimore, Md. 9 pm-1 am
 a Northfield, Minn. 7:30-11:30 am; 1:30-2:30 pm
 a St. Louis, Mo. 8 am-LS
 a New York, N. Y. 7:30 am-1 am
 a Minneapolis, Minn.

770 kcs. (389.4 m.)

CMKW ... 200
 KFAB CSyXZ 10000
 TILJ 775 450
 WBBM CSy 50000

z Santiago de Cuba
 a Lincoln, Nebr. 7 am-1 am
 z San Jose, C. Rica
 a Chicago, Ill.

780 kcs. (384.4 m.)

CHWK F 100
 CKSO F 1000
 CMQ N 25000
 KFCA ... 1000(.5)
 KFDY D 1000
 KFQD ... 250
 KGHL N 1000(.5)
 KWLK D 250
 WEAN BM 1000(.5)
 WMC JR 5000
 WPIC D 250
 WTAR JN 5000
 XEN ... 1000

f Chilliwack, B. C. 11 am-1:15 am
 a Sudbury, Ont. 9 am-midnight
 a Havana, Cuba 6:50 am-1 am
 a Los Angeles, Calif. 9 am-?
 a Brookings, S. Dak. 1:30-3 pm
 b Anchorage, Alaska 11 pm-5 am
 a Billings, Mont. 9 am-1 am
 a Longview, Wash. 10 am-LS
 a Providence, R. I. 6 am-?
 a Memphis, Tenn. 7:45 am-1 am
 a Sharon, Pa. 6:30 am-LS
 g Norfolk, Va. 6:30 am-1 am
 a Mexico City, D. F.

790 kcs. (379.5 m.)

CMGH ... 200
 KGO B 7500
 KOAM DN 1000
 WGY R 50000
 ZNS ... 1000

a Matanzas, Cuba
 a San Francisco, Calif. 7 am-1 am
 a Pittsburg, Kans. 7 am-LS
 a Schenectady, N. Y. 7 am-1 am
 d Nassau, Bahamas

800 kcs. (374.8 m.)

HIX ... 800
 TIXD ... 1000
 WBAP ENa 50000

a Trujillo, D. R.
 z San Jose, Costa R.
 a Fort Worth, Texas 6:45-8 am; 9:30-11:30 am;
 1:30-4 pm; 6:30-7:30 pm; 8-11 pm
 a Dallas, Texas 8-9:30 am; 11:30 am-1:30 pm;
 4-6:30 pm; 7:30-8 pm.
 a Cumberland, Md. 8:30 am-LS

810 kcs. (370.2 m.)

CMCF ... 5000
 WCCO C 50000
 WNYC D 1000
 XEBZ ... 100
 XEDF ... 100

a Havana, Cuba
 g Minneapolis, Minn. 7:30 am-1 am
 a New York, N. Y.
 a Mexico City, D. F.
 e Nuevo Laredo, Tam. 11 am-3:15 pm; 7-8:15 pm

820 kcs. (365.6 m.)

WHAS C 50000
XEBG ... 1000

a Louisville, Ky.
z Tijuana, B. Cfa.

830 kcs. (361.2 m.)

CMHI E 1000
KOA R 50000
TIEP ... 3000
WEEU DR 1000
WHDH L 1000
WRUF L 5000
XERC A 500

a Santa Clara, Cuba
a Denver, Colo. 9 am-2 am
a San Jose, C. Rica
a Reading, Pa. 8 am-5 pm
a Boston, Mass. 7 am-LS
a Gainesville, Fla. 7 am-6:30 pm
z Mexico City, D. F.

840 kcs. (356.9 m.)

CBL F 50000
VOGY ... 400

a Toronto, Ont. 7:45 am-12:30 am
a St. John's, Nfld. 8:30 am-12:30 pm; 4:30-9:30 pm

XERA ... 250000

a Villa Acuna, Coah.

850 kcs. (352.7 m.)

CMCM ... 200
KIEV D 250
WFSG CD 1000
WKAR DX 1000
WWL C 50000

a Havana, Cuba 8 am-1130 pm
a Glendale, Calif.
a Elmira, N. Y. 6:00 am to SS at New Orleans
a E. Lansing, Mich. 7 am-5 pm
a New Orleans, La.

860 kcs. (348.6 m.)

CMJA ... 200
TIEMC ... 250
WABC Ca 50000
WROQ QA 50000
WHB DM 1000
XEMO ... 5000

a Camaguey, Cuba
z San Jose, C. Rica
a New York, N. Y. 7:30 am-1 am
a New York, N. Y.
a Kansas City, Mo.
a Tijuana, B. Cfa. 9:45 am-3 am

870 kcs. (344.6 m.)

CMHO
WENR Ba 50000
WLS Ba 50000
XEFB ... 200

z Sagua la Grande, Cuba
b Chicago, Ill. Noon to midnight
a Chicago, Ill. 8 am-noon
a Monterrey, N. L.

880 kcs. (340.7 m.)

CRO F 1000
CFJC F 1000
CMX ... 15000
KFKA M2 500(1)
KLX ... 1000
KPOF 2 1000
KVAN DP 250
TILS ... 500
WCOC C 1000
WGBI CI 500(1)
WQAN 1 500(1)
WRNL DX 500
WSUI ... 500(1)

a Ottawa, Ont. 7:45 am-midnight
a Kamloops, B. C.
a Havana, Cuba 8 am-midnight
a Greeley, Colo. 7:30 am-1 am
a Oakland, Calif. 10:30 am-2:30 am
a Denver, Colo. 9:15-10:45 am, 430-6:30 pm;
z Vancouver, Wash. 8:30-10:30 pm
b San Jose, C. Rica
a Meridian, Miss. 12:30-10:30 pm
f Scranton, Pa. 12:30-10 pm
a Scranton, Pa. 6:30 am-LS
a Richmond, Va. 10 am-11 pm
a Iowa City, Iowa

890 kcs. (336.9 m.)

KARK N 1000
KFNF X2 500(1)
KFPY C 1000(5)
KUSD 2 500
WBAA ... 500(1)
WGST C 1000(5)
WJAR R 1000(5)
WMMN C 1000(5)
XEW ... 100000

a Little Rock, Ark. 7 am-1 am
a Shenandoah, Iowa 7 am-1 am
a Spokane, Wash. 9:50 am-3 am
a Vermillion, S. Dak.
a W. Lafayette, Ind. Noon-6 pm
a Atlanta, Ga.
a Providence, R. I. 7:30 am-1 am
a Fairmont, W. Va. 6:30 am-1 am
a Mexico City, D. F.

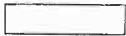
900 kcs. (333.1 m.)



HIG ... 250
 KGBU X 500
 KHJ M 1000(5)
 KSEI N 250(1)
 TIAFB ... 600
 WBEN R 1000(5)
 WELI DXZ 500
 WFMD D 500
 WJAX N 1000(5)
 WKY N 1000(5)
 WLBL D 5000
 WTAD D 1000

z Trujillo, D. R.
 a Ketchikan, Alaska
 a Los Angeles, Calif. 9 am-4 am
 a Pocatello, Idaho 9:30 am-1 am
 z San Jose, C. Rica
 a Buffalo, N. Y. 7 am-1 am
 a New Haven, Conn. 7 am-?
 a Frederick, Md. 6:30 am-LS
 a Jacksonville, Fla. 6:45 am-1 am
 a Oklahoma City, Okla. 7:45 am-1 am
 a Stevens Point, Wis. 9 am-5 pm
 a Quincy, Ill. 8 am-5:45 pm

910 kcs. (329.6 m.)



CBF FN 50000
 CJAT F 1000
 CKY F 15000
 CMBQ ... 5000
 CMKD ... 1000
 XENT ... 150000

a Montreal, P. Q. 8 am-midnight
 a Trail, B. C. 10 am-2 am
 a Winnipeg, Man. 8:30 am-1 am
 a Havana, Cuba 8 am-midnight
 a Santiago de Cuba
 a Nuevo Laredo, Tam. 7 pm-8:15 am

920 kcs. (325.9)



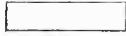
CMHT ... 200
 KFEL aMX 500
 KOMO R 1000(5)
 KPRC ER 1000(5)
 KVOD Ba 500

z Trinidad, Cuba
 a Denver, Colo. 8 am-2:30 am
 a Seattle, Wash. 10 am-3 am
 a Houston, Texas 7 am-1 am
 a Denver, Colo. 10:30 am-12:30 pm; 2:30-5 pm; 6:30-8 pm; 9:30 pm-2:30 am

TIRS 925 200
 WAAF D 1000
 WORL D 500
 WPEN ... 1000
 WSPA D 1000
 WWJ R 1000(5)

z San Jose, C. Rica
 a Chicago, Ill. 6 am-LS
 a Boston, Mass. 7 am-LS
 a Philadelphia, Pa.
 a Spartanburg, S. C. 6 am-LS
 a Detroit, Mich.

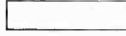
930 kcs. (322.4 m.)



CFAC F 1000
 CFCH F 100
 CFLC ... 100
 CHNS F 1000
 CKPC ... 100
 CMJF ... 200
 KMA B 1000(5)
 KROW ... 1000
 WBRC R 1000(5)
 WDBJ C 1000(5)
 XEBH ... 500

a Calgary, Alta. 9 am-2 am
 a North Bay, Ont.
 a Prescott, Ont. 7 am-10 pm
 a Halifax, N. S. 7:30 am-11 pm
 a Brantford, Ont.
 z Camaguey, Cuba
 a Shenandoah, Iowa
 a Oakland, Calif. 9 am-5 am
 a Birmingham, Ala. 8 am-12:30 am
 a Roanoke, Va. 7 am-midnight
 a Hermosillo, Son. 1-3 pm; 9 pm-midnight

940 kcs. (319 m.)



CMBZ ... 200
 KOIN C 1000(5)
 TIOS ... 500
 WAAT D 500
 WAVE N 1000
 WCSH R 1000(2.5)
 WDAY N 1000(5)
 WHA D 5000
 WICA DX 250
 XEFO ... 5000

a Havana, Cuba 7:42 am-1 am
 a Portland, Ore. 9:30 am-3 am
 z San Jose, C. Rica
 a Jersey City, N. J. 6:30 am-6 pm
 a Louisville, Ky. 8 am-1 am
 a Portland, Maine 7:30 am-midnight
 a Fargo, N. Dak. 7 am-1 am
 a Madison, Wis. 9 am-5:30 pm
 a Ashtabula, Ohio 7 am-LS
 a Mexico City, D. F.

950 kcs. (315.6 m.)



CBV F 1000
 CJRM F 1000
 CMKL ... 200
 FFWB ... 1000(5)

a Quebec, P. Q. Noon-midnight
 a Regina, Sask.
 z Bayamo, Cuba
 a Los Angeles, Calif. 9:30 am-4 am

KMBC C 1000(5)
 VOAR ... 25
 WRC R 1000(5)
 WTRY DP 1000

a Kansas City, Mo.
 z St. John's, Nfld.
 a Washington, D. C.
 z Troy, N. Y.

6:55 am-1 am

960 kcs. (312.3 m.)

CBM FR 5000
 CFRN F 100
 XEAW ... 100000
 XECL ... 1000

a Montreal, P. Q.
 a Edmonton, Alta.
 a Reynosa, Tam.
 z Mexicali, B. Cfa.

.....
 Silent
 5-7:15 am; 7pm-12:30 am

970 kcs. (309.1 m.)

CMCK ... 5000
 KJR B 5000
 WCFL N 5000
 WIBG D 100

z Havana, Cuba
 a Seattle, Wash.
 a Chicago, Ill.
 a Glenside, Pa.

7:50 am-12:30 am
 10 am-3 am

 7:30 am-LS

980 kcs. (306 m.)

KDKA B 50000
 XEAC ... 5000
 XEFE ... 250

b Pittsburgh, Pa.
 a Tijuana, B. Cfa.
 z Nuevo Laredo, Tam.

.....
 8 am-1 am

990 kcs. (302.8 m.)

WBZ B5y 50000
 WBZA B5y 1000
 XEAF ... 750
 XEK X 100
 XES ... 250

a Boston, Mass.
 a Springfield, Mass.
 a Nogales Son.
 a Mexico City, D. F.
 a Tampico, Tam.

6 am-1 am
 6 am-1 am
 11 am-3 pm; 7 pm-midnight

1000 kcs. (299.8 m.)

KFVD L 1000
 TIFA ... 250
 WHO KR 50000
 XEBI ... 250

a Los Angeles, Calif.
 z San Jose, C. Rica
 a Des Moines, Iowa
 a Aguascalientes, Ags.

9 am-8:15 pm

 7 am-1 am

1010 kcs. (296.9 m.)

CHML F 100
 CKCD 1 100
 CKCK F 1000
 CKCO F 100
 CKIC ... 50
 CKWX F1 100
 CMCU ... 200
 KGGF M2 1000
 KQW M 1000
 WHN ... 1000(5)
 WNAD 2 1000
 WNOX C 1000(5)
 XEFQ ... 50
 XEU ... 250

a Hamilton, Ont.
 a Vancouver, B. C.
 a Regina, Sask.
 a Ottawa, Ont.
 a Wolfville, N. S.
 a Vancouver, B. C.
 a Havana, Cuba
 a Coffeyville, Kans.
 a San Jose, Calif.
 a New York, N. Y.
 a Norman, Okla.
 a Knoxville, Tenn.
 a Cananea, Son.
 a Veracruz, Ver. C.

8 am-midnight
 Silent
 9:30 am-2 am
 Noon-11:30 pm

 Noon-4 am
 6:55 am-1 am
 Silent
 9:30 am-3 am
 7 am-1 am
 3-10:15 pm
 6:30 am-2 am

 8 am-1 am

1020 kcs. (293.9 m.)

KYW R 10000
 WDZ D 1000
 XEJ ... 1000

b Philadelphia, Pa.
 a Tuscola, Ill.
 a Juarez, Chih.

7:05 am-10 pm
 7 am-6 pm

1030 kcs. (291.1 m.)

CFCN F 10000
 CJBR F 1000
 CKLW FM 5000
 TIHO ... 500
 XEB ... 10000

a Calgary, Alta.
 a Rimouski, P. Q.
 a Windsor, Ont.
 z San Jose, C. Rica
 a Mexico City, D. F.

9 am-1:30 am

 6:30 am-4 am

 10 am-12:15 am

1040 kcs. (288.3 m.)



KRLD C 50000
 KWJJ HL 500
 KYOS DM 250
 VOXM ... 100
 WTIC HR 50000

a Dallas, Texas
 a Portland, Ore. 9 am-5:45 am
 a Merced, Calif. 9 am-LS
 z St. John's, Nfld.
 a Hartford, Conn. 6 am-1 am

1050 kcs. (285.5 m.)



CBA F 50000
 CMCH ...
 CMCP ... 200
 HIT ... 50
 KFBI LY 5000
 KNX C 50000
 WEAU L 1000(5)
 WIBC D 1000

a Sackville, N. B. 7 am-midnight
 z—Havana, Cuba 7:55 am-midnight
 z—Havana, Cuba
 z Trujillo, D. R.
 a Abilene, Kans. 7 am-7:45 pm
 b Los Angeles, Calif. 9:30 am-3:15 am
 a Eau Claire, Wis. Until 5S at Abilene, Texas
 a Indianapolis, Ind. 7 am-LS

1060 kcs. (282.8 m.)



KTHS HN 10000
 VOAC 1065 40
 WBAL BM 10000
 WJAG L 1000

a Hot Springs, Ark. 7 am-LS; 9 pm-1 am
 z St. John's, Nfld.
 a Baltimore, Md. 6 am-9 pm
 a Norfolk, Nebr. 7:30 am-LS

1070 kcs. (280.2 m.)



CMJW ... 200
 KJBS L 500
 TJNBC P 5000
 WCAZ D 100
 WTAM R 50000

z Camaguey, Cuba
 a San Francisco, Calif. 1 am-9:45 pm
 z San Jose, C. Rica
 a Carthage, Ill. 8 am-5 pm
 a Cleveland, Ohio 6 am-midnight

1080 kcs. (277.6 m.)



CMBX ... 200
 CMKM ... 200
 WBT C 50000
 WCBD LI 5000
 WMBI LI 5000
 XEBA ... 20
 XEBK ... 100
 XEDP ... 500

a Havana, Cuba
 a Manzanillo, Cuba
 a Charlotte, N. C. 6:45 am-midnight
 a Chicago, Ill. 8 am-5:30 pm
 g Chicago, Ill.
 z Guzman, Jal.
 z Nuevo Laredo, Tam.
 a Mexico City, D. F.

1090 kcs. (275.1 m.)



CMHA ... 200
 HIN ... 100
 KMOX C 50000
 XERB ... 150000

z Sagua la Grande, Cuba
 z Trujillo, D. R.
 a St. Louis, Mo. 7 am-1 am
 a Rosarito Beach, B. Cfa.

1100 kcs. (272.6 m.)



CBR F 5000
 CMHP ... 200
 KGDH DM 1000
 KWKH CH 50000
 WBIL I 5000
 WCAR DP 1000
 WPG CI 5000
 XECL ? 1000

a Vancouver, B. C.
 z Piacetas, Cuba
 f Stockton, Calif. 9 am-LS
 a Shreveport, La.
 a New York, N. Y.
 z Pontiac, Mich.
 a Atlantic City, N. J. 8 am-6 pm; 8pm-midnight
 z Mexicali, B. Cfa.

1110 kcs. (270.1 m.)



CMCJ ... 200
 KSOO LN 5000
 WRVA CM 50000

a Havana, Cuba 8 am-10 pm
 a Sioux Falls, S. Dak. 7 am-LS
 a Richmond, Va. 6:30 am-1 am

1120 kcs. (267.7 m.)



CBJ F 100
 CHLP F 100

a Chicoutimi, P. Q. 3:15-11:15 pm
 a Montreal, P. Q. 9 am-11 pm

CHSJ F 100
 CKOC F 500(1)
 CKX F 1000
 CMGF ... 200
 KFIO D 100
 KFSG a 500(2.5)
 KRKD a 500(2.5)
 KRSC ... 250
 KTBC DP 1000
 WCOP D 500
 WDEL R 250(1)
 WISN C 250(1)
 WJBO B 500
 WTAW L 500

a St. John, N. B.
 a Hamilton, Ont.
 a Brandon, Man.
 a Matanzas, Cuba
 a Spokane, Wash.
 a Los Angeles, Calif.
 a Los Angeles, Calif.
 a Seattle, Wash.
 z Austin, Texas
 a Boston, Mass.
 a Wilmington, Del.
 a Milwaukee, Wis.
 a Baton Rouge, La.
 a College Station, Texas

5 am-midnight

 9 am-12:30 am

 9 am-3 am
 9 am-4:30 am

 7 am-4 pm
 9 am-11 pm
 8 am-1 am
 7:45 am-1 am

1130 kcs. (265.3 m.)



CMJI ... 200
 KSL C 50000
 WJJD L 20000
 WOV D 1000
 XEJP ... 100

a Ciego de Avila, Cuba
 a Salt Lake City, Utah
 a Chicago, Ill.
 a New York, N. Y.
 z Mexico City, D. F.

Noon-10 pm
 8:30 am-3 am
 6 am-6:45 pm

1140 kcs. (263 m.)



CMBG ... 200
 KVOO N 25000
 WAPI C 5000
 WSPR LM 500

z Havana, Cuba
 a Tulsa, Okla
 a Birmingham, Ala.
 a Springfield, Mass.

7:57 am-midnight

 7 am-1 am
 7 am-5:45 pm

1150 kcs. (260.7 m.)



CMKG ... 200
 WHAM N 50000
 XEBP ... 250
 XEC ... 100
 XEDW ... 300
 XEL ... 250

z Santiago, Cuba
 a Rochester, N. Y.
 z Durango, Dgo.
 a Tijuana, B. Cfa.
 a Minatitlan, Ver. C.
 z Mexico City, D. F.

.....
 7 am-midnight

1160 kcs. (258.5 m.)



CMHJ ... 200
 WOWO B1 10000
 WWVA C1 5000
 XEAS ... 100
 XED ... 2500
 XEP ... 500

a Cienfuegos, Cuba
 a Fort Wayne, Ind.
 a Wheeling, W. Va.
 a Saltillo, Coah.
 a Guadalajara, Jal.
 a Juarez, Chih.

.....

 6 am-?

 Noon-midnight
 9 am-2 am

1170 kcs. (256.3 m.)



CMBS ... 200
 WCAU C 50000
 XEXX ... 1000

a Havana, Cuba
 a Philadelphia, Pa.
 z Mexico City, D. F.

7:27 am-11 pm
 7:30 am-1 am

1180 kcs. (254.1 m.)



KEX B 5000
 KOB N 10000
 WDGY M 1000(5)
 WINS L 1000
 WMAZ CL 1000(5)

a Portland, Ore.
 a Albuquerque, N. Mex.
 a Minneapolis, Minn.
 a New York, N. Y.
 a Macon, Ga.

9:30 am-3 am
 9 am-1 am
 7 am-7:30 pm

 7 am-7 pm

1190 kcs. (252 m.)



CMKX ... 200
 KTKC DMXZ 250
 WOAI EN 5000
 WSAZ L 1000

z Santiago de Cuba
 f Visalia Calif
 a San Antonio, Texas
 a Huntington, W. Va.

.....
 9 am-LS
 7:30 am-12:30 am
 7 am-7 pm

1200 kcs. (249.9 m.)



CFGP ... 100
 CHAB F 100(.25)

a Grande Prairie, Alta.
 a Moose Jaw, Sask.

9:45 am-5 pm; 7pm-midnight
 9 am-12:30 am

CHGB	F	100	z	St. Anne de la Pocatierrc, P. O.	.....
CKNX	...	100	z	Wingham, Ont.	11 am-1 am
CKTB	F	100	a	St. Catharines Ont.	9:30 am-11:30 pm
CMCO	...	200	a	Havana Cuba	7:55 am-midnight
KADA	LM	100	a	Ada Okla.	.....
KAST	...	100(.25)	a	Astoria Ore.	.....
KBTM	D	100	a	Jonesboro Ark.	8:30 am-6:30 pm
KELO	N	100(.25)	a	Sioux Falls, S. Dak.	1 pm-1 am
KFJB	...	100(.25)	a	Marshalltown, Iowa	7 am-10 pm
KFXD	...	100(.25)	a	Nampa Idaho	8 am-11 pm
KFXJ	...	100(.25)	a	Grand Junction, Colo.	.....
KGDE	...	100(.25)	b	Fergus Falls, Minn.	8 am-10 pm
KGEK	...	100	f	Sterling Colo.	Silent
KGFJ	...	100	a	Los Angeles, Calif.	24 hours daily
KGHI	...	100(.25)	a	Little Rock, Ark.	8:30 am-11 pm
KHAS	P	100(.25)	z	Hastings, Nebr.	.....
KMLB	...	250	a	Monroe, La.	.....
KOOS	M	100(.25)	a	Marshfield, Ore.	10 am-7:45 pm
KSUN	...	100(.25)	a	Lowell Ariz.	11 am-midnight
KVCV	M	100	a	Redding, Calif.	.....
KVEC	M	100(.25)	a	San Luis Obispo, Calif.	9:30 am-3 am
KVNU	...	100	z	Logan Utah	9:30 am-?
KVOS	M	100	a	Bellingham, Wash.	.....
K...D	DP	100	z	Plainview Texas	.....
KWG	N	100	a	Stockton, Calif.	10 am-3 am
KWNO	...	100(.25)	a	Winona Minn.	.....
TIRCC	...	500	z	San Jose C. Rica	.....
WABI	C	100(.25)	a	Bangor, Maine	.....
WAIM	C	100	a	Anderson, S. C.	6 am-10 pm
WATX	...	100(.25)	a	Waycross, Ga.	7 am-9 pm
WBAB	P	100(.25)	z	Atlantic City, N. J.	.....
WBBZ	M	100(.25)	a	Ponca City, Okla.	8 am-10 pm
WBHP	...	100	a	Huntsville, Ala.	.....
WCAT	D	100	a	Rapid City, S. Dak.	Noon-2 pm
WCAX	...	100(.25)	a	Burlington, Vt.	7:30 am-9 pm
WCLO	...	250	a	Janesville, Wis.	8 am-10 pm
WCPO	...	100(.25)	a	Cincinnati, Ohio	7 am-11:30 pm
WOLF	P	100(.25)	z	Panama City, Fla.	.....
WDSM	P	100	z	Superior, Wis.	.....
WENY	P	100(.25)	z	Elmira, N. Y.	.....
WEST	...	100(.25)	a	Easton, Pa.	.....
WESX	P	100	z	Salem, Mass.	.....
WFAM	4	100	a	South Bend, Ind.	.....
WFTC	...	100(.25)	a	Kinston, N. C.	.....
WHBC	...	100(.25)	a	Canton, Ohio	.....
WHBY	E	100(.25)	a	Green Bay, Wis.	.....
WIBX	C	100(.25)	a	Utica, N. Y.	Silent
WIL	...	250	a	St. Louis, Mo.	5:30 am-1 am
WJBC	5	250	a	Bloomington, Ill.	4-8:30 pm
WJBL	Z5	100	a	Decatur, Ill.	7-10 am; 1:30-4 pm; 8:30 pm-1 am
WJBW	L	100	a	New Orleans, La.	2 am-9 pm
WJHL	...	100(.25)	a	Johnson City Tenn.	.....
WJNO	C	100(.25)	a	W. Palm Beach, Fla.	7 am-midnight
WJRD	D	250	a	Tuscaloosa, Ala.	.....
WKBO	N	100(.25)	a	Harrisburg Pa.	8 am-11 pm
WLVA	...	250	a	Lynchburg Va.	7 am-11 pm
WMFR	...	100	a	High Point, N. C.	6:30 am-10 pm
WMOB	DP	100	z	Mobile, Ala.	.....
WMPC	...	100(.25)	a	Lapeer, Mich.	.....
WOLS	...	100	a	Florence, S. C.	7 am-?
WRBL	C	100(.25)	a	Columbus, Ga.	8 am-midnight
WSAL	D	250	z	Salisbury, Md.	.....
WSKB	DP	100	z	McComb, Miss.	.....
WSOO	P	100(.25)	z	Saul Ste. Marie, Mich.	.....
WTHT	M	100	a	Hartford, Conn.	7 am-4:15 pm
WTOL	...	100	a	Toledo, Ohio	.....
WWAE	4	100	a	Hammond, Ind.	.....

1210 kcs. (247.8 m.)

CHLT	...	100	z	Sherbrooke, P. Q.	.....
CJCS	...	50	a	Stratford, Ont.	8 am-9 pm
CJOC	F	100	a	Lethbridge, Alta.	9 am-1 am
CKBI	F	100	a	Prince Albert, Sask.	9:45 am-1 am
CKCH	F	100	a	Hull, P. Q.	10 am-1 pm; 4-10 pm
CKMC	...	50	a	Cohalt, Ont.	8 am-11 pm
CMHK	...	200	z	Cruces, Cuba	.....
KALB	...	100(.25)	a	Alexandria, La.	.....
KANS	N	100	a	Wichita, Kans.	7:30 am-midnight
KASA	M	100	a	Elk City, Okla.	7 am-8 pm
KDLR	...	100(.25)	a	Devils Lake, N. Dak.	7:30 am-9:30 pm
KDON	M	100	a	Monterey, Calif.	9:30-?
KFJI	...	100	a	Klamath Falls, Ore.	9 am-?
KFOR	CM	100(.25)	a	Lincoln, Nebr.	8 am-11:15 pm
KFPW	...	100	a	Fort Smith, Ark.	7:30 am-11 pm
KFVS	5	100(.25)	z	Cape Girardeau, Mo.	.....
KFXM	M2	100	a	San Bernardino, Calif.	9 am-3 am
KGLO	C	100(.25)	z	Mason City, Iowa	7 am-1 am
KGy	M	100	a	Olympia, Wash.	.....
KHBG	D	100	a	Okmulgee, Okla.	.....
KIUL	...	100	a	Garden City, Kans.	8 am-10 pm
KLAH	...	100(.25)	a	Carlsbad, N. Mex.	8:30 am-11 pm
KOCA	...	100(.25)	a	Kilgore, Texas	.....
KOVO	P	100(.25)	z	Provo, Utah	10:15 am-midnight
KPFA	EN	100(.25)	a	Helena, Mont.	Silent
KPPC	2	100	a	Pasadena, Calif.	9:30 am-2:30 pm
KROY	C	100	a	Sacramento, Calif.	8 am-11 pm
KVSO	M	100(.25)	a	Ardmore, Okla.	10 am-midnight
KWJB	...	100(.25)	a	Globe, Ariz.	.....
KWTN	A	100	a	Watertown, S. Dak.	.....
KXOX	DP	250	z	Sweetwater, Tex.	.....
KYUM	P	100(.25)	z	Yuma, Ariz.	.....
WALR	...	100	a	Zanesville, Ohio	7 am-9 pm
WBAX	M	100	a	Wilkes-Barre, Pa.	.....
WBBL	S	100	a	Richmond, Va.	11 am-9:15 pm
WBRB	3	100	a	Red Bank, N. J.	4-7 pm
WCOL	N	100	a	Columbus, Ohio	7 am-11 pm
WCOU	M	100(.25)	a	Lewiston, Maine	6 am-midnight
WCOV	D	100	z	Montgomery, Ala.	.....
WCRW	4	100	a	Chicago, Ill.	11 am-7 pm
WEBQ	5	100(.25)	a	Harrisburg, Ill.	7-10 am; 1-5 pm; 8:30-10 pm
WEDC	4	100	a	Chicago, Ill.	10-11 am; 5-6 pm; 11 pm; mid- night
WFAS	3	100	a	White Plains, N. Y.	7:30 am-midnight
WFOY	...	100(.25)	a	St. Augustine, Fla.	.....
WGBB	3	100	a	Freeport, N. Y.	.....
WGCM	...	100(.25)	a	Gulfport, Miss.	.....
WGRM	Y	100(.25)	a	Grenada, Miss.	.....
WHAI	M	250	a	Greenfield, Mass.	7 am-?
WHBU	...	100(.25)	a	Anderson, Ind.	.....
WIBU	E	100(.25)	a	Poynette, Wis.	.....
WINN	P	100(.25)	z	Louisville, Ky.	.....
WJBY	...	100(.25)	a	Gadsden, Ala.	8 am-10:30 pm
WJEJ	...	100	a	Hagerstown, Md.	7 am-11:30 pm
WJIM	B	100(.25)	z	Lansing, Mich.	7:15 am-12:30 am
WJLS	...	250	z	Beckley, W. Va.	.....
WJMC	D	250	z	Rice Lake, Wis.	.....
WJTN	B	100(.25)	a	Jamestown, N. Y.	7:30 am-12:30 am
WJW	...	100(.25)	a	Akron, Ohio	8 am-10:30 pm
WKOK	...	100	a	Sunbury, Pa.	6 am-midnight
WLOK	D	100	a	Lima, Ohio	6 am-5:15 pm
WMFG	C	250	a	Hibbing, Minn.	7:30 am-10 pm
WOCB	P	100(.25)	z	Hyannis, Mass.	.....
WOMT	...	100	a	Manitowoc, Wis.	.....
WPAX	...	100(.25)	a	Thomasville, Ga.	8 am-6 pm
WPIV	P	100(.25)	z	Petersburg, Va.	.....
WRAL	M	250	z	Raleigh, N. C.	6 am-1 am
WSAY	...	100(.25)	a	Rochester, N. Y.	7 am-12:30 am
WSBC	4	250	a	Chicago, Ill.	6 am-midnight
WSIX	M	250	a	Nashville, Tenn.	7 am-1 am

WSNJ	...	100(25)
WSOC	MN	100(.25)
WTAX	...	100
WTMA	...	250
XEAT	...	250
XEE	...	50
XEFV	...	50
XETH	...	100

a	Bridgeton, N. J.
a	Charlotte, N. C.
a	Springfield, Ill.
z	Charleston, S. C.
a	Parral, Chih.
a	Durango, Dgo.
a	Juarez, Chih.
a	Puebla, Pue.

7 am-7
7 am-midnight
.....
.....
11 am-9 pm
.....
.....
.....

1220 kcs. (245.8 m.)

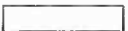


KFKU	a	1000(5)
KTMS	B	500
KTW	S2	1000
KWSC	Z	1000(5)
TIGPH2	1225	1007
WCAD	D	500
WCAE	MR	1000(5)
WDAE	C	1000(5)
WGNV	D	250
WREN	aB	1000(5)
XEBL	...	50
XEDA	...	200
XETF	...	12

a	Lawrence, Kans.
z	Santa Barbara, Calif.
a	Seattle, Wash.
a	Pullman, Wash.
b	San Jose, C. Rica
a	Canton, N. Y.
a	Pittsburgh, Pa.
a	Tampa, Fla.
z	Newburgh, N. Y.
a	Lawrence, Kans.
z	Mazatlan, Sin.
z	Gral. Anaya, D. F.
a	Veracruz, Ver. C.

3:30-7:30 pm
.....
.....
9:45 am-12:30 am
.....
12:30-4 pm
7 am-2:30 am
7:30 am-midnight
.....
8 am-7 pm
.....
.....
.....

1230 kcs. (243.8 m.)



CMCB	...	200
CMJE	...	200
KGBX	N	500
KGGM	C	1000
KYA	...	1000(5)
WFBM	C	1000(5)
WNAC	R	1000(5)
WOL	M	1000
XEG	...	250
XECA	...	250

a	Havana, Cuba
z	Camaguey, Cuba
a	Springfield, Mo.
a	Albuquerque, N. Mex.
a	San Francisco, Calif.
a	Indianapolis, Ind.
a	Boston, Mass.
a	Washington, D. C.
z	Monterrey, N. L.
z	Tampico, Tam.

8 am-11 pm
.....
.....
9:30 am-11:30 pm
9:30 am-3 am
7:30 am-1 am
5 am-1 am
6 am-2 am
.....
.....

1240 kcs. (241.8 m.)

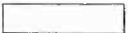


CJCB	F	1000
CMAB	...	200
CMHB	...	200
KF.Z	M	1000
KGCU	...	250
KTFI	N	1000
WHBF	M	1000(2.5)
WKAQ	C	1000
WXYZ	B	1000
XEBU	...	50
XECW	...	250
XEKL	A	500
XEME	...	50

a	Sydney, N. S.
z	Pinar del Rio, Cuba
z	Sancti Spiritus, Cuba
a	Fort Worth, Texas
a	Mandan, N. Dak.
a	Twin Falls, Idaho
a	Rock Island, Ill.
a	San Juan, Puerto Rico
a	Detroit, Mich.
z	Chihuahua, Chih.
z	Corduba, Ver. C.
b	Leon, Gro.
z	Merida, Yuc.

7 am-1 am
.....
.....
.....
11 am-midnight
8 am-1 am
.....
6 am-9:30 pm
.....
.....
.....
.....
.....
.....

1250 kcs. (239.9 m.)



CMKC	...	200
KFOX	...	1000
KIT	MX	250(.5)
KXOK	...	1000
WAIR	DM	250
WDSU	B	1000
WHBI	Z	100(2.5)
WKST	DX	250
WMRO	D	250
WNEW	Z	1000(5)
WTCN	B	1000(5)
XEAI	...	500

a	Santiago, Cuba
a	Long Beach, Calif.
a	Yakima, Wash.
z	St. Louis, Mo.
a	Winston-Salem, N. C.
a	New Orleans, La.
a	Newark, N. J.
a	New Castle, Pa.
z	Aurora, Ill.
a	New York, N. Y.
a	Minneapolis, Minn.
z	Mexico City, D. F.

.....
.....
9:30 am-3 am
.....
.....
6 am-LS
7 am-midnight
.....
7 am-LS
.....
.....
24 hours daily
7 am-midnight
.....

1260 kcs. (238 m.)



CMBD	...	200
CMJO	...	200

z	Havana, Cuba
a	Ciego de Avila, Cuba

.....
.....

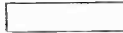
KGVO C 1000(5)
 KHSL M 250
 KOIL CM 1000(5)
 KPAC DZ 500
 KRGV MN 1000
 KUOA D 5000
 KVTA FN 1000
 WFVA DP 250
 WHIO C 1000(5)
 WHIO DP 1000
 WNBX CM 1000
 WTOC C 1000

a Missoula, Mont.
 a Chico Calif.
 a Omaha Nebr.
 a Port Arthur, Texas
 a Weslaco Texas
 a Siloam Springs, Ark.
 a Tucson Ariz
 z Fredericksburg, Va.
 a Dayton, Ohio
 z Niagara Falls, N. Y.
 a Springfield, Vt.
 a Savannah, Ga.

8:50 am-1 am

 6 am-5:45 pm
 8 am-11 pm
 7 am-LS
 8 am-11:30 pm
 6 am-1 am
 7 am-midnight
 7 am-midnight

1270 kcs. (236.1 m.)



CMHD ... 200
 KG LA DO2 1000
 KOL M 1000(5)
 KVOR C 1000
 KWLC DZ 100
 WASH aDN 500
 WFRB R 1000(5)
 WJDX R 1000(5)
 WOOD aN 500
 XFSM ... 100
 XEXB A 250
 XEXE ... 17

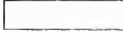
d Caibarien, Cuba
 a Decorah, Iowa
 a Seattle, Wash.
 a Colorado Springs, Colo.
 a Decorah, Iowa
 a Grand Rapids, Mich.
 a Baltimore, Md.
 a Jackson, Miss.
 a Grand Rapids, Mich.
 z Mexico City, D. F.
 a Jalapa, Ver. C.
 z Texcoco, D. F.

.....

 9 am-1 am
 9:30 am-5:30 pm
 7 am-LS
 6:30 am-1:30 am

 7 am-midnight

1280 kcs. (234.2 m.)



CMKO ... 200
 KFBB C 1000(5)
 KLS ... 250
 WCAM 2 500
 WCAP 2 500
 WDOD C 1000(5)
 WIBA N 1000(5)
 WORC C 500
 WRR M 500
 WTNJ 2 500
 XEMX ... 100

z Holguin, Cuba
 a Great Falls, Mont.
 a Oakland, Calif.
 a Camden, N. J.
 a Asbury Park, N. J.
 b Chattanooga, Tenn.
 a Madison, Wis.
 a Worcester, Mass.
 a Dallas, Texas
 a Trenton, N. J.
 z Mexico City, D. F.

.....
 10 am-1 am

 Silent
 10:30 am-4 pm
 7:30 am-12:30 am
 8 am-1 am
 8 am-midnight
 8 am-midnight

1290 kcs. (232.4 m.)



CMCG ... 200
 CMJK ... 200
 KDYL R 1000(5)
 KLCN D 100
 KTRH C 1000(5)
 WATR ... 250
 WEBC N 1000(5)
 WJAS C 1000(5)
 WJHP P 250
 WNBZ D 100
 WNEL ... 1000(2.5)

a Havana, Cuba
 a Camaguey, Cuba
 a Salt Lake City, Utah
 a Blytheville, Ark.
 a Houston, Texas
 a Waterbury, Conn.
 a Duluth, Minn.
 a Pittsburgh, Pa.
 z Jacksonville, Fla.
 a Saranac Lake, N. Y.
 a San Juan, Puerto Rico

7 am-midnight

 8 am-3 am

 7:30 am-3:30 am
 8 am-?
 8 am-1 am
 7:30 am-12:30 am

 9:30 am-LS
 6:30 am-11:30 pm

1300 kcs. (230.6 m.)



KALE M 1000
 KFAC ... 1000
 KFH C 1000(5)
 WBBR 2 1000
 WEVD 2 1000
 WFBC N 1000(5)
 WHAZ 2 1000
 WHBL ... 250(1)

a Portland, Ore.
 a Los Angeles, Calif.
 a Wichita, Kans.
 a Brooklyn, N. Y.
 a New York, N. Y.
 a Greenville, S. C.
 a Troy, N. Y.
 g Sheboygan, Wis.

9:15 am-3 am
 24 hours daily
 7 am-1 am
 Silent

 6:45 am-midnight
 6 pm-midnight
 8 am-midnight

1310 kcs. (228.9 m.)



CHCK ... 50
 CJKL F 100

a Charlottetown, P. E. I.
 a Kirkland Lake, Ont.

.....

CJLS	F	100	a	Yarmouth, N. S.	.....
CKCV	F	100	a	Quebec P. Q.	7:55 am-11:30 pm
CMKE	?	.....	z	Manzanillo, Cuba	.....
KAND	M	100	a	Corsicana, Texas	7 am-?
KARM	C	100	a	Fresno, Calif.	9 am-3 am
KBND	...	100(25)	z	Bend, Ore.	.....
KCKN	...	100	a	Kansas City, Kans.	7 am-1 am
KCRJ	...	100(25)	a	Jerome, Ariz.	.....
KFPL	...	100(25)	f	Dublin, Texas	7 am-10:45 pm
KFYO	M	100(25)	a	Lubbock, Texas	8 am-10:15 pm
KGFZ	...	100	a	Kalispell, Mont.	9 am-11 pm
KGFW	...	100(25)	a	Kearney, Nebr.	7 am-10 pm
KHUB	...	100(25)	a	Watsonville, Calif.	9 am-?
KOCY	...	100(25)	a	Oklahoma City, Okla.	7:45 am-?
KOME	EM	100(25)	z	Tulsa, Okla.	.....
KPDN	D	100	a	Pampa, Texas	.....
KRBA	D	100	a	Lufkin, Texas	7 am-6:15 pm
KPMD	...	250	a	Shreveport, La.	7:30 am-1 am
KROC	N	100(25)	a	Rochester, Minn.	7 am-12:15 am
KRRV	DM	250	a	Sherman, Texas	.....
KSRO	...	250	a	Santa Rosa, Calif.	10 am-2 am
KSUB	...	100	a	Corlar City, Utah	.....
KTSM	N	100(25)	a	El Paso, Texas	8:30 am-1 am
KVIC	P	100(25)	z	Victoria, Texas	.....
KVOL	...	100(25)	a	Lafayette, La.	7 am-2 pm; 5-11 pm
KVOX	...	100(25)	a	Moorehead, Minn.	7 am-10 pm
KVSF	...	100	a	Santa Fe, N. Mex.	.....
KWFC	P	100(25)	z	Hot Springs, Ark.	.....
KWOC	D	100	a	Poplar Bluff, Mo.	7:30 am-LS
KWOS	...	100(25)	a	Jefferson City, Mo.	7 am-11 pm
KXRO	M	100(25)	a	Aberdeen, Wash.	10 am-2 am
TGI	...	.....	d	Guatemala City, Guat.	6 pm-3 am
WAML	...	250	a	Laurel, Miss.	8 am-10 pm
WBEO	L	100(25)	a	Marquette, Mich.	.....
WBOW	NZ	100(25)	a	Terre Haute, Ind.	7 am-midnight
WBRE	N	100(25)	a	Wilkes-Barre, Pa.	.....
WBRK	M	100(25)	a	Pittsfield, Mass.	7 am-1 am
WCLS	L	100	a	Joliet, Ill.	8 am-9:30 pm
WCMI	M	100(25)	a	Ashland, Ky.	6 am-11:30 pm
WDAH	S	100(25)	a	El Paso, Texas	Silent
WEFR	B	250	a	Buffalo, N. Y.	7 am-midnight
WEMP	...	250	a	Milwaukee, Wis.	7:30 am-?
WEXL	...	50	a	Royal Oak, Mich.	8 am-4 am
WFBG	...	100	a	Altoona, Pa.	7 am-10:30 pm
WFDL	B	100	a	Flint, Mich.	7 am-midnight
WFIG	P	100(25)	z	Sumter, S. C.	.....
WGAU	...	100(25)	a	Athens, Ga.	7 am-midnight
WGH	...	100(25)	a	Newport News, Va.	7 am-midnight
WGTM	D	100	a	Wilson, N. C.	.....
WHAT	4	100	a	Philadelphia, Pa.	.....
WJPF	P	100(25)	z	Herrin, Ill.	.....
WJPR	P	100(25)	z	Greenville, Miss.	.....
WLAK	N	250	z	Lakeland, Fla.	.....
WLBC	...	250	a	Muncie, Ind.	7 am-midnight
WLBJ	P	100(25)	z	Bowling Green, Ky.	.....
WLNH	M	100	a	Laconia, N. H.	7 am-midnight
WMBO	...	100(25)	a	Auburn, N. Y.	.....
WMIF	B	100(25)	a	Plattsburg, N. Y.	7:45 am-midnight
WNBH	M	100(25)	a	New Bedford, Mass.	7:30 am-11:15 pm
WRAW	...	100	a	Reading, Pa.	7 am-11 pm
WROL	N	100(25)	a	Knoxville, Tenn.	.....
WSAJ	...	100	a	Grove City, Pa.	Silent
WSAV	P	100	z	Savannah, Ga.	.....
WSGN	B	100(25)	a	Birmingham, Ala.	8 am-midnight
WSJS	C	250	a	Winston-Salem, N. C.	8 am-10 pm
WTAL	...	100(25)	a	Tallahassee, Fla.	8 am-midnight
WTEL	4	100	a	Philadelphia, Pa.	8 am-midnight
WTJS	...	100(25)	a	Jackson, Tenn.	7 am-11 pm
WTRC	...	250	a	Elkhart, Ind.	7 am-8:30 pm
XEAG	...	10	z	Cordoba, Ver. C.	.....
XERO	...	25	z	Irapuato, Gro.	.....

XEFW ... 300
 XETB ... 500
 XEX ... 500

a Tampico, Tam.
 a Torreón, Coah.
 a Monterrey, N. L.

1320 kcs. (227.1 m.)

CMCR ... 200
 KGHF B 500
 KGMB CMZ 1000
 KID ... 500(1)
 KRNT C 1000(5)
 WADC C 1000(5)
 WORK N 1000
 WSMB R 1000(5)

z Havana, Cuba
 a Pueblo, Colo. 9 am-1 am
 a Honolulu, Hawaii 1:30 am-6 pm
 a Idaho Falls, Idaho 6 am-7
 a Des Moines, Iowa 6:30 am-1 am
 a Akron, Ohio 7 am-1 am
 a York, Pa. 8 am-10 pm
 a New Orleans, La.

1330 kcs. (225.4 m.)

KGB M 1000
 KMO M 1000
 KRIS MN 500
 KSCJ C 1000(5)
 WDRC C 1000(5)
 WSAI MN 1000(5)
 WTAQ C 1000(5)

a San Diego, Calif. 10 am-4 am
 a Tacoma, Wash. 9 am-3 am
 a Corpus Christi, Tex. 7:30 am-midnight
 a Sioux City, Iowa 7 am-2 am
 g Hartford, Conn. 7 am-midnight
 a Cincinnati, Ohio 7 am-1 am
 a Green Bay, Wis. 8 am-1 am

1340 kcs. (223.7 m.)

KDTH DP 500
 KGIR EN 1000(5)
 KGNO ... 250(1)
 WCOA N 500(1)
 WFEA MN 500(1)
 WFNC DP 250
 WSPD B 1000(5)
 XEAP ... 50
 XEBJ ... 100
 XEBS ... 200
 XEDH ... 200
 XEFC ... 100
 XEBW ... 250

z Dubuque, Iowa
 a Butte, Mont.
 b Dodge City, Kans. 8:30 am-midnight
 a Pensacola, Fla.
 a Manchester, N. H. 8 am-1 am
 z Fayetteville, N. C.
 a Toledo, Ohio 6:30 am-1 am
 z Obregon, Son.
 a Victoria, Tam.
 z Mexico City, D. F.
 z Villa Acuna, Coah.
 a Merida, Yuc.
 a Chihuahua, Chih.

1350 kcs. (222.1 m.)

CMCA ... 200
 KIDO N 1000(2.5)
 KWK BM 1000(5)
 WAWZ 2 1000
 WBNX 2 1000
 WMBG RX 500

a Havana, Cuba
 a Boise, Idaho 9 am-2 am
 a St. Louis, Mo. 6:30 am-1 am
 a Zarephath, N. J. 7:45 am-8:45 am; 6-7:30 pm
 a New York, N. Y.
 a Richmond, Va. 7 am-midnight

1360 kcs. (220.4 m.)

CMJH ... 200
 KCRC EM 250
 KGER ... 1000
 KLPM ... 500(1)
 KSLM M 500
 WCSC N 500(1)
 WFBL C 1000(5)
 WGES 2 500(1)
 WQBC D 1000
 WSBT C2 500

d Ciego de Avila, Cuba
 a Enid, Okla. 8 am-11 pm
 a Long Beach, Calif. 9 am-3 am
 a Minot, N. Dak.
 a Salem, Ore. 10 am-1 am
 a Charleston, S. C. 7 am-midnight
 a Syracuse, N. Y. 7 am-1 am
 a Chicago, Ill. 8 am-9 pm
 a Vicksburg, Miss.
 a South Bend, Ind.

1370 kcs. (218.8 m.)

CFAR ... 100
 CFOS ... 100
 CKCW F 100
 CKRN ... 100
 CMGE ... 200
 HIZ ... 75
 KEEN 3 100

a Flin Flon, Man. 8 am-2:15 pm; 6-10 pm
 z Owen Sound, Ont.
 a Moncton, N. B.
 z Rouyn, P. Q.
 a Cardenas, Cuba 10 am-10:30 pm
 z Trujillo, D. R.
 a Seattle, Wash. 3 pm-1 am

KELD	...	100	z	El Dorado, Ark.	.....
KERN	N	100	a	Eakerstield, Calif.	11 am-3 am
KFGQ	D	100	a	Eoone, Iowa	7 am-2 pm
KFRO	DMXZ	250	a	Longview, Texas	7:45 am-LS
KGFL	4	100	a	Roswell, N. Mex.	9 am-?
KGKL	M	100(.25)	a	San Angelo, Texas	.....
KICA	4	100	a	Clovis, N. Mex.	9 am-11 pm
KIUN	...	100	a	Pecos, Texas	8 am-10 pm
KIUP	...	100	a	Durango, Colo.	10 am-11 pm
KLUF	M	250	a	Galveston, Tex.	8 am-1 am
KMAC	5	100(.25)	a	San Antonio, Tex.	8 am-9 pm
KOBH	...	100(.25)	a	Rapid City, S. Dak.	8 am-midnight
KOKO	...	100	a	La Junta, Colo.	8 am-11:30 pm
KONO	5	100	a	San Antonio, Tex.	7 am-11 pm
KRE	...	100(.25)	a	Berkeley, Calif.	24 hours daily
KRKO	3	50	a	Everett, Wash.	10 am-3 pm; 7-10 pm
KRMC	...	100(.25)	a	Jamestown, N. Dak.	.....
KTEM	M	100(.25)	a	Temple, Texas	.....
KTOK	EMN	250	a	Oklahoma City, Okla.	7 am-1 am
KTWS	...	100	a	Emporia, Kans.	.....
KTUC	C	100(.25)	a	Tucson, Ariz.	9 am-1 am
KUJ	...	100	a	Walla Walla, Wash.	9:30 am-1 pm
KVFD	LP	100(.25)	z	Fort Dodge, Iowa	.....
KVGB	...	100	z	Great Bend, Kans.	.....
KVRS	...	100(.25)	a	Rock Springs, Wyo.	.....
KWYO	...	100(.25)	a	Sheridan, Wyo.	9 am-midnight
WABY	BM	100(.25)	a	Albany, N. Y.	7 am-midnight
WAGF	D	250	a	Dothan, Ala.	9 am-LS
WATL	...	100(.25)	a	Atlanta, Ga.	7 am-1 am
WBLK	N	250	a	Clarksburg, W. Va.	6 am-11:30 pm
WBNY	2	100(.25)	a	Buffalo, N. Y.	7:30 am-midnight
WBTH	D	100	z	Williamson, W. Va.	.....
WBTM	...	100(.25)	a	Danville, Va.	7 am-10 pm
WCBM	...	100(.25)	a	Baltimore, Md.	.....
WCNC	P	100(.25)	z	Elizabeth City, N. C.	.....
WCOS	P	100(.25)	z	Columbia, S. C.	.....
WDAS	...	100(.25)	a	Philadelphia, Pa.	8 am-midnight
WDWS	...	100(.25)	a	Champaign, Ill.	7 am-midnight
WEOA	C	250	a	Evansville, Ind.	8 am-1 am
WFOR	...	100	a	Hattiesburg, Miss.	8 am-9 pm
WFTL	P	100(.25)	z	Ft. Lauderdale, Fla.	.....
WGBR	P	100	z	Goldsboro, N. C.	.....
WGL	N	100(.25)	a	Fort Wayne, Ind.	.....
WGRC	DM	250	a	New Albany, Ind.	7 am-LS
WHBQ	...	100	a	Memphis, Tenn.	8 am-11:30 pm
WHDF	...	100(.25)	a	Calumet, Mich.	10:30 am-6:30 pm
WHLB	C	250	a	Virginia, Minn.	.....
WHLS	...	100(.25)	a	Port Huron, Mich.	6 am-7:30 pm
WHUB	P	100(.25)	z	Cookeville, Tenn.	.....
WIBM	B	100(.25)	a	Jackson, Mich.	6:30 am-12:30 am
WISE	P	100	z	Asheville, N. C.	.....
WJAC	...	100(.25)	a	Johnstown, Pa.	.....
WLLH	MSy	100(.25)	a	Lowell, Mass.	7:30 am-midnight
WLLH	Sy	100	a	Lawrence, Mass.	7:30 am-midnight
WMAN	DP	250	z	Mansfield, Ohio	.....
WMBR	C	100(.25)	a	Jacksonville, Fla.	7:30 am-midnight
WMFD	...	100(.25)	a	Wilmington, N. C.	7:30 am-7 pm
WMFO	D	100	a	Decatur, Ala.	8 am-6:30 pm
WMGA	P	100(.25)	z	Moultrie, Ga.	.....
WMIN	...	100(.25)	a	St. Paul, Minn.	7 am-1 am
WOC	C	100(.25)	a	Davenport, Iowa	7 am-1 am
WPAV	...	100	a	Portsmouth, Ohio	7 am-10:15 pm
WPRA	XX	1000(.25)	a	Mayaguez, P. R.	.....
WRAK	...	100(.25)	a	Williamsport, Pa.	7:30 am-9 pm
WRDO	MN	100	a	Augusta, Maine	8 am-11:15 pm
WRJN	...	100(.25)	a	Racine, Wis.	8:45 am-midnight
WSAU	...	250	a	Wausau, Wis.	7 am-11:15 pm
WSVS	D2	50	b	Buffalo, N. Y.	8:30 am-10 pm
WTSP	P	100(.25)	z	St. Petersburg, Fla.	.....
XECZ	...	100	z	San Luis Potosi, S. L. P.	.....
XEI	...	125	a	Morelia, Micho.	.....
XELZ	...	100	z	Mexico City, D. F.	.....

1380 kcs. (217.3 m.)



CMCW	...	200	d	Havana, Cuba	6:55 am-midnight
KOH	C	500	a	Reno, Nev.	11 am-3 am
KQV	C	500(1)	b	Pittsburgh, Pa.	7 am-10 pm

WALA	CX	500(1)	a	Mobile, Ala.	8:30 am-midnight
WING	N	250(1.5)	a	Dayton, Ohio	6 am-7:30 pm; 10 pm-1 am
WKBH	C	1000	a	La Crosse, Wis.	7 am-midnight
WNBC	R	250(1)	a	New Britain, Conn.	7 am-midnight
XEM	...	500	z	Chihuahua, Chih.	.....

1390 kcs. (215.7 m.)

CMJC	...	200	z	Camaguey, Cuba	.....
KABR	...	500(1)	a	Aberdeen S. Dak.	8 am-11 pm
KLRA	C	1000(5)	a	Little Rock, Ark.	.....
KOY	C	1000	g	Phoenix, Ariz.	9 am-12:15 am
KRLC	...	250	a	Lewiston, Idaho	9:30 am-12:30 am
WHK	KBM	1000(5)	a	Cleveland, Ohio	7 am-midnight
WQDM	D	1000	f	St. Albans, Vt.	6 am-LS

1400 kcs. (214.2 m.)

CMKR	...	200	z	Santiago de Cuba	.....
KHBC	CM	250	a	Hilo, Hawaii	Noon-4 am
KLO	B	1000(5)	a	Ogden, Utah	9:30 am-1:30 am
KTUL	C	1000(5)	a	Tulsa Okla.	7:30 am-1:30 am
TGX	...	500	d	Guatemala City, Guat.	.....
WARD	2	500	a	Brooklyn, N. Y.	3:45-6 pm
WBBC	2	500	a	Brooklyn, N. Y.	7-11 am; 7:30-9 pm
WHDL	D	250	a	Olean, N. Y.	.....
WIRE	MR	1000(5)	a	Indianapolis, Ind.	7:30 am-1 am
WLTH	2	500	a	New York, N. Y.	11 am-1:30 pm; 6-7:30 pm
WVFW	2	500	a	Brooklyn, N. Y.	1:30-3:45 pm; 9-10:30 pm

1410 kcs. (212 m.)

CKFC	2	50	a	Vancouver, B. C.	.....
CKMO	2	100	a	Vancouver B. C.	11 am-?
CMCQ	...	200	a	Havana Cuba	7 am-11 pm
KFJM	...	500(1)	a	Grand Forks, N. Dak.	8 am-10 pm
KGNC	N	1000(2.5)	a	Amarillo Texas	7 am-?
KMED	N	250	b	Medford, Ore.	.....
WAAB	M	1000	a	Boston, Mass.	7 am-?
WBCM	...	500(1)	a	Bay City, Mich.	9 am-12:30 am
WHIS	...	500(1)	a	Bluefield W. Va.	5 am-10 pm
WROK	...	500(1)	a	Rockford Ill.	7:30 am-midnight
WSFA	C	500(1)	a	Montgomery, Ala.	7:30 am-midnight

1420 kcs. (211 m.)

CBY	F	100	a	Toronto, Ont.	.....
CHLN	...	100	z	Three Rivers, P. Q.	.....
CKCA	F	100(25)	a	Kenora Ont.	.....
CKLN	...	100	z	Nelson, B. C.	.....
CMJP	...	200	a	Moron, Cuba	.....
KABC	M	100(25)	a	San Antonio, Texas	7 am-12:15 am
KATE	...	100(25)	a	Albert Lea, Minn.	7:30 am-?
KBPS	4	100	a	Portland Ore.	2-3:30 pm; 7-8 pm
KCMC	M	250	a	Texarkana Texas	8 am-midnight
KDNT	D	100	a	Denton Texas	8 am-LS
KEUB	...	100	a	Price Utah	9:30 am-midnight
KFAM	N	100(25)	a	St. Cloud, Minn.	8 am-10 pm
KFIZ	E	100	a	Fond du Lac, Wis.	.....
KGFF	EM	100(25)	a	Shawnee, Okla.	8 am-10 pm
KGIW	3	100	a	Atamosa, Colo.	9:30 am-10:30 pm
KGLU	...	100(25)	a	Safford, Ariz.	.....
KIDW	2	100	a	Lamar Colo.	9 am-8 pm
KLBM	...	100(25)	z	La Grande, Ore.	10 am-?
KNET	D	100	a	Palestine Texas	.....
KORE	M	100	a	Eugene, Ore.	10 am
KRBC	M	100(25)	a	Abilene, Texas	8 am-10 pm
KRBM	E	100(25)	z	Bozeman, Mont.	.....
KRIC	...	100(25)	z	Beaumont, Texas	8 am-?
KRLH	...	100	a	Midland Texas	.....
KSAN	...	100	a	San Francisco, Calif.	24 hours daily
KTRI	...	100(25)	f	Sioux City, Iowa	7 am-midnight
KUMA	...	100	a	Yuma, Ariz.	.....
KVAK	...	100	z	Atchison, Kans.	.....
KWAL	...	100(25)	z	Wallace, Idaho	.....

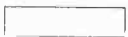
KWBG	...	100	a	Hutchinson, Kans.	8 am-10 pm
KXL	4	100(.25)	b	Portland, Ore.	9 am-3 am
WACO	CM	250	b	Waco, Texas	9 am-1 am
WAGM	...	100	a	Presque Isle, Maine	11 am-7 pm
WAPO	N	100(.25)	a	Chattanooga, Tenn.	7 am-7 pm
WAZL	...	100	a	Hazleton Pa.	9 am-10 pm
WCBS	...	100(.25)	a	Springfield, Ill.	8 am-11 pm
WCHV	...	250	a	Charlottesville, Va.	7 am-midnight
WEED	...	250	a	Rocky Mount, N. C.	7 am-8 pm
WELL	B	100	a	Battle Creek, Mich.	7:30 am-midnight
WFMJ	DP	100	z	Youngstown, Ohio	.....
WGNC	...	250	z	Gastonia N. C.	6 am-11 pm
WGPC	...	100	a	Albany, Ga.	.....
WHFC	...	100(.25)	a	Cicero, Ill.	7 am-1 am
WHMA	...	100	a	Anniston, Ala.	.....
WILM	...	100	a	Wilmington, Del.	.....
WJMS	X	100	a	Ironwood, Mich.	8 am-8:30 pm
WLAP	M	100(.25)	a	Lexington, Ky.	8 am-11 pm
WLEU	B	100(.25)	a	Erie, Pa.	.....
WLPM	P	100(.25)	z	Suffolk Va.	.....
WMAS	C	100(.25)	a	Springfield, Mass.	7 am-midnight
WMBC	...	100(.25)	a	Detroit, Mich.	7:30 am-midnight
WMBH	...	100(.25)	a	Joplin, Mo.	7 am-midnight
WMBS	...	100(.25)	a	Uniontown Pa.	7 am-8 pm
WMFJ	...	100	a	Daytona Beach, Fla.	8 am-11 pm
WMSD	...	100	a	Muscle Shoals City, Ala.	8 am-11 pm
WNOE	...	100(.25)	a	New Orleans, La.	1 pm-midnight
WPAD	...	100(.25)	a	Paducah, Ky.	7 am-midnight
WPAR	C	100	a	Paikersburg W. Va.	.....
WPRP	...	100(.25)	a	Ponce, Puerto Rico	.....
WSLI	...	250	a	Jackson, Miss.	8 am-11 pm
WSPB	P	100(.25)	z	Sarasota, Fla.	.....

1430 kcs. (209.7 m.)



CJGX	F	1000	a	Yorkton, Sask.	8:30 am-12:30 am
CMKZ	...	200	z	Palma Soriano, Cuba	.....
KGNF	D	1000	a	North Platte, Nebr.	8 am-6:15 pm
KINY	X	250	a	Juneau, Alaska	Noon-?
KSO	BM	1000(.5)	a	Des Moines, Iowa	7:30 am-2 am
WBNS	C	1000(.5)	a	Columbus, Ohio	6 am-?
WHEC	C	500(1)	a	Rochester, N. Y.	7:50 am-midnight
WHP	C	500(1)	a	Harrisburg Pa.	6:30 am-midnight
WMPS	B	500(1)	a	Memphis, Tenn.	8 am-12:30 am
WOKO	CK	500(1)	a	Albany N. Y.	8 am-1 am
XERH	?	500	z	Mexico City, D. F.	.....

1440 kcs. (208.2 m.)



CKGB	F	100	a	Timmins, Ont.	11 am-11:30 pm
CMBY	...	200	a	Havana, Cuba	7:55 am-11:30 pm
KDFN	...	500	a	Casper, Wyo.	.....
KELA	M	1000	a	Centralia, Wash.	9:45 am-3 pm
KXYZ	BM	1000	a	Houston, Texas	24 hours daily
WBIG	C	1000(.5)	a	Greensboro, N. C.	6:30 am-11:30 pm
WCBA	a	500	a	Allentown, Pa.	7:30 am-11:30 pm
WBMD	C	1000(.5)	a	Peoria, Ill.	7 am-midnight
WSAN	aN	500	a	Allentown, Pa.	1 pm-11:30 pm
XEFI	...	250	a	Chihuahua, Chih.	.....

1450 kcs. (206.8 m.)



CFCT	...	500	a	Victoria, B. C.	10:45 am-1215 am
CHGS	F	50	f	Summerside, P. E. I.	6:30 am-10 pm
CMHM	...	200	z	Cienfuegos, Cuba	.....
HRN	...	500	z	Tegucigalpa, Hond.	Noon-1 pm; 2-3 pm; 7-10:30 pm
KCMO	...	1000	a	Kansas City, Mo.	7 am-2 am
KGCX	...	1000	a	Wolf Point, Mont.	.....
KIEM	M	500(1)	a	Eureka, Calif.	10 am-1 am
KTBS	NZ	1000	a	Shreveport, La.	7:30 am-1 am
TGO	...	200	a	Quezaltenango, Guat.	.....
WAGA	B	500(1)	a	Atlanta, Ga.	7:15 am-2 am
WGAR	C	1000(.5)	a	Cleveland, Ohio	7 am-midnight
WHOM	...	250	a	Jersev City, N. J.	7 am-midnight
WSAR	M	1000	f	Fall River, Mass.	7:30 am-midnight
XEF	...	100	a	Juarez, Chih.	.....

1460 kcs. (205.4 m.)

CMKF ... 250
 KSTP RX 10000(25)
 WJSV CX 10000

z Holguin, Cuba
 z St. Paul, Minn. 7 am-2 am
 a Washington, D. C. 7 am-1 am

1470 kcs. (204 m.)

CMCX ... 200
 H18Q 1475 100
 KGA BM 5000
 WLAC ... 5000

z Havana, Cuba 9 am-11 pm
 z Trujillo, D. R.
 a Spokane, Wash.
 a Nashville, Tenn.

1480 kcs. (202.6 m.)

CMHX ... 200
 KOMA C 5000
 WHIP D 5000
 WKBW C 5000

a Cienfuegos, Cuba
 a Oklahoma City, Okla. 7:30 am-1 am
 z Hammond, Ind. 7:30 am-5:30 pm
 a Buffalo, N. Y. 8 am-1 am

1490 kcs. (201.2 m.)

CMKQ E 1000
 KFBK KN 10000
 WCKY CX 10000
 XECH ? 250
 XEDR ... 100

z Santiago de Cuba
 a Sacramento, Calif. 10 am-3 am
 a Covington, Ky. 7 am-midnight
 z Toluca, Mex.
 z Guaymas, Son.

1500 kcs. (199.9 m.)

CJIC F 100
 CMOX ... 200
 KAWM ... 100
 KBIX EM 100
 KBKR P 100(.25)
 KBST M 100
 KDAL C 100
 K-3 EM 100(.25)
 KDRO P 100(.25)
 KFDA M 100
 KGFI ... 100(.25)
 KGKB M 100(.25)
 KGKY ... 100(.25)
 KNEL W 250
 KNOW C 100
 KOTN D 100
 KOVC ... 100(.25)
 KPAB ... 100(.25)
 KPLC ... 100(.25)
 KPLT M 100(.25)
 KPQ M 250
 KRNR M 100(.25)
 KROD P 100
 KSAL XZ 100(.25)
 KSAM D 100
 KTOH P 100(.25)
 KUTA N 100
 KVOE M 100
 KVWC ... 100(.25)
 KWEW D 100
 KXO M 100
 KYCA P 100(.25)
 KYSM N 100(.25)
 WCNW 2 100(.25)
 WDAN ... 100(.25)
 WQNC C 250
 WGAL N 100(.25)
 WGLV D 250
 WGKV N 100
 WGTG DP 250
 WHBB ... 100
 WJBK ... 100(.25)
 WKAT ... 100(.25)
 WKBB CY 100(.25)
 WKBW ... 100(.25)
 WKRZ ... 250
 WKEU D 100
 WKNY DP 100

a Sault Ste. Marie, Ont. 10 am-10 pm
 a Havana, Cuba
 a Gallup, N. Mex. 10 am-10 pm
 a Muskogee, Okla. 8 am-11 pm
 z Baker, Ore.
 a Big Spring, Texas
 a Duluth, Minn. 7:30 am-midnight
 a Santa Barbara, Calif. 10 am-3 am
 z Sedalia, Mo.
 z Amarillo, Texas
 a Brownsville, Texas 8 am-midnight
 a Tyler, Texas 8 am-1 am
 a Scottsbluff, Nebr. 8:30 am-11 pm
 a Brady, Texas 8 am-6 pm
 a Austin, Texas
 a Pine Bluff, Ark. 8 am-LS
 a Valley City, N. Dak. 9 am-10 pm
 a Laredo, Texas 24 hours daily
 a Lake Charles, La.
 a Paris, Texas
 a Wenatchee, Wash.
 a Roseburg, Ore.
 z El Paso, Texas
 a Salina, Kans.
 z Huntsville, Texas
 z Lihue, Hawaii
 a Salt Lake City, Utah 9 am-2 am
 a Santa Ana, Calif. Noon-2 am
 z Vernon, Texas
 z Hobbs, N. Mex. 9 am-LS
 a El Centro, Calif. 11 am-midnight
 z Prescott, Ariz.
 a Mankato, Minn. 7 am-3 am
 a Brooklyn, N. Y. 9 am-midnight
 a Danville, Ill. 7:30 am-?
 a Durham, N. C. 7:30 am-12:30 am
 a Lancaster, Pa.
 a Galesburg, Ill.
 z Charleston, W. Va.
 z Greenville, N. C. 7:30 am-?
 a Selma, Ala. 24 hours daily
 a Detroit, Mich.
 z Miami Beach, Fla. 7:30 am-noon
 a E. Dubuque, Ill. 9:30 am-9:30 pm
 a Richmond, Ind. 7 am-10 pm
 a Muskegon, Mich.
 a Griffin, Ga.
 z Kingston, N. Y.

WMEX	...	100(.25)	a	Boston, Mass.	8 am-?
WMOG	P	-00(.25)	z	Brunswick, Ga.	.....
WNBF	C	100(.25)	a	Binghamton, N. Y.	.....
WNLC	M	100	la	New London, Conn.	7:30 am-?
WOMI	...	100(.25)	a	Cwensboro, Ky.	6 am-9 pm
WOPI	...	100	a	Bristol, Tenn.	7 am-10:30 pm
WRDW	C	100(.25)	a	Augusta, Ga.	7 am-9 pm
WRGA	...	250	a	Rome, Ga.	8 am-11 pm
WRTD	B	100	a	Richmond, Va.	7 am-1 am
WSTP	M	250	a	Salisbury, N. C.	.....
WSYB	XM	100	a	Futland, Vt.	8:30 am-9 pm
WTMC	...	100	z	Ocala, Fla.	.....
WTMV	...	100(.25)	a	E. St. Louis, Ill.	.....
WWRL	2	100(.25)	a	Woodside, N. Y.	8 am-midnight
WWSW	...	100(.25)	a	Pittsburgh, Pa.	.....
XEQK	...	100	z	Mexico City, D. F.	.....

1510 kcs. (198.6 m.)



CFRC	F	100	a	Kingston, Ont.	Noon-11 pm
CKCR	...	100	a	Waterloo, Ont.	8 am-11 pm

1520 kcs. (197.3 m.)



TGW	...	5000	d	Guatemala City, Guat.	7:45 am-9 am; 12:45-3:45 pm; 7:30 pm-12:15 am
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1530 kcs. (196 m.)



CMC	...	200	z	Havana, Cuba
KITE	...	1000	a	Kansas City, Mo.	6 am-3 am
WAKR	P	1000	z	Akron, Ohio
WBRY	CM	1000	a	Waterbury, Conn.	8:30 am-midnight

1550 kcs. (193.4 m.)



KPMC	M	1000	a	Bakersfield, Calif.	10 am-2 am
WQXR	...	1000	a	New York, N. Y.	10 am-9:15 pm

1560 kcs. (192.2 m.)



CMBF	...	5000	z	Havana, Cuba	6:55 am-midnight
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1580 kcs. (189.8 m.)



CM9RT	...	200	z	Guines, Cuba
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1600 kcs. (187.4 m.)



CMBH	...	5000	z	Havana, Cuba
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RADEXING

(Continue from Page 15)

TP Topics

FORECAST: Reception from down under in Australia and New Zealand should have passed its peak by November, but they ought to be heard for some time yet under good conditions. Perhaps in the latter part of November, some RADEXER in the East may succeed in snagging a Japanese or other Asiatic station.

For 'tis in December and January that the conditions will be at their best for Asiatics.

Australia: 6WF, assigned to 3500 watts at present is using 2500 watts and will soon have doubled power, that is 5000 watts. . . . 6WN uses 1000 watts on 790 kcs. and is not for DX listening. It uses a 300 ft. steel tower and is intended only for Metropolitan Perth reception. Both these items are from the Broadcaster. (Jim Walker, Romney, W. Va.)

NORTH AMERICAN B. C. STATIONS BY LOCATIONS

WGES	1360
WGN	720
WJLD	1130
WLS	870
WMAQ	670
WMBI	1080
WSBC	1210
Cicero	
VIHC	1420
Danville	
WDAN	1500
Decatur	
WIBL	1200
East Dubuque	
WKBB	1500
East St. Louis	
WTMV	1500
Galesburg	
WGL	1500
Harrisburg	
WBOQ	1210
Herrin	
WJFF	1310
Joliet	
WCLS	1310
Peoria	
WMRD	1440
Quincy	
WTAD	900
Rockford	
WROR	1410
Rock Island	
WHRF	1240
Springfield	
WCBS	1420
WTAX	1210
Tuscola	
WDZ	1020
Urbana	
WILL	580

INDIANA

Anderson	
WHRU	1210
Elkhart	
WTRC	1310
Evansville	
WEOA	1370
WGRF	630
Fort Wayne	
WGL	1370
WOVO	1160
Gary	
WIND	560
Hammond	
WHIP	1480
WVAE	1200
Indianapolis	
WFBM	1230
WIRC	1050
WIRE	1400
Muncie	
WLBC	1310
New Albany	
WGRC	1370
Richmond	
WKBY	1500
South Bend	
WPAM	1200
WSBT	1360
Terra Haute	
WBOW	1310
West Lafayette	
WBAA	890

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

KANSAS

Ablene	
KFBH	1050
Atchison	
KVAK	1420
Coffeyville	
KGGF	1010
Dodge City	
KGNO	1340
Emporia	
KTSW	1370
Garden City	
KIUL	1210
Great Bend	
KVGB	1370
Hutchinson	
KWBG	1420
Kansas City	
KCKN	1310
Lawrence	
KFKC	1220
WREN	1220
Manhattan	
KSAC	580
Pittsburg	
KOAM	790
Salina	
KSAL	1500
Topeka	
WIRW	580
Wichita	
KANS	1210
KPH	1300

KENTUCKY

Ashland	
WCMI	1310
Bowling Green	
WBLJ	1310

Covington	
WCKY	1490
Lexington	
WLAP	1420
Louisville	
WAVE	940
WHAS	820
WINN	1210
Owensboro	
WOMI	1500
Paducah	
WPAD	1420

LOUISIANA

Alexandria	
KALB	1210
Baton Rouge	
WJBO	1120
Lafayette	
KVOL	1310
Lake Charles	
KPLC	1500
Monroe	
KMLB	1200
New Orleans	
WDSU	1250
WJBW	1200
WNOE	1420
WSMB	1320
WWL	850
Shreveport	
KRMD	1310
KTBS	1450
KWKH	1100

MAINE

Augusta	
WRBO	1370
Bangor	
WABI	1200
WLHZ	620
Lewiston	
WCOU	1210
Portland	
WCSH	940
WGAN	640
Presque Isle	
WAGM	1420

MARYLAND

Baltimore	
WRAL	760
WBAL	1060
WCAO	600
WCBM	1370
WFRR	1270
Cumberland	
WTBO	800
Frederick	
WFMD	900
Hagerstown	
WPEJ	1210
Salisbury	
WSAL	1200

MASSACHUSETTS

Boston	
WAAB	1410

WBZ	990
WCOP	1120
WEHI	590
WHDH	830
WMEX	1500
WNAC	1230
WORL	920
Fall River	
WSAR	1450
Greenfield	
WHAI	1210
Hyannis	
WOGB	1210
Lawrence	
WLAW	680
WLLH	1370
Towell	
WLLH	1370
New Bedford	
WNLH	1310
PHSfield	
WBRK	1310
Salem	
WPSX	1200
Springfield	
WBZA	990
WMAS	1420
WSFR	1140
Worcester	
WOIC	1280
WTAG	580

MICHIGAN

Battle Creek	
WELL	1420
Bay City	
Calumet	
WJDF	1370
Detroit	
WBRK	1500
WJR	750
WMBE	1420
WJW	920
WXYZ	1240
East Lansing	
WKAR	850
Flint	
WFDF	1310
Grand Rapids	
WASH	1270
WOOD	1270
Ironwood	
WJMS	1420
Jackson	
WIBM	1370
Kalamazoo	
WKZO	590
Lansing	
WJIM	1210
Lapeer	
WMPG	1200
Marquette	
WBEO	1310
Muskegon	
WKBZ	1500
Pontiac	
WCAR	1100
Port Huron	
WHLS	1370
Royal Oak	
WEXL	1310
Sault Ste. Marie	
WSOO	1200

MINNESOTA

Albert Lea	
KATE	1420
Duluth	
KDAL	1500
WERC	1290
Fergus Falls	
KGDE	1200
Hibbing	
WMPG	1210
Mankato	
KYSM	1500
Minneapolis	
WCCO	810
WDGY	1189
WLB	760
WTUN	1250
Headhead	
KVOX	1310
Northfield	
WCAL	760
Rochester	
KROC	1310
St. Cloud	
KFAM	1420
St. Paul	
KSTP	1480
WMIN	1370
Virginia	
WTLB	1370
Winona	
KWNO	1200

MISSISSIPPI

Greenville	
WUPR	1310
Grenada	
WGRM	1210
Gulfport	
WGCM	1210
Hattiesburg	
WFOR	1370
Jackson	
WJDX	1370
WSLI	1420
Laurel	
WAML	1310
McComb	
WSKB	1200
Meridian	
WCOC	880
Vicksburg	
WQBC	1360

MISSOURI

Cape Girardeau	
KFVS	1210
Columbia	
KFRU	630
Jefferson City	
KWOS	1310
Joplin	
WMBH	1420
Kansas City	
KCMO	1450
KITE	1520
KMBC	950
WDJF	610
WHB	860
Poplar Bluff	
KWOC	1310

NORTH AMERICAN B. C. STATIONS BY LOCATIONS

St. Joseph	
KFEQ	680
St. Louis	
KFUO	550
KMOX	1090
KSD	540
RWK	1350
KXOK	1250
WEW	760
WIL	1200
Sedalla	
KDRO	1500
Springfield	
KGBX	1230
KWTO	560

MONTANA

Billings	
KGHL	780
Bozeman	
KIRM	1420
Butte	
KGIR	1340
Great Falls	
KFBIS	1280
Helena	
KPPA	1210
KallsPELL	1310
KGZ	
Missoula	
KGVO	1260
Wolf Point	
KGX	1450

NEBRASKA

Grand Island	
KMLI	140
Hastings	
KHAS	1200
Kearney	
KGFW	1310
Lincoln	
KFAB	770
KFUR	1210
Norfolk	
WJAG	1060
North Platte	
KGNF	1430
Omaha	
KOIL	1260
KOVH	660
WOW	590
Scottsbluff	
KGKY	1500

NEVADA

Reno	
KOH	1380

NEW HAMPSHIRE

Laconia	
WLNH	1310
Manchester	
WFEL	1340
Portsmouth	
WHEB	740

NEW JERSEY

Asbury Park	
WCAP	1280

Atlantic City	
WRAB	1200
WJG	1100
Bridgeton	
WSNJ	1210
Camden	
WCAM	1280
Jersey City	
WVAAT	940
WHOM	1450
Newark	
WHBI	1350
WOR	710
Red Bank	
WBRB	1210
Trenton	
WTNJ	1280
Zarephath	
WVAWZ	1350

NEW MEXICO

Albuquerque	
KGGM	1230
KOB	1180
Carlsbad	
KLAH	1210
Clovis	
KICA	1370
Gallup	
KAAM	1500
Hobbs	
KWEW	1500
Roswell	
KGFL	1370
Santa Fe	
KVSF	1310

NEW YORK

Albany	
WABY	1370
WOKO	1430
Auburn	
WMBO	1310
Binghamton	
WNBF	1500
Brooklyn	
WARD	1400
WBBC	1400
WBUR	1300
WCNW	1500
WVFW	1400
Buffalo	
WBEN	900
WBNY	1370
WEBR	1310
WGR	550
WKBW	1430
WWSV	1370
Canton	
WCAD	1220
Elmira	
WENY	1200
WESG	850
Freeport	
WGIB	1210
Jamestown	
WJTN	1210
Kingston	
WKNY	1500
Newburgh	
WGNY	1220

New York	
WABC	860
WBTL	1100
WBXN	1350
WBOQ	860
WEAF	660
WVVD	1300
WHN	1940
WINS	1180
WJZ	760
WLTH	1400
WNCA	570
WNEW	1250
WNYC	810
WOP	1130
WQXR	1550
Niagara Falls	
WILD	1260
Olean	
WIDL	1400
Plattsburgh	
WHPF	1310
Rochester	
WRAM	1150
WHYC	1430
WSAY	1210
Saranac Lake	
WNZ	1200
Schenectady	
WGY	790
Syracuse	
WFBL	1360
WSYR	570
WSYU	570
Troy	
WHAZ	1300
WTRY	950
Utica	
WIBX	1200
White Plains	
WFAS	1210
Woodside	
WWRL	1500

NORTH CAROLINA

Asheville	
WISE	1370
WWNC	570
Charlotte	
WBT	1080
WSOC	1210
Durham	
WBNC	1500
Elizabeth City	
WCNC	1370
Fayetteville	
WFNC	1340
Gastonia	
WGNC	1420
Goldsboro	
WGBR	1370
Greensboro	
WBIG	1440
Greenville	
WUTC	1500
High Point	
WMFR	1200
Kingston	
WFTC	1200
Raleigh	
WTFE	680
WRAL	1210
Rocky Mount	
WREB	1420

Sallsbury	
WSPF	1500
Wilmington	
WMFD	1370
Wilson	
WGTM	1310
Winston-Salem	
WATR	1250
WSJS	1310

NORTH DAKOTA

Bismarck	
KEYR	550
Devils Lake	
KDLR	1210
Fargo	
WDAY	940
Grand Forks	
KFJM	1410
Jamestown	
KRMK	1370
Mandan	
KGOT	1240
Minot	
KLPM	1360
Valley City	
KOVC	1500

OHIO

Akron	
WADC	1320
WAKR	1330
WJW	1210
Ashtabula	
WICA	940
Canton	
WHRC	1200
Cincinnati	
WCPO	1200
WKRC	550
WLW	700
WSAI	1370
WONO	700
Cleveland	
WCLE	610
WGAN	1450
WHK	1390
WTAM	1070
Columbus	
WBNS	1450
WCOL	1210
WHKC	640
WOPT	570
Dayton	
WHIO	1260
WING	1380
Lima	
WLOK	1210
Mansfield	
WMAN	1370
Portsmouth	
WPAV	1370
Toledo	
WSPD	1240
WTOL	1200
Youngstown	
WPHI	1420
WKBN	570
Zanesville	
WZLR	1210

PENNSYLVANIA

Allentown	
WCRA	1440
WSAN	1440
Altoona	
WFBG	1310
Easton	
WEST	1200
Erie	
WLEU	1420
Glenside	
WIBG	970
Greensburg	
WJIB	620

Ardmore	
KVSO	1210
Elk City	
KASA	1210
Enid	
KCHC	1360
Muskogee	
KBIX	1500
Norman	
WNAD	1010
Oklahoma City	
KOCY	1310
KOMA	1480
KTKO	1370
WKY	900
Okmulgee	
KHUR	1210
Ponca City	
WHBZ	1200
Shawnee	
KGFF	1420
Tulsa	
KOME	1310
KTTT	1400
KVOO	1140

OREGON

Astoria	
KAST	1200
Baker	
KBRK	1500
Bend	
KBNB	1310
Corvallis	
KOAC	550
Eugene	
KORE	1420
Klamath Falls	
KFLI	1210
La Grande	
KLBM	1420
Marshfield	
KOOS	1200
Medford	
KMED	1410
Portland	
KALE	1300
KBPS	1420
KEX	1180
KGW	620
KOLN	940
KWJJ	1040
KXL	1420
Roseburg	
KRRR	1500
Salem	
KSLM	1360

NORTH AMERICAN B. C. STATIONS BY LOCATIONS

Grove City	
WSAJ	1310
Harrisburg	
WHP	1430
WKRO	1200
Hazelton	
WAZL	1420
Johnstown	
WJA	1370
Lancaster	
WGAL	1500
New Castle	
WKST	1250
Philadelphia	
KYW	1020
WCAU	1170
WDAS	1370
WFIL	560
WHAT	1310
WIP	610
WPEN	920
WTEL	1310
Pittsburgh	
KDKA	980
KQV	1380
WCAE	1220
WJAS	1290
WWSW	1500
Reading	
WEU	830
WRAW	1310
Scranton	
WGBI	880
WQAN	880
Sharon	
WPIC	780
Sunbury	
WKOK	1210
Uniontown	
WHHS	1420
Wilkes-Barre	
WBAK	1210
WBRE	1310
Williamsport	
WRAK	1370
York	
WORK	1320
PUERTO RICO	
Mavaguez	
WPIA	1370
Ponce	
WPHP	1420
San Juan	
WPAQ	1240
WNEL	1290

RHODE ISLAND	
Providence	
WEAN	780
WJAR	890
WPRO	630
SOUTH CAROLINA	
Anderson	
WAIM	1200
Charleston	
WCSC	1360
WTMA	1210
Columbia	
WCOS	1370

WIS	560
Florence	
WOLS	1200
Greenville	
WFBC	1300
Spartanburg	
WSPA	920
Sumter	
WFIG	1310

SOUTH DAKOTA	
Aberdeen	
KABR	1360
Brookings	
KFDY	720
Pierre	
KGFX	630
Rapid City	
KOBH	1270
WCAT	1290
Sioux Falls	
KELQ	1290
KSOO	1110
Vermillion	
KUSD	890
Yankton	
WNAX	570

TENNESSEE	
Bristol	
WOPJ	1500
Chattanooga	
WAPQ	1320
WDOD	1280
Cookeville	
WQJB	1370
Jackson	
WTEB	1510
Johnson City	
WJHL	1290
Knoxville	
WNOX	1010
WROL	1310
Memphis	
WHBQ	1370
WMC	780
WMPS	1430
WREC	800
Nashville	
WLAC	1470
WSIX	1210
WSM	650

TEXAS	
Abilene	
KRBC	1420
Amarillo	
KPDA	1500
KGNC	1410
Austin	
KNOW	1500
KTHC	1120
Beaumont	
KFDM	560
KRIC	1410
Big Spring	
KBST	1500
Brady	
KNEL	1500

Brownsville	
KGFI	1500
College Station	
WTAW	1120
Corpus Christi	
KRIS	1330
Coriscana	
KAND	1310
Dallas	
KRLD	1040
WFAA	800
WBR	1280
Denton	
KDNT	1420
Dublin	
KFPL	1310
El Paso	
KROD	1500
KTSM	1310
WDAH	1310
Fort Worth	
KFIZ	1240
KGKO	570
WBAP	800
Galveston	
KLUP	1370
Houston	
KPRC	920
KTRH	1290
KXYZ	1440
Huntsville	
KSAM	1500
Kilgore	
KOCA	1210
Laredo	
KPAR	1500
Longview	
KPRO	1370
Lubbock	
KFYO	1310
Lufkin	
KTRB	1310

Midland	
KRLH	1420
Palestine	
KNEI	1420
Pampa	
KPDN	1310
Paris	
KPLT	1500
Pecos	
KIUN	1370
Plainview	
KWED	1200
Port Arthur	
KPAC	1260
San Angelo	
KGKL	1370
San Antonio	
KABC	1420
KMAC	1370
KONO	1370
KTSA	550
WQAI	1190
Sherman	
KRRV	1310
Sweetwater	
KNOX	1210
Temple	
KTEM	1370
Texarkana	
KCMC	1420
Tyler	
KGKB	1500
Vernon	
KVWC	1500

Victoria	
KVCJ	1310
Waco	
WACO	1420
Weslaco	
KRGV	1260
Wichita Falls	
KWFT	620

UTAH	
Cedar City	
KSUB	1310
Logan	
KVNU	1200
Ogden	
KLO	1400
Price	
KEUB	1420
Provo	
KOVO	1210
Salt Lake City	
KDYL	1290
KSL	1130
KUTA	1500

VERMONT	
Burlington	
WCAN	1200
Rutland	
WSBY	1500
St. Albans	
WQDM	1390
Springfield	
WVNX	1260
Waterbury	
WDEV	550

VIRGINIA	
Charlottesville	
WCHV	1420
Danville	
WBPM	1370
Fredericksburg	
WFVA	1260
Harrisonburg	
WSVA	550
Lynchburg	
WLVA	1200
Newport News	
WGH	1310
Norfolk	
WTAR	780
Petersburg	
WPIV	1210
Richmond	
WRIJ	1210
WMBG	1350
WRNL	880
WPTD	1500
WVVA	1110
Roanoke	
WDBJ	930
Suffolk	
WLPM	1420

WASHINGTON	
Aberdeen	
KXRO	1310
Bellingham	
KVOS	1280

Centralia	
KELA	1440
Everett	
KRKO	1370
Longview	
KWLK	750
Olympia	
KGY	1210
Pullman	
KWNC	1220
Seattle	
KEEN	1370
KIRO	710
KJR	970
KOL	1270
KOMO	320
KNSC	1190
KTW	1220
KXA	760
Spokane	
KFIO	1120
KFPY	890
KGA	1470
KHQ	590
Tacoma	
KMO	1330
KVI	570
Vancouver	
KVAN	880
Walla Walla	
KUJ	1370
Wenatchee	
KPY	1500
Yakima	
KIT	1250

WEST VIRGINIA	
Beekley	
WHS	1210
Bluefield	
WHHS	1410
Charleston	
WCHS	580
WGKY	1500
Clarksburg	
WHLK	1370
Fairmont	
WMMN	890
Huntington	
WSAZ	1190
Parkersburg	
WPAR	1420
Wheeling	
WVVA	1160
Williamson	
WETH	1370

WISCONSIN	
Eau Claire	
WEAU	1050
Fond du Lac	
KFIZ	1420
Green Bay	
WBAY	1200
WTAQ	1330
Janesville	
WCLO	1200
LaCrosse	
WKBB	1380
Madison	
WHA	940

NORTH AMERICAN B. C. STATIONS BY LOCATIONS

WIBA	1280
Manitowoc	
WOMT	1410
Marinette	
WJAM	570
Milwaukee	
WEWP	1310
WISN	1120
WTMJ	620
Poynette	
WIBU	1210
Racine	
WILN	1370
Rice Lake	
WJMC	1210
Sheboygan	
WHBL	1300
Stevens Point	
WLBL	900
Superior	
WDSM	1200
Wausau	
WSAU	1370

WYOMING

Casper	
KDFN	1440
Rock Springs	
KVRS	1370
Sheridan	
KWYO	1370

BAHAMAS

Nassau	
ZNS	790

CANADA
ALBERTA

Calgary	
CFAC	930
CFPC	1030
CJGJ	690
Edmonton	
CFRN	960
CJCA	730
CKUA	580
Grande Prairie	
CFGP	1200
Lethbridge	
CJOC	1210

BRITISH
COLUMBIA

Chilliwack	
CHWK	780
Kamloops	
CFJC	880
Kelowna	
CKOV	630
Nelson	
CKLN	1420
Prince Rupert	
CFPR	580
Trail	
CJAT	910
Vancouver	
CBR	1100
CJOR	600
CKCD	1010

CKFC	1410
CKMO	1410
CKWX	1010
Victoria	
CFCT	1450

MANITOBA

Brandon	
CKX	1120
Flin Flon	
CFAR	1370
Winnipeg	
CHIC	630
CKY	910

NEW
BRUNSWICK

Fredericton	
CFNB	550
Moncton	
CKCW	1370
Sackville	
CBA	1050
St. John	
CHSJ	1120

NOVA SCOTIA

Glace Bay	
VAS	685
Halifax	
CHNS	230
Sydney	
CKCB	1240
Wolfville	
CKIC	1010
Yarmouth	
CJLS	1310

ONTARIO

Brantford	
CKPK	930
Chatham	
CFCO	630
Cobalt	
CKMC	1210
Fort William	
CKPR	580
Hamilton	
CHML	1010
CKOC	1120
Kenora	
CKKA	1420
Kingston	
CFRC	1510
Kirkland Lake	
CJKL	1310
London	
CFPL	730
North Bay	
CFCH	930
Ottawa	
CBO	880
CKCO	1010
Owen Sound	
CFOS	1370
Prescott	
CFLC	930
St. Catharines	
CKTB	1200

Sault Ste. Marie	
CHC	1500
Stratford	
CJCS	1210
Sudbury	
CKSO	780
Timmins	
CKGB	1440
Toronto	
CHL	810
CKY	1420
CFRB	690
CKCL	580
Waterloo	
CKCR	1510
Windsor	
CKLW	1030
Wingham	
CKNX	1200

PRINCE ED-
WARD ISLAND

Charlottetown	
CFCY	530
CHCK	1310
Summerside	
CHGS	1450

QUEBEC

Chicoutimi	
CHL	1120
Hull	
CKHL	1210
Montreal	
CHP	910
CBM	990
CFCE	600
CHLP	1120
CKAC	720
New Carlisle	
CHNC	610
Quebec	
CHRC	580
CKCV	1310
CBV	950
Rimouski	
CHRR	1030
Rouyn	
CKRN	1370
St. Anne de la Pocatiere	
CHGB	1200
Sherbrooke	
CHLT	1210
Three Rivers	
CHLN	1420

ASKATCHEWAN

Moose Jaw	
CHAB	1200
Prince Albert	
CKBH	1210
Regina	
CHRM	950
CKCK	1010
Saskatoon	
CFQC	600
Watrous	
CBK	540
Yorkton	
CJGX	1430

COSTA RICA

Atajuela	
TECV	575
San Jose	
TEAFB	900
TEFAC	860
TEFP	830
TIFA	1000
TEGH	690
TEGPH	690
TEGPH2	1225
TEHO	1070
TELI	775
TELS	880
TENBC	1070
TENG	750
TEOS	910
TEPG	870
TEPFC	1200
TEPS	910
TEXD	800

CUBA

Bayamo	
CKML	950
Calbarien	
CMHD	1270
Camaguey	
CMIA	800
CMBC	1300
CMDE	1230
CMDF	920
CMFK	1290
CMHW	1070
CMIX	740
Cardenas	
CMGE	1370
Ciego de Avila	
CMHI	1360
CMII	1130
CMJO	1290
Cienfuegos	
CMJI	1160
CMJM	1450
CMKX	1430
Cruces	
CMBK	1210
Guantanamo	
CMKS	710
Guines	
CMRT	1580
Havana	
CMIC	690
CMID	1260
CMIF	1560
CMIG	1140
CMIH	1600
CMIL	750
CMIM	910
CMIQ	1170
CMIS	1080
CMIX	1440
CMJY	1030
CMJZ	940
CMC	1530
CMCA	1350
CMCB	1230
CMCD	630
CMCF	810
CMCG	1290
CMCH	1050
CMCI	1110
CMCJ	970
CMCL	720
CMCM	850

CMCO	1200
CMCP	1050
CMCQ	1410
CMCJ	1010
CMCR	1320
CMCW	1380
CMCX	1470
CMCY	570
CMK	720
CMOA	660
CMOX	1500
CMQ	780
CMW	550
CMX	880

Holguin	
CMKF	1460
CMKO	1280

Manzanillo	
CMKE	1310
CMKM	1080

Matanzas	
CMGF	1120
CMGH	790
Moron	
CMJP	1420

Palma Soriano	
CMKZ	1430
Pinar del Rio	
CMAR	1240

Placetas	
CMHP	1100
Sagua la Grande	
CMUA	1090
CMUO	870

Sancti Spiritus	
CMHR	1240

Santa Clara	
CMHI	930
CMHW	680

Santiago	
CMKC	1250
CMKD	910
CMKG	1150
CMKQ	1490
CMKR	1400
CMKW	750
CMKX	1190

Trinidad	
CMHT	920

DOMINICAN
REPUBLIC

Ciudad Trujillo	
HIC	990
HIN	1090
HIX	800
HIT	1050
HIZ	1370
HISQ	1470

EL SALVADOR

San Salvador	
YSS	640

GUATEMALA

Guatemala City	
TGW	1520
TGX	1400
TGI	1310

NORTH AMERICAN B. C. STATIONS BY LOCATIONS

Quezaltenango
TGQ 1450

HONDURAS

Tegucigalpa
HRF 1450

MEXICO

B. A. A

CALIFORNIA

Aguascalientes
XEBI 1000

Mexicali

XEAA 750

XEAO 460

XEAL 1100

Rosarito Beach

XERB 1090

Tijuana

XEA 980

XEBG 820

XEC 1150

XELO 730

XEMO 860

CHIHUAHUA

Chihuahua

XEBC 1240

XEBW 1340

XEFJ 1440

XEM 1380

Juarez

XEF 1450

XEFV 1210

XEJ 1020

XEP 1160

Parral

XEAT 1210

COAHUILA

Piedras Negras

XENU 580

XEPN 730

Sabinas

XEBX 640

Salttillo

XEAS 1160

Torreón

XETB 1310

Villa Acuna

XEDH 1340

XERA 840

DISTRITO FEDERAL

Grat. Anaya

XEDA 1220

Mexico City

XEAI 1250

XEB 1030

XEBS 1340

XEBZ 810

XEDP 1080

XEFO 940

XEFP 1136

XEK 990

XEL 1150

XELZ 1370

XEN 740

XEQ 730

XEQH 1500

XERC 830

XERH 1430

XESM 1274

XEW 890

XEXX 1170

DURANGO

Durango

XERP 1150

XEE 1210

GUANAJUATO

Irapuato

XEBO 1310

Leon

XEKL 1240

JALISCO

Guadalajara

XED 1100

Guzman

XEBM 1080

MEXICO

Texcoco

XENE 1270

Toluca

XECH 1490

MICHOACAN

Morelia

XEI 1370

NUEVO LEON

Monterrey

XEPB 870

XEG 1230

XEH 720

XET 690

XEX 1310

PUEBLA

Puebla

XETI 1210

SAN LUIS POTOSI

San Luis Potosi

XEZ 1970

SINALOA

Mazatlan

XEBL 1220

SONORA

Cananea

XEFQ 1010

Guaymas

XEDR 1490

Hermosillo

XEBH 930

Nonales

XEAF 990

Obregon

XEAP 1340

TAMAULIPAS

Matamoros

XEAM 700

Nuevo Laredo

XEBK 1080

XEDF 810

XEFE 980

XENT 910

Reynosa

XEAV 960

Tampico

XEA 1230

XEFW 1310

XES 900

Victoria

XEBJ 1340

VERACRUZ

Cordoba

XEAG 1310

XECW 1240

Jalapa

XEXB 1270

Minatitlan

XEDW 1150

Veracruz

XETF 1220

XEU 1010

YUCATAN

Merida

XEFC 1340

XEME 1240

XEZ 630

MIQUELON

St. Pierre

PQN 609

NEWFOUNDLAND

St. John's

VOAC 1065

VOAR 950

VOCM 1040

VOGY 840

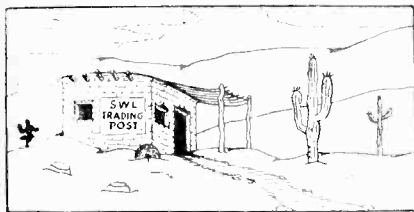
VONF 640

VOWR 700

PANAMA

Colon

HOK 610



Ken Munn, 419 W. Granite, Albuquerque, N. Mex. Exc. SWL cards, photos and correspondence).

Vert Mandelstamm, 738 S. Park St., Saginaw, Mich. (SWL cards).

Ralph Simpson, 142 Vassall St., Wollaston, Mass. (SWL cards and correspondence).

Forrest E. Campbell, Jr., 405 E. 4th St., Berwick, Pa. (SWL cards).

John Roscoe, Route 1, Box 174-A, New Baltimore, Mich. (SWL cards).

Ronald Wellstood, 288 Egan Ave., Verdun, P. Q., Canada. (Correspondence about stamps and books with South America, Europe and Asia readers).

Edward Lang, 3508 S. 83rd St., Philadelphia, Pa. (SWL cards).

Jack E. Roomy, 429 Stratton St., Logan, W. Va. (SWL cards).

John C. Long, Jr., 9406 Georgia Ave., Silver Springs, Md. (SWL cards).

Jack Varner, 1114 Rugby Blvd., Roanoke, Va. (Correspond with Apex owners).

Bob Johnson, Box 146, Logan, W. Va. (SWL cards).

Walter Bishop, 1722 Sixth St., Rensselaer, N. Y. (Correspond and swap cards and photos).

Luis Diez A., formerly of Guatemala, has moved to Spain and wishes to exchange SWL cards and photos. New address, Luis Diez Abouso, Daoiz y Velarde 19, Santander, Spain.

Oddgeir Barneson, 3060 Rosswell St., Los Angeles, Calif. (SWL cards).

Nicholas Woytan, 309 S. Wilbur Ave., Syracuse, N. Y. (SWL cards from Miss. and Nevada).

NORTH AMERICAN B. C. STATIONS BY CALL LETTERS

For power and network affiliations, see
the list of stations by frequencies.

The space under the call letters may
be used for logging or checking.

CBA	1050	CHGB	1200	CKCL	580	CMBQ	910	CMHJ	1160	CMKW	770
CBF	910	CHGS	1450	CKCO	1010	CMBS	1170	CMHK	1210	CMKX	1190
CBJ	1120	CHLN	1420	CKCR	1510	CMBX	1080	CMHM	1450	CMKZ	1430
CBK	540	CHLP	1120	CKCV	1310	CMBY	1440	CMHO	870	CMOA	660
CBL	840	CHLT	1210	CKCW	1370	CMBZ	940	CMHP	1100	CMOX	1500
CBM	960	CHML	1010	CKFC	1410	CMC	1530	CMHT	920	CMQ	780
CBO	880	CHNC	610	CKGB	1440	CMCA	1350	CMHW	680	CMW	550
CBR	1100	CHNS	930	CKIC	1010	CMCB	1230	CMHX	1480	CMX	880
CBV	950	CHRC	580	CKLN	1420	CMCD	630	CMJA	860	CM9RT	1580
CBY	1420	CHSJ	1120	CKLW	1030	CMCF	810	CMJC	1390	FQN	609
CFAC	930	CHWK	780	CKMC	1210	CMCG	1290	CMJE	1230	HIG	900
CFAR	1370	CJAT	910	CKMO	1410	CMCJ	1110	CMJF	930	HIN	1090
CFCF	600	CJBR	1030	CKNX	1200	CMCH	1050	CMJH	1360	HIT	1050
CFCB	930	CJCA	730	CKOC	1120	CMCK	970	CMJI	1430	HIX	800
CFCN	1030	CJCB	1240	CKOV	630	CMCL	730	CMJK	1290	HIZ	1370
CFCO	630	CJCJ	690	CKPC	930	CMCM	850	CMJO	1260	H18Q	1470
CFCT	1450	CJCS	1210	CKPR	580	CMCO	1200	CMJP	1420	HOK	640
CFCY	630	CJGX	1430	CKRN	1370	CMCP	1050	CMJW	1070	HRN	1450
CFGP	1200	CJIC	1500	CKSO	780	CMCQ	1410	CMJX	740	KABC	1420
CFJC	880	CJKL	1310	CKTB	1200	CMCR	1320	CMK	720	KABR	1390
CFLC	930	CJLS	1310	CKUA	580	CMCU	1010	CMKC	1250	KADA	1200
CFNB	550	CJOC	1210	CKWX	1010	CMCW	1380	CMKD	910	KALB	1210
CFOS	1370	CJOR	600	CKX	1120	CMCX	1470	CMKE	1310	KALE	1300
CFPL	730	CJRC	630	CKY	910	CMCY	590	CMKF	1460	KAND	1310
CFPR	580	CJRM	950	CMAB	1240	CMGE	1370	CMKG	1150	KANS	1210
CFQC	600	CKAC	730	CMBC	690	CMGF	1120	CMKL	950	KARK	890
CFRB	690	CKBI	1210	CMBD	1260	CMGH	790	CMKM	1080	KARM	1310
CFRC	1510	CKCA	1420	CMBF	1560	CMHA	1090	CMKO	1280	KASA	1210
CFRN	960	CKCD	1010	CMBG	1140	CMHB	1240	CMKQ	1490	KAST	1200
CHAB	1200	CKCH	1210	CMBH	1600	CMHD	1270	CMKR	1400	KATE	1420
CHCK	1310	CKCK	1010	CMBL	750	CMHI	830	CMKS	710	KAWM	1500

KBIX	1500	KFBI	1050	KFWB	950	KGLO	1210	KLBM	1420	KOKO	1370
KBKR	1500	KFBK	1490	KFXJ	1200	KGLU	1420	KLCN	1290	KOL	1270
KBND	1310	KFDA	1500	KFXM	1210	KGMB	1320	KLO	1400	KOMA	1480
KBPS	1420	KFDM	560	KFYO	1310	KGNC	1410	KLPM	1360	KOME	1310
KBST	1500	KFDY	780	KFYR	550	KGNF	1430	KLRA	1390	KOMO	920
KBTM	1200	KFEL	920	KGA	1470	KGNO	1340	KLS	1280	KONO	1370
KCKN	1310	KFEQ	680	KGB	1330	KGO	790	KLUF	1370	KOOS	1200
KCMC	1420	KFGQ	1370	KGBU	900	KGU	750	KLX	880	KORE	1420
KCMO	1450	KFH	1300	KGBX	1230	KGVO	1260	KLZ	560	KOTN	1500
KCRC	1360	KFI	640	KGCA	1270	KGW	620	KMA	930	KOVC	1500
KCRJ	1310	KFIO	1120	KGCU	1240	KGY	1210	KMAC	1370	KOVO	1210
KDAL	1500	KFIZ	1420	KGCX	1450	KHAS	1200	KMBC	950	KOWH	660
KDB	1500	KFJB	1200	KGDE	1200	KHBC	1400	KMED	1410	KOY	1390
KDFN	1440	KFJI	1210	KGDM	1100	KHBG	1210	KMJ	580	KPAB	1500
KDKA	980	KFJM	1410	KGEK	1200	KHJ	900	KMLB	1200	KPAC	1260
KDLR	1210	KFJZ	1240	KGER	1360	KHQ	590	KMMJ	740	KPDN	1310
KDNT	1420	KFKA	880	KGEZ	1310	KHSL	1260	KMO	1330	KPFA	1210
KDON	1210	KFKU	1220	KGFF	1420	KHUB	1310	KMOX	1090	KPFT	1210
KDRO	1500	KFNF	890	KGFI	1500	KICA	1370	KMPC	710	KPLC	1500
KDTH	1340	KFOR	1210	KGFJ	1200	KID	1320	KMTR	570	KPLT	1500
KDYL	1290	KFOX	1250	KGFL	1370	KIDO	1350	KNEL	1500	KPMC	1550
KECA	780	KFPL	1310	KGFW	1310	KIDW	1420	KNET	1420	KPO	680
KEEN	1370	KFPW	1210	KGFX	630	KIEM	1450	KNOW	1500	KPOF	880
KELA	1440	KFPY	890	KGGF	1010	KIEV	850	KNX	1050	KPPC	1210
KELD	1370	KFQD	780	KGGM	1230	KINY	1430	KOA	830	KPQ	1500
KELO	1200	KFXD	1200	KGHF	1320	KIRO	710	KOAC	550	KPRC	920
KERN	1370	KFRC	610	KGHI	1200	KIT	1250	KOAM	790	KQV	1380
KEUB	1420	KFRO	1370	KGHL	780	KITE	1530	KOB	1150	KQW	1010
KEX	1180	KFRU	630	KGIR	1340	KIUL	1210	KOBH	1370	KRBA	1310
KFAB	770	KFSD	600	KGIW	1420	KIUN	1370	KOCA	1210	KRBC	1420
KFAC	1300	KFSG	1120	KGKB	1500	KIUP	1370	KOCY	1310	KRBM	1420
KFAM	1420	KFUO	550	KGKL	1370	KJBS	1070	KOH	1380	KRE	1370
KFAR	610	KFVD	1000	KGKO	570	KJR	970	KOIL	1260	KRGV	1260
KFBB	1280	KFVS	1210	KGKY	1500	KLAH	1210	KOIN	940	KRIC	1420

KRIS	1330	KTBS	1450	KVOO	1140	KYA	1230	VOAR	950	WBAX	1210
KRKD	1120	KTEM	1370	KVOR	1270	KYCA	1500	VOWR	700	WBBC	1400
KRKO	1370	KTFI	1240	KVOS	1200	KYOS	1040	WAAB	1410	WBBL	1210
KRLC	1390	KTHS	1060	KVOX	1310	KYSM	1500	WAAF	920	WBBM	770
KRLD	1040	KTKC	1190	KVRS	1370	KYUM	1210	WAAT	940	WBBR	1300
KRLH	1420	KTMS	1220	KVSF	1310	KYW	1020	WABC	860	WBBZ	1200
KRMC	1370	KTOH	1500	KVSO	1210	TGQ	1450	WABI	1200	WBCM	1410
KRMD	1310	KTOK	1370	KVWC	1500	TGW	1520	WABY	1370	WBEN	900
KRNR	1500	KTRB	740	KWAL	1420	TGX	1400	WACO	1420	WBEO	1310
KRNT	1320	KTRH	1290	KWBD	1200	TGI	1310	WADC	1320	WBHP	1200
KROC	1310	KTRI	1420	KWBG	1420	TIAFB	900	WAGA	1450	WBIG	1440
KROD	1500	KTSA	550	KWEW	1500	TIEMC	860	WAGF	1370	WBIL	1100
KROW	930	KTSM	1310	KWFC	1310	TIEP	830	WAGM	1420	WBLK	1370
KROY	1210	KTSW	1370	KWFT	620	TIFA	1000	WAIM	1290	WBNS	1430
KRRV	1310	KTUC	1370	KWG	1200	TIGH	690	WAIR	1250	WBNX	1350
KRSC	1120	KTUL	1400	KWJB	1210	TIGPH	605	WAKR	1530	WBNY	1370
KSAC	580	KTW	1220	KWJJ	1040	TIGPH2	1225	WALA	1380	WBOQ	860
KSAL	1500	KUJ	1370	KWK	1350	TIHO	1030	WALR	1210	WBOV	1310
KSAM	1500	KUOA	1260	KWKH	1100	TILJ	775	WAML	1310	WBRB	1210
KSAN	1420	KUSD	890	KWLC	1270	TILS	880	WAPI	1140	WBRC	930
KSCJ	1330	KUTA	1500	KWLK	780	TINBC	1070	WAPO	1420	WBRE	1310
KSD	550	KVAK	1420	KWNO	1200	TING	750	WARD	1400	WBRK	1310
KSEI	900	KVAN	880	KWOC	1310	TIOS	940	WASH	1270	WBRY	1530
KSFO	560	KVCV	1200	KWOS	1310	TIPG	625	WATL	1370	WBT	1080
KSL	1130	KVEC	1200	KWSC	1220	TIRCC	1200	WATR	1290	WBTH	1370
KSLM	1360	KVFD	1370	KWTO	560	TIRS	920	WAVE	940	WBTM	1370
KSO	1430	KVGB	1370	KWYO	1370	TIXD	800	WAWZ	1350	WBZ	990
KSOO	1110	KVI	570	KXA	760	TI4NRH	725	WAYX	1200	WBZA	990
KSRO	1310	KVIC	1310	KXL	1420	TI5CV	575	WAZL	1420	WCAD	1220
KSTP	1460	KVNU	1200	KXO	1500	VAS	685	WBAA	890	WCAE	1220
KSUB	1310	KVOA	1260	KXOK	1250	VOCM	1040	WBAB	1200	WCAL	760
KSUN	1200	KVOD	920	KXOX	1210	VONF	640	WBAL	760	WCAM	1280
KTAR	620	KVOE	1500	KXRO	1310	VOGY	840	WBAL	1060	WCAO	600
KTBC	1120	KVOL	1310	KXYZ	1440	VOAC	1065	WBAP	800	WCAP	1280

WCAR	1100	WDAN	1500	WESX	1500	WGES	1360	WHEB	740	WIOD	610
WCAT	1200	WDAS	1370	WEVD	1310	WGH	1310	WHEC	1430	WIP	610
WCAU	1170	WDAY	940	WEW	760	WGIL	1500	WHFC	1420	WIRE	1400
WCAX	1200	WDBJ	930	WIXL	1310	WGL	1370	WHIO	1260	WIS	560
WCAZ	1070	WDBO	580	WFAA	800	WGKV	1500	WHIP	1480	WISE	1370
WCBA	1440	WDEL	1120	WFAM	1200	WGN	720	WHIS	1410	WISN	1120
WCBD	1080	WDEV	550	WFAS	1200	WGNC	1420	WHJB	620	WJAC	1370
WCBM	1370	WDGY	1180	WFBC	1300	WGNY	1220	WHK	1390	WJAG	1050
WCBS	1420	WDLP	1200	WFBG	1310	WGPC	1420	WHKC	640	WJAR	890
WCCO	810	WDNC	1500	WFBL	1360	WGR	550	WHLB	1370	WJAS	1290
WCFL	970	WDOB	1280	WFBM	1230	WGRC	1370	WHLD	1250	WJAX	900
WCHS	580	WDRC	1330	WFBR	1270	WGRM	1210	WHLS	1370	WJBC	1200
WCHV	1420	WDSM	1200	WDFD	1310	WGST	890	WHMA	1420	WJBK	1500
WCKY	1490	WDSU	1250	WFEA	1340	WGTC	1500	WHN	1010	WJBL	1200
WCLE	610	WDWS	1370	WFIG	1310	WGTM	1310	WHO	1000	WJBO	1120
WCLO	1230	WDZ	1020	WFIL	560	WGY	790	WHOM	1450	WJBY	1210
WCLS	1310	WEAF	660	WFLA	620	WHA	940	WHP	1430	WJBW	1200
WCMI	1310	WEAN	780	WFMD	900	WHAI	1210	WHUB	1370	WJDX	1270
WCNC	1370	WEAU	1050	WFMJ	1420	WHAM	1150	WIBA	1280	WJEJ	1210
WCNW	1500	WEBC	1290	WFNC	1340	WHAS	820	WIBC	1050	WJHL	1200
WCOA	1340	WEBQ	1210	WFOR	1370	WHAT	1310	WIBG	970	WJHP	1290
WCOC	880	WEBR	1310	WFOY	1210	WHAZ	1300	WIBM	1370	WJIM	1210
WCOL	1210	WEDC	1210	WFTC	1200	WHB	860	WIBU	1210	WJJD	1130
WCOP	1120	WEED	1420	WFTL	1370	WHBB	1500	WIBW	580	WJLS	1210
WCOS	1370	WEEI	590	WFVA	1260	WHBC	1200	WIBX	1200	WJMC	1210
WCOU	1210	WEEU	830	WGAL	1500	WHBF	1240	WICA	940	WJMS	1420
WCOV	1210	WELI	900	WGAN	640	WHBI	1250	WICC	600	WJNO	1200
WCPO	1200	WELL	1420	WGAR	1450	WHBL	1300	WIL	1200	WJPF	1310
WCRW	1210	WEMP	1310	WGAU	1310	WHBQ	1370	WILL	580	WJPR	1310
WCSC	1360	WENR	870	WGBB	1210	WHBU	1210	WILM	1420	WJR	750
WCSH	940	WENY	1200	WGBF	630	WHBY	1200	WIND	560	WJRD	1200
WDAE	1220	WEOA	1370	WGBI	880	WHDF	1370	WING	1380	WJSV	1460
WDAF	610	WESG	850	WGBR	1370	WHDH	830	WINN	1210	WJTN	1210
WDAH	1310	WEST	1200	WGCM	1210	WHDL	1400	WINS	1180	WJW	1210

WJZ	760	WLTH	1400	WMRO	1250	WOW	590	WRTD	1500	WSVS	1370
WKAQ	1240	WLVA	1200	WMSD	1420	WQWO	1160	WRUF	850	WSYB	1500
WKAR	850	WLW	700	WMT	600	WPAD	1420	WRVA	1110	WSYR	570
WKAT	1500	WMAL	630	WNAC	1230	WPAR	1420	WSAI	1330	WSYU	570
WKBB	1500	WMAM	570	WNAD	1010	WPAX	1210	WSAJ	1310	WTAD	900
WKBH	1380	WMAN	1370	WNAX	570	WPAY	1370	WSAL	1200	WTAG	580
WKBN	570	WMAQ	670	WNBC	1380	WPEN	920	WSAN	1440	WTAL	1310
WKBO	1200	WMAS	1420	WBNF	1500	WPG	1100	WSAR	1450	WTAM	1070
WKBV	1500	WMAZ	1180	WNBH	1310	WPIC	780	WSAU	1370	WTAQ	1330
WKBW	1480	WMBC	1420	WNBX	1260	WPIV	1210	WSAV	1310	WTAR	780
WKBZ	1500	WMBD	1440	WNBZ	1290	WPRA	1370	WSAY	1210	WTAW	1120
WKEU	1500	WMBF	610	WNEL	1290	WPRO	630	WSAZ	1190	WTAX	1210
WKNY	1500	WMBG	1350	WNEW	1250	WPRP	1420	WSB	740	WTBO	800
WKOK	1210	WMBH	1420	WNLC	1500	WPTF	680	WSBC	1210	WTCN	1250
WKRC	550	WMBI	1080	WNOE	1420	WQAM	560	WSBT	1360	WTEL	1310
WKST	1250	WMBO	1310	WNOX	1010	WQAN	880	WSFA	1410	WTHT	1200
WKY	900	WMBR	1370	WNYC	810	WQBC	1360	WSGN	1310	WTIC	1040
WKZO	590	WMBS	1420	WOAI	1190	WQDM	1390	WSIX	1210	WTJS	1310
WLAC	1470	WMC	780	WOC	1370	WQXR	1550	WSJS	1310	WTMA	1210
WLAK	1310	WMCA	570	WOCB	1210	WRAK	1370	WSKB	1200	WTMC	1500
WLAP	1420	WMEX	1500	WOI	540	WRAL	1210	WSLI	1470	WTMJ	620
WLAW	680	WMFD	1370	WOKO	1430	WRBW	1310	WSM	650	WTMY	1500
WLB	760	WMFF	1310	WOL	1230	WRBL	1200	WSMB	1320	WTNJ	1280
WLBC	1310	WMFG	1210	WOLS	1200	WRC	950	WSNJ	1210	WTOC	1260
WLBJ	1310	WMFJ	1420	WOMI	1500	WRDO	1370	WSOC	1210	WTOL	1200
WLBL	900	WMFO	1370	WOMT	1210	WRDW	1500	WSOO	1200	WTRC	1310
WLBZ	620	WMFR	1200	WOCB	1210	WREC	600	WSPA	920	WTRY	950
WLEU	1420	WMGA	1370	WOPI	1500	WREN	1220	WSPB	1420	WTSP	1370
WLLH	1370	WMIN	1370	WOR	710	WRGA	1500	WSPD	1340	WVFW	1400
WLLH	1370	WMMN	890	WORC	1280	WRJN	1370	WSPR	1140	WWAE	1200
WLNH	1310	WMOB	1200	WORK	1320	WRNL	880	WSTP	1500	WWJ	920
WLOK	1210	WMOG	1500	WORL	920	WROK	1410	WSUI	880	WWL	850
WLPM	1420	WMPC	1200	WOSU	570	WROL	1310	WSUN	620	WWNC	570
WLS	870	WMPS	1430	WOV	1130	WRR	1280	WSVA	550	WWRL	1500

WWSW 1500	XEBA 1080	XECH 1490	XEFI 1440	XEME 1240	XET 690
WWVA 1160	XEBG 820	XECL 1100	XEFO 940	XEMO 860	XETB 1310
WXYZ 1240	XEBH 930	XECW 1240	XEFQ 1010	XEMU 580	XETH 1210
W8XO 700	XEBI 1000	XECZ 1370	XEFV 1210	XEMX 1280	XEU 1010
XEAA 750	XEBJ 1340	XED 1160	XEFW 1310	KEN 780	XEW 890
XEAC 990	XEBK 1080	XEDA 1220	XEG 1230	XENT 910	XEX 1310
XEAF 990	XEBL 1220	XEDF 810	XEH 720	XEP 1160	XEXB 1270
XEAG 1310	XEBO 1310	XEDH 1340	XEI 1370	XEPN 730	XEXE 1270
XEAI 1250	XEBP 1150	XEDP 1080	XEJ 1020	XEQ 730	XEXX 1170
XEAM 750	XEBS 1340	XEDR 1490	XEJP 1130	XEQK 1500	XEZ 630
XEAO 660	XEBU 1240	XEDW 1150	XEK 990	XERA 840	YSS 640
XEAP 1340	XEBW 1340	XEE 1210	XEKL 1240	XERB 1090	ZNS 790
XEAS 1160	XEBX 640	XEF 1450	XEL 1150	XERC 830	
XEAT 1210	XEBZ 810	XEFB 870	XELO 730	XERH 1430	
XEAW 960	XEC 1150	XEFC 1340	XELZ 1370	XES 990	
XEB 1030	XECA 1230	XEFE 980	XEM 1380	XESM 1270	

(Continued from Page 62)

Opelika, Ala., Opelika-Auburn Brdstg. Co., 1370 kcs. 100(25).
 Orlando, Fla., Hazlewood Co., 1350 kcs. 1 kw. unltid.
 Pawtucket, R. I., Pawtucket Brdstg. Co., 1390 kcs. 1 kw. unltid.
 Phoenix, Ariz., M. C. Reese, 1200 kcs. 100(25) unltid.
 Ponce, P. R., Portorican American Brdstg. Co., 1340 kcs. 1 kw.
 Pontiac, Mich., King-Trendle Brdstg. Corp., 1440 kcs. 250 unltid.
 Riverside, Calif., Brdstg. Corp. of America, 1390 kcs. 1 kw.
 Riverside, Calif., Richard T. Sampson, 1390 kcs. 250 days.
 Rochester, N. Y., Edward J. Doyle, 1270 kcs. 500 days.
 Saginaw, Mich., Saginaw Brdstg. Co.
 Salina, N. Y., Sentinel Brdstg. Corp., 620 kcs. 1 kw. unltid.
 Sandusky, Mich., Thumb Brdstg. Co., 880 kcs. 1 kw. days.
 San Juan, P. R., Enrique Abarca Sanfeliz, 580 kcs. 1 kw. unltid.
 San Juan, P. R., United Theaters, Inc., 580 kcs. 1 kw. unltid.
 Santa Monica, Calif., A. E. Austin, 1160 kcs. 100(25).
 Scranton, Pa., Lackawanna Brdstg. Co., 1370 kcs. 100(25).
 Scranton, Pa., Union Brdstg. Co., 1370 kcs. 100(25) unltid.
 Shelby, N. C., Jos. A. Lattimore, 1370 kcs. 100(25) unltid.
 Spartanburg, S. C., S. Advertising Co., 1370 kcs. 100(25) unltid.

Springfield, Ohio, Radio Voice of Springfield, 1310 kcs. 100 unltid.
 Springfield, Ohio, S. Radio Corp., 1310 kcs. 100 unltid.
 Springfield, Ohio, S. Radio Service, 780 kcs. 250 days.
 Syracuse, N. Y., Civic Brdstg. Corp., 1500 kcs. 100 unltid.
 Tacoma, Wash., Tacoma Brdstg. Co., 1420 kcs. 100(25).
 Tacoma, Wash., Michael J. Mingo, 1400 kcs. 250 unltid.
 Traverse City, Mich., Northern Brdstg. Co., 570 kcs. 500 days.
 Valdosta, Ga., John F. Arrington, Jr., 1230 kcs. 250 unltid.
 Vincennes, Ind., Samuel M. Emison, 1420 kcs. 100 unltid.
 Vincennes, Ind., Vin. Newspapers, Inc., 1420 kcs. 100 unltid.
 Washington, D. C., Lawrence J. Heller, 1310 kcs. 100(25).
 Watertown, N. Y., Black River Valley Brdstg. Co.
 Watertown, N. Y., Watertown Brdstg. Corp.
 Willmar, Minn., Lakeland Brdstg. Co., 680 kcs. 250 days.
 Wisconsin Rapids, Wis., Wm. F. Huffman, 580 kcs. 250 unltid.
 Worcester, Mass., Winfield A. Schuster, 1200 kcs. 100 unltid.
 Worcester, Mass., C. T. Sherer Co., Inc., 1200 kcs. 100(25).
 Yuma, Ariz., Silver Crest Theaters, 1420 kcs. 100 S. H.

Selected Back Numbers

The Oceania Broadcasting Stations, Sept. '38.

Tuning South Pacific Stations, Tuning South Americans, and a list of South American Broadcasting Stations, Oct. '38.

Dialing the Europeans, Nov. '38.

Dialing the Asiatics, Dec. '38.

This Hobby Called DXing, the International Prefixes, the QSA and R Codes, Jan. '39.

Stations of France and Norway, March '39.

Stations of New Zealand, April '39.

Television is Here, list of Television Stations, the stations of Colombia, China and Venezuela, Mid-summer '39.

Stations of Costa Rica and Venezuela, Sept. '39.

The World's Broadcasting Stations, Sept. '39.

These past issues are still available at the regular price of 25c each or five for a dollar.

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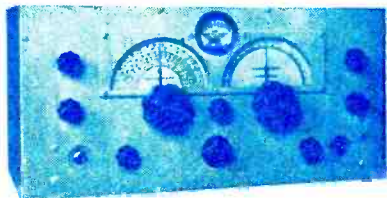
City and State



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THE RME 69



THE RME 69

RME 69

\$152.88 Cash Price

**Complete With
Tubes, Crystal
and Speaker**

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12 Months \$11.41 ea.

● **TUNING RANGE.** RME-69 employs six separate bands tuning from 550 kcs. to 32000 kcs. The amateur bands have been allocated so that practically no pointer change is required when shifting from one band to another except on ten meters.

● **CONTROLS.** Finger-tip hairline tuning is possible with the two and one half inch heavy tuning knob coupled to a planetary and interlocking gear device. No back-lash.

● **RESONATOR CONTROL.** Permits peaking of circuits at any time, providing an instantaneous method of alignment of the RF circuits.

● **BAND SPREAD.** Two dials with single control tuning, electrical band spread. Spread may be had anywhere within the receiver's tuning range. Ten, 20 and 40 meter bands spread out to 100 degrees.

● **RME-69 Single Signal Super** housed in steel cabinet with choice of gray or black crinkle finish, 465 kcs. crystal, complete set of 9 tubes, 8 inch Dynamic speaker housed in gray or black crinkle finish baffle.

The RME70 is Also Available on Time Payments

RME-70, complete with tubes, crystal and speaker in cabinet, Cash Price **\$138.60**. Down Payment, **\$21.10**. 8 Months **\$15.31** each. 12 Months **\$10.41** each.

The RME-70 has Full Vision Tuning, Illuminated DB-R Meter, Resonator Control, Six Bands from 550 to 32000 kcs., Band Spread, Fully Automatic Noise Suppressor, Crystal Filter.

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