

THE DECEMBER 1932

RADIO INDEX

THE ALL-WAVE RADIO MAGAZINE



25^c

The Last Word in Battery Sets
Changing to the New Tubes
Short Wave Stations of the World
by Call Letters
Wednesday Time on the Air for all
Stations

DECEMBER 1, 1932

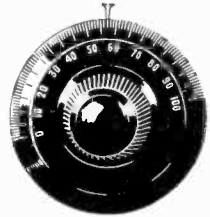


RADIO IN DEX

Reg. U. S. Patent Office

FRED CLAYTON BUTLER

Editor and Publisher



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NINTH YEAR

NUMBER 64

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THE LAST WORD *in* BATTERY SETS

By B. FRANCIS DASHIELL

LAST month we discussed radio receivers designed to operate on 110-volt direct current. Now we come to another kind of d.c. set—the battery receiver. There are millions of radio listeners who depend entirely upon battery operated sets, for they either live in outlying regions where a.c. or d.c. power is not available, or they have no desire to change from old, but tried and true, battery sets.

All original radio sets were battery operated, but the advent of more modern a.c. receivers relegated the earlier apparatus to the limbo of undeveloped things. Then came the new types of low-drain battery tubes and a new type of long-life A battery, and the discarding of such ancient tubes as, WD-11, WD-12, -99, -01A, -12A, -22 and -71A in dry and storage battery operated receivers. The Air Cell battery and the two-volt "30" series of tubes rescued the battery set from certain oblivion, and, now, with automatic volume control, tone control, spot and easy tuning, dynamic speakers, superheterodyne and all-wave screen-grid and pentode circuits, and other features of a.c. sets, there is little that the owner of a battery operated set does not have to satisfy his whims.

The Air Cell battery, with a potential of slightly more than two volts and a current output of about 600 amperes, a total of over 1200 watts, permits the use of many tubes in the circuit—types -30, -31, -32, -33 and -34. Some other d.c. battery sets, mostly for automobiles, use the 6.3-volts tubes—types -36, -37, -39 and LA. Nearly all new battery sets require 180 volts B battery and, in a few cases, a separate C biasing battery.

The inherent disadvantage of the battery set remains. The problem of unsightly A and B batteries must be met, usually by using a console type of cabinet, and there is the expense and nuisance of replacements from time to time. These factors are inevitable if we are to use batteries where other electric power is not available.

Constant Voltage Necessary

The voltages of all batteries must be maintained at the correct requirements at all times for perfect reception. Distortion may be experienced, due to weakened plate voltages operating in combination with a normal C voltage. In this case it is advisable to reduce the C bias when the B battery voltage drops below the normal battery rating. Failing A batteries are quickly indicated by weak signals; defective cells in B batteries by mysterious static and crackling noises; and distortion by an improper balance between B and C battery voltages.

While space does not permit of the publication of the entire merits and qualifications of all battery sets, we have endeavored to present the important characteristics of a number of new and efficient receivers in the following paragraphs:

The Midwest Radio Corporation offers two new and guaranteed sets. One is a 6-tube superheterodyne (model B-6), and the other is a 9-tube All Wave receiver (model B-9). There is tone control, automatic volume control, dual dial tuning, dynamic speaker, and console cabinet. The small set uses three -30 tubes, one -32 and two -34s. It sells from \$22.50 to \$49.95. The larger set uses four -30 tubes, five -34s, and lists

from \$29.75 to \$59.95. There is a 30-day free trial, but batteries are not returnable.

The Lincoln Radio Corporation has a new 9-tube battery set (model SW-33) which is guaranteed All Wave receiver having an abundance of power. It uses three -30 tubes, five -32s and two -31s in push-pull. The price, with dynamic speaker and deluxe console cabinet, is \$129.00, with the set broadly guaranteed for performance.

Stewart-Warner presents its newest battery 8-tube superheterodyne receiver (model 49), with electrodynamic speaker and console cabinet. Battery replacement is reduced to the lowest minimum and the set uses the entire -30 series of 2-volt tubes with Air Cell battery. The price is \$75.95.



Model 469 Atwater Kent Battery Console, 9-tube battery-operated superheterodyne. Uses 2-volt tubes with air-cell "A" battery.

Atwater Kent has two cabinet sets (models 558 Compact and 469 Console) both of which use a 9-tube superheterodyne chassis and permanent magnet dynamic speaker, 4-gang condenser, automatic volume control and tone control. It contains three -34 tubes, two -32s, four -30s, and a

neon light is used as a pilot light. The compact table set lists at \$68.90 while the Console sells for \$89.75.

E. H. Scott Radio Laboratory furnishes its famous All Wave Console receiver in a newly perfected battery model covering all bands from 15 to 550 meters. It uses ten -30 tubes. It is of the same general appearance as the de luxe a.c. model, but lists at \$80.50 for the chassis alone. This set is guaranteed to bring in 10,000 miles distant stations and for five years against failure. There is a 10-day free trial for testing and comparison.

The Radio Corporation of America has a new battery receiver (model R-71) that uses the -30 types of tubes and Air Cell battery. It is an 8-tube table type superheterodyne and lists at \$62.75. Kolster Radio presents a new 9-tube Console superheterodyne set (model K-114) with their remarkable Rejectostat device. This set uses six -30 tubes and three -34s. Montgomery Ward's Airline set in console cabinet uses four -32 tubes and one -33.

Sparks-Withington offers a new Sparton battery set (model 54) which is an 8-tube superheterodyne with super-control, a tremendous amount of clear volume, and increased battery economy. The dynamic speaker employs an oversize permanent magnet, thus reducing battery drain. The "Country Home Receiver" Console uses two -34 tubes, one -32, four -30s, and one 25-S special purpose detector-automatic volume control tube.

The Philco manufacturers have produced a table type battery set (model 37) using five tubes in superheterodyne circuit and a dynamic speaker with field strength equivalent to any a.c. speaker. The special Philco A battery is used in connection with a ballast tube to provide constant voltage. Philco tubes are used throughout—one type 15, two 32s, one 30, and one 19 push-pull pentode. It sells complete for \$55.00.

General Electric's battery set (model S-42B) is an 8-tube screen-

grid superheterodyne circuit in console cabinet. It uses three -32 tubes and five 30s. Tone control is a feature of the set which is highly sensitive and selective. The price, less batteries, is \$99.50.

Allied Radio presents two new All Wave battery sets, one of 8 tubes (model E-9764), and the other having 5 tubes (model E-9726), both with automatic volume control, noise suppressor, spot tuning and tone control. The 5-tube set is in a midget cabinet and the 8-tube in a console cabinet.

Sears, Roebuck offer the 8-tube Silvertone All Wave battery set in midget and console models, as well as a 5-tube midget of another type. The 8-tube set uses two -30 tubes, four -32s, one -33, and one -31 for filament control. There is microvision tuning, automatic volume control and constant filament voltage regulation. Complete, with guaranteed battery, at prices ranging from \$36.50 to \$59.95.

The Radolek 9-tube superheterodyne cabinet model uses six -30 tubes and three -34s. It lists complete for \$58.95. Lafayette battery receivers come in two models—6 tubes and 9 tubes. Both are furnished in Console cabinets and the smaller set uses three -34 tubes, one -30, one -31 and one -33, while the 9-tube set uses six -30 tubes and three -34s. The 6-tube set lists at \$32.00 and the 9-tube at \$43.50.

Silver Marshall's All Wave receivers (models 728SW and CB1), absolutely guaranteed for performance, are also available in battery circuits using the new 2-volt tubes and Air Cell batteries. Majestic, Stromberg-Carlson, Brunswick and General Motors do not manufacture battery receivers.

Battery Sets for Short Waves

In the short wave field National offers a battery set (model SW-34) using one -30 tube, two -34s and two -31s with plug-in coils covering wave ranges from 9 to 850 meters, as desired. These Thrill Boxes are particularly efficient and list at \$75.00.

A small 3-tube receiver (model DC-SW3) lists at \$55.00. Hammarlund, makers of the Comet "Pro," has no battery operated set, but the Pilot Company continues to offer its famous Super-Wasp for battery operation.

The Delco system has developed a 32-volt 6-tube receiver designed particularly to operate on the 32-volt circuit of their home and farm lighting plants. In this set the filaments of six tubes, four -36s and two -38s, are connected in series. It uses a 140-volt separate B battery.

The Crosley Corporation presents two 8-tube Air Cell battery models, "Mayor" and "Chieftain," the former cabinet a midget and the latter a console. This superheterodyne circuit has three type -32 tubes, three -30s and two -31s. There is a hair-line shadow dial with neon lamp, vernier drive, stepless tone control, and permanent magnetic dynamic speaker. The table model sells for \$59.95 and the console for \$73.50, with tubes, but less with batteries.

Other battery-operated receivers listed among the 1932-1933 lines are the following: "Lyric" made by the All-American Mohawk Corp., North Tonawanda, N. Y. "Columbia" by the Columbia Phonograph Co., Inc., 55 Fifth Ave., New York City. "Crescent" by the Crescent Radio Mfg. Co., 1026 Second Ave., Minneapolis, Minn. "Crosley" by the Crosley Radio Corp., Cincinnati, Ohio. "Gulbransen" by the Gulbransen Co., 816 N. Kedzie Ave., Chicago. "Kolster" by the Kolster Radio, Inc., 200 Mt. Pleasant Ave., Newark, N. J. "Pioneer" by the Pioneer Products Corp., Plano, Ill. "Simplex" by the Simplex-Radio Co., Sandusky, Ohio.

A special DX program for Radexers will be given by Station WJAG, Norfolk, Neb., at midnight, Friday, Dec. 9th, until 1:00 a. m. Saturday, CST., on 1060 kcs. with 1000 watts. WJAG is in the center of North American continent. Let's see how far away it can be received.

A REAL RADIO LABORATORY

• • • *Paradise for DXers*

HOW would you like to be turned loose in this home radio laboratory of Philip Cass, located ten miles outside the city of Philadelphia? This most complete DX quarters is located in a separate building near the home of Mr. Cass who is head of a large wholesale electrical supply house in Philadelphia. "We built every piece of our own equipment," writes Mr. Cass, "and do all our own experimental work. After fifteen years of this we have pretty good reproduction."

All reception on the broadcast band is on a loop antenna. The short-wave antenna is Ross flat-braid tinned, very carefully insulated at supports by glass and Wirt porcelain insulators. The aerial enters the building through isolintite tube with brass rod center having nuts at each end. A single-pole, double-throw switch cuts out the aerial as protection against lightning.

In the photograph, reading from left to right, we find first the input control and charging panel for storage battery current for lighting and heating tubes, the jack box on the wall and condenser for tuning short wave aerial and the loop aerial.

The radio apparatus on the desk is, first, single stage push-pull 112-A tube amplifier for short wave work in

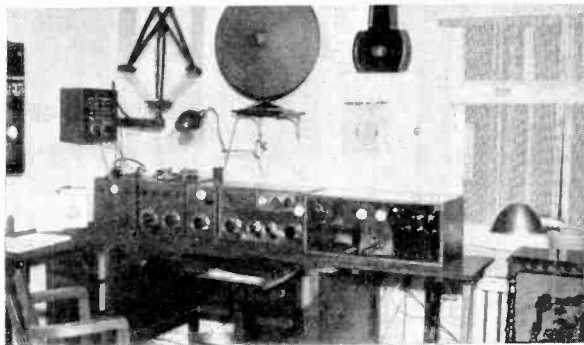
conjunction with a Western Electric speaker, all battery operated; second, the short wave adapter; third, radio frequency stage booster for incoming signals on s. w. adapter (this can also be used with long wave radio receiver); fourth, 4-D Western Electric circuit radio receiver, high-wave. All of the 4-D circuits, which were built by the Western Electric Company for use in the United States Government service, were in wooden cases and shielded on the inside. When Mr. Cass and his associate improved this circuit to reach out all over the country, they built cases of sheet copper. Fifth, a 500-ohm transformer and impedance coupled push-pull amplifier, containing two 112-A tubes and two 210 tubes in push-pull, which are operated from a special power pack which also supplies all the B voltages.

The baffle shown contains a Wright De Coster 2500-ohm d. c. speaker which is operated from the power pack. The lightning switch is shown under the table. The cabinet shown to the right of the amplifier contains a Wright De Coster speaker a. c., which is used in operation in conjunction with the d. c. speaker and gives a slight variation in tone quality.

The Victrola attachment shown in the corner contains the complete W. E. system which is used by movie houses for reproduction, at 500 ohms through the amplifier with filters, and condensers are carried in the compartment.

Lastly, the equipment includes RADEX, the radio map of North America and the map of the world with time converter.

When would a DXer ever sleep with a room like this?



WINS DX PRIZE *in* NEW ZEALAND

• • • *Verifies 214 American Stations*

A READER of this magazine, Frank H. A. Barnett, Dunedin, New Zealand, has just won the DX championship of that far-away country. Thus it seems that RADEX helps to win championships even on the other side of the world. Our readers will recall the letter from Mr. Barnett which was published in the September, 1932, issue. Notwithstanding the fact that he is located in South Island, a good 500 miles further from America than many of his competitors, Mr. Barnett won the "Radio Record" Challenge Cup with 291 verified stations to his nearest competitor's 272.

The New Zealand DX Club has a membership of over 800 and holds a DX competition every six months for the largest number of verifications from stations overseas. From the New Zealand Radio Record and the New Zealand Radio Times we quote the following regarding the contest which has just closed.

Although I have been a keen DXer since the days of crystal sets (writes Mr. Barnett in the "Radio Record") I did not trouble to write to any of the stations that I heard except a few who asked for reports.

On seeing the result of the first competition I decided to write to the stations, that I heard, for verification and having the utmost confidence in the particular make of receiver that I use, I said to myself, I'm going to get all these stations I'm hearing verified, and try for the DX Cup. It was easier said than done, and has been hard work, especially as I started late in the field. As I am generally busy during the week, it is seldom that I can, except at the week-ends, listen for DX stations.

However, I set to and listened in at

every opportunity and wrote to all the stations that I heard and was able to identify. I have to date received about 75 per cent replies from the stations that I have logged, and have about another 50 yet to come to hand, and am still logging a few, although conditions for DX reception have not been too good this last month.

The receiver I use is a Majestic Super-Hetrodyne, 7 valves, excluding rectifier and all DX-ing is done with the speaker. I have fitted output device for phones, but do not use them except if someone else wants to get some sleep, as I can hear much better off the speaker.

The set is calibrated exactly in kilocycles from 1500 k.s.'s to 550



Ray Knight and Alice Davenport in their small-town newspaper office. The NBC Wheatana program daily except Friday and Saturday, 7:15 p. m. EST.

K. c.'s, and has 10 k. c. selectivity on all stations except powerful locals. The calibrated dial is a big help in identifying stations, as one knows exactly the frequency, and used in conjunction with a good call book makes DX-ing much easier, 10 k. c. selectivity also enables me to get even a 100 watt American with powerful Americans on either side.

The aerial system consists of: Beverage aerial for American reception an aerial approximately 120 ft. long, average height 25 ft. for Australian, European and Eastern stations. Both are directional. The earth consists of 1 Laker copper earth tube driven about 3 ft. 6 in. in damp clay.

The receiver, aerial and earth are situated on a rise about 1000 feet above sea level, about 10 miles airline from Dunedin and about 1 mile from the coast. I have experimented with all kinds of aeriels and earths, and find that the ones I am now using are the most suitable for my locality. I have tried all the fancy earth systems that I have seen recommended, but find that the one described is just as good for my locality, in fact the set brings in the 100 watt Americans with the earth off, providing the aerial tuning knob is adjusted to suit, just as good as with it on.

Their Summer Holidays

I was always of the opinion that the winter was the best time for reception of North American stations, but have changed my mind after listening during Christmas and New Year, about this time I logged about 100 new ones. During the Christmas and New Year holidays I heard 17 100 American stations and 1 100 watt Canadian, as well as dozens of higher powered ones, there was also hardly a click of "static" or interference right through the holidays.

Reception has not been of the best down here of late, only a few new ones have been logged, of course the more one gets the harder he is making it to get more new ones, as there is only a limited number of stations



Introducing the "Three X Sisters" in vocal harmony and rapid-fire comedy skits. CBS at 7:30 p. m. EST, Mon. Wed. Fri.

that can be heard out here, due to the conditions not being suitable for reception when they are on the air. There are also quite a number that will never be heard out here, as they either close down too early for us, or are not on the air at all at a time where reception of them is possible. DX and Test programmes help us to log stations that would not be heard on their usual programmes.

Included in Mr. Barnett's log of verified stations are 3 50-watters and 22 100-watters in the U. S. A. He pulled in one 250-watter in New Jersey, three 100-watters in Michigan, one 250 in Maryland and one 500 in New Hampshire. "Believe it or not."

If New Zealand can tune our stations in, we can tune theirs. Use the RADEX Time Converter for ascertaining the time to tune.

ON RIDING A HOBBY . . .

By THE EDITOR

I PITY the man who grows old without a hobby. Can anything be more pathetic than a man or woman growing old and just sitting around? No matter if that hobby be merely collecting cigar bands or match-package covers, the interest of it will grip a man and give him a joy and zest in living. While many people make some game like golf or bridge or solitaire their hobby, perhaps the most nearly universal hobby takes the form of collecting something or other. This seems to be an inherited trait because it shows itself so early in life. Did a boy or girl ever live who didn't make a collection of some thing or other?

If their secret lives were known, we would undoubtedly find that many men famous in public life, the arts or business were enthusiastic collectors. Only the other day I was reading a statement by a very famous man of letters regarding philately in which he said in effect: "Some men try to kid themselves that they are collecting postage stamps because it gives them an insight into history or biography; why not let's be honest and admit that we collect stamps because it is fun?" Again I was reading of a millionaire who has a wood-working shop in his house in which he spends much of his time cutting out puzzles on a scroll-saw.

What more intriguing hobby could there be than that which our radio makes possible for which we have no fancy name like philately or numismatics but only the simple code, DX. What greater thrill than picking up a station which we never heard before and for which we may have been trying for months? Can any collector get such a kick out of a mere stamp or coin? No other hobby has such an intimate contact with life as radio. Most collectors are gathering dead things but the DXer collects bits of life.

This magazine receives and publishes many interesting records of achievements in DXing but occasionally we receive letters which give a glimpse of the humanities of radio, of its influence upon the lives of people. Here is a letter from a boy whose mother adds this postscript: "This letter is written to you by a sixteen-year-old boy who, because of a physical handicap, has never attended school but has educated himself practically with the radio." We cannot publish all the letter but the quotations we are making will give a glimpse of what radio means to this young man and how well he has profited by what it has taught.

"I am writing to tell of what little luck I've had—it isn't anything to boast of—but nevertheless, here it is. First, 410 stations comprise my log which originated in December, 1929,



You'd never guess this one because it is Miss Jane Dillon, famous character actress, as "John the Hired Man." In the NBC "Thru Lighted Windows."



Meet "The Hoosier Editor" nee Frederick Landis, brother of Judge Kenesaw Mountain Landis. CBS Sundays at 2:45 p. m. EST.

including 150 100-watters or less with KUJ, KWG, CHML and CMJH. Hope to reach the 500 mark before the current campaign comes to an end. Although I have never had anything farther than British Columbia, I hope to cross the waters via radio during the present winter. My first issue of RADEX dates back to No. 44 and it has been coming into this household consistently ever since. I get almost as great a kick out of reading the DX department as I do in DXing myself and also enjoy reading 'Betty's' pages. I have tried all sorts of aerials and grounds with varying results. Am now alternating between an upper and a ground-aerial finding that on the upper which is about 65 feet long and approximately 50 feet high, volume is increased on the higher frequencies while on the lower part of the dial, volume is decreased but the tuning isn't so broad. The ground-aerial gives its best results on the crowded frequencies." This young friend's name is Tom Shaw and he lives in Tennessee.

And here is a letter from a reader not quite so young but whom radio is helping to keep young. Miss Lilian E. Clarke of Connecticut writes: "I have been buying RADEX for more than a year and find it very useful. I mark them all over beside keeping a big note-book. I have a new Majestic and am experimenting to see what stations I can get. I find the best hours are in the evening although I can use my radio in the night if I wake up, as it is right next to my bed. I am seventy-five years old so I cannot always do things young people might. WWL, New Orleans, is particularly good and through their suggestion, I got Caracas, Venezuela. I want to get Honolulu but have not succeeded yet. I wish you all success as you are doing a good work in helping those who are trying to make their radio worth while."

Last is a letter signed "C. M. & D. C. King," from Vermont. It begins: "My father and I are partners in this DX business. We have a three-tube homemade set about seven years old. It covers the b.c. band and extends down into the s.w. band for a few meters. We have been DXing for three and a half years and have used RADEX since 1930. I see by the October number that Charles Kneer of Rochester, N. Y., claims the s.w. record on a b.c. set. It may interest him to know that we have 113 amateurs, 6 experimentals, 2 fire stations, 3 fireboats, 15 police and one ship at sea or a total of 140 s.w. stations on a b.c. set. Our grand total is 724. We have the usual run of Canada, Cuba, Mexico, Porto Rico, Haiti and all the states except North Dakota, Nevada and Wyoming. We are waiting for verification from YV1BC, Venezuela. A few of our best ones are KGU, XEF (then Oaxaca with 105 watts) VONA, CJOC (then 50 watts), KGFJ, K G E K, K O R E, K C R C, K F X R, KGFF, KFJZ and KGDA."

Our best wishes for new records to our young friend in Tennessee, to the dear lady in Connecticut and to the firm of "C. M. & D. C. King," a wise father and a loyal son, in Vermont.

EDITORIAL CHAT *and* COMMENT . . .

The Monthly Visit

REVERBERATIONS still echo among the hills following the storm that raged about the question of what was possible in radio and what was not. It is the unexpected in radio that gives it its thrill. If reception could be computed by any formula, DXing as a game would be on a par with mathematics. Imagine being a member of a mathematics club. Here are one or two more instances of the unusual in reception.

"Judging DX reception on a definite basis doesn't work," says Robert McGarvey, Jr., 627 Jackson Ave., Elizabeth, N. J. "After ten years of listening I'm well aware of that. Many times I've found low-powered stations coming in when 5 KW plants were lost in a maze of static. You can't figure a station's coverage by its wattage, as far as DX is concerned. I have heard WNBX, Springfield, Vt., several times using ten watts. Yet I've read of a listener in Vermont who spent several years trying to log the same call. Peculiar conditions exist even among locals. WODA, Paterson, N. J., is nearer my home than WJBI in Red Bank. Despite this, WJBI, with 100 wats, comes in twice as loud as WODA, with 1000 watts. And a DXer in Irvington, five miles from Elizabeth, can hardly hear WJBI at all. On my set WODA fades like a west-coaster, after dark. On a friend's set in Newark it comes in with perfect volume. Any DXer who says a station can't be heard is offering eloquent proof of his inexperience. I really believe anything is possible. I myself have never heard an Australian or a Japanese, but I haven't given up trying."

"Here is an experience of mine, 'believe it or not,' as I haven't looked for a verification," writes T. P. McCarthy, Tilting, Fogo District, New-

foundland. "On Sunday, September 11th, at 9:30 p. m., EDST, I heard quite plainly and with good speaker volume, the announcement of stations WPAW and WPRO, of Providence, R. I. They had just given a program of old time tunes. I haven't heard these stations since, nor do I expect to hear them again. WPAW and WPRO are listed as 100 watts, and, considering the distance I am situated from Providence, I think you will agree that my reception of these stations was a freak in radio. More so when I say that my set is a 5-tube dry cell operated, early model."

Two Inquiries

This magazine receives a great many letters from readers of which the two given are typical. From Samuel Stutson, 838 Kelly St., Fox Street Station, New York City: "I



Tony Wons of "Scrap Book" fame. His pleasing philosophies come from CBS each weekday morning at 9:30 EST. "Are you listenin'?"

would appreciate it very much if you give me your opinion of the Norden-Hauck Custom-built receiver manufactured in Philadelphia. I am contemplating buying one but hesitate on account of having seen so few used." And from Joe Whiteside, 720 N. Navajo, Altus, Okla., "I have a friend who is thinking of buying a 12-tube Silvertone Radio. Is it a satisfactory radio?" Readers who are using either of the receivers named will be doing the inquirer a favor if they will write him of their experience with the particular set. But this magazine cannot pass any opinion upon the merits of any receiver. To do this fairly would require careful tests of each set not only in laboratory but in a home under ordinary conditions. Without such exhaustive tests, our opinion would be worth little. This may be illustrated by assuming that one was in the market for an automobile and wrote to several people asking their opinion of the Chevrolet, for example. The opinions they received would be just opinions.

It's Poor DXing

DXers should not try to get a verification from a station unless they are morally certain it was that station they heard. If some listeners pick up a program they cannot understand, they seem to jump to the conclusion that it was a Mexican or Cuban and sit down and send a report to the nearest CM or X to the frequency tuned in. This is pretty childish DXing and tends to bring the whole brotherhood into disrepute with the broadcasters. Some of the Cuban stations report a lot of letters received from listeners in the U. S. A. reporting reception of their stations, in which the report is entirely wrong. Among these listeners, we are sorry to say, are a number of readers of RADEX. They probably just "took a chance." Don't do it, DXers. If you aren't sure beyond a reasonable doubt which station you heard, wait and try again. Don't



The Harding Sisters, Irene and Mathilde, two of radio's most popular pianists. "Twenty Fingers of Harmony" NBC-WJZ 10:45 p. m. EST Saturdays.

send reports either raw or half-baked; you'll only make it harder for everybody. In the case of Cuba, the stations there are now requiring 10c in American money for verification. This is done in order to head off a lot of inaccurate and guess-work reports.

Those Cuban Frequencies

Through the courtesy of the Philadelphia Radio Club, we are enabled to put three special DX programs from Cuba in our Calendar for December. The frequencies given us by the PRC do not agree with those furnished us by the Cuban Government but, as the PRC has a member in Cuba who represents them there, it is possible their frequencies are correct. The official Cuban list shows CMJF on 930 kcs., and CMJE on 1175 while the PRC gives them as 900 and 1150 respectively. The PRC also reports two stations, CMJN and CMJK, which the official list does not mention.

Regarding this discrepancy in the Cuban frequencies, one of the most painstaking DXers in the United States has this to say: "It might be helpful if you would put in a brief note suggesting that listeners be not surprised to find some of the Cubans off their assigned frequencies, and that when they are off, they are more likely to be on a lower frequency than on a higher one. For the reputation of RADEX it would be better to have your lists agree with the Official Bulletin of the Cuban Government, no matter what may be the experience of listeners.

"My opinion is that some of the stations do not have frequency control and get off wave unintentionally, but that others deliberately seek the split frequencies, so as to escape interference. I took the matter up with the officials in the case of CMCD listed for 925 but usually received by me on 915. Was assured that they would be ordered back on their wave, and sure enough for a couple nights they were found on 925, then it became 922 and so on, until night after night they would come in on 915. I have also heard on 1150 Cubans that belonged on 1175. CMC comes in regularly on 835, CMK on 725, XED usually on 960, but sometimes on 965, CMX usually on 880 but sometimes on 885, and XEFO on 935. That may mean I am only able to hear them when they are off frequency. CMAF is invariably on 675, and I have a verification from them which gives that frequency. Nevertheless, they are listed in the Bulletin on 660."

The BENDX Club

"The Buffalo Evening News DX Club has started its fifth year of DX and plans are going on for an extensive program," chronicles the Secretary-Treasurer, Mrs. M. L. Ellis, 152 Tremont Ave., Kenmore, N. Y. "We insist upon real verifications thus there is small chance of cheating. Stamps are not accepted. Short waves are barred. In order to get

their verifications, our members are more particular as to the data they send in and consequently stations are more apt to verify. Certificates are awarded for different groups of verification and when our members win their 'Ace,' they know they have won a good one." A very interesting feature of the work of the BENDX Club is their "Singleton Log." A singleton is a station verified by one member that up to the time the list is published no other member has verified. Thus A has WINS, KARK and KGNF. As the list is published the last Saturday of the month, no other member, we will say, has sent his verification of either of those stations to the verification committee. A therefore has three singletons. The next month B verifies KARK so he is called an eliminator and KARK is crossed off the list of singletons. Once in three months the singleton list is published. This list is kept up to date with the latest RADEX and there are now about 140. However we have one member, Mr. Brauner, who has verifications from all but 19 of the stations listed in RADEX but he does not compete, which is very good of him. The BENDX Club now sends tips weekly to all members that are unable to get the Buffalo News. The dues are \$1.00.

Prohibiting S. W. Sets

The police department at Jacksonville, Fla., is installing short wave radio and G. H. Coyle of that city sends us a clipping from the Jacksonville Journal indicating that the police will try to have an ordinance passed prohibiting citizens from owning a short wave set. We believe a number of cities have passed laws prohibiting the installing of s. w. receivers in automobiles. This regulation is entirely right and proper for if the crooks and gangsters have radio-equipped cars, the police will be greatly handicapped. But to prohibit the use of s. w. sets in the homes, is unjust and unnecessary and we do not believe such an or-

dinance would stand in the courts. Readers of this magazine are urged to report to us any such legislation, either enacted or contemplated, and we will take it up with the proper authorities. We believe such legislation would be an infringement upon the proper rights of our readers.

"I have just moved from Pittsburgh, Pa., to Vancouver," advises Richard D. Caddell, 1115 West Pender St., Vancouver, B. C., "and I thought you might be interested



The Skipper of the Show Boat, otherwise Charles Winninger. On the NBC "Red" Thursdays at 9:00 p. m. EST.

to know that radio reception is 100% better here on the west coast than back east in Pittsburgh. I am using, at the present time, a small five Northern Electric midget receiver, and although I haven't had very much spare time as yet to do much DXing, what little I have done has thoroughly convinced me that the west coast has it all over the middle west and east for radio reception, atmospheric conditions, etc. I am using a 300-foot aerial, but expect to erect a longer one soon. I have also no-

ticed a vast difference in the types of aeriels used here in the west, nearly all the aeriels here being of the umbrella type, while back east the fans use the straight type of antenna. The Japs and Aussies come in like locals, especially the Japs."

Static From Pilot Light

One of the writer's receivers recently became very noisy. At certain frequencies, it gave off most annoying crashes. Removing aerial and ground and connecting the two posts with a short piece of wire demonstrated that the noise was in the set for the noise continued with aerial grounded although of course quite reduced in volume. A careful examination of the chassis disclosed nothing wrong. Tubes were checked and found OK. After the most minute inspection it was noticed that the lead wire to the pilot light touched the drum dial lightly as the dial was turned. The pilot light was disconnected and the lead wire examined. It had been rubbing sufficiently to wear through the insulation so that at certain points on the dial, the bare wire made an electrical contact resulting in the crashes. Undoubtedly many so-called service men would have said the set needed new resistances, new transformers and probably new condensers! Moral, in case of trouble look your set over very, very carefully. The trouble is much more apt to be mechanical than electrical.

Another Little Kink

"I use no ground on my Philco 7-tube t. r. f.," states Oliver W. Todd, 1619 N. Conestoga St., Philadelphia, Pa., "as I have discovered a wonderful little trick which works much better than any ground I have ever tried. I wound 50 turns of No. 24 d. c. c. wire on a two-inch form. I fasten on my 120 foot aerial in the proper place and then I connect one end of the coil to the control grid cap of the first r. f. stage tube which is a -24 (the other end of coil is left

(Continued on page 30)

The HUMAN SIDE of the STARS

By "BETTY"

RUSH phone calls—usually around midnight—have been the determining factors in the career of Jack Denny. It was a hurry call from the manager of the Mt. Royal Hotel that caused Jack, some five years ago, to leave the old Frivolity Club in New York and journey to Montreal; and it was another rush call that brought him back to New York.

Ted Husing, now radio's ace sports announcer, really "signed" the contract which took Jack and his orchestra up to Montreal. A comparative newcomer to radio at the time, Ted was assigned to announce Denny's broadcasts from the Frivolity Club. One evening around midnight while Denny was broadcasting, Husing answered a phone call for him. Thinking it was from a fan, Ted said he was Jack. The voice at the other end announced himself as Vernon Cardy, manager of the Mt. Royal Hotel in

Montreal, and invited Jack to name his own price for an engagement at the hotel. Knowing nothing about dance orchestra rates, Ted looked wildly about, hemmed and hawed a bit, finally caught sight of the telephone number of the Frivolity Club and quoted it as the price. Much to his surprise and further embarrassment, it was accepted on the spot. Fortunately, however, the telephone number happened to be about twice the amount Jack Denny was receiving at the Frivolity, so he accepted a six weeks' contract for performances in Montreal. He stayed five years and two months.

Back to New York

The second important phone call in Jack's life caused him to pack up again and bring his orchestra back to Manhattan. When he left the Mt. Royal, an enthusiastic audience of more than seven hundred people were on hand to applaud his farewell performance.

Jack found his way to radio via the vaudeville stage. He was born in the little town of Greencastle, Indiana, where his father was professor of history at de Pauw University. Since both his parents played the piano, Jack early began to try his hand at it, and at the age of six was taking regular lessons from his father. After starring in all forms of athletics in high school and during his college days at de Pauw, Jack decided he was never meant to be a scholar, so at the age of nineteen he left school and home to go to Chicago. Here he found a job in a music store selling pianos and lasted three weeks at it—until his artistic temperament asserted itself.

The reasons for Jack's sudden artistic ambitions were his natural talent for the piano, and Tom Catalano's idea that "Catalano and Denny" would look well in lights. So Cata-



The telephone brought him fame.

lano and Denny drifted into a booking office, where they landed a contract for a vaudeville act at \$125 a week. With Catalano doing the tenor solos, Denny playing the piano, and the two combining for comedy songs, they toured the middle west for two years on the Keith circuit. Finally they reached New York with \$6.00 between them. As they walked by the Palace, seeing the sights of the big city, Jack remarked to his partner, "If we ever play this house, I'll quit and go to work!" Two weeks later they were at the Palace. The act, coming second on the bill, was a terrific failure; yet after it, the team found itself booked for 64 weeks on the Keith circuit all around the country. Returning to New York to appear at the Colonial, Catalano and Denny proved a sensation—and two weeks later were out of a job. It was at this time that the salaries of all Keith artists were cut, and the team preferred to split up rather than accept the reduction.

Signed Armistic When He Came

A few months later, Jack enlisted at the training camp at Plattsburg, New York, and later was transferred to the 77th Division with which he crossed to Europe, arriving just in time for the Armistice. He returned to vaudeville for a few months and then joined a music publishing house as arranger. Bobby Folsom, one of vaudeville's leading artists, asked Jack to write some songs for her. He not only wrote the songs, but also became her partner and leader of the orchestra in the act.

Tiring of vaudeville, Jack turned to orchestral work as leader of the band at the Astor Roof. Freddie Rich, now one of radio's prominent conductors, was his piano player. A short stay there and Jack went to the Frivolity Club. Then came the call from Montreal, and Jack took his entire aggregation to Canada with him. Back in New York once more, he plays in the Empire Room of the Waldorf-Astoria.

Jack Denny and his orchestra are



Formerly "Olive Palmer."

heard twice weekly over two different networks—the NBC (Red) at 8:45 P.M. EST Wednesday, and the Columbia at 8:45 P.M. EST Thursday.

Just a Little Choir Girl

When she was 15, Virginia Rea sang in a church choir in Des Moines, Iowa, and was paid for it. Years later, after an extensive course in voice culture, she went abroad for further study and a concert career.

Miss Rea got the additional training but no recital work. She found that American artists are expected to pay for the chance to sing in Europe, and that condition didn't rest well with an American girl used to making money with her singing. So she came home and promptly signed a contract to appear on the radio at a specified and substantial sum. "America," says Virginia, "is the real land of opportunity for singers."

It was in 1927 that Virginia returned from her European excursion, and her first contract was as soloist on the Ever Ready Hour. Soon she went to the Palmolive program, becoming Olive Palmer in deference to the sponsors of that period. For several years her own identity was sacrificed on the altar of advertising, but

recently she appeared on the N.B.C. networks under the name of Virginia Rea, which was her mother's maiden name.

Born in "Ole Kentucky"

Miss Rea was born in Louisville, Ky., and was educated in the public schools there. After graduating from high school she went to Drake University at Des Moines. She has been singing in public ever since she was a child of 5, when she made her debut at a church entertainment. During her attendance at Drake, she sang in church choirs, and when she returned to Louisville she was a member of Mu Phi Epsilon, the honorary musical sorority.

When Miss Rea first came to New York she sought an opera and concert career. For a while she made phonograph recordings, establishing a reputation for herself which led to three concert tours with Gowdowsky. It was shortly after this that she went abroad, and came back, determined to confine her singing to American audiences.

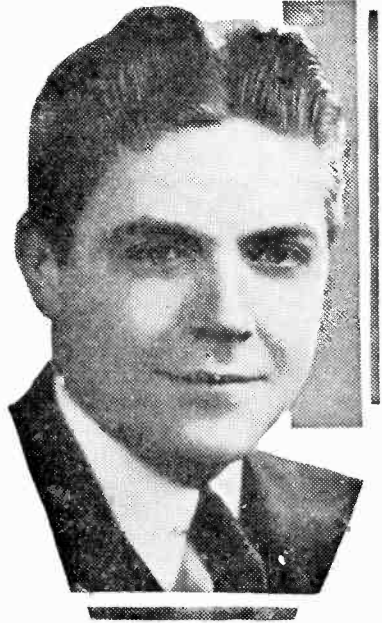
She is a true daughter of the South and speaks with a soft Southern accent. She has black hair, laughing blue eyes and a forehead higher than most girls. She is quiet and well poised. She lives with her parents in Jackson Heights, Long Island, and is decidedly the home-girl type. Her wants and interests are simple and cultural and she finds relaxation at recitals rather than at night clubs. She is colorful without being conspicuous.

Back With Former Partner

Virginia's preference is for pastels and she won't wear brown even when it is the fashionable color. She is intensely interested in people and in the interval between the time she ceased to be Olive Palmer and became Virginia Rea spent her holiday going places and studying folks. For a while she had a perfectly gorgeous time doing all she always wanted to do but never could because of her broadcasts. Gradually the novelty

wore off and when the call came to return to the N.B.C. studios, Virginia responded with alacrity.

Virginia Rea is now heard with her old partner, Frank Munn (Paul Oliver) with Paul Whiteman and his orchestra over the N.B.C. network each Monday at 9:30 P. M. EST.



Hon. Thomas McLaughlin, Baritone.

Tommy McLaughlin, the most recently acquired baritone of the C.B.S., is Irish through and through. His mother was born in Donegal, his father in Belfast. Though neither parent, to quote Tommy, "could carry a note in a basket," all five children can sing, though none of them professionally, except Tommy.

When Tommy was eleven, and his older brother returned from the war, he sang "Silent Night" for him. In the middle of the song, his voice cracked—he had begun a soprano, and finished a baritone. He's been one ever since.

For two years, on station KFI, Los
(Continued on page 33)

SAILING *The* SHORT WAVES

• • • *Letters from the Pilots*

THE data regarding short wave stations is so voluminous that we are forced to give it to our readers on the installment plan. In each issue of this magazine will be found some information regarding s. w. stations which is necessary for those who would work these higher frequencies. Under the circumstances, therefore, it will be necessary for them to secure each and every copy of **RADEX** in order not to miss some vital data.

In the September issue, No. 61, there was given a list of the short wave stations outside of North America in geographical order. The time on the air for each station, so far as it was obtainable, was given in this list.

In the October number, No. 62, a list of all short wave stations was given. These were arranged in the order of their frequencies. In No. 63, the November edition, there was given the s. w. stations of the United States arranged by states and cities, and this issue a similar list is given of the Canadian stations. It will thus be apparent that all four issues are necessary to give the s. w. fan a complete list of all the information of stations in his favorite bands.

In this issue is given also, a list of all s. w. stations arranged in the order of their call letters. This, we believe, is the very first time such a list was ever published and it ought to be of very great help in identifying calls heard. The moral of all this is plain—don't miss a single issue of this magazine or you will lose something you ought to have.

Both For and Against

A letter from Bob Purcell of the Editorial Department of the Miami Post, has us puzzled. He started in by intimating that the short waves were a delusion and a snare but he

ended up by giving some mighty interesting experiences in the short waves. So we still don't know just where Bob stands. "There is more bunk told and written about s. w. reception than would fill quite a library," he warns us in the very start. "Few people who were induced to buy an all-wave set ever bother with the s. w. dial after the first two weeks of squawks and whistles. They expected to be able to tune in foreign stations and sit back and listen to something interesting." After this dash of cold water he goes on to say: "At 19 meters we get Schenectady, France, Germany and the new Pittsburgh station regularly. At 20, the amateur telephones. At 25 m. France, Pittsburgh, Rome, Mexico, England, France, Winnipeg and Yucatan. At 31 m. Schenectady, Boston-Springfield, Sydney and Melbourne, Rio de Janeiro, and WEF, a telephone. At 49 m. are Pittsburgh, Bowmanville, WIW, WENR, Montreal and the new Miami station, W4XD, on 6060 kcs. The Australian stations are the easiest to get as there is nothing else on the air at that time of night or morning. I have picked up Melbourne at 11:30 on Tuesday night. I have listened to Sydney from 2 a. m. to 9 when it went off the air."

Mr. Purcell uses a Miami-built set, the Kent All-Wave, which tunes in the 19, 20, 25, 31 and 49 meter bands as well as the regular broadcast band, all on one 360 degree dial.

"I certainly was glad to learn that **RADEX** is devoting space to the short-wave fans," says E. P. Palmer, 84 Cornell Street, Williston Park, L. I., New York. "I want to thank you for the excellent list of s. w. stations in the October issue. I have been interested in s. w. reception for nearly two years and since last May have been using a Pilot Dragon with good results. I am enclosing a partial list

of stations received. One of the bugaboos of s. w. reception is trying to identify foreign stations when you are unable to understand their language. Fading is another annoyance that is hard to get used to, particularly the rapid, high-speed type of fading characteristic of the short waves. By the use of a V-shaped antenna, a great deal of this fading can be overcome and I think RADEX would be doing the s. w. fans a very great favor if it would run an article on antennas for s. w. reception." Mr. Palmer's suggestion is respectfully referred to Mr. Dashiell who may be able to dig up some data and experiences regarding aerials for short waves. On the b. c. band, Mr. Palmer says he gets excellent results with absolute ten-kcs. selectivity and plenty of sensitivity. Mr. Palmer submits a fine list of s. w. stations with the dial setting for the Pilot Dragon. In submitting lists of s. w. stations received, may we ask our readers to give the frequency or wave-length, and if possible, the day and hour of the week on which they were received? The time received is of the utmost importance in s. w. work. And, by the way, do our readers feel that it is going to be possible to discuss s. w. work in terms of frequency rather than wave length?

Just Getting a Start

"I have been DXing for seven months," says Harold M. Wheeler, 410 Marston Ave., Madison, Wis., "only about two of which were DX weather, so I am just beginning. But I have a broadcast band log of 310 stations. I have a shortwave log of 231 stations, my best catch on the broadcast band, by far, is 2YA at Wellington, N. Z., on 720 keys. My shortwave luck with a converter has been fairly good, and all summer I listened to Germany, England, France, Italy, Spain, Portugal, Argentina, Australia, Japan, Mexico, Costa Rica, and amateurs from everywhere. I get the biggest kick, however, out of foreign reception on

the broadcast band, because, after all, that is the real DX. I have a Philco, Model 112, eleven tubes and a Kennedy Converter. I use one of your filtered aerials for broadcast band work, but get best results on shortwave with a double sixteen foot antenna in my attic. I would like to hear from anyone who has tried the Tobe Filterizer kit described in your September issue. I would also like to have someone send me the address of the Transcontinental DX Club and would like to correspond with anyone who would like to help out a beginner."

Here's the Address

The address of the Transcontinental Radio DX Club is 4 Vincent Street, Hawthorne, N. J. Ralph H. Schiller is President. This Club reports that a total of 46 stations took part in their "United States on the Air" DX series on October 15th. The Club is now arranging for a similar series for the Canadian stations on Saturday morning, December 3rd. The actual stations taking part are not yet known but undoubtedly DXers ought to be able to add a number of the northern stations to their logs between the hours of midnight and 6 a. m. EST, the morning of December 3rd.

"May I suggest to the shortwave readers of RADEX," writes C. Gates, 514 Ivy St., Pittsburgh, Pa., "that they listen in on the twenty-meter band some Sunday afternoon? It is very interesting, and even with adverse weather conditions, amateur stations from all over the United States can be received. Here is a list of stations I have received on that band: VE1CO, W5QL, VE1BT, VE1DQ, VE1BL, G5BY, VE4AR, CM2QJ, CM8QS, W9CJJ, W4FI, W4DJ, W5AFI, W6EN, W6CME, W6ACN, W9BRD, VE3BK, W9BRQ, W6QV, W5VA, W6KG, VE1HA, W9LD, W9ENU, W5ASI, W5BOC, W4ADR. Station W9CJJ, of Denver, comes in like a ton of bricks.

"Can you tell me if FYA uses directional antennae for their Asiatic

and African transmissions? Have received both. Also, would appreciate identification of two telephone stations on approximately fifteen and fifteen and a half meters that carried on conversation this morning (October 28) from eight till ten. Language sounded somewhat like German, but don't believe it was German. In calling the station on the lower wave repeated 'Allo' three times. Man and woman announcer alternating. I didn't hear any call letters given."

"Just recently I took the Government examination and am now a licensed amateur radio operator and will soon get my station license from the F. R. C.," advises A. R. Van Compernelle, 618-A No. Baker St., Santa Ana, Calif. "Some other DXers I know are also members of the A. R. R. L. and will sooner or later become amateurs. A great many DXers who become shortwave fans are going to become interested in amateur radio when they hear the amateur phone stations talking to each other. According to the latest count there are over 33,000 amateur stations in the U. S. A. Mr. William Kirchmann, your W8BOZ is Raymond M. Rapp, 8 Kenmore St., Warren, Pa., according to my amateur call book, and W3SM is Robert Adams 3rd, 1302 Keswick Ave., Haddon Heights, N. J."

We Got Him Into It

"It was entirely due to your articles and information that I decided to purchase a shortwave converter," admits Richard W. Mitchell, 542 Ste. Angele St., Three Rivers, Que. "After trying several makes I got hold of a 1930 Silver-Marshall No. 738 Superhet converter and connected it with my Majestic Model 92. The results have been remarkable. I am able to pick up Rome and Chelmsford eight nights out of ten when I come home from the office at 5:30 p. m. EST."

"I bought a Marconi superheterodyne all-wave set about the end of October last year and started to log about November 1st, and so in less



Irene Taylor, lovely blues singer from Chicago Wednesdays at 8:30 and Saturdays at 11:30 p. m. EST on NBC-WEAF.

than a year, in looking over my log, I find I have 140 b. c. stations to my credit and 26 shortwave," writes E. W. Law, 10439 69th Ave., Edmonton, Alta. "However, I am afraid I have not made very good success as far as the shortwave stations are concerned, as the only ones I have had, outside of the U. S. A., are two in London, England, one in Rome, two in Honolulu, and have lately been getting VE9GW, Bowmanville, Ont."

"I recently logged two shortwave stations on a b. c. set, which I have not read of being picked up by other RADEX readers," reports Stowell Stowell, Rockledge Ave., Fox Chase, Pa. "They are WIXO and WEY. WIXO is the portable station used with WMP, the Massachusetts state police station in Boston. When I picked it up it was testing with WMP. The only time I received WEY was when I heard it sign off early one morning. This brings my total to 13

(Continued on page 32)

FIRST AID IN TIME OF TROUBLE • • •

By the TECHNICAL EDITOR

Knife Edge Selectivity

I have a Kolster a.c. model 6 J radio set, a Jensen dynamic speaker and a 90 foot outdoor antenna. How can I get knife edge selectivity on this set, especially in the lower wave lengths?

This set has a variometer tuned input which is not the most selective method in the world, and therefore we do not believe the set can be made much more sensitive than it is at present. You might try placing a small fixed condenser (.00025 mfd. capacity) in series with your antenna, and this should increase the selectivity on the lower wave lengths.

If you wish to change the antenna input circuit in your set, you might experiment by replacing the variometer and antenna inductance with a coil wound on a tube that is about 2½ inches in diameter and three inches in length. Place 12 turns of No. 28 silk covered wire on one end for a primary, and ¼ inch away begin a secondary coil consisting of 53 turns. Connect the primary between the antenna and ground, and the secondary between the grid of the first -26 tube and the ground. Tune the secondary with a .0005 variable condenser if that capacity is not now in your set at this point. If all the lower waves are not heard remove a few turns from the secondary coil.

Phonograph and Microphone

I would like to know how to use a phonograph pickup on my model 90 Majestic radio set. I have tried but I don't seem to be able to make it work. Also, my microphone does not work with a detector adapter plug, and will not reproduce through the loud speaker.

The phonograph pickup device and microphone output are connected to

the set in identical manners. See the answer to a previous question in this issue showing how to make the attachment to an Atwater Kent receiver. Some changes, however, will be necessary in your case.

There is an input transformer connected to the plate circuit of the detector (-27) tube. It has a split secondary, the center of which is grounded. Open this ground lead and insert the two binding posts as explained in the previous answer. So much for the phonograph attachment.

You must use an output transformer with your microphone. Place the microphone in series with the primary of the transformer and two dry cells of battery. Run two leads from the secondary of the audio transformer and insert them in the two binding posts previously mentioned in the same manner you connect the phonograph pickup leads. In your set it is best to remove the detector tube when the phonograph or microphone is being used, for you do not ground any cathodes as mentioned in the previous answer.

Delco System Interferes

Please tell me what I can do to keep my 32-volt Delco electric system from interfering so much with my 6-tube Crosley battery set—1929 model.

The trouble does not lie in the set, although if it were more perfectly shielded the interference would be somewhat less. It is not quite practicable, however, to make such changes in the set. We presume you get this interference when the battery charger is working, or other motors and power devices are operating. You will get certain clicks when switches and starters are turned on, but these cannot well be eliminated. If the trouble is due to sparking of brushes

on the commutators of the generator when charging the storage batteries, or on motors used for power purposes, some remedy is possible. Brushes and commutators should work smoothly and perfectly so as to reduce sparking as far as possible.

It will be necessary to connect condensers across terminals and use certain choke coils to absorb the high frequency sparking that takes place. We suggest that you write the Tobe Deutschmann Corporation, Canton, Mass., for information about their Filterettes which can be connected to your sparking devices and thus absorb a great deal of the interference. This concern is expert at this type of radio noise elimination.

Signals Almost Inaudible

I have a My Own midget set that does not give the volume it has had before. The stations are almost inaudible, but there is no noise in the speaker. I have had a new by-pass condenser installed and it helped the volume a bit

Loss of signal strength may be caused by several sources. The first, of course, is the suspicion of worn-out tubes. These should be tested—the two -24s and the two -27s, and replaced if at fault. Next we should suspect any one of the grid resistances and others used in the circuit. A failure of some fixed condenser will give much trouble. A broken or burned out transformer primary or speaker frequently does not stop all signals, but greatly diminishes them in volume. Have the windings tested not only for breaks but for short-circuits between coils and metal covers.

A breakdown in the power unit may be the cause, for the plates of the tubes may not be getting their proper voltage or the grid bias of a tube may be too negative or too positive. The potentials being supplied each tube should be tested with a voltmeter when the set is being used. It is possible that an electrolytic condenser is defective or the voltage



Ohman and Arden, piano duo, Sundays at 9:45 p. m. EST over NBC and WEAf network.

divider may have a break in the resistance coils at some vital place. All these things should be tested carefully with a voltmeter for proper operating voltages. A careful test of tubes and operating voltages for filaments, grids and plates should soon disclose the source of failure.

Power Line Interference

I live beside a high tension power line which interferes with radio reception. The power company has made some tests and suggestions, one being the use of a new design for antennas using transformers in the circuit. They say the electric field around the wires does not extend far enough away to give much trouble. What can you suggest?

If your receiver is well shielded the trouble is picked up almost entirely by your antenna and ground lead wires. Try using a metallic shielded wire for ground and leadin from the antenna. The new type of aerial, suggested by the company, may be of

benefit. The Kolster Radio Corporation is now furnishing all their sets with a new antenna Rejctostatic which is said to eliminate much of the trouble you are experiencing. Write to them at 67 Broad Street, in New York City for information and prices on this new device.

High tension power lines are surrounded by great electrical fields and the lines of force extend out sufficiently far to affect a sensitive radio receiver. We have heard that some success has been had with an antenna curtain, and you might be justified in experimenting with this system. A wire is hung parallel to the power line and slightly higher. It should be about 75 feet in length. Hanging down at two-foot intervals are vertical wires that are grounded at their lower ends. The radio antenna is then placed behind this curtain and at right angles to it. The antenna must not be any longer than the curtain, or about 75 feet. The leadin wire must be carefully shielded with grounded metal covering. The antenna must not be as high as the top of the curtain. If space is available this device, at least, will be an inexpensive and interesting experiment.

Phone Adapter Changes Tuning

I use the I.C.A. headphone adapter in my Atwater Kent a.c. set but it changes the tuning somewhat when between 1300 and 1500 kilocycles. It seems to me, also, that the telephones do not have as much power as they should.

The I.C.A. adapter connects to the grid input circuit of one of the power amplifier tubes, and therefore the gain due to power amplification, such as the -47 tube in your set, is lost. It is likely that the change in tuning characteristics is due to the added circuit in the grid caused by the introduction of the adapter. Are you using it, perhaps, in the detector tube socket? Try attaching a 0.5 fixed condenser in series at each phone cord tip and then connecting them to the plates of the two power tubes. This

is a capacity coupling and will eliminate the change in tuning on the dial.

Slow Heating and Noisy

My model 52 Zenith receiver does not start to work perfectly until some time after it has been turned on. Also, there is some noise when the volume control knob is turned. Why is this trouble experienced?

All sets require some moments to warm up, that is, the tube filaments heat cathode heaters surrounding the filament, and they do not start emitting electrons until very hot. This takes about 20 to 30 seconds with some older tubes. New quick heating tubes are now available.

The noise is in your volume control. Inspect and clean it, if possible, and place a bit of clock oil on the wire resistance, if of that type. If it is a carbon resistance, the parts may be packed and this will require a new control.

Phonograph Attachment

I have a model 89 Atwater Kent radio receiver but it is not equipped with a phonograph connection. Is it possible to make a change in the set so that I can use a phonograph attachment?

The model 89 Atwater Kent receiver does not have the phonograph outlet connections and switch that are provided on the model 89-P. Otherwise the two sets are identical.

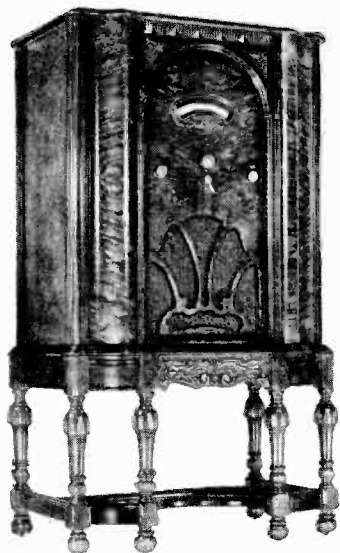
Your set, the model 89, has a volume control which is a potentiometer with moving arm to vary the resistance. This arm connects to the grid of the first audio tube—a -27. One end of the resistance in the control is grounded to the chassis. Cut or open this grounded circuit and run a separate wire from the resistance to a binding post placed at a convenient place in the cabinet. It must be well insulated from the chassis, of course. Place another binding post adjacent to the first and connect it to some grounded point on the chassis.

When the phonograph attachment
(Continued on page 33)

LOOKING OVER *The* MARKET

As Radio Develops

THE All-Wave Set with the Magic Dial is the intriguing name of the new 11-tube Stewart-Warner Superheterodyne Receiver. The dial is of entirely new design with the four scales for the four bands being printed one above the other. Only one of these scales may appear at a time, however, in the arc-shaped window in the panel. The four scales are 15 to 30 meters, 30 to 75, 75 to 195 and 550 kcs. to 1600. A single band-selector switch moves any one of these scales into view and at the same time changes the coils accordingly. The main control knob or station-selector controls the tuning for all four scales. The advantage of the Magic Dial lies in its simplicity and the fact that the scale for the particular band in use is the only one visible thus eliminating the confusion due to several different scales visible at the same time.



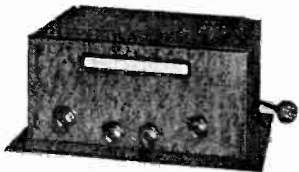
Stewart-Warner Master All-Wave.

The Stewart-Warner has two-speed tuning, that is by pushing in or pulling out the tuning knob, the gear ratio is changed from 8 to 1 down to 50 to 1. First speed enables the operator to turn from one end of the scale to the other very rapidly while second speed enables him to tune to hairline limits for razor-edge selectivity so essential in the short waves. Automatic volume control and automatic tone control are provided. The former keeps the volume level automatically regardless of the proximity of station or strength of signal. The latter automatically increases the base response at low volume levels so that it registers on the ear. By pulling out or pushing in the volume control knob a local-distance switch changes the sensitivity of the set.

The circuit is said to be entirely new; the tube equipment includes four -56, one -57, three -58, two PZ output pentodes and one -80 type rectifier.

Succeeds the "Thrill Box"

Our readers will recall that a large number of the excellent records in short wave reception of which they have read in this magazine, were made on the National receiver. The old SW-45 made by the National Company, Inc., of Malden, Mass., has been superseded by the new SW-58. In the new set the type -58 pentodes are used in the r. f. and detector circuits (-34 in the d. c. model). The new tubes, the manufacturers say, contribute materially to the high efficiency of the circuit, and permit a degree of selectivity and sensitivity that have heretofore not been realized. The coils are available in various sets covering from 12 to 2000 meters and band-spread coils can be obtained for special portions of the frequency spectrum. A special tuning condenser makes it possible to isolate completely the input and output circuits of the



The National SW-58 is made in both A.C. and D.C. models.

r. f. stage which is said to result in a perfectly stable system even at the highest frequencies. This manufacturer thinks that switching devices necessarily introduce losses and therefore equips the SW-58 with plug-in coils in both a. c. and d. c. models. The receiver is constructed for use with a separate power-pack to prevent the excessive shielding otherwise necessary in the r. f. and detector circuits. The dial is full vision or open scale arrangement. The scale is seven inches long permitting greater accuracy in reading. The pointer moves across the entire length horizontally.

Apartment House Aerial

An aerial for the roofs of apartment houses where it is not possible to erect a long wire, is being produced by The Radio Service Co., of South Bend, Indiana. This antenna system uses a metal shielded lead-in wire with two transformers for elimination of

man-made static. The standard for the antenna is of threaded pipe construction. At a height of 15 feet or more two cross arms are supported which carry the aerial wire. These cross arms are 42 inches apart and four feet long. The aerial is woven back and forth through the cross arms using 42 feet of Belden chap wire. One of the transformers is mounted on a cross arm and connected to the aerial and to the shielded lead-in. The latter then runs to the other transformer at the set. This device can be furnished with multiple outlets so that five different radio sets may be used on the same aerial.

The Four-Pillar Tubes

The accompanying drawing illustrates the patented four-pillar construction of the Eveready Raytheon tubes manufactured by the National Carbon Co., New York. The elements in these tubes are held rigidly in position by four pillars instead of the two usually found in other tubes. Because of this construction these tubes will stand shipment in the set, and are particularly desirable in automobile radios where tubes are subject to constant jolts and vibration. Other points claimed for the Eveready tubes are: large clearances between electrodes which help to insure uni-

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| <input type="checkbox"/> One radio map of North America..... | 15c |
| <input type="checkbox"/> One Radio World Map and Time Converter..... | 25c |
| <input type="checkbox"/> One copy of the next RADEX..... | 25c |
| <input type="checkbox"/> Trial subscription, next five issues of RADEX..... | \$1.00 |
| <input type="checkbox"/> One year's subscription to RADEX, 10 issues and Time Converter, free..... | 1.75 |
| <input type="checkbox"/> Two subscriptions to RADEX with one leatherette cover and Time Converter, both free..... | 3.50 |
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| <input type="checkbox"/> Leatherette Cover..... | .50 |

Write Name Plainly.....

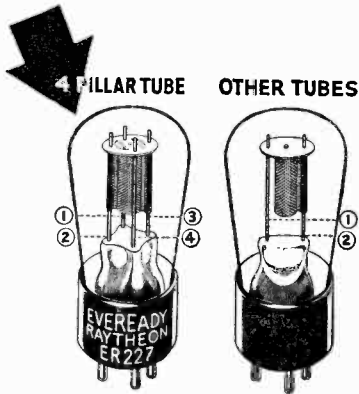
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City and State.....

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NEW TUBES

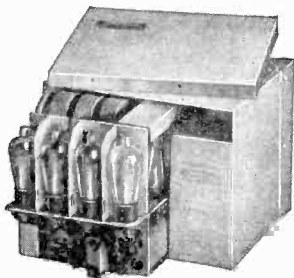
...for OLD?



form characteristics; large radiating area to dissipate heat, contributing to safe operating temperature and long life. All of the latest type tubes are furnished with this construction.

An Automobile Radio

The new Models 88 and 61 "Motorola" Auto Radios, manufactured by the Galvin Mfg. Co., 847 West Harrison St., Chicago, are eight and six-tube sets respectively. The power supply and receiver are in the same housing, the size being but 8x8x9½ inches. No B batteries are necessary. The station selector is mounted on the steering post. Both models are superheterodyne with automatic volume control. The dynamic speaker can be mounted on the cowl. It is claimed that the set is so thoroughly shielded that it could be mounted in the engine compartment with little or no chassis pick-up. The set comes ready to install with all cables connected.



The "Motorola" Superheterodyne.

IN most radio sets the new tubes, types 46, 56, 57 and 58, may be used to replace types -45, -27, -24 and -35, respectively. While there is not always an advantage in replacing these older tubes with newer types, there is some economy of current, for all of the new tubes, with the exception of the type 46, draw only 1.0 ampere while the older tubes use 1.75 amperes. The filament requires a potential of 2.5 volts in all the tubes.

Type 56 may be substituted for type -27 without change, for both tubes use 5-prong bases which fit all -27 sockets. The circuit wiring of the set needs no alterations. The use of the 56 tube in replacing the -27 is recommended because of the greatly improved performance of the newer type.

Type 57 cannot be substituted for type -24 unless a special adapter is used, for the 57 tube has a 6-prong base that will not fit the 5-prong receptacle used by the -24. Both tubes have the control-grid caps at the top. The suppressor-grid and cathode of type 57 are connected together and brought down through the new adapter to the cathode prong of its base. Simply remove the -24 tube, insert the adapter, and fit the 6-prong 57 tube into the top.

The same adapter is used to substitute the 58 type tube for the type -35 or -51. The new 58 is an improvement over the -35. And while the 58 can also be substituted for the -24, it is not always to be recommended. Many circuits were improved when type -35 tube replaced the -24 in radio and intermediate frequency circuits a year or so ago, and the electrical balance of those circuits may not always permit the combination of -24s and 58s; the

(Continued on page 32)

CIRCLING THE GLOBE *with* *the DXers . . .* *Records Great and Small*

WHAT a "grand and glorious feeling" when you sit down at the dials and suddenly bring in your first real foreigner. Like that fellow in the "Lost Chord"—"seated one day at the organ, I was weary and ill at ease"—you know how it goes. Well, our first letter this month tells about just such an experience. It has a moral too. If this listener hadn't just got the October RADEX the day before with the foreign broadcasters arranged by frequencies, she would not have tuned in 635 kcs. and got the big thrill of her DX life.

Let us repeat here what we have already said in the article on the short waves: The data regarding stations is voluminous enough to fill half a dozen books of our size. It is absolutely necessary for us to subdivide this information and publish a part of it in each issue. In October there was the list of trans-Pacific stations arranged by frequencies. In November, we gave a list of all the world stations in the broadcast band arranged by frequencies. The world broadcasters were published by countries and cities in April, No. 58. This list with corrections will appear again in an early number.

Now let's see what our DXers have been doing and—"Women first."

"Received my first Australian broadcaster, 5CK, this morning," records Mrs. L. R. Ledbetter, 1109 Grammar Street, Vicksburg, Miss. "I certainly was surprised; I had expected to have to strain my ears if I should hear an Australian whereas it was too loud for more than half volume on the speaker (excepting the times, of course, when it faded away) and reception got decidedly better from 4:30 a. m. until 5:30. I kept this station on 635 kcs. until the sun could be seen shining at 6:10 when the signal was

drowned by local interference. I give credit to the October RADEX—I bought it yesterday—and that was my first attempt at real DX.

"I have a Fada Model 45 Superhet with about 110 feet of aerial and a water-pipe ground. The aerial isn't over 45 or 50 feet high. Now that I know I can, under not very exceptional conditions, get a 7500 watt station that far away, I feel sure that patience, good radios and aerials under better conditions would bring in even that 'absurd 2-ZI.' How is this for selectivity—CFCN on 985 with WBZ on 990 and KDKA on 980 both coming in and also KNX on 1050 and XES on 1055 with no interference with each other?"

31 New Ones in 31 Days

"I started off this season with a bang," gloats Nancy Lee Saxton, 317 N. Sergeant St., Joplin, Mo. "From September 15th to October 16th, I logged 31 new stations. I thought this rather good for the first of the season and it brings my total up to 405 stations with 185 verified. Some of my best are CKPR, CMBG, CMBY, CMAF, CMQ, KDFN, KOAC, WAAF and 10-AB. I have every state but Maine, New Hampshire, Vermont, Rhode Island and Delaware and every channel from 540 to 1500. Starting September 11th, I tried to see how many days straight I could get KFI and I went from then to June 19th without missing a day. I agree with you that anything may happen in radio. Tonight I couldn't get either WLW, WMAQ or WGN but both CMK and CMAF were coming in fine." Miss Saxton adds this P. S.: "How about printing more letters from the women DXers?" We have a great many women readers and have published a number of their records but we will be delighted to receive more of them.

"I have been a DXer for over two

years," says E. Lloyd Whitmer, 121B S.E. 4th St., Evansville, Ind. "As I live in an apartment in the heart of the business district, reception conditions are very bad, and I have no choice of antenna installations. However, under these conditions I have logged 230 stations; 219 in the U. S. A., 4 in Canada, 3 in Mexico, and 2 in Cuba. I have heard stations in 40 states and my cities total 158. 39 of my stations logged have been ones using 100 watts power or less. I have used Atwater Kent radios exclusively in my DXing (Models 10, 32, 35 and 55) and am well pleased with their performance. At present I am using a Model 55, but am contemplating procuring a Model 72. I would appreciate hearing, through RADEX, from owners of either of these two models as to their results."

Nine JO's in One Day

"On the morning of Sunday, September 25th, I picked up these Japanese: JOAK, JOBK, JOCK, JOFK, JOIK, JOJK, JOLK, JQAK, JFAK, JOHK," reports Don Townsend, 1421 Arch St., Berkeley, Calif. "All of these came in loud enough to be heard across the room. JQAK was weakest. 5CK of Crystal Brook, Australia, came in very good. All talking distinctly heard and music good, almost no interference. It came in better than most of the Japanese. All of these were received between 3:30 and 4:05 a. m. PST. I got dope for verifications on JQAK, JOLK, JOJK, JOBK, JOHK and JFAK. I have already verified 5CK and the Japs. I have written twice before for verifications to JFAK, JOBK, JOHK, but they did not answer."

With a One-Tuber

"I use a home-made one-tube a.c. receiver, using a 227 tube with 22½ volts B battery for the plate voltage," advises Robert Loucks, 1048 Alcott Ave., Toledo, Ohio. "I built the set on August 3, 1932, and my total stations is 209 to October 9th, with 28 verified. I only write to the stations of 250 watts and under or those which are

over 1000 miles. I have had 50 stations of 250 watts and under, the best of which are: KGEK, Yuma, Colo., 100 watts; CKPR, Fort William, Ont., 50 watts; KFJZ, Fort Worth, Texas, 100 watts; WENC, Americus, Ga., 100 watts; WRBL, Columbus, Ga., 100 watts; WHET, Troy, Ala., 100 watts; KCMC, Texarkana, Ark., 100 watts. All of these are verified."

It Made a Big Difference

"I picked up RADEX a year ago today and believe me I haven't found one yet that will beat it," writes George E. Lowrey, David St., Brampton, Ont. "I only had about 75 stations then, half of them I didn't know just where they were located. But now I have 303 stations, with 112 verified. My very best catches are KGEK, Yuma, Colo., a 100-watter; KFPM, Greenville, Texas, a 15-watter; KRMD, Shreveport, La., a 50-watter, now 100 watts; KFJZ, Fort Worth, Texas, a 100-watter. These I have never heard twice and never expect to again. I would like to correspond with another DXer in Ontario, using a Rogers 400 model, 7-tube."

Tuning Amateurs on B. C. Set

R. M. Ballard of Visalia, Calif., offers this suggestion to owners of the Majestic 52: The amateurs can be received on this set by opening the aerial compensator very wide. This will drop you into the 160 meter amateur band. Tune until the greatest signal of the amateur is heard. Mr. Ballard has received ten amateurs by this method. He uses 300 feet of aerial and this may play some part. Mr. Ballard wants to know which Havana station was broadcasting on 1235 kcs. the morning of October 16th at 3:30 a. m. EST. The last number was a woman singing. The announcement was Havana but a station in the West drowned out the call letters.

"I have a Scott and specialize on the broadcast band," writes Abe Cohen, Library Dept., Seattle Post Intelligencer, Seattle, Wash. "Since April 14, 1931, when I received my set, I have logged 282 stations in 42

states and 96 out of 97 channels. With the exception of a small station in Portland, which just broadcasts a couple of hours during the afternoon (and I hope to get that this winter) I have completely logged Washington, Oregon, Idaho, Montana, Wyoming, Utah, Nevada and Alaska. I now have logged about 90% of the stations in and west of the Rockies."

Another Singleton

"I have read a lot in your magazine about small set DXers, so I've decided to write you about my activities," says Harvey Reid, 371 Willard Ave., Toronto, Ont. "I made a one-tube regenerative receiver, using a UY224, which sure pulls in the DX. With it I have logged 175 stations and am adding to this each day. I have four 50-watters, and about twenty 100-watters. I have received KFI, KXA, CMK, XEW, XER, XED, CFRN and many other distant stations. I started buying RADEX in February, 1932, and haven't missed an edition. I would be glad to communicate with fellow DXers about 15 years old."

"I have, I think, some good DX for my set that will compare with any comers," writes L. A. Brodhecker, Box 82, Brownstown, Ind. "I have a six cylinder General Motors outfit, midget job, with which I have logged 162 stations so far. Ten of them are from California, one from Washington State, one from Oregon, one from Nevada, one from Utah, Porto Rico, also several in Havana, also from Florida and Texas in the south, to Canadian stations in the north, and from Connecticut to California. I use an L type aerial, about 160 feet in length."

XFC is Holding Out

"I have been a DX hound for about twelve years," admits Myron A. Sturm, 922 Eastwood Ave., Chicago, Ill. "I have gone in for the elusive verification only since the first of this year. I have no record about which to brag, having logged only 170 stations since that date. However, I can boast a total of 169 verifications, the

only hold-out being XFC down in old Aguascalientes. The reception was logged three months ago and I have written three times, but I have just 'begun to fight.'"

"The DX season here started off with a bang on October 2nd and 3rd," advises Robert E. Moran, 1309 Wellington St., Ottawa, Ont. "That evening and morning I was very successful in pulling in YV1BC, Caracas, Venezuela, which came in like a local, and also WKAQ at San Juan, using a temporary power of 700 watts, due to conditions through storm damage. WPRO on 1200 kcys., 100 watts, comes booming in here with the strength of a 100-watt local, and this is in the daytime I'm talking about. Queer, eh?"

Back After Eight Years

"I have just rejoined the DXers," informs Gordon S. White, Rt. 4, Monroe, Mich., "having been gone since the early days in 1923. Am now working nights with plenty of opportunity to DX. So far have 38 states in about two weeks, also Canada, Mexico, Porto Rico, on a Model 20 Philco, built in 1928. I get a lot of 100-watters early in the morning as far as the west coast, but am bothered a lot with man-made static. I am going to buy a short-wave converter later on. Are they practical or would you recommend an all-wave set?"

As will be seen from many letters published in the short-wave department, many excellent records are being made with converters. An all-wave set is practically only a broadcast set and converter housed in the same cabinet and with the advantage of changing from band to band by turning a knob.

"I commenced logging last February and to date I have 175 stations which cover 34 states, District of Columbia, Mexico, Cuba and Canada," writes Harold Tynes, Russellville, Ky. "I expect to log at least six more states during the coming winter and also to enlarge my log to 500 stations. I have a Majestic, Model 20, 8 tubes, and it sure does speak well of itself.

I would like to correspond with DX fans over the United States, or any other place for that matter, and promise to answer every letter I receive."

Tries the Ground Waves

F. Martyn, 695 Nassau St., Winnipeg, Man., has been doing some experimenting with underground aeri-als, having tried successfully both an iron pipe driven seven feet into the earth and also 200 feet of copper wire buried 24 inches deep. He has a total of 306 stations with 130 verified.

"'DX as a Hobby' in the October issue was fine for a beginner," thinks Reeve Owen, 113 West Wall St., Calhoun, Ga. He has logged 251 stations from 46 states and six countries on his Crosley "Buddyboy" and thinks this is nearly a record for this set.

Every state but Delaware, is the record of Rexford Newcomb, Jr., 605 Nevada St., Urbana, Ill. With the time on the air now given in RADEX, he ought to be able to log WILM or WDEL before long. Rex wants information about "The Flying Dutchman," an orchestra on 920 kcs. which he received the evening of October 2nd. His total log is 364 most of which he has had to pull in between his classes in Ceramic Engineering at the University of Illinois. Other DXers in college, please write.

Who Uses This One?

"I'm wondering if any other DXer uses an 'Autocrat,'" remarks Glenn E. Mitchell, 1088 East 16th Ave., Columbus, Ohio. "It was built by Shaffer-Mann Co., of Detroit. It is a remarkable receiver. I have had WWL and WFAA at high noon." The first week of the new season adds ten stations to Glenn's list, which now totals 533.

"What was the Spanish-speaking station on 796 kcs. Sunday, Sept. 25th, from 12:15 to 12:50 a. m. EST, with a program of military music by a Spanish orchestra?" asks Earl R.

Roberts, 105 Gomber Ave., Cambridge, Ohio. "KGO interfered somewhat at times and the station was weak, fading entirely out at intervals."

Wants Help With Short Waves

Chas. K. Burkinshaw, 2856 Holt Street, Rosemount, Quebec, has an Echophone Super, 9 tubes, long and short wave. He is very much pleased with the set but does not get the results on the short waves which he thinks he should because of his lack of experience in tuning. He would appreciate any hints he may receive from other users of the Echophone.

Leonard Trisdorfer, 2056 East 24th St., Brooklyn, N. Y., has a tent-tube Sparton No. 737 which he thinks ought to give him better results than it does and would like to hear from other owners of this model.

"On January 15, 1932, I bought a Model 62 Kennedy radio, and to date have a log of 384 stations, covering 44 states, Canada, Cuba and Mexico," reports Roy V. Heater, 7805 S. Peoria St., Chicago, Ill.

"Received CMBY at 2:08 this morning, October 23rd, and CMCA at 2:48 a. m., both on 1225 keys., and signing in English," says R. H. Corson, Fern Hall, Cleveland, Ohio.

Some Possible Foreign DX

In addition to the "Canada on the Air" DX programs for Saturday, December 3rd, the Transcontinental Radio DX Club is negotiating with the following stations for special programs. It is not yet possible to say how many of them will cooperate but it will do no harm for DXers to try to tune them in on the dates and at the hours given.

LT3, Sunday, Dec. 11th, from 3 to 4 a. m.; CPX, Monday, 12th, 3 to 4; LS5, Tuesday, 13th, 2 to 3; PRAK, Wednesday, 14th, 2 to 3; CX26, Thursday, 15th, 2 to 3; OAX, Friday, 16th, 3 to 4; and HJN, Saturday, 17th, 3 to 4. All times are given in Eastern Standard and the hours are a. m.

The PUZZLE CORNER

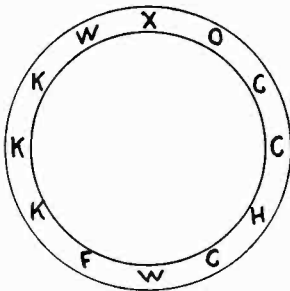
That was a pretty stiff puzzle that Messrs. Welsh and Moyer gave us in the November number. If you couldn't solve it, here is the answer: Stations around the rim, W T O C-CK G W-WSMK-KWLC-CHCK-KFPW; on the spokes, WOWO, CKMO, WDBO, KSOO, CFBO and KFUO.

"The following problem in long division," writes the originator, George Raba, of Stevensville, Michigan, "is based upon a favorite dramatic team heard in this section of the U. S. A., 'Dan and Sylvia.' Change the letters into numbers from naught to nine inclusive.

```

      AND
    -----
  DAN | SYLVIA
      | SITA
      |-----
      | IVNI
      | ILTN
      |-----
      | TOVA
      | TOVA
      |-----
  
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And here is one contributed by Fred Pheseay, Inverness P. O., Skeena River, British Columbia. The letters arranged around the adjoining circle conceal three radio calls. Starting at a certain letter count round and round the circle clockwise, striking out every eleventh letter and the station calls will appear.



Chat And Comment

(Continued from page 18)

open). This makes the volume control act as a regeneration control. The increase in sensitivity that this arrangement gives is simply amazing. Just the other morning I had little CKPR in Fort William with only 50 watts so loud and clear at 2:05 a. m. you could have heard it outside the house! (That's too loud for two a. m.—Ed.) The same morning I had 26 stations over 2000 miles away in three hours—14 in California alone. But the increase in selectivity is even greater. On any night after six p. m., I can cut out the locals and get WBBM, WBAP, WCCO, WWL, WENR, WCFL and WJJD."

Mr. Todd has been DXing since April 1931 and has logged 467 stations in seven different countries. He would like to hear from other owners of Philco No. 20. He is now taking the course in the National Radio Institute and hopes before long to be a full-fledged radio engineer.

Those Filipinos

Station KZRM in Manila, Philippine Islands, advises us that they are on the air daily from 6:30 to 7:30 a. m., from 12:15 to 1:15 p. m. and from 3:00 to 10:30 p. m. They are using 50,000 watts in the antenna and broadcasting on 618.5 kcs. According to the RADEX Time Converter, listeners would have to pick up these programs the day before they were sent! In the Eastern Standard Zone, the above times would be 5:30 to 6:30 p. m., 11:15 p. m. to 12:15 a. m., and 2:00 to 9:30 a. m. respectively. Unfortunately KZRM states that they do not verify reception. Neither do they have stamps.

Carroll H. Weyrich, 6 N. Gorman Ave., Baltimore, Md., and several other readers, ask why we no longer list the Philippine stations in the Index by Frequencies. These stations, although they belong to the U. S., are so far away as to be really foreign stations. We try to include in

the frequency list only those stations that ought to be heard more or less regularly in this country. Many of our readers try to complete our different channels and it is hardly fair to list stations therein (and thus keep them from achieving 100%) which cannot be tuned in. By the way, how many have heard KZRM?

Need Uniform Rules

A debate is now raging over the position of this magazine in making the rule that stations are not to be counted the second time when they change call letters but may be counted again if they change locations. The correspondence on this subject will be analyzed and published in the January issue. In the meantime, we will be glad to receive arguments pro and con on this rule.

They Want to Know . . .

SAYS Paul Cintrat, 640 Fort Washington Ave., New York City: "I have been DXing for almost three years and have over 300 stations. Can you tell me what station I hear nearly every night between 920 kcs. and 910. I tune in on XEW on 910 and WWJ on 920 and between them comes a station, the language of which seems to be Spanish. Is it possible that this station is TIGR the 50-watter of San Juan, Costa Rica?" And from Raymond M. Bell, 616 S. Allen Street, State College, Pa., is this inquiry: "I've been hearing regularly a Spanish station on 915 between XEW and WWJ. Who, what and where is it?" Has any other reader identified this mysterious stranger? A number of our readers have heard TIGR and perhaps this is the station although it hardly seems likely that this little and distant station should come in so distinctly.

"On October 23rd I picked up a station coming in on from 1620 to 1640 kcs.," advises Edgar Lane, Clark, S. D. "It was broadcasting on a chain when I heard the following: A

talk on the choice of a world polo team; a talk by Gar Wood; one by Mr. Johnson of the American Legion, and then someone asked Babe Ruth what he thought of the Chicago Cubs. At one announcement I thought I heard the call letter as 'K.' If you can help me out on this I would appreciate it very much."

"Have any Arizonians tuned in foreign stations on the b.c. band?" inquires H. Cowan Drachman, Box 1870, Tucson, Ariz. "The general contention here is that southern Arizona is very bad for reception due to the extreme difficulty of getting a damp ground and naturally bad atmospheric conditions together with many ore deposits. I was wondering if this was just propoganda or if southern Arizona is naturally a bad place for DX. We have one advantage in being 500 miles away from any really powerful stations." How about it, Arizonians?

"Wonder if any RADEX readers have heard a station on about 1065 kcs., which comes in between WTIC and WTAM?" inquires Olin Coleman, Young Harris, Ga. "The two latter stations interfered with it so that I couldn't get the location. I would like to hear from any DXers and promise to answer all letters. I would especially like to hear from someone in Alaska or Hawaii."

"What is the possibility of receiving a harmonic of CKAC (730) on about 1250 kcs.?" inquires Ben Van Wormer, 664 Valley Road, Upper Montclair, N. J. "Tonight (October 14th) I heard a French speaking announcer on 1250. Please tell me if you think this might be a harmonic. I think I heard the announcer say something about the Canadian Pacific."

We are asking Mr. Dashiell to write a short article for the January number regarding this phenomenon of harmonics explaining to us in simple terms just what may be expected and what may not.

"I picked up YV1BC, Caracas, on their DX program, and since then

have been able to pick them up almost every night and as early as 6:00 p. m. EST," writes Joseph J. Connolly, 14203 231st St., Rosedale, N. Y., and asks, "Can any of your readers identify a Spanish speaking station on 625 kcys.? I picked it up October 17th at 9:00 p. m. EST."

"On the morning of October 23rd I listened to a program on 1360 kcys., somewhere between 2:30 and 3:30 a. m. It was presenting the Wilson Oil program with phonograph records. I believe this was KGIR or KGER. Could you help me?" asks Jack Aird, 12600 Pinehurst, Detroit, Mich. "I am 12 years old, and use a U. S. 5-tube superheterodyne."

"How is this for one aerial 75 feet long, with two sets on it—one set playing WCCO and the other EAQ in Spain?" Charles Horton, 1329 South Jefferson St., Saginaw, Mich. Well, if you ask us, we would say that it was some feat and ought to go in "Believe It or Not."

"Can you tell me," inquires Ermin David, RR 2, Gering, Nebr., "what station interferes with KLZ, Denver? This interference starts about 5:45 p. m. MST, and continues until midnight, at which time KLZ signs off."

New Tubes For Old

(Continued from page 25)

placement of -35s by 58s is better.

The type 46 tube can be used to replace the -45. An adapter has been designed to make the necessary connections between the 5-prong receptacle on the top of the 4-prong base beneath. The grid nearest the plate and the plate are connected together and brought down through the adapter to the plate prong. The 46 may be substituted when one -45 is used, or in a push-pull combination with two -45s.

It must be remembered that when substituting new tubes for older types the expected advantage may not be noticed. Some good radio circuits are carefully designed around the characteristics of certain tubes, and

the introducing of new types with slightly different characteristics may tend to upset the balance sufficiently to offset the beneficial results that otherwise might be obtained. In the average circuit, however, using types 56, 57 and 58 to replace types -27, -24 and -35 should prove generally satisfactory. The increased height of the new tubes because of the adapter will necessitate new shielding cans when types 57 or 58 are substituted.

Among the manufacturers of adapters are Alden Products Co., Brockton, Mass., and the Insuline Corp. of America, 25 Park Place, New York, N. Y. Dealers who should have them in stock are Federated Purchase, 25 Park Place, N. Y. City. Wholesale Service, 100 Sixth Ave., N. Y. City, Radolek Company, 601 W. Randolph St., Chicago, and Allied Radio Co., 831 W. Jackson Blvd., Chicago.

On The Short Waves

(Continued from page 19)

shortwave stations heard on a b. c. set."

"When the combination sets were first mooted a few years ago," writes Jim Hedley, 121 23rd W., North Vancouver, B. C., "I made up my mind to have one as soon as they came out. I bought a Stewart-Warner and while I didn't get quite the thrill I received when I built my first crystal set, it was enough to satisfy me that, sooner or later, the S. W. will come into its own with a bang once the public is educated to its oddities."

"I have had my radio for a year and a half and have tuned in on many stations from Russia to PRDA, Brazil, which is a rather wide range," says Edward Collins, 16 Balsam St., St. John's, Newfoundland. "I have an Atwater Kent, model 84, midget, and an A. K. model 93 shortwave converter."

"I have been DXing for about a year now and have been able to hear 257 stations in four countries," reports Bruce Levitt, 45 York St., St.

Catharines, Ont. "Included in this list are nine police shortwave stations. Not included in this list are eight amateur broadcasters. All these stations were heard on a b. c. set (Earl 31A)."

"I use the larger part of my radio time on the shortwave," says Fred B. Tuck, 15 Eaton Place, Bangor, Maine. "I am listening now to a program coming from Rome, Italy, 3:05 p. m. EST. I have tuned in Australia 45 times since June 4, 1932, Melbourne and Sydney, also many others."

The Human Side

(Continued from page 16)

Angeles, Tommy was billed as "The World's Youngest Baritone." During this period he attended concerts and recitals by eminent baritones, among them Reinald Werrenrath. He would sit with pencil and paper, eagerly take down notes, and return home to attempt those selections himself. His first professional appearance was at the Pacific Coast Radio Show, where aged fifteen, with a great big voice he sang "Toreador."

He played football at Loyola College, and starred in their entertainments. The family moved to Detroit in 1926, and he enrolled in the University there. Thereafter, he renewed radio connections, singing and announcing at stations WMBC and WJR. A serious illness interrupted his work, and after a great struggle to regain his health he went to New York to search for a suitable teacher, and found one in William Whitney. The latter spent much of his time at the New England Conservatory, and urged Tommy to take a complete course there. Tommy assented, and determined then and there his profession.

Having completed his course, he sang with Vincent Lopez and accompanied him on tour. Returning he joined Major Bowes at the Capitol Theatre. After an appearance at the Roxy, Tommy heard of the sudden

death of his favorite brother, whom he had always adored. He returned to Detroit, and sang his Requiem. After this disheartening experience, he returned to New York and absorbed himself in work.

He sums himself up as "just a crazy Irishman who likes to sing." He is stocky, grey-eyed, and has an infectious grin. . . loves classic music best and is convinced people are slowly becoming educated to it. . . his favorite book is "Story of San Michele". . . has great regard for the work of Andre Kostelanetz, who conducts the Threads of Happiness Orchestra. . . would rather eat potatoes and gravy than anything else. . . favorite colors are black, brown, and grey. . . won't sing without ring on little finger. . . is a bachelor. . . raves about football, and is an incurable fight fan.

At present Tommy may be heard over the C.B.S. each Tuesday at 9:15 P. M. EST.

First Aid

(Continued from page 22)

is used the two wires leading from it are connected to the two binding posts. When the radio set is to be used only these two leads are removed and the two binding posts connected together with a short piece of wire, or a switch can be arranged to connect the binding posts when the phonograph is not in use.

Locate the -24 automatic volume control tube, which is the front left-hand tube when looking down upon the set from the front. A wire should be run from the cathode connection of this tube's socket to a small switch and then grounded. Close the switch so as to ground the cathode when the phonograph is used, and open when the radio is used.

Last Minute Dx Programs

Monday, Dec. 5th, 11:00—Mid. AST
WKAQ, 1240, Puerto Rico
Saturday, Dec. 10th, Mid.—2:00 EST
CFCLC, 915, Prescott, Ont.

DECEMBER DX CALENDAR

A. M. time is given as of the night before. Thus early Monday morning programs are listed under Sunday night. See time conversion table on page 66.

Standard Time: Eastern E; Central C; Mountain M; Pacific P.

SUNDAY NIGHT

Dec. 4th

Mid.-2:00 E—CMCH, 1405, Havana, Cuba.
Mid.-2:00 P—KPCB, 650, Seattle, Wash.

Dec. 4th, 11th, 18th, 25th

11:30-Mid. C—KSOO, 1110, Sioux Falls, S. D.
Mid.-1:00 E—WSAZ, 5200, Huntington, W. Va.
Mid.-2:00 C—WGES, 1360, Chicago, Ill.

MONDAY NIGHT

Dec. 19th

4:30-6:30 M—10BI, 1200, Prince Albert, Sask.

Dec. 26th

2:00-3:00 M—KPOF, 880, Denver, Colo.
2:00-5:00 E—WAGM, 1420, Presque Isle, Me.

Dec. 5th, 12th, 19th, 26th

Mid.- P—CFJC, 1120, Kamloops, B. C.
Mid.-2:00 M—KOY, 1390, Phoenix, Ariz.
Mid.-2:30 E—WMIL, 1500, Brooklyn, N. Y.
Mid.-4:00 C—WBAZ, 1200, New Orleans, La.
5:00-6:00 E—WAWZ, 1350, Zarephath, N. J.
5:15-5:30 E—WHP, 1430, Harrisburg, Pa.

TUESDAY NIGHT

Dec. 6th

3:00-6:00 E—WOPI, 1500, Bristol, Tenn.

Dec. 13th

1:00-2:00 C—WJMS, 1420, Ironwood, Mich.

Dec. 27th

1:30-2:30 C—WCLO, 1200, Janesville, Wis.

Dec. 6th, 13th, 20th, 27th

11:00-Mid. C—XEHI, 1132, Monterrey, Mexico.
Mid.-1:00 P—CFJC, 1120, Kamloops, B. C.
Mid.-3:00 C—WSUI, 880, Iowa City, Iowa.
2:00-3:00 C—KFGQ, 1310, Boone, Iowa.

WEDNESDAY NIGHT

Nov. 30th

Mid.-2:00 C—KFJZ, 1370, Fort Worth, Texas.

Dec. 14th

Mid.-2:00 P—KIT, 1310, Yakima, Wash.
1:00-3:00 C—WHET, 1210, Troy, Ala.
3:00-5:00 C—KFBI, 1050, Abilene, Kans.

Dec. 7th, 14th, 21st, 28th

10:30-Mid. C—KFUO, 550, St. Louis, Mo.
11:00-Mid. C—WHBL, 1410, Sheboygan, Wis.
11:30-1:30 P—CKWX, 730, Vancouver, B. C.
Mid.- M—KFXJ, 1310, Grand Jet, Colo.
1:30-3:30 C—KGGF, 1420, Shawnee, Okla.

THURSDAY NIGHT

Dec. 1st

11:00-Mid. P—CHWK, 665, Chilliwack, B. C.
2:00-4:00 E—CMJF, 900, Camaguey, Cuba.

Dec. 8th

2:00-4:00 E—CMJN, 1270, Camaguey, Cuba.

Dec. 1st, 15th

11:30-3:00 E—WMBC, 1420, Detroit, Mich.
2:00-4:00 C—KASA, 1210, Elk City, Okla.

Dec. 1st, 15th, 29th

2:00-4:00 C—KGFK, 1500, Moorhead, Minn.

Dec. 1st, 8th, 15th, 22nd, 29th

Mid.-1:00 M—CFAC, 690, Calgary, Alta.
Mid.-1:00 E—WTEL, 1310, Philadelphia, Pa.
Mid.-2:00 P—CKOV, 1200, Kelowna, B. C.
Mid.-2:30 E—WMIL, 1500, Brooklyn, N. Y.

FRIDAY NIGHT

Dec. 2nd

2:00-4:00 E—CMJE, 1150, Camaguey, Cuba.
2:00-4:00 E—10BQ, 1200, Brantford, Ont.

Dec. 9th

Mid.-1:00 C—WJAG, 1060, Norfolk, Nebr.
1:00-3:00 M—10BI, 1200, Prince Albert, Sask.
2:00-4:00 C—WHBF, 1210, Rock Island, Ill.

Dec. 16th

3:00-4:00 M—KGCU, 1240, Man'lan, N. D.
5:00-6:00 E—WJBU, 1210, Lewisburg, Pa.

Dec. 2nd, 9th, 16th, 23rd, 30th

11:00-Mid. M—CFCN, 985, Calgary, Alta.
11:30-12:30 C—WCAJ, 500, Lincoln, Neb.
11:30-1:30 M—KGEK, 1200, Yuma, Colo.
Mid.-1:00 C—WENG, 1420, Americas, Ga.
1:00-3:00 E—CKKL, 580, Toronto, Ont.
1:00-4:00 E—CKPR, 890, Fort William, Ont.

SATURDAY NIGHT

Dec. 3rd

Mid.-2:00 C—WILL, 890, Urbana, Ill.
2:00-3:00 E—CHML, 880, Hamilton, Ont.
2:30-3:30 A—CHGS, 1120, Summerside, P. E. I.
4:00-5:00 C—CKX, 930, Brandon, Man.

Dec. 10th

1:00-3:00 E—CMCY, 1125, Havana, Cuba
1:00-3:00 M—XEJ, 1000, Juarez, Mex.
3:00-4:00 E—WTEL, 1310, Philadelphia, Pa.
4:00-5:00 E—CFBO, 890, St. John, N. B.

Dec. 17th

2:00-3:00 E—WTOC, 1260, Savannah, Ga.
3:00-4:00 E—WHAZ, 1300, Troy, N. Y.
3:00-5:00 C—KGGI, 1500, Corpus Christi, Tex.

Dec. 24th

10:30-6:00 C—WHBQ, 1370, Memphis, Tenn.
2:00-2:30 E—WFAS, 1210, White Plains, N. Y.
2:00-3:00 C—KDLR, 1210, Devils, Lake, N. D.

Dec. 31st

11:00-3:00 C—WIBW, 580, Topeka, Kans.

Dec. 10th, 24th

Mid.-2:00 C—KUSD, 890, Vermilion, S. D.
4:30-6:00 E—10BP, 1199, Wingham, Ont.

Dec. 3rd, 10th, 17th

12:30-2:30 M—10AB, 1200, Moose Jaw, Sask.

Dec. 3rd, 10th, 17th, 24th, 31st

7:30-10:30 —KGU, 750, Honolulu, T. H.
11:30-1:30 P—CKWX, 730, Vancouver, B. C.
11:30-2:00 C—WBBZ, 1200, Ponca City, Okla.
Mid.-12:30 C—WKY, 900, Oklahoma City, Okla.
Mid.-1:00 P—CFCT, 630, Victoria, B. C.
Mid.-1:00 P—KDB, 1500, Santa Barbara, Cal.
Mid.-1:00 P—KFXM, 1210, San Bernardino, Cal.
Mid.-1:00 C—WGBP, 630, Evansville, Ind.
Mid.-1:00 E—WJBK, 1370, Detroit, Mich.
Mid.-2:00 P—CKOV, 1200, Kelowna, B. C.
Mid.-2:00 C—KRLD, 1040, Dallas, Texas.
Mid.-2:00 E—WCAH, 1430, Columbus, Ohio.
Mid.-2:00 E—WGBI, 880, Scranton, Pa.
Mid.-2:00 C—WGES, 1360, Chicago, Ill.
Mid.-2:30 C—WOW, 590, Omaha, Neb.
12:01-3:00 E—CMCD, 925, Havana, Cuba.
Mid.-3:00 E—WWRL, 1500, Woodside, N. Y.
Mid.-5:00 E—WTFI, 1450, Athens, Ga.
12:15-1:30 C—WOMT, 1210, Mantowoc, Wis.
12:30-2:00 C—KMAC, 1370, San Antonio, Tex.
12:30-3:00 M—10BI, 1200, Prince Albert, Sask.
1:00 E—KQV, 1380, Pittsburgh, Pa.
1:00-2:00 M—KFXP, 920, Denver, Colo.
1:00-3:00 E—WIBC, 930, Glenside, Pa.
1:00-4:00 M—KGCC, 1310, Wolf Point, Mont.
1:00-5:00 C—WTRC, 1310, Elkhart, Ind.
2:00-3:00 C—WKBZ, 1500, Ludington, Mich.
2:00-4:00 M—KVOA, 1260, Tucson, Ariz.

WHAT'S ON THE AIR TONIGHT?

Fill in calls and dial numbers for those stations through which you best receive the three chains. You can then turn quickly to the one that has the feature you want.

COLUMBIA (C).....WABC NATIONAL, Red (R).....WEAF NATIONAL, Blue (B).....WJZ

Call	Dial	Call	Dial

Call	Dial	Call	Dial

Call	Dial	Call	Dial

TIME—E Eastern Standard; C Central Standard; M Mountain Standard; P Pacific Standard.
 RADEX is the only publication listing stations in alphabetical order for your convenience.

MONDAY

E-10:15 a.m., C-9:15, M-8:15, P-7:15
B—Clara, Lu 'n' Em
 KDKA KFYR KOA KOIL KPRC
 KSL KSTP KVOO KWK WAPI
 WBAL WBZ WBZA WCKY WDAY
 WEBC WFAA WFLA WGAR WHAM
 WIBA WIOD WIS WJAX WJDX
 WJR WJZ WKY WMC WOAI WPTF
 WREN WRVA WSB WSM WSMB
 WTMJ WWNC

E-12:30 p.m., C-11:30, M-10:30, P-9:30
C—Columbia Revue
 CFRB CKOK KFAB KFKB KFH
 KFJF KFRK KHJ KLRA KLZ KOL
 KRLD KSCJ KTRH KVRB WAAB
 WBBM WBIG WBT WCAH WCAO
 WDBJ WDOJ WDOO WDRC WDSU
 WEAN WFAN WFBL WFEA WFGW
 WGST WHAS WHC WIBW WIP
 WISN WJAS WKBH WKBN WLWB
 WNAX WNOX WODX WORC
 WORC WOVO WPG WQAM WRC
 WSFA WTAQ WTR WTCO WWVA

B—National Farm and Home Hour
 KDKA KFYR KOA KOIL KPRC
 KSTP KTBS KTHS KVOO KWCR
 KWK KYW WAPI WBAL WBZ
 WBZA WCKY WDAF WDAY WEBC
 WFAA WFLA WGAR WHAM WHO
 WIBA WIOD WIS WJAX WJDX
 WJR WJZ WKY WLW WMC WOAI
 WOC WOW WPTF WRC WREN
 WRVA WSB WSM WSMB WTMJ
 WWNC

E-5:45 p.m., C-4:45, M-3:45, P-2:45
B—Little Orphan Annie
 CKGW KDKA WBAL WBZ WBZA
 WCKY WGAR WHAM WIS WJAX
 WJR WJZ WRVA WWNC

E-6:00 p.m., C-5:00, M-4:00, P-3:00
C—Irene Beasley
 CFRB CKOK KFAB KFH KFJF
 KLRA KMBC KSCJ KTRH KVRB
 WAAB WABC WBBM WBIG WBRC
 WBT WDAE WDBJ WDOO WDOO
 WDRC WDSU WFAN WFBL WFEA
 WGST WHAS WIBW WIP WISN
 WJAS WKBH WKBN WLWB WNAX
 WNOX WOKO WORC WOVO WQAM
 WRC WSA WTAQ WTR WTCO
R—Waldorf-Astoria Orchestra
 KSD KYW WBEW WCAE WDAF
 WFAF WEEL WFBR WGY WIOD
 WJAR WMAQ WRC WSM WTAG
 WJZ WWNC

E-6:15 p.m., C-5:15, M-4:15, P-3:15
C—Riviera Orchestra
 CFRB CKOK KFH KLZ KMBC

KOMA KSCJ KSL KVRB WAAB
 WACO WADC WBCM WBIG WBRC
 WCAO WDAE WDBJ WDOO WDOO
 WDRC WDSU WFAN WFBL WGR
 WHC WHP WIP WISN WJAS
 WKBH WLVA WLWB WLZ WMT
 WNAX WNOX WODX WOKO WORC
 WQAM WREC WSBT WSJS WTAQ
 WTOC

E-6:30 p.m., C-5:30, M-4:30, P-3:30
C—Vaughn DeLeath
 KLRA WAAB WABC WBIG WBRC
 WDAE WDBJ WDOO WDOO WDSU
 WFGA WGST WORC WREC WSFA
 WTR WTCO
R—Harding Sisters, Piano Duo
 KSD KSTP WCKY WEAF WFBR
 WFI WHO WIBA WIOD WJAR
 WMAQ WMC WOC WRC WSB
 WTAG WTAM WWJ WWNC

E-6:45 p.m., C-5:45, M-4:45, P-3:45
C—The Funnyboners
 CFRB CKOK KFAB KFH KFJF
 KLRA KLZ KSCJ KTRH WAAB
 WABC WBBM WBIG WBRC WBT
 WCAH WCAO WCAU WDAE WDBJ
 WDOO WDOO WGST WHAS WHP
 WISN WJAS WKBH WKBN WKBW
 WLWB WNAX WNOX WOKO WORC
 WOVO WQAM WRC WSFA WSPD
 WTAQ WTR WTCO WWVA
B—Lowell Thomas
 CKGW KDKA WBAL WBZ WBZA
 WGAR WHAM WJR WJZ WLW
R—G. E. Circle
 WBEW WCAE WCHS WEAF WFBR
 WFI WSAI WTAG WTAM WTCO
 WWJ

E-7:00 p.m., C-6:00, M-5:00, P-4:00
R—G. E. Circle
 KDYL KEI KFYR KGO KGW KHQ
 KOA KOMO WDAF WDAY WEBC
 WGY WIBA WMAQ WOV WTMJ
C—Myrt and Marge
 CKOK KRLD WAAC WADC WBT
 WCAO WCAU WDRC WEAN WFBL
 WGR WHK WJAS WKRC WNAC
 WOKO WSPD WWVA
B—Amos 'n' Andy
 CKGW KDKA WBAL WBZ WBZA
 WCKY WFLA WGAR WHAM WIOD
 WJAX WJR WJZ WLW WPTF WRC
 WRVA

E-7:15 p.m., C-6:15, M-5:15, P-4:15
R—Wheatonville, Ray Knight
 KHQ WDAF WEAF WEEL WGY
 WHO WJAR WLIT WMAQ WOC
 WOW WRC WTAM

B—Tasteyest Jesters
 KDKA WBAL WBZ WBZA WCKY
 WJZ
C—Buck Rogers in Year 2432
 CKOK WABC WGR WHK WNAC

E-7:30 p.m., C-6:30, M-5:30, P-4:30
C—Three X Sisters
 WABC WCAO WCAU WDRC WEAN
 WFBL WFEA WGR WHC WHP
 WJAS WLWB WNAC WOKO WORC
R—Billy Jones and Ernie Hare
 WBEW WCAE WCHS WDAF WEAF
 WEEL WENR WFLA WGY WIOD
 WIS WJAR WLIT WMAQ WOW
 WRC WRVA WSAI WTAG WTAM
 WTCO WWNC

E-7:45 p.m., C-6:45, M-5:45, P-4:45
R—The Goldbergs
 KSD WBEW WCAE WCHS WDAF
 WEAF WEEL WENR WFBR WGY
 WJAR WLIT WOW WRC WSAI
 WTAG WTAM WWJ

B—Johnny Hart in Hollywood
 WBZ WBZA WGAR WHAM WJZ
 WMAQ

C—Popular Classics
 CFRB CKOK KFH KMBC KMOX
 KOMA KSL KVRB WACO WADC
 WBBM WBCM WBIG WBRC WBT
 WCAO WCCO WDAE WDBJ WDOO
 WDOO WDRC WDSU WFAN WFBL
 WFBM WFEA WGR WHC WHK
 WHP WTBW WIP WISN WJAS WLAC
 WLWB WLZ WMT WNAX WNOX
 WODX WOKO WORC WQAM WREC
 WSJS WTAQ WTR WTCO WWVA

E-8:00 p.m., C-7:00, M-6:00, P-5:00
C—Whispering Jack Smith
 CKOK KMOX WABC WADC WCAO
 WCAU WEAN WFBL WBCM WGN
 WGR WHAS WHK WJAS WJSV
 WKRC WNAC WOKO WSPD
R—Socyanald Sketches
 WBEW WCHS WEAF WEEL WGY
 WJAR WTAG WTCO

E-8:15 p.m., C-7:15, M-6:15, P-5:15
C—Singing Sam
 CKOK KMBC KMOX WABC WADC
 WCAO WCAU WCCO WDRC WEAN
 WFBL WFBM WGN WGR WHK
 WJAS WKRC WNAC WOKO WSPD

E-8:30 p.m., C-7:30, M-6:30, P-5:30
C—Kate Smith, La Palina
 CKOK KFAB KFH KFJF KMBC
 KMOX WABC WADC ABCM WCAH
 WCAO WCAU WCCO WFBL WFBM
 WGN WGR WHAS WHC WHK

MONDAY—Continued

WISN WJAS WKBN WKRC WOKO WSPD

R — The Revelers, Quartet

CFCF CKGW KPRC KSD KTBS KTHS KVOO WAPI WBEN WCAE WCSH WDAF WDAY WFAF WBEBC WFRB WFLA WGY WHO WIOD WIS WJAR WJAX WJDX WKY WLIT WMAQ WMC WOAI WOC WOW WPTF WRVA WSAI WSB WSM WSMB WTAG WTAM WTIC WWJ WWNC

B — Rod and Ramona

KDKA KFYR KOIL KWCR WBAL WBS WSM WSMB WTAG WTAM WTIC WWJ WWNC

E-8:45 p.m., C-7:45, M-6:45, P-5:45

C — Fu Manchu Mystery Drama

CFRB CKOK KMBC KMOX KRLL WABC WADC WCAO WCAU WDRC WEAN WFBL WGN WHAS WHK WJAS WJSV WKBW WKRC WNAC WOKO WOVW WSPD

E-9:00 p.m., C-8:00 M-7:00, P-8:00

R — A. & P. Gypsies

KSD WBEN WCAE WCSH WFAF WEI WGY WHO WJAR WLIT WMAQ WOC WOW WRC WSAI WTAG WTAM WTIC WWJ

B — Sinclair Wiener Minstrels

KDKA KFYR KOIL KPRC KSTP KTBS KVOO KWCR KWK WBAL WBS WBSA WDAY WBEBC WFAA WFLA WGAR WHAM WIDA WIOD WIS WJAX WJDX WJZ WKY WLS WMC WOAI WPTF WREN WRVA WSB WSM WSMB WTMJ WWNC

E-9:15 p.m., C-8:15, M-7:15, P-8:15

C — Mills Brothers

CKOK KMBC KMOX WABC WADC WCAO WCAU WDRC WEAN WFBL WGN WHAS WHEC WHK WJAS WKBW WKRC WNAC WOKO WSPD

E-9:30 p.m., C-8:30, M-7:30, P-8:30

C — Evening in Paris Mystery

CKOK KMBC KMOX WABC WADC WBT WCAO WCAU WCCO WEAN WFBL WGN WHAS WHEC WHK WKBW WKRC WNAC WOKO WOWO WSPD

R — Paul Whiteman; Rea-Munn

KDYL KFI KFSD KFYR KGHK KGR KGO KGW KHQ KOA KOMO KSD KTAR KTHS WBEN WCAE WCSH WDAF WDAY WFAF WBEBC WEI WFAA WFRB WFLA WGY WHO WIOD WJAR WJAX WJDX WKY WLIT WMAQ WOAI WOC WOW WRC WRVA WSAI WSB WSM WSMB WTAG WTAM WTMJ WWJ

E-10:00 p.m., C-9:00, M-8:00, P-7:00

R — Carnation Contented Program

CFCF CKGW KFYR KPRC KSD WBEN WCAE WFAF WBEBC WENR WFAA WGY WIOD WJAX WKY WMC WOAI WRVA WSAI WSB WSM WTAM WTMJ WWJ

C — Music That Satisfies

CKOK KDB KERN KFBK KFH KJFJ KFPY KFCR KGB KHJ KLRA KLZ KMBC KMJ KMOX KOH KOIN KOL KRLL KTRH KTSA KVI KWG WABC WADC WBRC WBT

WCAO WCAU WCCO WDBJ WDRC WBSU WEAN WFBL WFBM WGN WGST WHAS WHEC WHK WISN WJAS WKBW WKRC WLAC WLIZ WMBG WMT WNAC WOKO WOWO WFG WREC WRUF WSPD WTAR

B — Phillips Lord, Country Doctor

CFCF CKGW KDKA KOIL KWCR KWK WBAL WBS WBSA WCKY WGAR WHAM WJR WJZ WMAQ WREN

E-10:15 p.m., C-9:15, M-8:15, P-7:15

C — Easy Aces

CFRB CKOK KDB KERN KFBK KFPY KPRC KGB KHJ KLZ KMBC KMJ KMOX KOIN KOL KSL KVI KWG WAAB WABC WADC WCAO WCAU WCCO WDRC WEAN WFBL WFBM WGN WHAS WHK WJAS WKBW WKRC WOKO WOWO WSPD

E-10:30 p.m., C-9:30, M-8:30, P-7:30

C — Charles Carlie, Tenor

KLRA WAAB WABC WDAE WDBJ WDBO WDOD WDRC WDSU WFEA WGST WLAC WLIZ WORC WQAM WREC WSAF WJSJ WTAR WTOC

R — Alice Jay

KSD WBEN WCAE WFAF WEI WFRB WGY WJAR WMAQ WTAM WWJ

B — Radio Rubes—Hill Billies

CFCF KDKA KFYR KOIL KTBS KWCR KYW WBAL WBS WBSA WCKY WGAR WHAM WIDA WIOD WIS WJAX WJDX WJR WJZ WKY WMC WREN WSB WSM WWNC

E-10:45 p.m., C-9:45, M-8:45, P-7:45

C — Myrt and Marge

KDB KERN KFBK KFPY KFCR KGB KHJ KLZ KMBC KMJ KMOX KOIN KOL KSL KVI KWG WBBM WCCO WDSU WFBM WHAS WLAC

C — Col. Stoopnagle and Budd

CFRB CKOK WAAB WABC WADC WBCM WDRC WFBL WFEA WHEC WHK WJAS WKBW WLIZ WOKO WORC

B — Mildred Bailey

CFCF KDKA KSTP KTBS KWCR WBAL WCKY WGAR WHAM WIDA WIOD WIS WJZ WKY WMAQ WMC WREN WWNC

E-11:00 p.m., C-10:00, M-9:00, P-8:00

C — Howard Barlow's Symphony

CFRB CKOK KLRA KLZ KMBC KSCJ KTRH KVRV WAAB WABC WACO WADC WBCM WCAH WCAO WDAE WDBJ WDBO WDOD WDRC WDSU WFAN WFBL WFBM WFEA WGST WHAS WHEC WHK WHP WIBW WIP WISN WKBW WKRC WLAC WLIZ WMT WNAX WOKO WORC WFG WQAM WREC WSBT WSAF WJSJ WTAR WTOC

B — Amos 'n' Andy

KDYL KFI KFSD KGO KGW KHQ KOA KOIL KOMO KPRC KSTP KTHS KWK WBAF WDAF WBEBC WENR WIDA WJDX WKY WMAQ WMC WOAI WREN WSB WSM WSMB WTMJ

R — Roger Wolfe Kahn Orchestra

KSD WCKY WFAF WFRB WHO WOC WRC WTAG WWJ

B — Pickens Sisters

CFCF WBAL WFLA WGAR WHAM

WIOD WIS WJAX WJZ WRVA WWNC

E-11:15 p.m., C-10:15, M-9:15, P-8:15

B — National Opera

CKGW KWCR KWK WBAL WCKY WENR WGAR WHAM WIS WJR WJZ WREN WWNC

R — Billy Jones and Ernie Hare

KDYL KFI KFSD KGO KGW KHQ KOA KOMO KTAR

E-11:30 p.m., C-10:30, M-9:30, P-8:30

C — Guy Lombardo and Orchestra

CFRB CKOK KFH KLRA KLZ KMBC KSCJ KTRH KVRV WAAB WABC WACO WADC WBCM WCAH WCAO WCAU WCCO WDAE WDBJ WDBO WDOD WDRC WDSU WGST WHAS WHEC WHK WHP WIBW WISN WKBW WKRC WLAC WLIZ WMBD WMT WNAX WOKO WORC WPG WQAM WREC WSBT WSAF WJSJ WTAR WTOC

R — Clyde McCoy and Orchestra

KSD WBEN WCAE WDAF WFAF WENR WFRB WJAR WRC WTAG WTAM WWJ

E-12:00 p.m. C-11:00 M-10:00 P-9:00

R — Donald Novis Tenor

KFYR KGO KOA KPRC KSD KSTP KTBS WCAE WDAF WFAF WBEBC WFRB WFLA WHO WIDA WIOD WJAR WMAQ WMC WOC WSB WSMB WTAM WWNC

B — Jack Denny and Orchestra

KDKA KWCR KWK KYW WBAL WBS WBSA WGAR WJZ WRC WREN

C — Eddie Duchin and Orchestra

CKOK KFAB KFBK KFH KJFJ KLRA KMBC KMOX KOL KRLL KSCJ KTRH KVRV WABC WBCM WBRC WBT WCAH WCAU WCCO WDAE WDBJ WDBO WDOD WDSU WEAN WFBL WFBM WGL WGST WHAS WHEC WHIP WIBW WISN WKBN WKBW WLIV WMBD WNAC WNAX WNOX WOKO WPG WQAM WREC WSAF WSPD WTAR WTOC WWVA

E-12:30 a.m., C-11:30, M-10:30, P-9:30

B — Low Diamond's Orchestra

KOIL KTBS KWCR KYW WBAL WHAM WJR WJZ WKY WLW WRC WREN

TUESDAY

E-10:15 a.m., C-9:15, M-8:15, P-7:15

B — Clara, Lu 'n' Em, See Monday

E-12:30 p.m., C-11:30, M-10:30, P-9:30

C — Columbia Revue, See Monday

B — National Farm and Home, See Mon.

E-5:45 p.m., C-4:45, M-3:45, P-2:45

B — Little Orphan Annie, See Monday

E-8:00 p.m., C-5:00, M-4:00, P-3:00

C — Current Events, Kattenborn

CKOK KFH KGB KLZ KMBC KOH KSCJ KTRH KVRV WAAB WABC WACO WBIG WBRC WBT WCAH WCAO WDAE WDBJ WDBO WDOD WDRC WFAN WFBL WFEA WHAS WHEC WIBW WIP WISN WJAS WKBN WKBW WLAC WLIV WLIZ WMT WNAX WNOX WOKO WORC

TUESDAY—Continued

WOWO WQAM WREC WSBT WSFA
WSJS WTAQ WTAR WTOC WVVA
R — Waldorf-Astoria Orch., See Mon.

E-6:30 p.m., C-5:30, M-4:30, P-3:30
C — Jack Miller and Orchestra
KLRA WABC WBIG WBRC WDRJ
WDRB WDDO WDSU WFEA WGST
WNOX WORC WREC WSFA WTAR
WTOC

E-6:45 p.m., C-5:45, M-4:45, P-3:45
R — Back of the News in Washington
KFI KFSD KGHL KGIR KGO KOA
KSD KTAR WAPI WFAE WFBF
WFI WIOD WIS WJAR WJDX
WMAQ WOW WPTF WRC WSM
WSMB WTAG WUNC
B — Lowell Thomas, See Monday
C — Keenan and Phillips
CKOK KFH KLZ KMBC KSCJ
KTRH KVOR WAAB WACO WADC
WBCM WCAH WCAO WDAE WDBJ
WDBO WDDO WDSU WFBM WFEA
WGST WHAS WHIP WISN WJAS
WKBW WKRC WLAC WLWB WLBZ
WMT WNAX WORC WQAM WREC
WSBT WSJS WTAQ WTAR WTOC

E-7:00 p.m., C-6:00, M-5:00, P-4:00
R — Mid-Week Hymn Sing
KFI KGIR KGO KOA KSD KTAR
WAPI WBAE WFAE WJAR WJDX
WMAQ WSAI WSMB WTAG
C — Myrt and Marge, See Monday
B — Amos 'n' Andy, See Monday

E-7:15 p.m., C-6:15, M-5:15, P-4:15
R — Ray Knight, See Monday
C — Buck Rogers See Monday

E-7:30 p.m., C-6:30, M-5:30, P-4:30
B — Betty Boop
KDKA KDYL KGO KOA KPRC
KVOO KWK WBAL WFAA WGAR
WIOD WIS WJZ WMC WREN WRVA
WSB WSM WSMB WUNC
R — Ray Perkins
KSD KYW WBAE WCAE WCSH
WEAF WEEI WFBF WFI WGY
WFO WJAR WOC WOW WRC WSAI
WTAG WTAM WWJ

E-7:45 p.m., C-6:45, M-5:45, P-4:45
C — Chase & Sanborn, Georgie Price
CKOK KMBC KMOX WABC WBBM
WCAO WCAU WGR WHK WJAS
WKRC WNAC WOKO
R — The Goldbergs, See Monday
B — Johnny Hart, See Monday

E-8:00 p.m., C-7:00 M-6:00, P-5:00
R — Blackstone, Sanderson-Crumit
KSD KSTP KYW WBAE WCAE
WCSH WDAF WFAE WFBF WEEI
WFI WGY WHO WJAR WOC WOW
WRC WSAI WTAG WTAM WWJ
B — You and Your Government
CFPC CKGW KDKA KDYL KEX
KFSD KGIR KJR KOA KOI KPO
KTAR KTBS KWCR KWK WBAL
WBZ WBZA WCKY WENR WFLA
WGAR WHAM WIOD WIS WJZ
WKY WMC WPTF WREN WSB
WSM WUNC
C — Abe Lyman and Orchestra
CKOK KMBC KMOX WABC WADC

WCAO WCAU WDRS WEAN WFBL
WFBM WGN WGR WHAS WHK
WJAS WCRK WNAC WOKO WSPD

E-8:15 p.m., C-7:15, M-6:15, P-5:15
C — Magic Voice Drama
CFRB CKOK KFH KLZ KMBC
KOMA KSCJ K TSA KVOR WABC
WACO WADC WBBM WBCM WBIG
WBRC WBT WCAO WCCO WDAE
WDBJ WDBO WDDO WDRS WDSU
WFBL WFEA WGR WHEC WHK
WHP WIBW WISN WJAS WKBH
WLAC WLWB WLWB WMT WNAX
WNOX WODX WOKO WORC WPG
WQAM WRC WSBT WSJS WTAQ
WTAR WTOC

E-8:30 p.m., C-7:30, M-6:30, P-5:30
C — Kate Smith, See Monday
B — Adventures in Health
KDKA KOIL KWCR KWK WBAL
WBZ WBZA WHAM WJR WJZ WLS
WREN
R — Wayne King and Orchestra
KSD WBAE WCAE WCSH WFAE
WFBF WEEI WFBF WFI WGY WHO
WJAR WOC WOW WRC WVA
WSAI WTAG WTAM WTMJ WWJ

E-8:45 p.m., C-7:45, M-6:45, P-5:45
C — The Columbians
CFRB CKOK KFH KLZ KMBC
KMOX KOMA KRLD KSCJ KSL
K TSA KVOR WABC WADC WBCM
WBIG WBRC WCAO WCAU WCCO
WDAE WDBJ WDBO WDDO WDSU
WFBM WFEA WGR WHEC WHK
WHP WIBW WISN WJAS WKBH
WLAC WLWB WLWB WMT WNAX
WNOX WODX WOKO WORC WQAM
WREC WSJS WTAQ WTAR WTOC

E-9:00 p.m., C-8:00, M-7:00, P-6:00
C — Music That Satisfies
CKOK KDB KERN KFBK KFH
KFJF KFPY KFRC KGB KHJ KLRA
KLZ KMBC KMJ KMOX KOI KOIN
KOL KRLD KSL KTRH KVI KWG
WABC WADC WBRC WBT WCAO
WCAU WCCO WDBJ WDRS WDSU
WEAN WFBL WFBM WGN WGST
WHAS WHEC WHK WISN WJAS
WKBW WKRC WLAC WLWB WMBG
WMT WNAC WOKO WOW WPG
WREC WSPD WTAR
R — Ben Bernie and Orchestra
KFYR KOA KPRC KSTP WBAP
WBAE WCAE WCKY WFSH WDAF
WDAY WEAF WEEI WFBF WFI
WGY WHO WJAR WKY WLS WMC
WOAI WOC WOW WRC WRC WSAI
WSB WSM WSMB WTAG WTAM
WWJ

B — Musical Memories
KDKA KWK WBAL WBZ WBZA
WIIAM WJR WJZ WMAQ WREN

E-9:15 p.m., C-8:15, M-7:15, P-6:15
C — Threads of Happiness
CKOK KDB KERN KFBK KFH
KFJF KFPY KFRC KGB KHJ KLRA
KLZ KMBC KMJ KMOX KOIN
KOL KRLD KSL KTRH KVI KWG
WABC WADC WBRC WBT WCAO
WCAU WCCO WDDO WDRS WDSU
WEAN WFBL WFBM WGN WGST
WHAS WHK WJAS WKBW WKRC
WLAC WNAC WOKO WOW WSPD
WTAR

E-9:30 p.m., C-8:30, M-7:30, P-6:30
R — Ed Wynn-Don Voorhees
CFPC KFI KFSD KFYR KGHL
KGIR KGO KGW KHQ KOA KOMO
KPRC KSD KSL KSTP KTAR KTBS
KVVO WBAP WBAE WCAE WCSH
WDAF WDAY WFAE WFBF WEEI
WFBF WFI WGY WHO WIBA
WIOD WIS WJAR WJAX WJDX
WKY WMAQ WMC WOAI WOC
WOW WPTF WRC WRVA WSAI
WSB WSMB WTAG WTAM WTMJ
WWJ WUNC
B — Friendship Town
KDKA KOIL KWK KYW WBAL
WBZ WBZA WGAR WHAM WJR
WJZ WREN

E-10:00 p.m., C-9:00 M-8:00, P-7:00
C — Jay C. Flippencies
CFRB CKOK KFAB KFBK KFBK
KFJF KFPY KHJ KLRA KLZ KMBC
KMOX KOL KRLD KTRH KVOR
WABC WACO WBCM WBIG WBRC
WBT WCAH WCAO WCAU WCCO
WDAE WDBJ WDBO WDDO WDC
WDSU WFBL WFBM WFEA WGL
WGST WHAS WHEC WHF WIBW
WISN WJAS WKBH WKBW WKBW
WNAC WNAX WNOX WODX WORC
WQAM WREC WRUF WSPD WTAQ
WTAR WTOC WVVVA

R — Lucky Strike Dance Hour
KFI KFSD KFYR KGO KGW KHQ
KOA KOMO KPRC KSD KSL KSTP
KTAR KTBS KTHS KVVO WBAP
WBAE WCAE WCSH WDAF WDAY
WEAF WBAE WEEI WENR WFBF
WFI WFLA WGY WHO WIBA WIOD
WIS WJAR WJAX WJDX WKY
WMC WOAI WOC WOW WRC WRVA
WSAI WSB WSM WSMB WTAG
WTAM WTMJ WWJ WUNC
B — Phillips Lord, See Monday

E-10:15 p.m., C-9:15, M-8:15, P-7:15
B — Sigmund Spaeth, Tune Detective
CFPC KWCR WBZ WBZA WGAR
WJZ

E-10:30 p.m., C-9:30, M-8:30, P-7:30
C — Edwin C. Hill
CFRB CKOK KFH KLZ KMBC
KOMA KSCJ K TSA KVOR WAAB
WABC WACO WADC WBCM WBIG
WBRC WBT WCAO WCAU WCCO
WDAE WDBJ WDBO WDDO WDRS
WDSU WFBL WFBM WFEA WHEC
WHP WIBW WISN WJAS WKBH
WKBW WLAC WLWB WLWB WMBD
WMT WNAX WNOX WOKO WORC
WPG WQAM WRC WSBT WSFA
WSJS WTAR WTOC
B — Radio Rubes See Monday

E-10:45 p.m., C-9:45, M-8:45, P-7:45
C — Myrt and Marge, See Monday

E-11:00 p.m., C-10:00, M-9:00, P-8:00
C — Columbia Symp. Orch., See Mon.
B — Amos 'n' Andy, See Monday
B — Pickens Sisters See Monday

E-11:15 p.m., C-10:15, M-9:15, P-8:15
R — Jack Denny and Orchestra
KDYL KEX KGA KGHL KJR KPO
KSD WBAE WCAE WFAE WFBF
WFI WGY WHO WJAR WOC WOW
WTAG WTAM WWJ
B — National Opera See Monday

TUESDAY—Continued

E-11:30 p.m., C-10:30, M-9:30, P-8:30
C — Isham Jones and orchestra
CFRB CKOK KFH KLRA KMBC
KSCJ KTRH KVOR WAAB WABC
WACO WADC WBCM WCAH WCAO
WCAU WCCO WDAE WDBJ WDBO
WDOD WDRC WDSU WGST WHEC
WHP WISN WKBW WKRC WLAC
WLBC WMBD WMT WNAX WOKO
WORC WPG WQAM WREC WSBT
WSFA WSJS WTAR WTOC

E-12:00 m., C-11:00, M-10:00, P-9:00
C — Don Redman and Orchestra
CKOK KLZ KMBC KMOX KSCJ
KTRH KVOR WABC WBCM WCAH
WCAU WCCO WDSU WFBL WGST
WHAS WHEC WHP WIBW WISN
WKBW WKHC WLAC WMBD WMT
WNAX WOKO WPG WREC WSBT
WTOC
R — George Olsen and Orchestra
WCAE WEAF WFBR WGY WMAQ
WTAM WWJ WWNC

E-12:30 a.m. C-11:30, M-10:30 P-9:30
R — Ben Bernie and Orchestra
KDYL KFI KFSD KGO KGW KHQ
KOA KOMO KTAR

WEDNESDAY

E-10:15 a.m., C-9:15, M-8:15, P-7:15
B — Clara Lu 'n' Em, See Monday

E-12:30 p.m., C-11:30, M-10:30, P-9:30
C — Columbia Revue, See Monday
B — National Farm and Home, See Mon.

E-5:45 p.m., C-4:45, M-3:45, P-2:45
B — Little Orphan Annie, See Monday

E-6:00 p.m., C-5:00, M-4:00 P-3:00
R — Waldorf-Astoria Orch. See Monday
C — Vaughn DeLeath
CFRB CKOK KFH KLZ KSCJ KTRH
KVOR WAAB WABC WACO WADC
WBCM WCAH WCAO WDAE WDBJ
WDBO WDOD WDRC WDSU WFAN
WFBL WFEA WGST WHAS WHEC
WHK WHP WISN WJAS WKBW
WKRW WLAC WLWB WLZ WMT
WNAX WOKO WQAM WREC WSBT
WSFA WSJS WTAQ WTAR WTOC
WVVA

E-6:30 p.m. C-5:30 M-4:30 P-3:30
B — Sheer Romance
KDKA KOIL WBAL WHAM WJZ
WMAQ WREN
R — Harding Sisters See Monday
C — Connie Boswell
KSCJ WAAB WABC WBIG WBRC
WBT WDAE WDBJ WDBO WDOD
WDRC WDSU WFEA WLZB WNOX
WORC WQAM WREC WSJS WTAR
WTOC

E-6:45 p.m., C-5:45, M-4:45, P-3:45
R — G. E. Circle, See Monday
C — Funnyboners, See Monday
B — Lowell Thomas, See Monday

E-7:00 p.m., C-6:00, M-5:00 P-4:00
C — Myrt and Marge, See Monday
B — Amos 'n' Andy, See Monday
R — G. E. Circle, See Monday

E-7:15 p.m. C-6:15, M-5:15, P-4:15
B — Royal Vagabonds, Ward Wilson
KDKA KFI KGO KGW KHQ KOA

KOIL KOMO KPRC KWK WAPI
WBAL WBZ WBZA WKCY WEBC
WGAR WIOD WJAX WJDX WJFC
WKY WMAQ WMC WOI WPTF
WREN WRVA WSB WSM WSMB
WTMJ WWNC
C — Buck Rogers, See Monday
R — Ray Knight, See Monday

E-7:30 p.m., C-6:30, M-5:30, P-4:30
C — Three X Sisters, See Monday
R — Jones and Hare, See Monday
B — Jack Fulton, Tenor
KDKA KDYL KFYR KGO KOA KPRC
KTBS KWK WBAL WKCY WENR
WGAR WHAM WIBA WJZ WKY
WQAI WREN

E-7:45 p.m., C-6:45, M-5:45, P-4:45
C — Angelo Patri
CKOK KMBC KMOX WABC WCAO
WCAU WCCO WFBL WGR WHAS
WFK WJAS WKRC WNAC
R — The Goldbergs, See Monday
B — Johnny Hart, See Monday

E-8:00 p.m., C-7:00, M-6:00, P-5:00
R — The Shadow
WBEN WCHS WEAF WEEI WFBR
WGY WJAR WLIT WRC WTAG
WTIC
C — Jack Smith, See Monday

E-8:15 p.m., C-7:15, M-6:15, P-5:15
C — Singin' Sam, See Monday

E-8:30 p.m., C-7:30, M-6:30, P-5:30
C — Kate Smith, See Monday

E-8:45 p.m., C-7:45, M-6:45, P-5:45
R — Whitman's Sampler, Jack Denny
KPRC KSD KTBS KYOO WBEN
WCAE WKCY WEAF WFAA WFBR
WFLA WGY WHO WIOD WIS WJAX
WJDX WKY WLIT WMAQ WMC
WQAI WCC WOV WRC WRVA WSAI
WSB WSM WSMB WTAM WWJ
WWNC
C — Edwin C. Hill

CFRB CKOK KFH KMBC KMOX
KOMA KRLD KSL KTSa KVOR
WABC WADC WBCM WBIG WBRC
WCAO WCAU WCCO WDAE WDBJ
WDBO WDOD WDRC WDSU WFBM
WFEA WGR WHK WIBW WISN
WJAS WKBH WLAC WLWB WLZ
WMT WNAX WNOX WODX WOKO
WORC WQAM WREC WSJS WTAQ
WTOC

E-9:00 p.m., C-8:00, M-7:00, P-6:00
C — Guy Lombardo-Burns and Allen
CKOK KFJF KMBC KMOX KTRH
KTSa WABC WADC WCAO WCAU
WCCO WDRC WEAN WFBL WFBM
WGN WHK WJAS WKBW WKRC
WHK WJAS WKBW WKRC WMAL
WNAO WOKO WOWO WRR WSPD
B — Sherlock Holmes
CFBC CKGW KDKA KWCR KWK
WBAL WBZ WBZA WGAR WHAM
WJR WJZ WLW WREN

E-9:30 p.m., C-8:30, M-7:30, P-6:30
R — The Pridgetts, Comedy Sketch
KDYL KFI KFYR KGO KGW KHQ
KOA KOMO KPRC KSD KSTP
KTAR KVOO WBEN WCAE WCHS
WDAF WDAY WEAF WERC WEEI
WENR WFAA WFBR WFLA WGY
WHO WIBA WIOD WIS WJAR WJAX
WJDX WKY WLIT WMC WQAI
WOC WOW WRC WSAI WSB WSM

WSMB WTAG WTAM WTIC WTMJ
WWJ WWNC
C — Eno Crime Club
CKOK KMBC KMOX WABC WADC
WCAO WCAU WDRC WJAN WFBL
WGN WHK WJAS WJWS WKBW
WKRC WNAC WSPD

E-10:00 p.m., C-9:00, M-8:00, P-7:00
C — Music That Satisfies, See Monday
R — Corn Cob Pipe Club
KFI KGHL KGIR KGO KGW KHQ
KOA KOMO KSD KSL WBEN WCAE
WCHS WDAF WEAF WEEI WENR
WFBR WGY WHO WJAR WLIT
WOC WOW WRC WRVA WSA
WTAG WTAM WTIC WWJ
B — Phillips Lord, See Monday

E-10:15 p.m., C-9:15, M-8:15, P-7:15
C — Easy Aces, See Monday

E-10:30 p.m., C-9:30, M-8:30, P-7:30
C — Charles Carille, See Monday
B — Radio Rubes, See Monday

E-10:45 p.m., C-9:45, M-8:45, P-7:45
C — Myrt and Marge, See Monday
C — Stoopnagle and Budd, See Monday
B — Mildred Bailey, See Monday

E-11:00 p.m., C-10:00, M-9:00, P-8:00
C — Columbia Symph. Orch., See Mon.
R — Nellie Revell
CFBC CKGW KSD WEAF WGY
WLIT WRC WWJ
B — Amos 'n' Andy, See Monday
B — Pickens Sisters, See Monday

E-11:15 p.m. C-10:15, M-9:15, P-8:15
C — Angelo Patri
KDB KERN KFBK KFPY KFRC
KGB KHJ KMJ KOIN KOL KSL
KVI KWG
R — Jones and Hare, See Monday

E-11:30 p.m., C-10:30, M-9:30, P-8:30
C — Isham Jones, See Tuesday

E-12:00 m., C-11:00 M-10:00 P-9:00
C — Don Redman, See Tuesday
B — Cab Calloway and Orchestra
KPRC KTBS WAPI WABC WJZ WKY
WMC WQAI WSB WSM WSMB

E-12:15 a.m., C-11:15, M-10:15, P-9:15
B — Sherlock Holmes
KDYL KFI KFSD KGHL KGIR KGO
KGW KHQ KOA KOMO KTAR

THURSDAY

E-10:15 a.m., C-9:15, M-8:15, P-7:15
B — Clara, Lu 'n' Em, See Monday

E-12:30 p.m., C-11:30, M-10:30, P-9:30
C — Columbia Revue, See Monday
B — National Farm and Home See Mon.

E-5:45 p.m., C-4:45, M-3:45, P-2:45
B — Little Orphan Annie, See Monday

E-6:00 p.m., C-5:00, M-4:00, P-3:00
C — H. V. Kaltonborn, See Tuesday
R — Waldorf-Astoria Orch., See Monday

E-6:30 p.m., C-5:30 M-4:30, P-3:30
B — Old Songs of Church
KEX KFSD KGA KJR KOA KOIL
KPO KTBS KWCR WBAL WGAR
WJZ WKY WLW WMAQ WREN
R — Ralph Kirby, Baritone
KEX KGA KJR KOA KPO KSD

THURSDAY—Continued

WCKY WDAF WFAF WFI WIOD
WIS WJAR WMAQ WMC WRC
WSMB WTAG WWNC

E-6:45 p.m., C-5:45, M-4:45, P-3:45
R — G. E. Circle, See Monday
B — Lowell Thomas, See Monday

E-7:00 p.m., C-6:00, M-5:00, P-4:00
C — Myrt and Marge, See Monday
B — Amos 'n' Andy, See Monday
R — G. E. Circle, See Monday

E-7:15 p.m., C-6:15, M-5:15, P-4:15
C — Buck Rogers, See Monday
R — Ray Knight, See Monday
B — Ward Wilson, See Wednesday

E-7:30 p.m., C-6:30, M-5:30, P-4:30
B — Louise Bernhardt, Contralto
KDKA KDYL KFI KPFD KFYP KGO
KOA KPFC KTBS KWK WBAL
WCKY WFCB WENR WGAR WHAM
WIBA WIOD WIS WJZ WQAI WREN
WSMB
R — Ray Perkins, See Tuesday

E-7:45 p.m., C-6:45, M-5:45, P-4:45
C — George Price, See Tuesday
R — The Goldbergs, See Monday
B — Johnny Hart, See Monday

E-8:00 p.m., C-7:00, M-6:00, P-5:00
R — Fleischmann, Rudy Vallee
CFCF CKGW KFI KFYP KGO KGW
KHQ KOA KOMO KPFC KSD KSL
KSTP KTAZ KVOO WAPI WDAF
WBEN WCAE WCKY WCSH WDAF
WLYA WFAF WFCB WEEI WFBR
WFI WFLA WGY WHO WIOD WJAR
WJX WJZZ WKY WMAQ WMC
WQAI WOC WOW WPTF WRC
WRVA WSAI WSB WSM WSMB
WTAG WTAM WTMJ WJZ
C — Abe Lyman, See Tuesday
B — Regimentalists, Male Chorus
KDKA KOIL KWCR KWK WBAL
WENR WGAR WHAM WJZ WREN

E-8:15 p.m., C-7:15, M-6:15, P-5:15
B — Sigmund Spaeth, Song Sleuth
KDKA KOIL KWK WBZ WBZA
WGAR WHAM WJR WJZ WLS WLW
WREN
C — Canada Dry, Jack Benny
CFRB CKAK CKOK KMBC KMOX
WABC WACO WADC WCAO WCAU
WCCO WDRC WEAN WFBL WFBM
WGN WHK WJAS WKRC WNAK
WOKO WOWO WPG WSPD

E-8:30 p.m., C-7:30, M-6:30, P-5:30
B — Rin Tin Tin Thriller
KDKA KOIL KWK WBZ WBZA
WGAR WHAM WJZ WLS WLW
WREN

E-8:45 p.m., C-7:45, M-6:45, P-5:45
C — Whitman's Sampler, Jack Denny
CKOK KMBC KMOX WABC WADC
WBIG WBRC WBT WCAO WCAU
WDAE WDBJ WDBO WDOD WDRC
WDSU WEAN WFBL WFBM WGN
WGR WGST WHAS WHK WJAS
WJSV WKRC WLAC WMBG WNAK
WNOX WOKO WOWO WQAM WREC
WSFA WSPD WTAR WTOC
B — Howard Thurston, Magician
KDKA KWK WBAL WBZ WBZA
WGAR WHAM WJR WJZ WLS WLW

E-9:00 p.m., C-8:00, M-7:00, P-8:00
C — Music That Satisfies, See Tuesday
R — Maxwell House Show Boat
KDYL KFI KPFD KGO KGW KHQ
KOA KOMO KPFC KSD KTAZ KTBS
WAPI WBEN WCAE WCSH WDAF
WFAF WEEI WFBR WFI WFLA WGY
WHO WIOD WIS WJAR WJAX
WKY WMAQ WMC WQAI WOC WOW
WRC WRVA WSAI WSB WSM
WSMB WTAG WTAM WTMJ WJZ
WWNC

B — Death Valley Days
KDKA KOIL KWCR KWK WBAL
WBZ WBZA WENR WGAR WHAM
WJR WJZ WLS WLW WREN

E-9:15 p.m., C-8:15, M-7:15, P-8:15
C — Mills Bros. See Monday

E-9:30 p.m., C-8:30, M-7:30, P-8:30
C — Omar Khayyam
CKOK KDB KERN KFBK KFPY
KPFC KGB KHJ KLZ KBMC KMJ
KMOX KOIN KOL KSL KVI KWG
WABC WADC WCAH WCAO WCAU
WCCO WDRC WEAN WFBL WFBM
WGN WHAD WHAS WHK WJAS
WJSV WKBW WKRC WNAK WOKO
WOWO WSPD

E-10:00 p.m., C-9:00, M-8:00, P-7:00
C — Andre Kostelanetz Presents
CFRB CKOK KLRA KLZ KMBC
KMOX KSCJ KTRH KTAZ KVOR
WAAB WABC WADC WBT WCAO
WCCO WDAE WDBJ WDBO WDOD
WDRC WDSU WEAN WFBL WFBM
WFEA WGST WHAS WHEC WHP
WIBW WJCC WJAS WKHH WKRP
WLAC WLJZ WMBD WMT WNAK
WODX WOKO WORC WPG WQAM
WREC WSBT WTAR WTOC
R — Lucky Strike, See Tuesday
B — Phillips Lord, See Monday

E-10:30 p.m., C-9:30, M-8:30, P-7:30
C — Edwin C. Hill, See Tuesday
B — Red and Ramona
KWK WBAL WCKY WGAR WHAM
WJR WJZ WREN

E-10:45 p.m., C-9:45, M-8:45, P-7:45
C — Myrt and Marge, See Monday

E-11:00 p.m., C-10:00, M-9:00, P-8:00
C — Columbia Symph. Orch., See Mon.
B — Amos 'n' Andy, See Monday
R — Art Jarrett-Don Bestor
WCAE WCKY WFAF WFBR WFI
WGY WHO WJAR WOC WRC WTAG
WJZ

E-11:30 p.m., C-10:30, M-9:30, P-8:30
R — Ben Bernie and Orchestra
KPFC KSD KTBS KTIS KVOO
WCAE WCKY WDAF WFAF WFBR
WFI WHO WJR WKY WMAQ WOC
WOW WTAG WJZ
C — Isham Jones, See Tuesday

E-12:00 p.m., C-11:00, M-10:00, P-9:00
C — Eddie Duchin, See Monday
R — Donald Novis See Monday

E-12:15 a.m., C-11:15, M-10:15, P-9:15
B — Howard Thurston, Magician
KDYL KFI KGO KGW KHQ KOA
KOMO

FRIDAY

E-10:15 a.m., C-9:15, M-8:15, P-7:15
B — Clara, Lu 'n' Em, See Monday

E-12:30 p.m., C-11:30, M-10:30, P-9:30
C — Columbia Revue, See Monday
B — National Farm and Home, See Mon.

E-5:45 p.m., C-4:45, M-3:45, P-2:45
B — Little Orphan Annie, See Monday

E-6:00 p.m., C-5:00, M-4:00, P-3:00
C — Irene Beasley, See Monday
R — Waldorf-Astoria Orch., See Monday
B — Don DeForest and Orchestra
KFYR KOIL KSTP KWCR WBAL
WGAR WHAM WIBA WJZ WLW
WMAQ WREN

E-6:45 p.m., C-5:45, M-4:45, P-3:45
B — Lowell Thomas, See Monday
R — G. E. Circle, See Monday

E-7:00 p.m., C-6:00, M-5:00, P-4:00
C — Myrt and Marge, See Monday
B — Amos 'n' Andy, See Monday
R — G. E. Circle, See Monday

E-7:15 p.m., C-6:15, M-5:15, P-4:15
C — Buck Rogers, See Monday
R — Kremling Art Quintet
WCFB WDAF WFAF WFBR WOW
WRC
B — Ward Wilson, See Wednesday

E-7:30 p.m., C-6:30, M-5:30, P-4:30
C — Three X Sisters, See Monday
R — James and Hare, See Monday
B — Jack Fulton, See Wednesday

E-7:45 p.m., C-6:45, M-5:45, P-4:45
R — The Goldbergs, See Monday
B — Johnny Hart, See Monday

E-8:00 p.m., C-7:00, M-6:00, P-5:00
R — Cities Service Orchestra
CKGW KOA KPFC KSD KSL KSTP
KTBS KTIS KVOO KYW WBEN
WCAE WCSH WDAF WFAF WFCB
WEEI WFAA WFBR WGY WHO
WJAR WKY WLIT WQAI WOC
WOW WRC WSAI WTAG WTAM
WTC WTMJ WJZ
B — Nestle's Program
KDKA KOIL KWK WBAL WBZ
WBZA WCKY WGAR WHAM WJR
WJZ WLS WREN

E-8:15 p.m., C-7:15, M-6:15, P-5:15
C — Singin' Sam, See Monday

E-8:30 p.m., C-7:30, M-6:30, P-5:30
C — March of Time

CKOK KFPY KHJ KLRA KLZ KMBC
KMOX KOH KSCJ KTRH KVI
WABC WADC WBCM WBIG WBRC
WBT WCAH WCAO WCAU WDAE
WDBJ WDBO WDRC WEAN WFBM
WFEA WGR WHEC WHK WHP
WIBW WISN WJAS WLAC WLKZ
WMT WNAK WNAK WNOX WORO
WORC WOWO WPG WQAM WREC
WSBT WSFA WSJS WSPD WTAR
WTAR WTOC
B — Adventures in Health, See Tuesday

E-8:45 p.m., C-7:45, M-6:45, P-5:45
B — Howard Thurston, See Thursday

E-9:00 p.m., C-8:00, M-7:00, P-6:00
R — Cliquot Club
KSD WBEN WCAE WCSH WDAF
WFAF WFI WFBR WGY WHO
WJAR WLIT WMAQ WOC WOW
WRC WSAI WTAG WTAM WTC
WJZ

**FRIDAY—Continued
and SATURDAY**

B — First Nighter
KDKA KDYL KFI KFSD KGO KGW
KHQ KOA KOIL KOMO KPRC
KSTP KTRAR KTBS KWK WBAL
WBZ WBZA WCKY WECB WGAR
WHAM WJZ WKY WQAI WREN
WTMJ

E-9:30 p.m., C-8:30, M-7:30, P-6:30
R — Pond's Program
KSD WHEN WCAE WCSH WDAF
WEAF WENR WFBR WGY WJO
WJAR WLIT WOC WOW WRC
WSAI WTAG WTAM WWJ

B — Armour Program, Eddie & Ralph
KDKA KFI KGO KGW KHQ KOA
KOIL KOMO KPRC KSL KSTP
KWK WAPI WBAL WBZ WBZA
WBCB WFAA WGAR WHAM WIOD
WJAX WJR WJZ WKY WMAQ
WMC WOAI WREN WRVA WSB
WSM WSMB WTMJ WWNC

E-10:00 p.m., C-9:00, M-8:00, P-7:00
C — Music That Satisfies, See Monday
B — Phillips Lord, See Monday
R — Big Six with Al Johnson
KDYL KFI KFSD KFYP KGH
KGR KOA KGW KHQ KOA KOMO
KPRC KSD KSTP KTRAR KTBS
KTHS KVOO WBNB WCAE WCSH
WDAF WDAY WEAF WECB WEEL
WENR WFAA WFBR WFLA WGY
WHO WIBA WIOD WIS WJAR WJAX
WJDX WKY WLIT WMC WOAI
WOC WOW WRC WRVA WSAI WSB
WSM WSMB WTAG WTAM WTIC
WTMJ WWJ WWNC

E-10:15 p.m., C-9:15, M-8:15, P-7:15
C — Easy Aces, See Monday
B — Concert Orchestra
CKGW KPRC WBAL WCKY WFLA
WGAR WHAM WIOD WIS WJAX
WJZ WKY WMAQ WMC WOAI
WREN WRVA WSB WSM WWNC

E-10:30 p.m., C-9:30, M-8:30, P-7:30
R — Elgin—Floyd Gibbons
CFCE CKGW KDYL KFI KFSD
KFYP KGHG KGR KGO KGW
KHQ KOA KOMO KPRC KSD
KSTP KTRAR KTBS WAPI WBNB
WCAE WCSH WDAF WDAY WEAF
WECB WEEL WENR WFAA WFBR
WFLA WGY WHO WIBA WIOD WIS
WJAR WJAX WJDX WKY WLIT
WMC WOAI WOC WOW WRC
WRVA WSAI WSB WSM WSMB
WTAG WTAM WTIC WTMJ WWJ
WWNC

E-10:45 p.m., C-9:45, M-8:45, P-7:45
R — Lanny Ross Tenor
KSD WEAF WFBR WGY WRC
WTAG WWJ

C — Myrt and Marge, See Monday
C — Stoppnagle & Budd, See Monday
B — Mildred Bailey, See Monday

E-11:00 p.m. C-10:00 M-9:00 P-8:00
C — Columbia Symp. Orch., See Monday
B — Amos 'n' Andy, See Monday
R — Anson Weeks and Orchestra
CFCE KSD WEAF WEEL WFBR
WFLA WGY WIOD WIS WJAR
WLIT WGW WRC WTAG WTAM
WWJ WWNC

E-11:15 p.m., C-10:15, M-9:15, P-8:15
R — Jones and Hare, See Monday

E-11:30 p.m., C-10:30, M-9:30, P-8:30
C — Guy Lombardo, See Monday

E-12:00 p.m., C-11:00, M-10:00, P-9:00
B — Cab Calloway, See Wednesday

E-12:15 p.m., C-11:15, M-10:15, P-9:15
B — Howard Thurston, See Thursday

SATURDAY

E-5:45 p.m., C-4:45, M-3:45, P-2:45
B — Little Orphan Annie, See Monday

E-6:00 p.m., C-5:00, M-4:00, P-3:00
R — Waldorf-Astoria Orch., See Monday
B — Little German Band

KDKA KEX KFSD KFYP KGA
KJR KOA KPO KTRAR KTBS KWCR
WBAL WFLA WGAR WIBA WIOD
WJZ WKY WREN WSB WWNC

C — The Funnybones
CFBR CKOK KFH KLZ KSCJ KTRH
KVOR WAAB WABC WACO WADC
WBCM WBT WCAH WCAO WCAU
WCCO WDAE WDBJ WDBO WDOD
WDRG WDSU WFEA WGST WHAS
WHFC WHK WHP WIBW WICC
WISN WJAS WKBH WKBW WKRC
WLAC WLWB WLWZ WMT WNAH
WOKO WORC WQAM WRBC WSBT
WSFA WSJS WTAQ WTAR WTOC
WWVA

E-6:30 p.m., C-5:30, M-4:30, P-3:30
R — Harlem Fantasy
KEX KFSD KGA KJR KOA KPO
KTBS WCAE WEAF WIBA WKY
WMC WRC WSM WWNC

E-6:45 p.m., C-5:45, M-4:45, P-3:45
C — Jack Miller and Orchestra
CFBR CKOK KFH KLZ KMBC
KMOX KSCJ KTRH KVOR WAAB
WABC WACO WADC WBCM WBT
WCAH WCAO WCCO WDAE WDBJ
WDBO WDOD WDRG WDSU WEAN
WFBL WFBM WFEA WGST WHAS
WHFC WHIP WISN WJAS WKBW
WKRC WLAC WLWB WLWZ WMT
WNAH WOKO WORC WQAM WRBC
WSBT WSFA WSJS WTAQ WTAR
WTOC WWVA

B — Lee Sims-Homay Bailey
WAPI WBAL WENR WFLA WHAM
WIOD WISWJZ WMC WRC WSB
WWNC

R — G. E. Circle, See Monday

E-7:00 p.m., C-6:00, M-5:00, P-4:00
C — Frederic William Wile
KTFB KPYP KGB KHJ KMBC
KMOX KOH KTRH KVI KVOR
WABC WACO WADC WBCM WBIG
WBRG WBT WCAH WCAO WCAU
WDAE WDRG WFBM WFEA WGL
WGN WGR WJAS WLAC WLWB
WMT WNAH WNOX WOKO WQAM
WSFA WSPD WTOC WWVA

R — G. E. Circle, See Monday

E-7:15 p.m., C-6:15, M-5:15, P-4:15
R — George Olsen and Orchestra
WBN WCKY WDAY WEAF WFBR
WPI WGY WHO WJAR WOW WRC
WTAG WTAM

B — Jack Fulton, Jr., Tenor
KDKA KOIL KWCR KWK WBAL
WENR WFLA WHAM WIOD WIS
WJR WJZ WREN WRVA WWNC

E-7:30 p.m., C-6:30, M-5:30, P-4:30
B — Cuckoo Program, Ray Knight
CKGW KEX KGA KJR KOA KTBS
KWCR WBAL WFLA WGAR WHAM
WIBA WJDX WJR WJZ WREN
WRVA WSB WSM WWNC

C — Connie Boswell
CFBR CKOK KFH KMBC KMOX
KOMA KSCJ KSL KTRH KVOR
WABC WACO WADC WBCM WBCM
WBG WBRC WBT WCAO WCAU
WDBJ WDBO WDOD WDRG WDSU
WEAN WFBL WFBM WFEA WGL
WGR WGST WHK WHP WICC WISN
WJAS WKBH WLAC WLWB WLWZ
WMT WNAH WNAH WNOX WOKO
WORC WQAM WRBC WSFA WSJS
WSPD WTAQ WTAR WWVA

E-8:00 p.m., C-7:00, M-6:00, P-5:00
C — Abe Lyman, See Tuesday
R — Archer Gibson, Organist
CKGW KFSD KGO KGW KHQ KOA
KPRC KSD KTBS WBNB WCSH
WEAF WECB WEEL WFBR WFI
WFLA WHO WIBA WIOD WIS
WJAR WKY WMAQ WOC WRC
WSAI WSMB WTAG WTAM WWJ
WWNC

E-8:15 p.m., C-7:15, M-6:15, P-5:15
B — Anson Weeks and Orchestra
KDKA KEX KFSD KFYP KJR KOA
KPO KPRC KTRAR KTBS KWCR
KWK WBAL WCKY WFLA WGAR
WHAM WIBA WIOD WIS WJZ WMC
WOAI WRC WREN WSB WSMB
WWNC

C — Magic Voice, See Tuesday

E-8:30 p.m., C-7:30, M-6:30 P-5:30
R — Economic World Today
CFCE CKGW KDYL KFI KFSD
KFYP KGO KGW KHQ KOA KOMO
KPRC KSD KSTP KTBS KYW WCAE
WCSH WDAF WDAY WEAF WECB
WFBR WFI WFLA WGY WHO WIBA
WIOD WIS WJAR WKY WOC WOW
WRC WSAI WSM WSMB WTAG
WTAM WWJ WWNC

B — Road to Romany
CKGW KWCR KWK WBAL WBZ
WBZA WFLA WGAR WHAM WIOD
WIS WJR WJZ WLV WREN WWNC

C — Isham Jones and Orchestra
CFBR CKOK KFBK KFH KFJF
KFYP KFCO KGB KHJ KIRA KLZ
KMBC KMOX KOH KOL KSCJ
KTRH KVI KVOR WABC WBCM
WBIG WBRG WBT WCAH WCAO
WCAU WCCO WDAE WDBJ WDBO
WDOD WDSU WEAN WFBL WFBM
WFEA WGL WGST WHFC WHK
WHP WIBW WISN WJAS WKBW
WLWB WNAH WNAH WNOX WOKO
WORC WFG WQAM WRBC WSFA
WSPD WTAQ WTAR WTOC WWVA

E-9:00 p.m., C-8:00 M-7:00, P-6:00
C — Music That Satisfies, See Tuesday
R — Erno Rapee and Orchestra
CFCE CKGW KFI KFYP KGO KGW
KHQ KOA KPRC KSD KSTP KTRAR
KTBS WBNB WCAE WCKY WCSH
WDAF WEAF WEEL WFBR WFI
WFLA WGY WHO WIBA WIOD
WIS WJAR WKY WMAQ WMC WOAI
WOC WRC WSAI WSB WSMB
WTAG WTAM WWJ WWNC

**SATURDAY—Continued
and SUNDAY**

B — Gus Van, Pickens Sisters
KDKA KOIL KPFC KWCR KWK
WAPI WBAL WBAP WBZ WBZA
WGAR WHAM WJDX WJR WJZ
WLS WMC WREN WSB WSM WSMB

E-9:15 p.m., C-8:15, M-7:15, P-8:15

C — Do Re Mi Girls
CFRB CKOK KFH KLRA KLZ
KMBC KSCJ KTRH KTSa KVOR
WAAB WABC WADC WBCM WBT
WCAH WCAU WCCO WDAE WDBJ
WDBO WDRC WDSU WEAN WFBL
WFBM WFEA WGST WHAS WHP
WIBW WISN WJAS WKBB WKBP
WLAC WLWB WLWZ WMBD WMT
WNAX WOKO WORC WQAM WRC
WSBT WSFA WSJS WTAR WTOC

E-9:30 p.m., C-8:30, M-7:30, P-6:30

B — S.R.O., Comedy Sketch
CFCF CKGW KDKA KWCR WBAL
WBZ WBZA WGAR WHAM WJR
WJZ WLW WMAQ WREN

C — Carborundum Band

CKOK KMBC KMOX WAAB WABC
WCAU WCAU WCCO WGN WHAS
WHK WJAS WKBW WKRC WSPD

E-10:00 p.m., C-9:00, M-8:00, P-7:00

R — Lucky Strike See Tuesday

E-10:15 p.m., C-9:15, M-8:15, P-7:15

C — Public Affairs Institute
KFBK KFH KJFJ KPFP KPFC
KGB KHJ KLRA KLZ KMBC KMOX
KOH KOL KSCJ KTRH KTSa KVI
KVOR WAAB WABC WBBM WBCM
WBIG WBRC WBT WCAU WCCO
WDAE WDBJ WDBO WDOD WDSU
WEAN WFBM WFEA WGST WHAS
WIBC WHP WIBW WJAS WKBB
WKBW WLWB WNAX WNOX WOKO
WORC WOWO WPG WQAM WREC
WSFA WSPD WTOC

E-10:30 p.m., C-9:30, M-8:30, P-7:30

B — Three Jesters
CFCF CKGW KDKA KOIL KWCR
WBAL WBZ WBZA WHAM WJZ
WREN

E-10:45 p.m., C-9:45, M-8:45, P-7:45

C — Vaughn DeLeath

CFRB CKOK KFAB KFBK KFH
KJFJ KPFP KPFC KGB KHJ KLZ
KMBC KOH KOL KSCJ KTRH KVI
KVOR WABC WACO WBCM WBIG
WBRC WCAU WCAU WCCO WDBJ
WDBO WDOD WDSU WEAN WFBL
WFEA WGR WGST WHP WJAS
WKBB WNAC WNAX WNOX WOKO
WORC WOWO WQAM WSFA WSPD
WTAQ WTAR WTOC WWVA

B — Twenty Fingers of Harmony

CFCF CKGW KDKA WKCY WGAR
WHAM WJZ WREN

E-11:00 p.m., C-10:00, M-9:00, P-8:00

C — Guy Lombardo and Orchestra
CKOK KFAB KFBK KJFJ KPFP
KPFC KGB KHJ KLRA KLZ KMBC
KMOX KOH KOL KRLD KSCJ
KTRH KTSa KVI KVOR WABC
WBCM WBRC WBT WCAH WCAU
WCAU WCCO WDAE WDBJ WDBO
WDOD WDSU WEAN WFBL WFBM
WGL WGST WHAS WHEC WHK
WHP WIBW WISN WKBW WLWB
WMBO WNAC WNAX WNOX WODX

WOKO WQAM WREC WSPD WTAR
WTOC WWVA

R — Art Jarrett See Thursday

E-11:15 p.m., C-10:15 M-9:15 P-8:15

B — Lew White, Organist
CFCF CKGW KDYL KEX KPFD
KFYR KGA KGHL KJR KOIL KPO
KPFC KTBS KWCR KWK WPAL
WKCY WBCB WFLA WGAR WHAM
WIBA WIOD WIS WJR WJZ WMC
WOAI WREN WSB WSMB WWNC

E-11:30 p.m., C-10:30, M-9:30, P-8:30

C — Harold Stern and Orchestra
R — Paul White and Orchestra
KSD WCAE WKCY WEAF WEEI
WFI WGY WJAR WMAQ WRC
WTAM WWJ

C — California Melodies

KFBK KPFP KLZ KMBC KOH
KTRH KVOR WABC WADC WBCM
WBRC WBT WCAH WCAU WFBL
WFBM WGL WHAS WISN WKBW
WLAC WMBD WMT WNAX WNOX
WOKO WPG WSPD WWVA

E-12:00 p.m., C-11:00, M-10:00, P-9:00

C — Ted Fiorito and Orchestra
CKOK KFAB KFH KLZ KMBC
KOMA KRLD KSCJ KSL KTRH
KVOR WABC WBCM WBRC WBT
WCAU WCCO WDAE WDBJ WDOD
WDSU WEAN WFBL WGL WGST
WHP WIBW WICC WISN WKBW
WLAC WLWB WLWZ WMBD WMT
WNAC WNAX WOKO WPG WREC
WSBT WSPD WTOC

R — Roger Wolfe Kahn Orchestra

KDYL KPFD KFYR KGA KGHL
KJR KPO KPFC KSD KSTP KTBS
KVOO WBN WCAE WKCY WDAF
WEAF WBCB WFBF WFLA WGY
WHO WIBA WIOD WIS WJAR
WMAQ WMC WOAI WOC WRC WSB
WSMB WTAG WTAM WWNC
B — Jack Denny, See Monday

E-12:30 a.m., C-11:30, M-10:30, P-9:40

R — Vincent Lopez and Orchestra
KDYL KEX KFYR KGA KJR KPO
KPFC KSD KSTP KTBS WCAE
WKCY WEAF WBCB WFBF WHO
WIBA WIOD WJAR WJZ WMC
WOAI WOC WRC WSB WSMB WTAG
WWNC

SUNDAY

E-11:30 a.m., C-10:30, M-9:30, P-8:30

R — Major Bowes Family
KEX KFYR KGA KJR KOA KPO
KSL KSTP KTBS WAPI WBSH WDAF
WEAF WFLA WGY WIOD WLIT
WMAQ WMC WPTF WRC WSM
WTAM WWJ WWNC

E-12:00 m., C-11:00, M-10:00, P-9:00

C — Salt Lake Tabernacle Choir
CFRB CKOK KFAB KFBK KPFP
KGB KLZ KMBC KOH KSCJ KVOR
WAAB WABC WADC WBIG WCAU
WCCO WDBJ WDOD WFBL WFEA
WGR WHAS WHEC WHK WISN
WJAS WKBN WLWZ WMBD WMT
WNAX WNOX WOKO WORC WPG
WQAM WREC WSBT WSJS WTAQ
WTAR WWVA

E-12:30 a.m., C-11:30, M-10:30, P-9:30

R — Russian Symphonic Choir
CKGW KDYL KEX KPFD KPFP

KGA KGHL KGIR KJR KOA KPO
KPFC KTAR WBN WCKY WDAF
WDAE WEAF WFBF WGY WHO
WIOD WIS WJAR WJAX WLIT WOC
WPTF WSMB WTAG WTAM WWJ
WWNC

E-12:30 p.m., C-11:30, M-10:30, P-9:30

R — Legion of the Lost
C — Reis and Dunn
C — Emery Deutsch and Orchestra
CFRB CKOK KFAB KFBK KJFJ
KFRC KHJ KLRA KMBC KOL
KRLD KSCJ KTRH KVOR WAAB
WABC WBBM WBCM WBRC WCAH
WCAU WCCO WDAE WDBJ WDBO
WDOD WDSU WFBL WGR WGST
WHAS WHEC WIBW WISN WJAS
WKBB WKBN WLWB WMBD WODX
WOKO WORC WOWO WPG WQAM
WREC WSFA WTAQ WTAR WWVA

E-1:00 p.m., C-12:00, M-11:00, P-10:00

C — Cathedral Hour
CFRB CKOK KFH KLRA KLZ
KMBC KSCJ KTRH KTSa KVOR
WABC WACO WADC WBCM WCAH
WCAU WCCO WCCO WDAE WDBJ
WDBO WDOD WDRC WDSU WFBL
WFEA WGR WGST WHAS WHEC
WHK WHP WIBW WISN WKBB
WLAC WLWZ WMT WOKO WORC
WQAM WREC WSBT WSJS WTAQ
WTAR WTOC

E-1:30 p.m., C-12:30, M-11:30, P-10:30

C — Columbia Church of the Air
CFRB CKOK KFAB KFBK KPFP
KLZ KMBC KOH KSCJ KTRH KVI
KVOR WAAB WABC WADC WBCM
WBIG WBRC WBT WCAH WCAU
WCAU WCCO WDBJ WDOD WDRD
WFBL WGR WHEC WIK WISN
WJAS WLWB WLWZ WMT WOKO
WOWO WPG WQAM WSBT WSJS
WTAQ WTAR WWVA

E-2:00 p.m., C-1:00 M-12:00 P-11:00

R — Clyde Doerr and Orchestra
CFCF CKGW KFI KPFD KGO KGW
KHQ KOA KOMO KPFC KSD KTAR
KTBS KTHS KVOO WAPI WBNB
WCAE WKCY WDAF WEAF WEEI
WFAA WFBF WFI WFLA WGY
WIOD WIS WJAR WJAX WLIX
WKY WLIT WMC WOW WRC WRA
WSB WSM WTAG WTAM WWJ
WWNC

E-2:15 p.m., C-1:15 M-12:15, P-11:15

C — Victor Arden and Orchestra
CKOK KMBC KMOX WABC WBBM
WCAU WCAU WGR WHEC WHK
WJAS WKRC WNAC WOKO WOWO

E-2:30 p.m., C-1:30, M-12:30, P-11:30

R — Moonshine and Honeyuckle
KSD WCAE WKCY WSSH WDAF
WEAF WEEI WFAQ WGY WHO
WJAR WLIT WMAQ WOC WOW
WGR WTAG WTAM WWJ

B — Yeast Foamers

KDKA KPI KPFD KFYR KGHL
KGO KGW KHQ KOIL KOMO KSTP
KTAR KTHS KVOO KWCR KWK
KYW WAPI WBAL WBZ WEZA
WDAY WBCB WFAA WFLA WGAR
WHAM WIBA WIOD WIS WJAX
WJDX WJR WJZ WLW WPTF WREN
WRA WSB WSM WSMB WTMJ
WWNC

SUNDAY—Continued

E-2:45 p.m., C-1:45, M-12:45, P-11:45
C — Hoosier Editor, Frederick Landis
CKOK KDB KFAB KFBK KFPY
KFRC KGB KHJ KLZ KMBC KMOX
KOLN KOH KOMA KSL KVI WABC
WBMM WCAH WCAO WCAU WCCO
WGR WHAS WHK WJAS WKRC
WNAC WOWO WRR

E-3:00 p.m., C-2:00, M-1:00, P-12:00
R — Wayne King and Orchestra
KDYL KFI KFJR KGO KGW KHQ
KOA KOMO KPRC KSD KSTP KTBS
KTHS KV00 KYW WBNB WCAE
WCSH WDAF WDAY WEAF WEBC
WEEI WFAA WFBP WGY WHO
WIBA WJAR WKY WLIT WOAI
WOC WOV WRC WSAI WTAG
WTAM WTMJ WWJ

C — N. Y. Philharmonic Orchestra
CFRB CKOK KFH KLRA KLZ KMBC
KRLD KSCJ KTRH KVR KWB
WACO WADC WBCM WCAH WCAO
WCAU WCCO WDAE WDBJ WDBO
WDOB WDRD WDSU WFLN WFBL
WFDW WFLA WGST WHAS WHEC
WHK WHP WIBW WIP WISN WKBH
WKBB WKRC WLAC WLWB WLZ
WMBD WMT WOKO WORC WQAM
WREC WSBT WSPA WSJS WTAQ
WTAR WTOC WVVV

B — Our American Music
KOIL KWCR KWK WBAI WFLA
WGAR WIOD WJAX WJZ WMAQ
WREN WRVA WSB WSM WSMB
WWNC

E-3:30 p.m., C-2:30, M-1:30, P-12:30
R — Dr. S. Parkes Cadman
KDYL KFSB KFJR KGHL KGO
KGW KHQ KOA KOMO KPRC KSD
KSTP KTRT KTBS KY00 WBNB
WCAE WCSH WDAF WDAY WEAF
WEBC WEEI WFBP WGY WHO
WIBA WJAR WKY WLIT WOAI
WOC WOV WRC WSAI WTAG
WTAM WWJ

B — Manhattan Merry-Go-Round
KDKA KOIL KWCR KWK WBAI
WBZ WBZA WHAM WJZ WMAQ
WREN

E-4:00 p.m., C-3:00, M-2:00 P-1:00
— Father Coughlin
KMOX KSTP KYW WCAO WCAU
WDRG WEAN WFBL WFEA WGAR
WGR WHB WICC WJAS WJR WLZ
WLW WMT WNAC WNBH WOC
WOL WOKO WOR WORC

R — Iodent Program
KFI KFSB KFJR KGHL KGIR
KGO KGW KHQ KOA KOMO KPRC
KSD KSL KTRT KTBS KTHS KV00
KYW WAPI WBAI WBAF WBY
WBZA WDAY WEBC WFLA WGAR
WHAM WIBA WIOD WIS WJAX
WJDX WJZ WMC WOAI WPTF
WREN WRVA WSB WSM WSMB
WTAG WTAM WTMJ WWJ WWNC

B — Temple of Song
KDKA KOIL KWCR WBAI WBZ
WBZA WCKY WFLA WHAM WJZ
WMAQ WREN

E-4:15 p.m., C-3:15 M-2:15, P-1:15
R — Wildroot-Vee Lawnhurst
KDYL KFI KGO KGW KHQ KOA
KOMO KSD WBNB WCAE WCSH
WDAF WEAF WEEI WFBP WGY
WJAR WLIT WMAQ WOW WRC
WSAI WTAG WTAM WWJ

E-4:30 p.m., C-3:30, M-2:30 P-1:30
R — International Radio Forum
CFRC CKGW WBNB WCAE WCKY
WCSH WDAF WEAF WEEI WFBP
WFI WGY WJAR WMAQ WOW WRC
WSAI WTAG

B — National Youth Conference
KDKA KDYL KFSB KFJR KGHL
KGO KGW KHQ KOA KOIL KOMO
KPRC KSTP KTRT KTBS KV00
KWCR KWK WAPI WBAI WBY
WBZA WCKY WDAY WEBC WENR
WFLA WGAR WHAM WIBA WIOD
WIS WJAX WJDX WJR WJZ WRY
WLW WMC WOAI WPTF WREN
WRVA WSB WSM WWNC

E-4:45 p.m., C-3:45, M-2:45 P-1:45
R — LeTrio Charmanto
CKGW WBNB WCAE WCSH WDAF
WEAF WEEI WENR WFBP WFI
WGY WHO WJAR WOC WOW WRC
WSAI WTAG

E-5:00 p.m., C-4:00, M-3:00, P-2:00
C — Roses and Drums
CKOK KMBC KMOX KRLD WAAB
WABC WADC WBBM WCAO WDSU
WFBM WGR WGST WHK WJAS
WKRC

R — Pop. Concert, Walter Logan
CKGW KFSB KGO KGW KHQ KOA
KSTP KTRT KTBS WAPI WBNB
WCAE WCSH WDAF WEAF WEBC
WEEI WENR WFBP WFI WFLA
WGY WHO WIOD WJAR WKY WMC
WOC WOW WRC WRVA WSAI WSB
WSM WTAG WTAM WWJ WWNC

R — National Vespers
KFSB KFJR KGHL KGIR KGO
KGW KHQ KOA KOIL KPRC KTRT
KTBS KTHS KV00 KWCR KWK
KYW WAPI WBAI WBAF WBY
WBZA WDAY WEBC WFLA WGAR
WHAM WIBA WIOD WIS WJAX
WJDX WJZ WMC WOAI WPTF
WREN WRVA WSB WSMB WWNC

E-5:30 p.m., C-4:30, M-3:30, P-2:30
C — Blue Coal Revue
WAAB WABC WCAO WCAU WDRG
WEAN WFBL WGR WHEC WHP
WOKO

R — Big Ben's Dream Dramas
KDYL KFI KGO KOA KSD KSTP
WBNB WCAE WCSH WDAF WEAF
WEEI WENR WFBP WFI WGY
WJAR WOV WRC WSAI WTAG
WTAM WTMJ WWJ

E-5:45 p.m., C-4:45, M-3:45, P-2:45
R — "Bring 'Em Back Alive"
KDYL KFI KFJR KGO KGW KHQ
KOA KOMO KSD KSTP WBNB
WCAE WCKY WCSH WDAF WDAY
WEAF WEBC WEEI WFBP WFI
WGY WHO WIBA WJAR WMAQ
WOC WOW WRC WSAI WTAG
WTAM WWJ

E-6:00 p.m., C-5:00, M-4:00, P-3:00
B — Paul Whiteman's Concert
CKGW KOIL KWCR KWK WBAI
WBZ WBZA WCKY WENR WGAR
WHAM WJR WJZ WRC WREN

C — Poe's Gold-David Ross
CFRB CKOK KFH KLZ KRLD
KSCJ KVR WABC WACO WADC
WBCM WCAO WCAU WCCO WDAE
WDBJ WDBO WDOB WDRG WDSU
WFBL WFBM WFEA WGR WGST
WHAS WHEC WHP WIBW WISN

WJAS WKBB WLAC WLWB WMT
WNAX WOKO WORC WQAM WREC
WSBT WSPA WSJS WTAQ WTAR
WTOC WVVV

R — Catholic Hour
KEX KFSB KFJR KGA KGHL
KGIR KJR KOA KPO KPRC KSTP
KV00 WAPI WBAF WBNB WCAE
WCSH WDAF WEAF WEBC WEEI
WENR WFBP WFLA WGY WHO
WIBA WIOD WJAR WJAX WJDX
WKY WLIT WMC WOAI WOC
WOW WRC WRVA WSAI WSM
WSMB WTAG WTAM WWJ WWNC

E-6:15 p.m., C-5:15, M-4:15, P-3:15
C — Little Jack Little
CFRB CKOK KFH KLZ KRLD KSCJ
KSL KVR WACO WADC WCAU
WCCO WDAE WDBJ WDBO WDOB
WDRG WDSU WFBL WFBM WFEA
WGR WGST WHAS WHEC WHP
WIBW WISN WJAS WKBB WKRC
WLAC WLWB WLZ WMT WNAX
WOKO WORC WPG WQAM WREC
WSBT WSPA WSJS WTAQ WTAR
WTOC WVVV

C — Irene Beasley, Round Towners
CFRB CKOK KFAB KPBK KFH
KFJF KFRC KHJ KLRA KMBC
KMOX KOL KRLD KSCJ KVR
WABC WBCM WBIG WBRB WBT
WCAH WCAO WCAU WCCO WDAE
WDBJ WDBO WDOB WDRG WDSU
WEAN WFBL WFBM WFEA WGR
WGST WHAS WHEC WHK WHP
WIBW WISN WJAS WKBB WKBN
WLWB WMBD WNAC WNOX WODX
WOKO WORC WOWO WQAM WREC
WSPA WSPD WTAQ WTAR WTOC
WVVV

R — Our American Schools
KDYL KEX KFSB KGA KJR KPO
KPRC KSD KSTP KTBS KYA WBNB
WCAE WCSH WDAF WEAF WEBC
WEEI WENR WFBP WFLA WHO
WIBA WIOD WIS WJAR WJAX
WKY WOAI WOC WOW WRVA WSAI
WSB WSM WSMB WTAG WTAM
WWJ WWNC

C — World's Business, Dr. Klein
KFAB KFH KFPY KGB KLZ KMOX
KOH KRLD KSCJ KTRH KVI
KVR WABC WACO WADC WBBM
WBCM WBIG WBIC WBT WCAH
WCAO WCCO WDBJ WDOB WDRG
WEAN WFAN WFBL WFBM WFEA
WGL WGR WHAS WHEC WIP
WISN WJAS WLAC WLWB WLZ
WMT WNAC WNAX WNOX WOKO
WORC WPG WQAM WREC WSBT
WTAQ WTAR WVVV

R — Marimba Band
KDYL KFI KFSB KFJR KGO KGW
KHQ KOA KPRC KSD KTBS WCAE
WCKY WDAF WDAY WEAF WEBC
WEEI WFBP WFLA WGY WHO
WIBA WIOD WIS WJAR WKY WLIT
WMAQ WOAI WOC WSMB WTAG
WWJ WWNC

E-7:15 p.m., C-6:15, M-5:15, P-4:15
C — Barbara Maurel, Contralto
CKOK KFH KLZ KMBC KMOX
KOM A KRLD KSCJ KSL KVR
WABC WACO WADC WBCM WBIG
WBCB WBT WCAO WCAU WCCO
WDAE WDBJ WDBO WDOB WDRG
WDSU WFLA WGR WHEC WHK
WHP WIBW WISN WJAS WKBB
WLWB WLZ WMT WNAX WNOX
WODX WOKO WORC WQAM WREC
WSBT WSJS WTAR WTOC WVVV

SUNDAY—Continued

B — Borrah Minnevitth—Harmonica
 KDYL KFI KFSO KFYR KGO KGW
 KHQ KOA KPRC KSTP KTBS
 KWCR WBAL WBZ WBZA WCKY
 WDAY WFCB WFAA WFLA WGAR
 WIBA WIOD WIS WJR WJZ WLS
 WQAI WREN WRVA WSB WSMB
 WWNC
R — Ray Knight See Monday
C — New World Symphony

E-7:30 p.m., C-6:30, M-5:30, P-4:30
B — Great Moments in History
 KDKA KDYL KFI KFSO KFYR KGO
 KGW KHQ KOA KOMO KPRC
 KSTP KTAR KVOO KWK WBAL
 WBZ WBZA WDAY WFCB WFAA
 WFLA WGAR WHAM WIBA WIOD
 WJAX WJDX WJR WJZ WKY WLS
 WLW WMC WQAI WREN WRVA
 WSB WSM WSMB WTMJ WWNC
R — Orchestral Gems
 KSD WBN WCAE WDAF WFAF
 WFBR WGY WJAR WLS WOW
 WSAI WTAG WTIC WWJ

E-7:45 p.m., C-6:45, M-5:45 P-4:45
R — Angelo Patri, See Wednesday
C — Chase and Sanborn Hour
 CFCF CKGW KFI KFSO KFYR
 KGO KGW KHQ KOA KOMO KPRC
 KSD KSL KSTP KTAR KTHS KVOO
 WAPI WBN WCAE WCFB WCFH
 WDAF WDAY WFAE WFCB WFLA
 WFBR WFLA WGY WHO WIOD
 WIS WJAR WJAX WJDX WKY
 WLIT WLS WMC WQAI WOC WPTF
 WRC WRVA WSAI WSB WSM
 WSMB WTAG WTAM WTIC WTMJ
 WWJ WWNC

C — Ernest Hutcheson—Pianist
 CKOK KLZ KMBC KMOX KOMA
 KRLD KSCJ KSL KTSB KVOR
 WABC WACO WADC WBBM WBCM
 WBRC WCOA WCCO WDAE WDBJ
 WDBO WDOD WDRC WDSU WFBL
 WFBM WFEA WGR WHEC WHK
 WHP WIBW WISN WJAS WKBH
 WLWB WLWZ WMT WNOX WODX
 WOKO WOKC WQAM WREB WSJS
 WTAR WWVA
B — Russian Gaieties
 KDKA KOIL KWCR KWK WBAL
 WGAR WJR WJZ WLS WREN

E-8:30 p.m., C-7:30, M-6:30, P-5:30
C — To The Ladies—Morton Downey
 CKOK KLZ KMBC KOMA KRLD
 KSCJ KSL KTSB KVOR WAAB
 WAHC WADC WBCM WBRC WBT
 WCAO WCAU WCCO WDAE WDBJ
 WDBO WDOD WDRC WDSU WFBL
 WFBM WFEA WGR WHEC WHK
 WHP WIBW WISN WJAS WKBH
 WLAC WLWB WLWZ WMT WNAK
 WNOX WODX WOKO WORC WQAM
 WREC WSJS
B — Red Adams—Sketch
 KDKA KOIL KWCR KWK WBAL
 WGAR WHAM WJR WJZ WLS WREN

E-9:00 p.m., C-8:00, M-7:00, P-6:00
R — Our Government, David Lawrence
 KPRC KSD KTBS KVOO WAPI
 WFAF WENR WFAA WFBR WFI
 WFLA WGY WHO WIOD WIS WJAR
 WJDX WKY WMC WOC WOW
 WPTF WRC WRVA WSAI WSB
 WSM WSMB WTAG WWNC

B — Enna Jettick Melodies
 CFCF CKGW KDKA KFI KFSO
 KFYR KGHL KGIR KGO KGW KHQ
 KOA KOIL KOMO KSTP KTAR
 KWCR KWK KYW WBAL WBZ
 WBZA WCKY WDAY WFCB WGAR
 WHAM WIBA WJAX WJR WJZ
 WREN WRVA WTMJ
C — Bath Club—Fred Allen
 CFRB CKOK KLRA KLZ KMBC
 KMOX KSCJ KTRH KTSB KVOR
 WABC WADC WBCM WCAH WCAO
 WCCO WDAE WDBJ WDBO WDOD
 WDRC WDSU WFAN WFBL WFBM
 WFEA WGR WGST WHAS WHEC
 WHK WHP WIBW WIP WISN WJAS
 WKBH WKRC WLAC WLWB WLWZ
 WMT WNAK WOKO WORC WQAM
 WREC WSBT WSJS WTAR WTOC

E-9:15 p.m., C-8:15, M-7:15, P-6:15
R — Album of Familiar Music
 KFI KFSO KFYR KGO KGW KHQ
 KOA KOMO KPRC KSD KSL KSTP
 KTAR KTHS WAPI WBN WCAE
 WCFB WDAY WFAE WFCB WENR
 WFAA WFBR WFI WFLA WGY
 WHO WIBA WIOD WJAR WJDX
 WKY WMC WQAI WOC WOW
 WRC WSAI WSB WSM WSMB
 WTAG WTAM WTMJ WWJ

B — Smith Brothers
 KDKA KOIL KWCR KWK KYY
 WBAL WBZ WJAX WHAM WJR
 WJZ WREN

E-9:30 p.m., C-8:30, M-7:30, P-6:30
C — Pennzoi Parade
 CKOK KJFF KLRA KMBC KMOX
 KTSB WABC WADC WBRC WBT
 WCAO WCAU WCCO WDRC WEAN
 WFLB WGN WGR WGST WHEC
 WHK WJAS WKRC WLAC WLWB
 WNAK WOKO WSPD
B — Harriet Lee and Leaders
 CKGW KDKA KFYR KOIL KSTP
 KWCR KWK KYW WBAL WGAR
 WHAM WJR WJZ WLW WREN

E-9:45 p.m., C-8:45, M-7:45, P-6:45
B — Sheaffer Lifetime Revue
 CFCF CKGW KDKA KDYL KFI
 KFYR KGHL KGIR KGO KGW
 KHQ KOA KOIL KOMO KPRC
 KSTP KTBS KTHS KWCR KWK
 WBAL WBZ WBZA WDAY WFCB
 WENR WGAR WHAM WIBA WJDX
 WJR WJZ WKY WMC WQAI WREN
 WSB WSM WSMB WTMJ
R — Ohman and Arden, Piano Duo
 KSD WBN WCAE WCFB WDAF
 WFAF WFBR WFI WGY WHO
 WJAR WMAQ WOC WOW WRC
 WSAI WTAG WTAM WTIC WWJ

E-10:00 p.m., C-9:00 M-8:00, P-7:00
C — Canada Dry-Jack Benny
 CFRB CKAC CKOK KMBC KMOX
 WABC WADC WCAO WCAU WCCO
 WDRC WEAN WFBL WFBM WGN
 WHAS WHK WJAS WKRW WKRC
 WNAK WOKO WOWO WPG WSPD

E-10:15 p.m., C-9:15, M-8:15, P-7:15
R — L'Heure Exquise
 CKGW KFYR KPRC KSD KSTP
 KTAR KTBS WBN WCAE WCKY
 WDAF WFAF WFCB WFLB WFBR
 WFI WFLA WGY WHO WIBA WIOD
 WJAR WKY WMC WOC WOW WRC
 WRVA WSAI WSM WSMB WTAG
 WTAM WTIC WWJ WWNC

B — Old Singing Master
 KDKA KFI KGO KGW KHQ KOA
 KOIL KOMO KSL KWK WBAL WBZ
 WBZA WGAR WHAM WJR WJZ
 WLW WMAQ WREN

E-10:30 p.m., C-9:30, M-8:30, P-7:30
C — Welfare and Relief Program
 CFRB CKAC CKOK KPH KLZ
 KMBC KOMA KSCJ KTSB KVOR
 WAAB WABC WADC WBBM WBCM
 WBRC WBT WCAO WCAU WCCO
 WDAE WDBJ WDBO WDOD WDRC
 WDSU WFBL WFBM WFLA WGR
 WHEC WHP WIBW WISN WJAS
 WKBH WLWB WLWZ WMBD WMT
 WNAK WNOX WOKO WORC WPG
 WQAM WREC WSAI WSJS WTAR
 WTOC

E-10:45 p.m., C-9:45, M-8:45 P-7:45
R — Sunday at Seth Parker's
 CFCF KECA KFSO KFYR KGHL
 KGIR KGO KGW KHQ KOA KOMO
 KPRC KSD KSL KSTP KTAR KTBS
 KYW WAPI WBN WCAE WCFB
 WDAF WDAY WFAE WFCB WEEI
 WFAA WFBR WFI WFLA WGY
 WHO WIBA WIOD WIS WJAR WJAX
 WJDX WKY WMC WQAI WOC WOW
 WPTF WRC WRVA WSAI WSB
 WSM WTAM WTMJ WWJ

E-11:00 p.m., C-10:00, M-9:00, P-8:00
B — Sam Herman, Xylophonist
 KOIL KWCR KWK WBAL WGAR
 WHAM WJR WJZ WMAQ WREN

E-11:15 p.m., C-10:15, M-9:15, P-8:15
R — Donald Novis—Tenor
 KDYL KFYR KGHL KGO KGW
 KHQ KSTP KTBS WCAE WCKY
 WDAF WFAE WFCB WENR WFBR
 WFI WFLA WGY WHO WIBA WIS
 WJAX WMC WOC WKY WSB WSMB
 WTAG WTAM WWNC
C — The Gauchos — Tito Guizar
 WAAB WABC WBRC WBT WDAE
 WDBJ WDBO WDOD WDRC WDSU
 WLAC WLWB WNOX WPG WQAM
 WREC WSJS WTAR WTOC

E-11:30 p.m., C-10:30, M-9:30, P-8:30
R — Melodic Serenade
 KFSO KFYR KGO KHQ KSTP
 KTAR KTBS WCAE WCKY WFAE
 WENR WFBR WFLA WGY WIBA
 WIOD WIS WJAR WMC WRC WSAI
 WSB WSM WTAM WWJ WWNC
C — Eddie Duchin's Orchestra
 CFRB CKOK KLRA KTRH WABC
 WADC WBCM WCAO WCAU WCCO
 WDAE WDBJ WDBO WDOD WDRC
 WDSU WFBL WGR WGST WHK
 WHP WISN WLAC WLWB WOKO
 WPG WQAM WREC WSJS WTAR
 WTOC

B — Frankie Masters and Orchestra
 KOIL KWCR KWK WBAL WCKY
 WENR WHAM WJR WJZ WREN
C — Pennzoi Parade
 KERN KFBK KFPY KPRC KGB
 KHJ KLZ KMJ KOIN KOL KVI
 KWG

E-12:00 p.m., C-11:00, M-10:00, P-9:00
B — Wm. Stoess and Orchestra
 KGHL KGO KGW KOA KOIL KOMO
 KSLP KTBS KWCR WDAY WENR
 WFLA WGAR WHAM WIOD WJR
 WJZ WKY WLW WMC WREN
 WSB WWNC
R — Joe Furst and Orchestra
 WCAE WCKY WDAF WFAF WFBR
 WHO WLIT WOC WTAM

CLASSIFIED INDEX TO CHAIN PROGRAMS

Time in Eastern Standard

BANDS

Carborundum Band, 9:30 p.m., Saturday, C.
Little German Band, 6:00 p.m., Saturday, B.
Marimba Band, 7:00 p.m., Sunday, R.

CONCERTS

Howard Barlow Symphony, 11:00 p.m., daily, ex. Sat. and Sun., C.
Cities Service, 8:00 p.m., Friday, R.
The Gauchos, 11:15 p.m., Sunday, C.
Kremlin Art Quintet, 7:15 p.m., Friday, R.
L'Heure Exquise, 10:15 p.m., Sunday, R.
Le Trio Charmant, 4:45 p.m., Sunday, R.
Walter Logan, 5:00 p.m., Sunday, R.
Melodic Serenade, 11:30 p.m., Sunday, R.
National Opera, 11:15 p.m., Mon. and Tues., B.
New York Philharmonic, 8:00 p.m., Sunday, C.
Orchestral Gems, 7:30 p.m., Sunday, R.
Our American Music, 8:00 p.m., Sunday, B.
Popular Classics, 7:45 p.m., Monday, C.
Erno Rapee, 9:00 p.m., Saturday, I.
Road to Romany, 8:30 p.m., Saturday, B.
Russian Gaieties, 8:00 p.m., Sunday, B.
Waldorf-Astoria, 6:00 p.m., daily, ex. Sunday, R.

DANCE BANDS

Ben Bernie, 9:00 p.m., and 12:30 a.m., Tues.; 11:30 p.m., Thurs., R.
Don Bestor, 11:00 p.m., Thurs. and Sat., R.
Cab Calloway, 12 mid., Wed. and Fri., B.
Don DeForest, 6:00 p.m., Friday, B.
Jack Denny, 12 mid., Mon., Sat., B.; 11:15 p.m., Tues., 8:45 p.m., Wed., R.; 8:45 p.m., Thurs., C.
Lew Diamond, 12:30 a.m., Monday, B.
Clyde Doerr, 2:00 p.m., Sunday, R.
Eddie Duchin, 11:30 p.m., Sun.; 12 mid. Mon. and Thurs., C.
Ted Fiorito, 12 mid., Saturday, C.
Joe Furst, 12 mid., Sunday, R.
Isham Jones, 11:30 p.m., Tues., Wed. and Thurs., C.
Roger Wolfe Kahn, 11:00 p.m., Mon.; 12 mid., Sat., R.
Wayne King, 3:00 p.m., Sun.; 8:30 p.m., Tues., R.
Guy Lombardo, 11:30 p.m., Mon. and Fri.; 9:00 p.m., Wed., C.
Vincent Lopez, 12:30 a.m., Saturday, R.
Lucky Strike, 10:00 p.m., Tues., Thurs. and Sat., R.
Abe Lyman, 8:00 p.m., Tues., Thurs. and Sat., C.
Clyde McCoy, 11:30 p.m., Monday, R.
Jack Miller, 6:30 p.m., Tues.; 6:45 p.m., Sat., C.
George Olsen, 12 mid., Tues.; 7:15 p.m., Sat., R.
Don Redman, 12 mid., Tues. and Wed., C.
William Stoess, 12 mid., Sunday, B.
Rudy Vallee, 8:00 p.m., Thursday, R.
Anson Weeks, 11:00 p.m., Fri., R.; 8:15 p.m., Sat., B.
Ted Weems, 10:00 p.m., Sun.; 8:15 p.m., Thurs., C.
Paul Whiteman, 6:00 p.m., Sun., B.; 9:30 p.m., Mon., 11:30 p.m., Sat., R.

DIALOG

Red Adams, 8:30 p.m., Sunday, B.
Fred Allen, 9:00 p.m., Sunday, C.
Amos 'n' Andy, 7:00 and 11:00 p.m., daily, ex. Sat., and Sun., B.
Betty Boop, 7:30 p.m., Tuesday, B.
Burns and Allen, 9:00 p.m., Wednesday, C.
Clara, Lu 'n' Em, 10:15 a.m., daily, ex. Sat. and Sun., B.
Easy Aces, 10:15 p.m., Mon., Wed. and Fri., C.
Eddie and Ralph, 9:30 p.m., Friday, B.
Funnyboners, 6:45 p.m., Mon. and Wed.; 6:00 p.m., Sat., C.
Johnny Hart, 7:45 p.m., daily, ex. Sat. and Sun., B.
Ray Knight, 7:30 p.m., Saturday, B.
Jack Pearl, 10:00 p.m., Thursday, R.
Ray Perkins, 7:30 p.m., Tues. and Thurs., R.
The Pridgetts, 9:30 p.m., Wednesday, R.
S. R. O. Comedy, 9:30 p.m., Saturday, B.
Sloopnagle & Budd, 10:45 p.m., Mon., Wed. and Fri., C.
Tastyest Jesters, 7:15 p.m., Monday, B.

Howard Thurston, 8:45 p.m. and 12:15 a.m., Thurs. and Fri., B.
Wheatonville, 7:15 p.m., daily, ex. Fri. and Sat., R.
Ward Wilson, 7:15 p.m., Wed., Thurs. and Fri., B.

DRAMA

Big Ben, 5:30 p.m., Sunday, R.
Death Valley Days, 9:00 p.m., Thursday, B.
Eno Crime Club, 9:30 p.m., Wednesday, C.
Evening in Paris, 9:30 p.m., Monday, C.
First Nighter, 9:00 p.m., Friday, B.
Friendship Town, 9:30 p.m., Tuesday, B.
Fu Manchu, 8:45 p.m., Monday, C.
Goldbergs, 7:45 p.m., daily, ex. Sunday, R.
Sherlock Holmes, 9:00 p.m., and 12:15 a.m., Wednesday, B.
Omar Khayyam, 9:30 p.m., Thursday, C.
Phillips Lord, 10:00 p.m., daily, ex. Sat. and Sun., B.
Magic Voice, 8:15 p.m., Tues. and Sat., C.
March of Time, 8:30 p.m., Friday, C.
Moments in History, 7:30 p.m., Sunday, B.
Moonshine and Honeysuckle, 2:30 p.m., Sunday, R.
Myrt and Marge, 7:00 and 10:45 p.m., daily, ex. Sat. and Sun., C.
Rin Tin Tin, 8:30 p.m., Thursday, B.
Buck Rogers, 7:15 p.m., daily, ex. Sat. and Sun., C.
Roses and Drums, 5:00 p.m., Sunday, C.
The Shadow, 8:00 p.m., Wednesday, R.
Sheer Romance, 6:30 p.m., Wednesday, B.
Soconyland Sketches, 8:00 p.m., Monday, R.

PIANO AND ORGAN

Archer Gibson, 8:00 p.m., Saturday, R.
Harding Sisters, 6:30 p.m., Mon. and Wed., R.; 10:45 p.m., Sat., B.
Ernest Hutcheson, 8:00 p.m., Sunday, C.
Keenan and Phillips, 6:45 p.m., Tuesday, C.
Ohnan and Arden, 9:45 p.m., Sun., R.; 2:15 p.m., Sun. C.
Lee Sims, 6:45 p.m., Saturday, B.
Lew White, 11:15 p.m., Saturday, B.

POPULAR PROGRAMS

A. & P. Gypsies, 9:00 p.m., Monday, R.
Armour Program, 9:30 p.m., Friday, B.
Bath Club, 9:00 p.m., Sunday, C.
Jack Benny, 10:00 p.m., Sun.; 8:15 p.m., Thurs., C.
Blue Coal Revue, 5:30 p.m., Sunday, C.
Major Bowes, 11:30 a.m., Sunday, R.
Carnation Contented, 10:00 p.m., Monday, R.
Chase and Sanborn, 8:00 p.m., Sunday, R.
Cluquot Club, 9:00 p.m., Friday, R.
Columbia Revue, 12:30 p.m., daily, ex. Sat. and Sun., C.
Enna Jettick Melodies, 9:00 p.m., Sunday, B.
Jay C. Flippen, 10:00 p.m., Tuesday, C.
G. E. Circle, 6:45 and 7:00 p.m., daily, ex. Sun. and Tues., R.
Sam Herman, 11:00 p.m., Sunday, B.
Andre Kostelanetz, 10:00 p.m., Thursday, C.
Manhattan Merry-Go-Round, 3:30 p.m., Sunday, B.
Maxwell House Sho Boat, 9:00 p.m., Thursday, R.
Nestle's Program, 8:00 p.m., Friday, B.
Pennzoil Parade, 9:30 and 11:30 p.m., Sunday, C.
Pond's Program, 9:30 p.m., Friday, R.
Sheaffer Revue, 9:45 p.m., Sunday, B.
Sinclair Wiener Minstrels, 9:00 p.m., Monday, B.
Smith Brothers, 9:15 p.m., Sunday, B.
To The Ladies, 9:30 p.m., Friday, C.
Wildroot Institute, 4:15 p.m., Sunday, R.
Ed Wynn, 9:30 p.m., Tuesday, R.
Yeast Foamers, 2:30 p.m., Sunday, B.

QUARTETS

Corn Cob Pipe Club, 10:00 p.m., Wednesday, R.
Mills Bros., 9:15 p.m., Mon. and Thurs., C.
Revelers, 8:30 p.m., Monday, R.

RELIGIOUS

Dr. S. Parkes Cadman, 3:30 p.m., Sunday, R.
Cathedral Hour, 1:00 p.m., Sunday, C.

Catholic Hour, 6:00 p.m., Sunday, R.
 Church of the Air, 1:30 p.m., Sunday, C.
 Rev. Chas. E. Coughlin, 4:00 p.m., Sunday.
 Mid-Week Hymn Sing, 7:00 p.m., Tuesday, R.
 National Vespers, 5:00 p.m., Sunday, B.
 National Youth Conference, 4:30 p.m., Sunday, B.
 Old Songs of Church, 6:30 p.m., Thursday, B.
 Seth Parker, 10:45 p.m., Sunday, R.
 Salt Lake Tabernacle Choir, 12 noon, Sunday, C.

SINGERS

Mildred Bailey, 10:45 p.m., Mon., Wed. and Fri., B.
 Irene Beasley, 6:30 p.m., Sun.; 6:00 p.m., Mon. and Fri., C.
 Louise Bernhardt, 7:30 p.m., Thursday, B.
 Connie Boswell, 6:30 p.m., Wed.; 7:45 p.m., Sat., C.
 Boswell Sisters, 10:00 p.m., Mon., 9:00 p.m., Thurs., C.
 Eddie Cantor, 8:00 p.m., Sunday, R.
 Charles Carlile, 10:30 p.m., Mon., Wed. and Fri., C.
 Vaughn DeLeath, 6:30 p.m., Mon.; 6:00 p.m., Wed.; 5:45 p.m., Thurs.; 10:45 p.m., Sat., C.
 Do Re Mi Girls, 9:15 p.m., Saturday, C.
 Morton Downey, 9:30 p.m., Friday, C.
 Jessica Dragonette, 8:00 p.m., Friday, R.
 Ruth Etting, 10:00 p.m., Wed.; 9:00 p.m., Sat., C.
 Jane Froman, 4:00 p.m., Sunday, R.
 Jack Fulton, 7:30 p.m., Wed. and Fri.; 7:15 p.m., Sat., B.
 Tito Guizar, 11:15 p.m., Sunday, C.
 Harlem Fantasy, 6:30 p.m., Saturday, R.
 Art Jarrett, 11:00 p.m., Thurs. and Sat., R.
 Al Jolson, 10:00 p.m., Friday, R.
 Jones and Hare, 7:30 and 11:15 p.m., Mon., Wed., Fri., R.
 Alice Joy, 10:30 p.m., Monday, R.
 Ralph Kirbery, 6:30 p.m., Thursday, R.
 Harriet Lee, 9:30 p.m., Sunday, B.
 Little Jack Little, 6:15 p.m., Sunday, C.
 Barbara Maurel, 7:15 p.m., Sunday, C.
 Tommy McLaughlin, 9:15 p.m., Tuesday, C.
 Frank Munn, 9:15 p.m., Sunday; 9:30 p.m., Monday, R.
 Musical Memories, 9:00 p.m., Tuesday, B.
 Donald Novis, 11:15 p.m., Sun.; 12 mid., Mon., Thurs., R.
 Old Singing Master, 10:15 p.m., Sunday, B.

Pickens Sisters, 11:00 p.m., Mon., Tues. and Wed.; 9:00 p.m., Sat., B.
 Georgie Price, 7:45 p.m., Tues. and Thurs., C.
 Radio Rubes, 10:30 p.m., Mon., Tues. and Wed., B.
 Virginia Rea, 9:30 p.m., Monday, R.
 Red and Ramona, 8:30 p.m., Mon.; 10:30 p.m., Thurs. B.
 Regimentalists, 8:00 p.m., Thursday, B.
 Lanny Ross, 9:00 p.m., Thurs.; 10:45 p.m., Fri., B.
 Russian Symphonic Choir, 12:30 p.m., Sunday, R.
 Sanderson-Crumit, 8:00 p.m., Tuesday, R.
 Singin' Sam, 8:15 p.m., Mon., Wed. and Fri., C.
 Jack Smith, 8:00 p.m., Mon. and Wed., C.
 Kate Smith, 8:30 p.m., Mon., Tues. and Wed., C.
 Street Singer, 9:00 p.m., Tues.; 10:00 p.m., Fri., C.
 Temple of Song, 4:00 p.m., Sunday, B.
 Three Jesters, 10:30 p.m., Saturday, B.
 Three X Sisters, 7:30 p.m., Mon., Wed. and Fri., C.
 Gus Van, 9:00 p.m., Saturday, B.

TALKS

Adventures in Health, 8:30 p.m., Tues. and Fri., B.
 American Schools, 6:30 p.m., Sunday, R.
 Frank Buck, 5:45 p.m., Sunday, R.
 Economic World Today, 8:30 p.m., Saturday, R.
 Floyd Gibbons, 10:30 p.m., Friday, R.
 William Hard, 6:45 p.m., Tuesday, R.
 Edwin C. Hill, 10:30 p.m., Tues. and Thurs.; 8:45 p.m., Wed., C.
 International Radio, 4:30 p.m., Sunday, R.
 H. V. Kaltenborn, 6:00 p.m., Tues. and Thurs., C.
 Dr. Julius Klein, 7:00 p.m., Sunday, C.
 Frederick Landis, 2:45 p.m., Sunday, C.
 David Lawrence, 9:00 p.m., Sunday, R.
 National Farm and Home, 12:30 p.m., daily, ex. Sat. and Sun., B.
 Angelo Patri, 7:45 and 11:15 p.m., Wed. and Sun., C.
 Poet's Gold, 6:00 p.m., Sunday, C.
 Public Affairs Institute, 10:15 p.m., Saturday, C.
 Nellie Revell, 11:00 p.m., Wednesday, R.
 Sigmund Spaeth, 10:15 p.m., Tues.; 8:15 p.m., Thurs., B.
 Lowell Thomas, 6:45 p.m., daily, ex. Sat. and Sun., B.
 You and Your Government, 8:00 p.m., Tuesday, B.
 Frederic William Wile, 7:00 p.m., Saturday, C.

KEY TO SYMBOLS

As Shown in the Index by Frequencies and Dial Numbers

Frequency is given in kilocycles; wavelength in meters. Night power is shown in watts in third column. Daytime power is shown in parenthesis in fourth column in kilowatts, thus (25) indicating 250 watts. Some stations outside the United States use a "split frequency." Their exact frequency is shown in fourth column. R-C indicates Remote Control. Where space permits, names of hotels or other buildings used in announcements are shown in parenthesis. These are not mail addresses.

Second Column Symbols

a	Verifies reception for return postage.	g	Sends Ekko stamp for postage.
b	Verifies only occasionally.	h	Sends own stations stamp for 10c.
c	Does not verify.	i	Sends own station stamp for 5c.
d	Verification 25c; reply card 10c.	j	Sends own station stamp for postage.
e	Sends Ekko stamp for 10c.	k	Has no stamps.
	Sends Ekko stamp for 5c.	z	Failed to reply.

Fourth Column Symbols

A	These stations are synchronized.	Q	Great Lakes network.
B	National "Blue" Network.	R	National "Red" network.
C	Columbia network.	S	Sunday only.
D	Daytime only.	T	Don Lee System.
Dn	Daytime with occasional evening hours.	U	Dixie network.
E	Trans-Canada network.	V	Maritime Broadcasting network.
F	Canadian National Railways network.	W	Curtis-Indiana network.
G	All Canadian networks.	X	Has permit to increase power.
H	Yankee network.	Y	Has permit to change location.
J	Orange and gold network.	Z	Has permit to change frequency.
K	Mexican networks.	a-b-c	Small letters show stations using same transmitter.
L	Canadian Pacific Ry. network (Dominion).	1-2-3	Figures denote stations sharing time.
M	Canadian Radio Corp. network.	...	No information.
N	National "Red" and "Blue" networks.		
P	Has construction permit only.		

INDEX BY FREQUENCIES AND DIAL NUMBERS

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FOR KEY TO SYMBOLS SEE PAGE 45

540 kilocycles 555.6 meters

CKOK ae 5000 CG Windsor, Ont.

99 1/2

Essex Broadcasters, Ltd.

550 kilocycles 545.1 meters

KFDY ae 500 (1)1 Brookings, S. D.
 KFUO ae 500 2(1) St. Louis, Mo.
 KFYZ ah 1000 1N(2.5) Bismarck, No. Dakota
 KOAC ak 1000 Corvallis, Ore.
 KSD ak 500 2R St. Louis, Mo.
 WDEV ae 500 D Waterbury, Vt.
 WGR ae 1000 C Buffalo, N. Y.
 WKRC ak 1000 C Cincinnati, Ohio

95 2

South Dakota State College
 Evangelical Lutheran Church
 Meyer Broadcasting Co.
 Oregon State Agricultural College
 Pulitzer Publishing Co.
 Harry G. Whitehill
 Buffalo Broadcasting Corp.
 WKRC, Inc., Hotel Alms

560 kilocycles 535.4 meters

KFDM ak 500 (1) Beaumont, Texas
 KLZ ae 1000 C Denver, Colo.
 KTAB ae 1000 San Francisco, Calif.
 WFI ae 500 1R Philadelphia, Pa.
 WBIB ae 1000 (1.5)a Chicago, Ill.
 WLIT ak 500 1R Philadelphia, Pa.
 WNOX ak 1000 C(2) Knoxville, Tenn.
 WPCC ak 500 Sa Chicago, Ill.
 WQAM ae 1000 C Miami, Fla.

97 5

Sabine Broadcasting Co., Inc.
 Reynolds Radio Co., Inc.
 Associated Broadcasters, Inc.
 WFI Broadcasting Co.
 Nelson Bros. Bond & Mtg. Co.
 Lit Bros. Broadcasting System, Inc.
 So. Carolina Broadcasting Co., Inc.
 North Shore Congregational Church
 Miami Broadcasting Co.

570 kilocycles 526.0 meters

KGKO z 250 (.5) Wichita Falls, Texas
 KMTR aeh 500 Hollywood, Calif.
 KVI ae 500 C Tacoma, Wash.
 TGW z 50 Guatemala
 WEAO ae 750 1 Columbus, Ohio
 WKBN ak 500 1C Youngstown, Ohio
 WMCA ak 500 3 New York, N. Y.
 WNAX ae 1000 C Yankton, S. D.
 WNYC ak 500 3 New York, N. Y.
 WSYR ak 250 R2a Syracuse, N. Y.
 WWNC ae 1000 N Asheville, N. C.

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Wichita Falls Broadcasting Co.
 KMTR Radio Corp.
 Puget Sound Broadcasting Co.
 Ohio State University
 WKBN Broadcasting Corp.
 Knickerbocker Broadcasting Co., Inc.
 House of Gurney, Inc.
 Dept. of Plant & Structures
 Clive B. Meredith Estate (WMAC)
 Citizens Broadcasting Co., Inc.

580 kilocycles 516.9 meters

CFCY ae 500 E Charlottetown, P. E. I.
 CHMA ak 250 4S Edmonton, Alta.
 CKCL agj 500 Toronto, Ont.
 CKUA ak 500 4F Edmonton, Alta.
 CMCJ z 250 588 Havana, Cuba
 CMDD z 150 588 Havana, Cuba
 KMJ ak 500 CT Fresno, Calif.
 KSAC ak 500 2(1) Manhattan, Kans.
 WDBO ae 250 CU Orlando, Fla.
 WIBW ae 1000 C2 Topeka, Kans.
 WOBU ak 250 1(.5) Charleston, W. Va.
 WSAZ ak 250 1(.5) Huntington, W. Va.
 WTAG ae 250 R(.5) Worcester, Mass.

87

Island Radio Broadcasting Co., Ltd.
 Christian & Missionary Alliance
 The Dominion Battery Co.
 University of Alberta
 Rafael Rodriguez
 G. deSequeira
 McClatchy Radio Stations (Fresno Bee)
 State Agricultural College
 Orlando Broadcasting Co., Inc.
 Capper Publications
 WOBU, Inc., Ruffner Hotel
 WSAZ, Inc.
 Worcester Telegram Pub. Co., Inc.

590 kilocycles 508.2 meters

CJGC ae 5000 595GZ London, Ont.
 KHQ ak 1000 N(2) Spokane, Wash.
 WCAJ ae 500 1 Lincoln, Neb.
 WEEI ak 1000 R Boston, Mass.
 WKZO ae 1000 D Kalamazoo, Mich.
 WOV aeh 1000 1R Omaha, Neb.

80

Free Press Printing Co., Ltd.
 Louis Wasmer, Inc.
 Nebraska Wesleyan University
 Edison Electric Illuminating Co.
 WKZO, Inc., Burdick Hotel
 Woodmen of the World

INDEX BY FREQUENCIES AND DIAL NUMBERS

600 kilocycles 499.7 meters

78			
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KCY5.

680

MTRS.

440.9

DIAL

CNRO	ak	500	F	Ottawa, Ont.
KFSD	ah	500	N(1)	San Diego, Calif.
WCAC	ak	250	2	Storrs, Conn.
WCAO	ae	250	C	Baltimore, Md.
WICC	ae	250	2H(.5)C	Bridgeport, Conn.
WMT	ak	500	C	Waterloo, Iowa
WREC	z	500	C(1)	Memphis, Tenn.

Canadian National Railways
 Airfan Radio Corp.
 Connecticut Agricultural College
 Monumental Radio Co.
 Bridgeport Bdctg. Station, Inc.
 Waterloo Broadcasting Co.
 WREC, Inc.

610 kilocycles 491.5 meters

75			
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KFRC	ae	1000	C	San Francisco, Calif.
WDAF	ae	1000	R	Kansas City, Mo.
WIP	ak	500	C	Philadelphia, Pa.
WJAY	ae	500	D	Cleveland, Ohio
XETR	z	2500	.....	Mexico City, Mexico

Don Lee Broadcasting System
 Kansas City Star Co.
 Pennsylvania Bdctg. Co. (WFAN)
 Cleveland Radio Broadcasting Corp.
 Cia. Difusora Mexicana S. A.

620 kilocycles 483.6 meters

73 1/2			
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KGW	ae	1000	N	Portland, Ore.
KRAR	ae	500	NJ(1)	Phoenix, Ariz.
WFLA	ae	1000	Na(2.5)	Clearwater, Fla.
WLBZ	ak	500	C	Bangor, Maine
WSUN	ae	1000	Na(2.5)	St. Petersburg, Fla.
WTMJ	ae	1000	N(2.5)	Milwaukee, Wis.

Oregonian Publishing Co.
 KTRAR Broadcasting Co.
 Florida West Coast Bdctg. Co., Inc.
 Maine Broadcasting Co., Inc.
 Florida West Coast Bdctg. Co., Inc.
 Journal Company

630 kilocycles 475.9 meters

69			
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CFCT	ae	500	G	Victoria, B. C.
CJGX	ae	500	FL	Yorkton, Sask.
CKOK	ae	1000	635aG	Hamilton, Ont.
CKTB	aej	1000	635aL	St. Catharines, Ont.
CMCQ	z	150	.....	Havana, Cuba
CMQ	z	250	.....	Havana, Cuba
CNRA	ae	700	F	Moncton, N. B.
HIX	ah	1000	.....	Santo Domingo, D. R.
KFRU	ak	500	1	Columbia, Mo.
KGFX	z	200	D	Pierre, S. D.
WGBF	ae	500	W	Evansville, Ind.
WMAL	ae	250	(.5)	Washington, D. C.
WOS	ak	500	1D	Jefferson City, Mo.
XETF	ak	500	K	Veracruz, Ver., Mexico

Victoria Broadcasting Assn.
 Winnipeg Grain Exchange
 Wentworth Radio Bdctg. Co., Ltd.
 Wentworth Radio Bdctg. Co., Ltd.
 Jorge Garcia Serra
 Jose Fernandez
 Canadian National Railways
 The Dominican Government
 KFRU, Inc.
 Dana McNeil
 Evansville On the Air, Inc.
 M. A. Leese Radio Corp., Inc.
 Missouri State Marketing Bureau
 Manuel Angel Fernandez

640 kilocycles 468.5 meters

67			
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CHRC	ak	100	645aG	Quebec, Que.
CKCI	ck	100	645a	Quebec, Que.
CKCR	ak	100	645G	Waterloo, Ont.
KFI	ah	50000	N1	Los Angeles, Calif.
WAUW	ae	500	1	Columbus, Ohio
WOT	ae	5000	D	Ames, Iowa

CHRC, Ltd., Victoria Hotel
 Le Soleil, Ltd.
 Mitchell & Liddle
 Earle C. Anthony, Inc.
 American Insurance Union
 State College of Agriculture

650 kilocycles 461.3 meters

65 1/2			
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KPCB	ae	100	Seattle, Wash.
WSM	aej	50000	N	Nashville, Tenn.

Queen City Broadcasting Co.
 National Life & Accident Ins. Co.

660 kilocycles 454.3 meters

63 1/2			
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CHWIK	ak	100	665	Chilliwack, B. C.
CJRM	z	500	665	Moose Jaw, Sask.
CJRW	z	1000	665	Fleming, Sask.
RUS	z	500	664	Salvador
WAAW	agh	500	D	Omaha, Neb.
WEAF	ak	50000	R	Norfolk, Va.

Chilliwack Broadcasting Co., Ltd.
 Jas. Richardson & Sons, Ltd.
 Jas. Richardson & Sons, Ltd.
 Republic of El Salvador
 Omaha Grain Exchange
 National Broadcasting Co., Inc.

670 kilocycles 447.5 meters

61			
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WMAQ	ae	5000	N	Chicago, Ill.
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WMAQ, Inc. (NBC Lessees)

680 kilocycles 440.9 meters

59			
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CMAF	ak	1000	Havana, Cuba
KFEQ	ae	2500	D	St. Joseph, Mo.
KPO	ak	5000	N	San Francisco, Calif.
WPTF	ae	1000	N Dn	Raleigh, N. C.
XFG	z	2000	683.3	Mexico, Mexico

International Broadcasting Co.
 Scroggin & Co., Bank
 National Broadcasting Co., Inc.
 Durham Life Insurance Co.
 Sria. de Guerra y Marina

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690 kilocycles 434.5 meters

CFAC	ak	500	1G	Calgary, Alta.
CFRB	ae	10000	CM	Toronto, Ont.
CJ CJ	ak	500	1LE	Calgary, Alta.
NAA	z	1000	.....	Arlington, Va.
VAS	z	2000	685(4)	Glace Bay, N. S.
XET	ck	500	.....	Monterrey, Mexico
VOX	z	100	.....	Halifax, N. S.

57

Calgary Herald, Ltd.
Rogers-Majestic Corp., Ltd.
Albertan Publishing Co., Ltd.
U. S. Navy
Canadian Marconi Co.
Cadena Radio Difusora Mexicana S. A.
Sambro Lightship

700 kilocycles 428.3 meters

WLW	ae	50000	B	Cincinnati, Ohio
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55

The Crosley Radio Corporation

710 kilocycles 422.3 meters

KMPC	ae	500	Dn	Beverly Hills, Calif.
WOR	ak	5000	X	Newark, N. J.
XEN	agj	1000	711K	Mexico City

53E

R. S. MacMillan
Bamberger's Broadcasting Service, Inc.
Cerveceria Modelo S. A.

720 kilocycles 416.4 meters

WGN	ak	25000	C	Chicago, Ill.
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374

WGN, Inc., Drake Hotel

730 kilocycles 410.7 meters

CHLS	ak	100	1b	Vancouver, B. C.
CHYC	z	5000	Sa	Montreal, Que.
CKAC	ak	5000	CaM	Montreal, Que.
CKCD	z	100	1b	Vancouver, B. C.
CKFC	ak	50	1	Vancouver, B. C.
CKMO	z	100	1	Vancouver, B. C.
CKWX	ak	100	1L	Vancouver, B. C.
CMK	aeH	3150		Havana, Cuba
KEF-XER	z	75000	735	Villa Acuna, Mexico

W. G. Hassell (Province Bldg.)
Northern Electric Co., Ltd.
La Presse Publishing Co., Ltd.
Vancouver Daily Province
United Church of Canada
Sprout-Shaw Radio Co.
Western Broadcasting Co., Ltd.
National Broadcasting Co. of Cuba
Villa Acuna Broadcasting Co., Inc.

740 kilocycles 405.2 meters

CJCA	ae	500	745EL	Edmonton, Alberta
KMMJ	bk	1000	Dn	Clay Center, Neb.
WSB	aeH	5000	N	Atlanta, Ga.
WHEB	ak	250	D	Portsmouth, N. H.

49

Edmonton Journal, Ltd.
M. M. Johnson Co. (R/C Lincoln)
Atlanta Journal, Biltmore Hotel
Granite State Broadcasting Co.

750 kilocycles 399.8 meters

KGU	aj	2500	NX	Honolulu, Hawaii
WOWR	ak	750	.....	St. John's, N. F.
WJR	ak	10000	B	Detroit, Mich.
XEQ	aeH	5000	.....	Juarez, Chih., Mexico

47

Advertiser Publishing Co.
Wesley United Church
WJR, The Goodwill Station, Inc.
Radio Difusora National S. A.

760 kilocycles 394.5 meters

KXA	ae	250	(.5)	Seattle, Wash.
WBAL	ae	10000	BA	Baltimore, Md.
WEW	ae	1000	D	St. Louis, Mo.
WJZ	ck	30000	BA	New York City

46

American Radio Tel. Co.
(See 1060 kcys. also)
St. Louis University
National Broadcasting Co., Inc.

770 kilocycles 389.4 meters

KFAB	ae	5000	1C	Lincoln, Neb.
WBBM	ae	25000	1C	Chicago, Ill.

41

KFAB Broadcasting Co.
WBBM Bdctg. Corp. (Wrigley Bldg.)

780 kilocycles 384.4 meters

CKY	z	5000	.....	Winnipeg, Man.
CMBS	z	150	.....	Havana, Cuba
CMCO	z	1000	.....	Havana, Cuba
KELW	aeH	500	2	Burbank, Calif.
KTM	ae	500	2(1)	Los Angeles, Calif.
WEAN	ak	250	CH(.5)	Providence, R. I.
WMC	ak	500	N(1)	Memphis, Tenn.
WPOR	aeH	500	b	Portsmouth, Va.
WTAR	aeH	500	bC	Norfolk, Va.
XEZ	z	500	.....	Mexico, Mexico

42 30

Manitoba Telephone System
Enrique Artalejo
Andres Martinez
Magnolia Park, Ltd.
Pickwick Broadcasting Corp., Ltd.
Shepard Broadcasting Service, Inc.
Memphis Commercial Appeal, Inc.
WTAR Radio Corp. (Norfolk)
WTAR Radio Corp.
Joaquin Capilla

790 kilocycles 379.5 meters

CMHC	z	250		Tuinucu, Cuba
CMJK	z	300	.....	Camaguey, Cuba
WGO	ak	7500	N	San Francisco, Calif.
WGY	ak	50000	R	Schenectady, N. Y.

41 34

Frank H. Jones
Tano Gomez
General Electric Co. (Opr. NBC)
General Electric Co.

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800 kilocycles 374.8 meters

WBAP ak 10000 1N Fort Worth, Texas
 WFAA ak 50000 1N Dallas, Texas

40

Carter Publications, Inc.
 Dallas News-Dallas Journal

810 kilocycles 370.2 meters

CHNS ae 500 815aZG Halifax, N. S.
 CNRH ak 500 815aZ Halifax, N. S.
 VOAS ak 200 D St. John's, N. F.
 WCCO ae 50000 C Minneapolis, Minn.
 WFCH ak 500 D New York City
 XFC z 250 Aguascalientes, Mex.

39

Maritime Bdctg. Co., Ltd. Oprs.
 Canadian National Railways
 Ayre & Sons, Ltd.
 Northwestern Broadcasting, Inc.
 Eastern Broadcasters, Inc.
 Gobierno del Estado de Aguascalientes

KCYS.
 890

820 kilocycles 365.6 meters

CMGC z 30 Matanzas, Cuba
 WHAS aj 25000 C Louisville, Ky.

37

Oscar S. Mechoso
 The Louisville Times Co., Inc.

MTRS.
 336.9
 DIAL

830 kilocycles 361.2 meters

CMGA z 100 834 Colon, Cuba
 KOA ak 12500 NJ Denver, Colo.
 WUEU ak 1000 D Reading, Pa.
 WHDH ae 1000 DY Boston, Mass.
 WRUF ae 5000 DnC Gainesville, Fla.

36 1/2

L. Valdes Figueroa
 General Electric Co. (NBC Opr.)
 Berks Broadcasting Co.
 Matheson Radio Co., Inc.
 State of Florida (Univ. of Fla.)

840 kilocycles 356.9 meters

CHNC z 500 a Toronto, Ont.
 CKGW ae 5000 NEa Toronto, Ont.
 CKLK ak 1000 G Red Deer, Alta.
 CMC z 500 Havana, Cuba
 CPRY ae 5000 La Toronto, Ont.

35

Canadian National Carbon Co., Ltd.
 Gooderham & Worts, Ltd.
 Alberta Pacific Grain Co., Ltd.
 Cuban Telephone Co.
 Canadian Pacific Co., Royal York Hotel

850 kilocycles 352.7 meters

KIEV z 100 D Glendale, Calif.
 KWKH ae 10000 1 Shreveport, La.
 WWL ak 5000 1DnX New Orleans, La.

34 1/2

Cannon Systems, Inc.
 Hello World Broadcasting Corp.
 WWL Development Co. (Loyola Univ.)

860 kilocycles 348.6 meters

WABC ae 50000 aC New York City
 WBOQ ae 50000 a New York City
 WHB ae 500 D Kansas City, Mo.
 XFX z 500 867 Mexico City, Mexico

33 1/2

Atlantic Broadcasting Corp.
 Atlantic Broadcasting Corp. (tests)
 WHB Broadcasting Co.
 Secretaria de Educacion Publica

870 kilocycles 344.6 meters

WENR ak 50000 Na Chicago, Ill.
 WLS ae 50000 Na Chicago, Ill.
 XFF z 500 875 Chihuahua, Mexico

32

Great Lakes Bdctg. Co. NBC Opr.
 Agricultural Broadcasting Co.
 Gobierno del Estado de Chihuahua

880 kilocycles 340.7 meters

CHML ae 50 4G Hamilton, Ont.
 CJC ak 100 G Sydney, N. S.
 CKCV ak 100 Quebec, Que.
 CKPC ak 100 4L Preston, Ont.
 KFKA ak 500 2(1) Greeley, Colo.
 KLX ae 500 Oakland, Calif.
 KPof ae 500 2 Denver, Colo.
 WCOC ae 500 (1) Meridian, Miss.
 WGBI ah 250 Q1 Scranton, Pa.
 WOAN ak 250 1 Scranton, Pa.
 WSUT ae 500 Iowa City, Iowa

31 1/2

Maple Leaf Radio Co., Ltd.
 Nathanson's Radio Headquarters
 Vandy, Inc.
 Cyrus Dolph
 Mid-Western Radio Corp.
 Tribune Publishing Co.
 Pillar of Fire
 Mississippi Broadcasting Co., Inc.
 Scranton Broadcasters, Inc.
 Scranton Times
 State University of Iowa

890 kilocycles 336.9 meters

CFBO z 500 St. John, N. B.
 CKCO z 100 3 Ottawa, Ont.
 CKPR ak 100 3G Fort William, Ont.
 CMCF ak 250 1 Havana, Cuba
 CMX ae 500 1 Havana, Cuba
 KARK ak 250 Little Rock, Ark.
 KFNF ak 500 2(1) Shenandoah, Iowa
 KSEI ae 250 (5) Pocatello, Idaho
 KUSD ae 500 2 Vermillion, S. Dak.

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C. A. Munro, Ltd.
 Dr. G. M. Geldert
 Dougall Motor Car Co., Ltd.
 Raoul Karman, Casa DelaPorte
 Casa "Lavin" Francisco A. Lavin, Adm.
 Arkansas Radio & Equipment Co.
 Henry Field Company
 Radio Service Corporation
 University of South Dakota

INDEX BY FREQUENCIES AND DIAL NUMBERS

VOGT	z	400	893	Wabana, N. F.	The Gaiety Theatre
WGST	ae	250	C(.5)	Atlanta, Ga.	Southern Broadcasting Co.
WILL	ak	250	2(.5)	Urbana, Ill.	University of Illinois
WJAR	ae	250	(.5)R	Providence, R. I.	The Outlet Co.
WMMN	ach	250	(.5)	Fairmont, W. Va.	A. M. Rowe, Inc.

900 kilocycles 333.1 meters

299

KGBU	ak	500	.....	Ketchikan, Alaska	Alaska Radio & Service Co.
RHJ	ae	1000	CT	Los Angeles, Calif.	Don Lee Broadcasting System
WBEN	ae	1000	R	Buffalo, N. Y.	WBEN, Inc., Buffalo Evening News
WJAX	ach	1000	N	Jacksonville, Fla.	City of Jacksonville
WKY	ae	1000	N	Oklahoma City, Okla.	Oklahoma Publishing Co.
WBLB	ae	2000	D	Stevens Point, Wis.	Wis. Dept. Agriculture & Markets

910 kilocycles 329.6 meters

29

CFQC	z	500	.....	Saskatoon, Sask.	The Electric Shop, Ltd.
CFLC	ae	100	915	Prescott, Ont.	Radio Association of Prescott
TICR	z	50	911	San Jose, Costa Rica	
VOGY	z	500	P	St. John's, N. F.	
XEW	ak	5000	.....	Mexico City, Mexico	Cadena Radio-difusora Mexicana S. A.

920 kilocycles 325.9 meters

CMCD	ach	250	925	Havana, Cuba	Angel Bertermaty y Garcia
CMDE	z	250	925	Havana, Cuba	Evilio Villar
HHK	z	1000	.....	Port au Prince, Haiti	Republic of Haiti
KFEL	ak	500	1	Denver, Colo.	Gene O'Fallon (Albany Hotel)
KFXF	ak	500	1	Denver, Colo.	Colorado Radio Corp.
KOMO	aj	1000	N	Seattle, Wash.	Fisher's Blend Station, Inc.
KPRC	ak	1000	N(2.5)	Houston, Texas	Houston Printing Co. (Houston Post)
WAAF	ak	500	D	Chicago, Ill.	Drovers Journal Publishing Co.
WBSO	ae	500	D	Babson Park, Mass.	Broadcasting Service Org., Inc.
WWJ	ak	1000	R	Detroit, Mich.	The Detroit News

930 kilocycles 322.4 meters

215

CFCH	aj	100	3LM	North Bay, Ont.	Northern Supplies, Ltd.
CFRC	ak	50	3(2)	Kingston, Ont.	Queen's University
CKX	ak	500	E	Brandon, Manitoba	Manitoba Telephone System
CMJF	z	200	.....	Carnaguey, Cuba	John L. Stowers
KFWI	aj	500	1	San Francisco, Calif.	Radio Entertainments, Ltd.
KGBZ	ak	500	2(1)	York, Neb.	Dr. Geo. R. Miller
KMA	ae	500	2(1)	Shenandoah, Iowa	Earl E. May Seed & Nursery Co.
KROW	ak	500	1(1)	Oakland, Calif.	Educational Broadcasting Corp.
WBRC	ak	500	C(1)	Birmingham, Ala.	Birmingham Bdctg. Co., Inc.
WDBJ	ae	250	C(.5)	Roanoke, Va.	Times-World Corp.
WIBG	ae	25	D	Glenside, Penna.	WIBG, Inc. (Keswick Bldg.)

940 kilocycles 319.0 meters

KOIN	zk	1000	CT	Portland, Ore.	KOIN, Inc. (New Heathman Hotel)
WAAT	ae	300	D	Jersey City, N. J.	Bremer Broadcasting Corp.
WCSH	ae	1000	R(2.5)	Portland, Maine	Congress Square Hotel Co.
WDAY	ae	1000	N	Fargo, No. Dakota	WDAY, Inc. (Black Bldg.)
WFIW	ae	1000	C	Hopkinsville, Ky.	WFIW, Inc.
WHA	ak	1000	D	Madison, Wis.	University of Wisconsin
XEFO	ak	5000	(35)	Mexico City, Mexico	National Revolucionario Party

950 kilocycles 315.6 meters

CMHD	z	250	.....	Caibarien, Cuba	Manual Alvarez
KFWB	ak	1000	.....	Los Angeles, Calif.	Warner Bros. Broadcasting Corp.
KGHL	ak	1000	NJ(2.5)	Billings, Mont.	Northwestern Auto Supply Co.
KMBC	ak	1000	C	Kansas City, Mo.	Midland Bdctg. Co. (Pickwick Hotel)
VONA	z	100	.....	St. John's, N. F.	Lane, Gillard & Avery
WRC	ak	500	N	Washington, D. C.	National Broadcasting Co., Inc.

960 kilocycles 312.3 meters

25

CHCK	ak	100	V	Charlottetown, P.E. I.	J. A. Gesner & W. E. Burke
CHWC	ak	500	3FL	Regina, Sask.	R. H. Williams & Sons, Ltd.
CKCK	ak	500	3FL	Regina, Sask.	Leader Post, Ltd. (Leader Bldg.)
CKNK	ak	500	M	Toronto, Ont.	Canadian National Carbon Co., Ltd.
CMAY	z	150	965	Havana, Cuba	Efigenio Oliver
CMBC	ach	150	965	Havana, Cuba	Domingo Fernandez
CMJL	z	50	.....	Carnaguey, Cuba	Enrique Artimes
XED	z	1000	965	Reynosa, Mexico	International Broadcasting Co.
YV1BC	z	.....	.....	Caracas, Venezuela	.....

INDEX BY FREQUENCIES AND DIAL NUMBERS

970 kilocycles 309.1 meters

KJR ae 5000 N Seattle, Wash.
 -WCFL ak 1500 RX Chicago, Ill.

Northwest Broadcasting System, Inc. Chicago Federation of Labor		

980 kilocycles 305.9 meters

CFCN ak 10000 985FL Calgary, Alberta
 CMGF z 100 987 Matanzas, Cuba
 -KDKA ak 50000 B Pittsburgh, Pa.

The Voice of the Prairies, Ltd. Bernabe R. de la Torre Westinghouse Elec. & Mfg. Co.		

990 kilocycles 302.8 meters

WBZ ak 25000 BA Boston, Mass.
 -WBZA ak 1000 BA Springfield, Mass.
 XEK z 101 Mexico City, Mexico

Westinghouse Elec. & Mfg. Co. Westinghouse Elec. & Mfg. Co. Arturo Martinez		

1000 kilocycles 299.8 meters

KFVD ak 250 Dn Los Angeles, Calif.
 WHO z 5000 RAX Des Moines, Iowa
 WOC ak 5000 RAX Davenport, Iowa
 -WORK aj 1000 D York, Pa.
 XEC z 50 Toluca, Mexico
 XEE z 105 Oaxaca, Oax., Mexico
 XEFE z 100 N. Laredo, Tams., Mex.
 XEFI z 100 Chihuahua, Mexico
 XEFS z 40 Queretaro, Mexico
 XEJ ak 100 K Juarez, Mexico
 XEL ak 25 Saltillo, Mexico
 XETC z 100 Jalapa, Ver., Mexico
 XETG z 100 Torreon, Coah., Mex.
 XEU ak 100 1007K Veracruz, Mexico
 XEV z 100 Puebla, Pue., Mex.
 XEY z 105 Merida, Yuc.

Los Angeles Broadcasting Co. Central Broadcasting Co. Central Broadcasting Co. York Broadcasting Co. Jesus R. Benavides Alfonso Zorilla B. Rafael T. Carranza Feliciano Lopez Islas Salvador Sanchez Juan G. Buttner & Leo Allande Antonio Garza Castro y J. T. Perez Juventino Sanchez Feliciano Lopez Islas Baltasar Pazos Sosa Ciro Molina Partido Socialista S. E.		

KCYS.
1050
 MTRS.
285.5
 DIAL

1010 kilocycles 296.8 meters

CKIC ak 50 Wolfville, N. S.
 CMBZ ak 150 Havana, Cuba
 CMCX z 150 Havana, Cuba
 KGGF ak 500 2(1) Coffeyville, Kans.
 KQW ae 500 T San Jose, Calif.
 WHN ae 250 1 New York City
 WIS ae 500 N(1) Columbia, S. C.
 WNAD ae 500 2 Norman, Okla.
 WPAP ae 250 1a New York City
 WQAO ae 250 1a New York City
 WRNY z 250 1 New York City

Acadia University Manuel & Guillermo Salas Diario "El Mundo" Powell & Platz Pacific Agricultural Foundation, Ltd. Marcus Loew Booking Agency South Carolina Bdctg. Co., Inc. University of Oklahoma Jersey Boulevard Corp. Jersey Boulevard Corp. Aviation Radio Station, Inc.		

1020 kilocycles 293.9 meters

-KYW ae 10000 N Chicago, Ill.
 WRAX ae 250 D Philadelphia, Pa.
 XEFD z 300 Tiajuana, Mex.

Westinghouse Elec. & Mfg. Co. (KFKX) WRAX Broadcasting Co. Carlos de la Sierra		

1030 kilocycles 291.1 meters

-CFCF ae 500 NG Montreal, Que.
 CMHI ck 30 a Santa Clara, Cuba
 CMKC z 150 1034a Santiago de Cuba
 CNRV ak 500 Vancouver, B. C.
 XEB ak 1000 Mexico City, Mexico

Canadian Marconi Co. Laviz & Paz Pinol Batlle y Co. Canadian National Railways El Buen Tono, S. A.		

1040 kilocycles 288.3 meters

CMGH z 15 Matanzas, Cuba
 -KRLD ae 10000 1C Dallas, Tex.
 -KTHS ae 10000 1N Hot Springs, Ark.
 WKAR ae 1000 D East Lansing, Mich.

O. y J. Alvarez KRLD Radio Corp. (Adolphus Hotel) Chamber of Commerce Michigan State College		

1050 kilocycles 285.5 meters

CMJG z 50 Camaguey, Cuba
 -KFBI ae 5000 Dn Abilene, Kans.
 -KNX ae 25000 X Hollywood, Calif.
 XEFC z 10 Merida, Yuc.
 XES z adk 500 1055K Tampico, Mexico

Jose Antonio Lefran Farmers & Bankers Life Ins. Co. Western Broadcast Co. Hugo Molina Font Wendell Cox		

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1060 kilocycles 282.8 meters

KWJJ	z	500	Dn	Portland, Ore.
WBAL	ae	1000	1B	Baltimore, Md.
WJAG	ak	1000	Dn	Norfolk, Neb.
WTIC	ak	5000	1R	Hartford, Conn.

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KWJJ Broadcast Co., Inc.
Consolidated Gas, Elec. L. & Pwr. Co.
Norfolk Daily News
Travelers' Bdctg. Service Corp.

1070 kilocycles 280.2 meters

CMBG	z	225	.....	Havana, Cuba
CMCB	af	150	.....	Havana, Cuba
KJBS	ae	100	D	San Francisco, Calif.
WCAZ	ae	50	D	Carthage, Ill.
WDZ	ak	100	D	Tuscola, Ill.
WTAM	ak	5000	R	Cleveland, Ohio
XEG	z	250	Mexico City, Mexico

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John L. Stowers
Metropolitan-Radio de Cuba
Julius Brunton & Sons Co.
Superior Bdctg. Service, Inc.
James L. Bush
National Broadcasting Co., Inc.
Miguel Yarza

1080 kilocycles 277.6 meters

WBT	ae	25000	CU	Charlotte, N. C.
WCBD	ae	5000	1Dn	Zion, Ill.
WMBI	ck	5000	1Dn	Chicago, Ill.

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Station WBT, Inc.
Wilbur Glenn Voliva
Moody Bible Institute

1090 kilocycles 275.1 meters

KMOX	ak	5000	C	St. Louis, Mo.
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1734		
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Voice of St. Louis, Inc.

1100 kilocycles 272.6 meters

KGDM	ak	250	D	Stockton, Calif.
WLWL	ae	5000	1	New York City
WPG	ae	5000	1C	Atlantic City, N. J.

1734		
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E. F. Peffer
Missionary Society of St. Paul
Municipality of Atlantic City

1110 kilocycles 270.1 meters

CMJO	z	15	.....	Ciego de Avila, Cuba
KSOO	ae	1000	Dn(2.5)	Sioux Falls, So. Dak.
VONF	z	500	1115	St. John's, N. F.
WRVA	ae	5000	N	Richmond, Va.
XENT	z	5000	1115	Neuvo Laredo, Mex.

1639		
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Rey-Borges
Sioux Falls Broadcast Assn., Inc.

Larus & Bros. Co., Inc.
Norman T. Baker

1120 kilocycles 267.7 meters

CFCA	ak	500	G	Toronto, Ont.
CFJC	ak	100	EL	Kamloops, B. C.
CHGS	ce	100	VX	Summerside, P. E. I.
CJOC	ak	100	.....	Lethbridge, Alta.
CMHJ	ae	40	1125	Cienfuegos, Cuba
KFIO	ae	100	D	Spokane, Wash.
KFGS	ak	500	3	Los Angeles, Calif.
KRKD	aeH	500	3	Los Angeles, Calif.
KRSC	ak	100	D	Seattle, Wash.
KTRH	ak	500	2C	Houston, Tex.
WDEL	aj	250	(.5)	Wilmington, Del.
WHAD	ae	250	1C	Milwaukee, Wis.
WISN	ak	250	1C	Milwaukee, Wis.
WTAW	ae	500	2	College Station, Texas

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Toronto Daily Star
The Kamloops Sentinel
R. T. Holman, Ltd.
Harold R. Carson
Victorino Lopez (Hotel Bristol)
Spokane Broadcasting Corp.
Echo Park Evangelistic Assn.
Dalton's, Inc. (Arcade Bldg.)
Radio Sales Corp. (Wash. Ath. Club)
KTRH Broadcasting Co. (Rice Hotel)
WDEL, Inc.
Marquette University
American Radio News Corp.
Agricultural & Mech. College

1130 kilocycles 265.3 meters

KSL	ae	5000	C	Salt Lake City, Utah
JVJD	ze	2000	Dn	Chicago, Ill.
WOV	ae	1000	D	New York City
XEH	ak	1000	1132	Monterrey, Mexico

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Radio Service Corp. of Utah
WJJD, Inc. (Palmer House)
International Broadcasting Corp.
Tarnava & Cia

1140 kilocycles 263.0 meters

CMBJ	z	150	.....	Havana, Cuba
CMBW	z	150	.....	Havana, Cuba
KWOC	ae	5000	1N	Tulsa, Okla.
WAPI	aj	5000	1N	Birmingham, Ala.
XETA	z	500	Mexico City, Mexico

1532		
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Emilio Perera
Alvarez-Moris
Southwestern Sales Corp.
WAPI Broadcasting Corp.
Manuel Espinosa Tagle

1150 kilocycles 260.7 meters

CMHJ	ak	50	.....	Ciego de Avila, Cuba
WHAM	ak	5000	BX	Rochester, N. Y.
XEA	ak	500	K1155	Guadalajara, Mexico
10-AT	z	25	1155	Trail, B. C.

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Luis Marauri Mendoza
Stromberg-Carlson Tel. Mfg. Co.
Radiofotografica de Guadalajara, S. A.
Trail Amateur Radio Assn.

INDEX BY FREQUENCIES AND DIAL NUMBERS

1160 kilocycles 258.5 meters

13			
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WOWO ae 10000 1C Fort Wayne, Ind.
 WWVA ae 5000 1C Wheeling, W. Va.

Main Auto Supply Co.
 West Virginia Broadcasting Corp.

1170 kilocycles 256.3 meters

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CMJE z 50 1175 Camaguey, Cuba
 WCAU ae 50000 C Philadelphia, Pa.

Manuel Fernandez
 Universal Broadcasting Corp.

1180 kilocycles 254.1 meters

13 1/2			
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CMW ae 1400 1185 Havana, Cuba
 ak 5000 2N Portland, Ore.
 KOB ae 10000 2 Albuquerque, N. M.
 WDGY ak 1000 Dn Minneapolis, Minn.
 WINS ae 500 New York City
 WMAZ ak 500 Macon, Ga.

Troncoso y Gil
 National Broadcasting Co.
 N. M. Coll. of Agr. & Mechanical Arts
 George W. Young
 American Radio News Corp.
 Southeastern Broadcasting Co.

1190 kilocycles 252.0 meters

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WOAI aeh 50000 N San Antonio, Texas

Southern Equipment Co.

1200 kilocycles 249.9 meters

13			
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CHCH z 100 Montreal, Que.
 CKOV ak 100 Kelowna, B. C.
 CMGB z 30 1205 Matanzas, Cuba
 KBTM ak 100 D Paragould, Ark.
 KERN ak 100 CT Bakersfield, Calif.
 KFJB ak 100 (.25) Marshalltown, Iowa
 KFWF ak 100 5 St. Louis, Mo.
 KF XD ak 100 Nampa, Idaho
 KGDE ae 100 (.25) Fergus Falls, Minn.
 KGDY ak 100 Huron, S. D.
 KGEK ak 100 9 Yuma, Colo.
 KGEW ak 100 9 Ft. Morgan, Colo.
 KCFJ ae 100 Los Angeles, Calif.
 KGHI ak 100 Little Rock, Ark.
 KCVO ak 100 Missoula, Mont.
 KMLB ae 100 Monroe, La.
 KVOS z 100 Bellingham, Wash.
 KWG aeh 100 CT Stockton, Calif.
 WABI ak 100 Bangor, Maine
 WABZ ak 100 1 New Orleans, La.
 WBBZ ak 100 1 Ponca City, Okla.
 WBHS ak 100 4 Huntsville, Ala.
 WCAT ak 100 D Rapid City, S. D.
 WCAX ak 100 Burlington, Vt.
 WCLO ak 100 Janesville, Wis.
 WCOD ae 100 3 Harrisburg, Pa.
 WFAM ae 100 8C South Bend, Ind.
 WFBE ak 100 (.25) Cincinnati, Ohio
 WHBC ak 10 Canton, Ohio
 WHBY ak 100 Green Bay, Wis.
 WIBX z 100 (.3) Utica, N. Y.
 WIL ae 100 5(.25) St. Louis, Mo.
 WJBC ae 100 6 LaSalle, Ill.
 WJBL ae 100 6 Decatur, Ill.
 WJBW ak 100 1 New Orleans, La.
 WKJC ae 100 3 Lancaster, Pa.
 WLAP ae 100 (.25) Louisville, Ky.
 WNBO aeh 100 Washington, Pa.
 WNBW z 10 (.1) Carbondale, Pa.
 WORC ak 100 CH Worcester, Mass.
 WPHR ae 100 (.25) Petersburg, Va.
 WRBL ak 100 Columbus, Ga.
 WWAE aeh 100 8 Hammond, Ind.
 10-AB ak 25 Moose Jaw, Sask.
 10-AK ak 15 Stratford, Ont.
 10-BI ak 25 Prince Albert, Sask.
 10-BP ak 25 1199 Wingham, Ont.
 10-BQ ak 15 Brantford, Ont.
 10-BU z 15 Canora, Sask.

Montreal Radio Corp.
 Okanagan Broadcasters, Ltd.
 Jose Anorga
 Beard's Temple of Music
 Bee Bakersfield Broadcasting Co.
 Marshall Electric Co., Inc.
 St. Louis Truth Center, Inc.
 Frank E. Hurt (R/C Boise)
 Jaren Drug Co.
 Voice of South Dakota, Inc.
 Beehler Electrical Equipment Co.
 City of Fort Morgan
 Ben. S. McGlashan
 O. A. Cook
 Mosby's, Inc.
 Liner's Broadcasting Station, Inc.
 KVOS, Inc.
 McClatchy Newspapers
 First Universalist Society
 Samuel D. Reeks
 C. L. Carrell (R/C various cities)
 Radio Station WBHS, Inc.
 State School of Mines
 Burlington Daily News
 WCLO Radio Corp. (R/C Beloit)
 Keystone Broadcasting Corp.
 South Bend Tribune (WSBT)
 The Post Publishing Co., Opr.
 Edward P. Graham
 St. Norbert College (Bellin Bldg.)
 WIBX, Inc.
 Missouri Broadcasting Corp.
 Kaskaskia Broadcasting Co.
 Commodore Broadcasting, Inc.
 C. C. Carlson
 Lancaster Bdc'tg. Service, Inc.
 American Broadcasting Corp. of Ky.
 Spriggs Symplex
 WNBW, Inc.
 A. F. Kleindienst
 WLBG, Inc.
 WRBL Radio Station, Inc.
 Hammond-Calumet Bdc'tg. Corp.
 Moose Jaw Radio Assn.
 M. I. Higgins Elec. & Radio Co.
 Prince Albert Radio Club
 W. T. Cruickshank
 Tom Brown & Harold Brown
 Canora Radio Assn.

KCYS.
1210
 MTRS.
247.8
 DIAL

1210 kilocycles 247.8 meters

12 1/2			
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CFCO ak 250 8G Chatham, Ont.
 CFNB ae 100 E Fredericton, N. B.

John Beardall (Wm. Pitt Hotel)
 James S. Neill & Sons, Ltd.

INDEX BY FREQUENCIES AND DIAL NUMBERS

CJOR	ak	500	E	Vancouver, B. C.	George C. Chandler
CKMC	ak	100	8	Cobalt, Ont.	R. L. McAdam
KASA	ak	100	.....	Elk City, Okla.	E. M. Woody (Casa Grande Hotel)
KDLR	ak	100	.....	Devils Lake, N. Dak.	KDLR, Inc.
KFJI	ak	100	.....	Klamath Falls, Ore.	KFJI Broadcasters, Inc.
KFOR	ak	100	(.25)	Lincoln, Neb.	Howard A. Shuman
KFPW	ak	100	.....	Fort Smith, Ark.	Southwestern Hotel Co.
KFVS	ae	100	6	Cape Girardeau, Mo.	Oscar C. Hirsch
KFXM	ak	100	9	San Bernardino, Calif.	J. C. & E. W. Lee
KGCR	ah	100	.....	Watertown, S. Dak.	Greater Kampeska Radio Corp.
KGNO	ak	100	.....	Dodge City, Kans.	Dodge City Broadcasting Co.
KGY	ak	100	.....	Olympia, Wash.	KGY, Inc. (Capitol Park Bldg.)
KIEM	z	100	DP	Eureka, Calif.	Harold H. Harseth
KPPC	ak	50	9	Pasadena, Calif.	Pasadena Presbyterian Church
KWEA	z	100	.....	Shreveport, La.	WALR World Broadcasting Corp.
WALR	ae	100	.....	Zanesville, Ohio	WALR Broadcasting Corp.
WBAX	ae	100	1	Wilkes-Barre, Pa.	John H. Stenger, Jr. (Morris Bldg.)
WBBL	ak	100	7S	Richmond, Va.	Grace Covenant Pres. Church
WBBS	ak	100	2	Springfield, Ill.	WCBS, Inc.
WCRW	ae	100	4	Chicago, Ill.	Clinton R. White
WBEQ	ae	100	6	Harrisburg, Ill.	Harrisburg Broadcasting Co.
WEDC	z	100	4	Chicago, Ill.	Emil Demerick, Inc.
WFAS	ak	100	3	White Plains, N. Y.	Westchester Broadcasting Corp.
WGBB	ae	100	3	Freeport, N. Y.	Harry H. Carman
WGCM	ae	100	5	Gulfport, Miss.	Great Southern Land Co.
WGNV	z	50	P	Chester Twp., N. Y.	Peter Goelet
WHBF	ae	100	.....	Rock Island, Ill.	Beardsley Specialty Co. (Harms Hotel)
WHBU	aj	100	.....	Anderson, Ind.	Anderson Broadcasting Corp.
WHET	ak	100	D	Troy, Ala.	Troy Broadcasting Co.
WIBU	ae	100	.....	Poynette, Wis.	Wm. C. Forrest
WJBI	ak	100	3	Red Bank, N. J.	Monmouth Broadcasting Co., Inc.
WJBU	ae	100	1	Lewisburg, Pa.	Bucknell University
WJBY	aeh	100	.....	Gadsden, Ala.	Ingrams Broadcasting Co.
WJEJ	z	100	PD	Hagerstown, Md.	A. V. Tidmore
WJW	ae	100	.....	Akron, Ohio	John F. Weimer
WKFI	ak	100	5	Greenville, Miss.	J. Pat Scully
WMBG	aj	100	7C	Richmond, Va.	Havens & Martin, Inc.
WOCL	ak	50	.....	Jamestown, N. Y.	A. E. Newton
WOMT	ae	100	.....	Manitowoc, Wis.	Francis Margin Kadov
WPAW	ak	100	a	Providence, R. I.	Cherry & Webb Broadcasting Co.
WPRO	ak	100	a	Providence, R. I.	Cherry & Webb Broadcasting Co.
WQDX	z	100	.....	Thomasville, Ga.	Stevens Luke
WBCS	z	100	4	Chicago, Ill.	World Battery Co., Inc.
WSEN	ak	100	.....	Columbus, Ohio	Columbus Bdcg. Corp. (Seneca Hotel)
WSIX	ae	100	.....	Springfield, Tenn.	638 Tire & Vulc. Co. (R/C WLW)
WSOC	ae	100	.....	Gastonia, N. C.	WSOC, Inc.
WTAX	ae	100	2	Springfield, Ill.	WTAX, Inc.
XEX	z	500	.....	Mexico City, Mexico	Excelsior, Cia Editorial S. A.

1220 kilocycles 245.8 meters

CMHK	z	15	1225	Cruces, Cuba	
KFKU	ae	500	1	Lawrence, Kans.	V. Villaneuva
KTW	z	1000	2	Seattle, Wash.	University of Kansas
KWSC	ae	1000	2(2)	Pullman, Wash.	First Presbyterian Church
WCAD	ak	500	D	Canton, N. Y.	State College of Washington
WCAE	ae	1000	R	Pittsburgh, Pa.	St. Lawrence University
WDAE	ak	1000	C	Tampa, Fla.	WCAE, Inc. and Sun-Telegraph
WREN	ak	1000	1B	Lawrence, Kans.	Tampa Daily Times (Tampa Terrace)
					Jenny Wren Co.

1230 kilocycles 243.8 meters

CMBY	z	350	.....	Havana, Cuba	Callejas-Estefani
CMCA	z	150	.....	Havana, Cuba	Manuel Cruz
KFQD	aj	250	.....	Anchorage, Alaska	Anchorage Radio Club, Inc.
KGGM	ak	250	(.5)	Albuquerque, N. M.	New Mexico Broadcasting Co.
KYA	ae	1000	N	San Francisco, Calif.	Pacific Broadcasting Co.
WFBM	aeh	1000	1C	Indianapolis, Ind.	Indianapolis Power & Light Co.
WNAC	ae	1000	CH	Boston, Mass.	Shepard Broadcasting Service, Inc.
WSBT	ak	500	1C	South Bend, Ind.	South Bend Tribune (WFAM)
XETQ	z	100	.....	Mexico, Mexico	Carlos G. Caballero

1240 kilocycles 241.8 meters

CMAB	z	20	1249	Pinar del Rio, Cuba	Jose Silvera
KGCU	ak	250	3	Mandan, N. Dak.	Mandan Radio Assn.
KLPM	ak	250	3	Minot, N. Dak.	John B. Cooley

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KTAT	ak	1000	1	Fort Worth, Texas	KTAT Broadcast Co., Inc.
KTFI	ak	500	Twin Falls, Idaho	Radio Broadcasting Corp. of Idaho
WACO	ak	1000	1C	Waco, Texas	Central Texas Broadcasting Co.
WKAQ	ae	1000	.....	San Juan, P. R.	Radio Corp. of Porto Rico
WXYZ	ak	1000	.....	Detroit, Mich.	Kunsky-Trendle Broadcasting Corp.

1250 kilocycles 239.9 meters

KFMX	aj	1000	2	Northfield, Minn.	Carleton College
KFOK	ae	1000	CT	Long Beach, Calif.	Nichols & Warinner, Inc.
WAAM	ae	1000	1(2.5)	Newark, N. J.	WAAM, Inc.
WCAL	ae	1000	2	Northfield, Minn.	St. Olaf College
WDSU	ak	1000	C	New Orleans, La.	Jos. H. Uhalt
WGCP	ak	250	1	Newark, N. J.	May Radio Broadcasting Co.
WLB	ak	1000	2	Minneapolis, Minn.	University of Minnesota
WODA	z	1000	1	Paterson, N. J.	Richard E. O'Dea
WRHM	ae	1000	2	Minneapolis, Minn.	Minnesota Broadcasting Corp.
XEFA	z	250	.....	Mexico City, Mexico	Manuel F. Murguia

1260 kilocycles 238.0 meters

CMJI	ak	.....	5	Ciego de Avila, Cuba	Gilberto Gessa Lopez
KOIL	ak	1000	B	Council Bluffs, Iowa	Mona Motor Oil Co.
KRGV	ae	500	1	Harlingen, Texas	KRGV, Inc. (Rio Grande Na. Life Bldg.)
KVOA	ak	500	P	Tucson, Arizona	Robert M. Riculfi
KWVG	z	500	1	Brownsville, Texas	Frank P. Jackson
WLBW	ae	500	C(1)	Eric, Pa.	Broadcasters of Pennsylvania, Inc.
WNBX	ak	250	D	Springfield, Vt.	WNBX Broadcasting Corp.
WTOC	ae	500	CU	Savannah, Ga.	Savannah Broadcasting Co., Inc.

1270 kilocycles 236.1 meters

CMBD	z	150	.....	Havana, Cuba	Luis Perez Garcia
CMCN	z	250	.....	Havana, Cuba	Antonio Ginard
CMJN	z	50	.....	Camaguey, Cuba	E. de Ugarriza
KGCA	ak	100	D2	Decorah, Iowa	Chas. W. Greenley
KOL	ae	1000	CT	Seattle, Wash.	Seattle Broadcasting Co.
KVOR	ae	1000	C	Colorado Springs, Col.	Reynolds Radio Co., Inc.
KWLC	ak	100	D2	Decorah, Iowa	Luther College
WASH	ak	500	a	Grand Rapids, Mich.	Kunsky-Trendle Broadcasting Corp.
WESG	ae	1000	D	Elmira, N. Y.	Cornell University
WFBR	ae	500	R	Baltimore, Md.	Baltimore Radio Show, Inc.
WJDJ	ak	1000	N	Jackson, Miss.	Lamar Life Insurance Co.
WOOD	ak	500	a	Grand Rapids, Mich.	Kunsky-Trendle Broadcasting Corp.

1280 kilocycles 234.2 meters

KFBB	ae	1000	(2.5)	Great Falls, Mont.	Buttrey Broadcast, Inc.
WCAM	ae	500	1	Camden, N. J.	City of Camden (City Hall Tower)
WCAP	ae	500	1C	Asbury Park, N. J.	Radio Industries Broadcast Co.
WDOD	ae	1000	C(2.5)	Chattanooga, Tenn.	WDOD Bdctg. Corp. (Hotel Patten)
WIBA	ae	500	N(1)	Madison, Wis.	Badger Broadcasting Co., Inc.
WOAX	ae	500	1	Trenton, N. J.	Trenton Broadcasting Co.
WRR	ae	500	C	Dallas, Texas	City of Dallas (Hilton Hotel)

1290 kilocycles 232.4 meters

CMHL	z	20	.....	Cienfuegos, Cuba	Oscar Zayas
KDYL	ak	1000	N	Salt Lake City, Utah	Intermountain Broadcasting Corp.
KFVL	ak	500	1	Galveston, Texas	News Publishing Co. (Buccaneer Hotel)
KLCN	z	50	D	Blytheville, Ark.	C. L. Lintzenich
KTSA	ak	1000	1C(2.5)	San Antonio, Texas	Lone Star Broadcast Co. (Plaza Hotel)
WEBC	ae	1000	N(2.5)	Superior, Wis.	Head of the Lakes Broadcasting Co.
WJAS	ak	1000	C(2.5)	Pittsburgh, Pa.	Pittsburgh Radio Supply House
WNBZ	z	50	D	Saranac Lake, N. Y.	Smith & Mcree

1300 kilocycles 230.6 meters

CMKJ	z	20	.....	Guantanamo, Cuba	Luis Morlote
KALE	ak	500	3C	Portland, Ore.	KALE, Inc.
KFAC	aj	1000	.....	Los Angeles, Calif.	Los Angeles Broadcasting Co.
KFH	ae	1000	C	Wichita, Kans.	Wichita Eagle—Hotel Lassen
KFJR	ag	500	3	Portland, Ore.	Ashley C. Dixon—KFJR, Inc.
WBRR	aej	1000	1	Brooklyn, N. Y.	Peoples Pulpit Assn.
WEVD	ae	500	1	New York City	Debs Memorial Radio Fund, Inc.
WFAB	z	1000	1	New York City	Defenders of Truth Society, Inc.
WHAZ	ae	500	1	Troy, N. Y.	Rensselaer Polytechnic Institute
WIOD	ae	1000	N	Miami, Fla.	Isle of Dreams Broadcasting Corp.
WQQ	ae	1000	.....	Kansas City, Mo.	Unity School of Christianity
XEM	z	250	.....	Tampico, Tams, Mex.	Mania T. de Gutierrez

KYCS.
1300
MTRS.
230.6
DIAL

INDEX BY FREQUENCIES AND DIAL NUMBERS

1310 kilocycles 228.9 meters

9/2

CMJP	z	7.5	.....	Moron, Cuba	Cesar Canals
KCRJ	ak	100	D	Jerome, Arizona	Chas. C. Robinson
KFBK	ak	100	C	Sacramento, Calif.	Jas. McClatchy Co.
KFGQ	ak	100	7	Boone, Iowa	Boone Biblical College
KFFL	ck	100	.....	Dublin, Texas	C. C. Baxter
KFFM	ae	15	.....	Greenville, Texas	New Furniture Co.
KFXJ	ak	100	.....	West Junction, Colo.	Western Slope Broadcasting Co.
KFXR	ak	100	(.25)	Oklahoma City, Okla.	Exchange Ave. Baptist Church
KFYO	z	100	(.25)Z	Lubbock, Texas	T. E. Kirksey
KGBX	ae	100	.....	Springfield, Mo.	KGBX, Inc.
KGCX	ak	100	(.25)	Wolf Point, Mont.	First State Bank of Vida
KGEZ	aj	100	.....	Kalispell, Mont.	Donald C. Treloar
KGFW	ah	100	.....	Kearney, Neb.	Central Nebraska Bdctg. Corp.
KIT	ak	100	.....	Yakima, Wash.	Valley Broadcasters, Inc.
KMED	ak	100	.....	Medford, Ore.	Mrs. W. J. Virgin
KRMD	ak	100	.....	Shreveport, La.	KRMD, Inc. (Jefferson Hotel)
KTSM	z	100	a	El Paso, Texas	Tri-State Broadcasting Co., Inc.
KXRO	ak	100	.....	Aberdeen, Wash.	KXRO, Inc. (Hotel Morck)
WBEO	z	100	.....	Marquette, Mich.	Lake Superior Broadcasting Co.
WBOW	ak	100	.....	Terre Haute, Ind.	Banks of Wabash, Inc.
WBRE	z	100	.....	Wilkes-Barre, Pa.	Louis G. Baltimore
WCLS	ae	100	b	Joliet, Ill.	WCLS, Inc.
WDAH	z	100	a	El Paso, Texas	First State Broadcasting Co., Inc.
WEBR	ae	100	Q(.25)	Buffalo, N. Y.	Howell Broadcasting Station
WEXL	ak	50	.....	Royal Oak, Mich.	Royal Oak Broadcasting Co.
WFBG	ae	100	3	Altoona, Pa.	The William F. Gable Co.
WFDL	ae	100	.....	Flint, Mich.	Frank D. Fallain (Union Ind. Bldg.)
WGAL	ae	100	5	Lancaster, Pa.	WGAL, Inc. (Lancaster Newsp. Bldg.)
WGH	ae	100	.....	Newport News, Va.	Hampton Roads Broadcasting Corp.
WHAT	ak	100	4	Philadelphia, Pa.	Independence Broadcasting Co.
WIAS	ak	100	7	Ottumwa, Iowa	Iowa Bdctg. Co. (Hotel Ottumwa)
WJAC	ae	100	3	Johnstown, Pa.	WJAC, Inc.
WKAV	ae	100	.....	Laconia, N. H.	Laconia Radio Club
WKBB	ae	100	bYZ	Joliet, Ill.	Richard W. Hoffman
WKBC	z	100	.....	Birmingham, Ala.	R. B. Broyles Furniture Co.
WKBS	z	100	.....	Galesburg, Ill.	Pernell N. Nelson
WLBC	ak	50	6	Muncie, Ind.	D. A. Burton—A. J. Marriott
WMBO	ak	100	.....	Auburn, N. Y.	WMBO, Inc. (Masonic Temple)
WNBH	ae	100	H(.25)	New Bedford, Mass.	New Bedford Bdctg. Co. (N. B. Hotel)
WOL	ae	100	.....	Washington, D. C.	American Broadcasting Co.
WRAW	ak	100	5X	Reading, Pa.	Reading Broadcasting Co.
WROL	ak	100	.....	Knoxville, Tenn.	Stuart Bdctg. Co. (Farragut Hotel)
WSAJ	ae	100	.....	Grove City, Pa.	Grove City College
WSJS	ae	100	C	Winston-Salem, N. C.	Winston-Salem Journal Co.
WTEL	ae	100	4	Philadelphia, Pa.	Foulkrod Radio Eng. Co., Inc.
WTJS	ak	100	(.25)	Jackson, Tenn.	Sun Publishing Co. (Sun Bldg.)
WTRC	ak	50	6	Elkhart, Ind.	Elkhart Daily Truth
WTSL	z	100	.....	Laurel, Miss.	G. A. Houseman
XEFB	ak	100	1315	Monterrey, N. L., Mex.	Quintanilla y Stevenson
XEI	ak	150	.....	Morelia, Mexico	Carlos Gutierrez M.

1320 kilocycles 227.1 meters

9/2

CMCR	z	150	1325	Havana, Cuba	Aurelio Hernandez
KGHF	ak	250	(.5)	Pueblo, Colo.	C. P. Ritchie & J. E. Finch
KGMB	ak	250	C	Honolulu, Hawaii	Honolulu Broadcasting Co.
KID	ae	250	(.5)	Idaho Falls, Idaho	KID Broadcasting Co., Inc.
WADC	ae	1000	C	Akron, Ohio	Allan T. Simmons
WSMB	ae	500	N	New Orleans, La.	WSMB, Inc.

1330 kilocycles 225.4 meters

9/2

KGB	ae	1000	CT	San Diego, Calif.	Don Lee Broadcasting System
KMO	ak	250	.....	Tacoma, Wash.	KMO, Inc. (Hotel Winthrop)
KSCJ	ah	1000	1C(2.5)	Sioux City, Iowa	Perkins Bros. Co.
WDRC	ae	500	CH	Hartford, Conn.	WDRC, Inc.
WSAI	ae	500	R(1)	Cincinnati, Ohio	The Crosley Radio Corp.
WTAQ	ae	1000	1C	Eau Claire, Wis.	The Gillette Rubber Co.

1340 kilocycles 223.7 meters

KFPY	ae	1000	CT	Spokane, Wash.	Symons Bdctg. Co. (Symons Bldg.)
WCOA	agj	500	.....	Pensacola, Fla.	Pensacola Bdctg. Co. (San Carlos Hot.)
WSPD	ae	1000	C	Toledo, Ohio	Toledo Bdctg. Co. (Com. Perry Hotel)

INDEX BY FREQUENCIES AND DIAL NUMBERS

1350 kilocycles 222.1 meters

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KIDO ak 1000 Boise, Idaho
 KWK ae 1000 B St. Louis, Mo.
 WAWZ ae 250 1 Zarephath, N. J.
 WBNX ae 250 1a New York City
 WCDA ae 250 1a New York City
 WEHC ae 500 DY Emory, Va.
 WMSG ae 250 1a New York City

C. G. Phillips & Frank Hill
 Thomas Patrick, Inc. (Hotel Chase)
 Pillar of Fire
 New York Met. Broadcasting Corp.
 Italian Educ. Bdctg. Co., Inc.
 Emory & Henry College
 New York Met. Broadcasting Corp.

1360 kilocycles 220.4 meters

274		
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CMBF z 150 1365 Havana, Cuba
 CMCW ak 150 1365 Havana, Cuba
 CMCY ak 1000 1365 Havana, Cuba
 KGIR ah 1000 Long Beach, Calif.
 KGIR ak 500 NJ Butte, Mont.
 WCSC ae 500 Charleston, S. C.
 WFBL ak 1000 C(2.2) Syracuse, N. Y.
 WGES ae 500 1(1) Chicago, Ill.
 WJKS agj 1000 1Z Gary, Ind.
 WQBC ak 500 Vicksburg, Miss.

Ramon Bardales
 Jose Lorenzo
 M. D. Autran
 Consolidated Bdctg. Co. (R/C Los An.)
 KGIR, Inc.
 So. Carolina Broadcasting Co., Inc.
 Onondaga Radio Broadcasting Corp.
 Oak Leaves Broadcasting Station, Inc.
 Johnson-Kennedy Radio Corp.
 Delta Bdctg. Co. (Post-Herald Station)

1370 kilocycles 218.7 meters

8		
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CMGE z 30 1375 Cardenas, Cuba
 KCRC ak 100 2(.25) Enid, Okla.
 KFBL aj 50 3 Everett, Wash.
 KFJM zk 100 Grand Forks, N. Dak.
 KFJZ ae 100 Fort Worth, Texas
 KFLX z 100 Galveston, Texas
 KGAR ak 100 (.25) Tucson, Arizona
 KGDA ak 100 Mitchell, S. Dak.
 KGFG bk 100 2 Oklahoma City, Okla.
 KGFL zk 190 4 Santa Fe, N. Mex.
 KGKL ak 100 San Angelo, Texas
 KICA z 100 4 Clovis, N. Mex.
 KMAC ak 100 5 San Antonio, Texas
 KONO ak 100 5 San Antonio, Texas
 KOOS ae 100 Marshfield, Ore.
 KRE ak 100 Berkeley, Calif.
 KUJ ak 100 D Walla Walla, Wash.
 KVL z 100 3 Seattle, Wash.
 KWKC z 100 7 Kansas City, Mo.
 WBTM ak 100 Danville, Va.
 WCBM ae 100 Z(.25) Baltimore, Md.
 WDAS aeh 100 (.25) Philadelphia, Pa.
 WGLC z 50 Y(.1) Glens Falls, N. Y.
 WGL aeh 100 C Fort Wayne, Ind.
 WHBD bk 100 Mount Orab, Ohio
 WHBQ ak 100 Memphis, Tenn.
 WHDF ak 100 (.25) Calumet, Mich.
 WIBM aeh 100 1 Jackson, Mich.
 WJBK ae 50 1O Detroit, Mich.
 WIEQ z 100 6P Williamsport, Pa.
 WITL ae 100 Atlanta, Ga.
 WLEY aeh 100 (.25) Lexington, Mass.
 WLVA ck 100 7 Lynchburg, Va.
 WMBR ak 100 Tampa, Fla.
 WPEB ak 100 Hattiesburg, Miss.
 WQDM ae 100 D St. Albans, Vt.
 WRAK ak 100 6 Williamsport, Pa.
 WRAM ae 100 Wilmington, N. C.
 WRDO ae 100 Augusta, Maine
 WRJN ae 100 Racine, Wis.
 WSVS ak 50 Buffalo, N. Y.
 XEFZ ae 100 Coyoacan, Mexico

Genaro Sebater
 Enid Radiophone Co. (Oxford Hotel)
 Leese Bros.
 University of North Dakota
 Fort Worth Broadcasters, Inc.
 George Roy Clough
 Tucson Motor Service Co.
 Mitchell Broadcasting Corp.
 Oklahoma Broadcasting Co., Inc.
 KGFL, Inc.
 KGKL, Inc. (St. Angelus Hotel)
 W. E. Whitmore
 Walmac Co., Inc. (Blue Bonnet Stud.)
 Mission Broadcasting Co.
 H. H. Hanseth, Inc. (Hall Bldg.)
 First Cong. Church of Berkeley
 KUJ, Inc. (Marcus Whitman Hotel)
 KVL, Inc.
 Wilson Duncan Broadcasting Co.
 Piedmont Broadcasting Corp.
 Baltimore Broadcasting Corp.
 WDAS Bdctg. Sta., Inc. (Elks Hotel)
 O. T. Griffin & G. F. Bissell
 F. C. Zieg
 F. P. Molar
 Station WHBQ, Inc. (Hotel Claridge)
 Upper Michigan Broadcasting Co.
 WIBM, Inc. (Otsega Hotel)
 James F. Hopkins, Inc. (Curtiss Bldg.)
 Sun-Gazette Broadcasting Co.
 Oglethorpe University
 Lexington Air Station
 Lynchburg Broadcasting Corp.
 F. J. Reynolds
 Hattiesburg Broadcasting Co.
 A. J. St. Antoine & E. J. Regan
 C. R. Cummins (Penn Central Bldg.)
 Wilmington Radio Assn., Inc.
 WRDO, Inc. (Augusta House)
 Racine Bdctg. Corp. (Hotel Racine)
 Seneca Vocational School
 Manuel Zetina

KCYS.

1380

MTRS.

217.3

DIAL

1380 kilocycles 217.3 meters

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CMJC z 150 1382 Camaguey, Cuba
 KOH ak 500 C Reno, Nevada
 KQV ak 500 2 Pittsburgh, Pa.
 KSO z 100 BYZ(.25) Clarinda, Iowa
 WKBH aj 1000 1C LaCrosse, Wis.
 WSMK ak 200 2 Dayton, Ohio
 XETB z 125 Torreon, Coah., Mex.

Feliciano Isaac
 McClatchy Newspapers
 KQV Bdctg. Co. (Investment Bldg.)
 Iowa Broadcasting Co.
 WKBH, Inc. (Radio Bldg.)
 Stanley M. Krohn, Jr.
 Jose A. Berumen

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1390 kilocycles 215.7 meters

KLRA	ae	1000	1C
KOY	ae	500	C
KUOA	bk	1000	1
WHK	ae	1000	C

Little Rock, Ark.
Phoenix, Arizona
Fayetteville, Ark.
Cleveland, Ohio

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Arkansas Broadcasting Co.
Nielsen Radio & Sporting Goods Co.
Southwestern Hotel Co. (Ft. Smith)
Radio Air Service Corp. (Higbee Stor e)

1400 kilocycles 214.2 meters

CMCH	ak	50	1405
CMCM	z	15	1405
CMDB	z	40	1405
KLO	ae	500	.....
KOCW	z	250	(.5)
WBAA	ak	500	1
WBBC	ae	500	2
WCGU	ak	500	2
WCMA	ak	500	1
WFOX	ak	500	2W
WKBF	ak	500	1W
WLTH	ae	500	2
XEP	z	200	.....

Havana, Cuba
Havana, Cuba
Havana, Cuba
Salt Lake City, Utah
Chickasha, Okla.
Lafayette, Ind.
Brooklyn, N. Y.
Brooklyn, N. Y.
Culver, Ind.
Brooklyn, N. Y.
Indianapolis, Ind.
Brooklyn, N. Y.
Laredo, Mexico

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Wifredo & Hum. Fontanals Sanchez
Aurelio Balino
Julio Powers
Interstate Bcg. Corp. (Hotel Bigelow)
College for Women
Purdue University
Brooklyn Broadcasting Corp.
United States Broadcasting Corp.
General Broadcasting, Inc.
Paramount Broadcasting Co.
Indianapolis Broadcasting, Inc.
Voice of Brooklyn, Inc.
La Voz Latino

1410 kilocycles 212.6 meters

KFLV	ak	500	4
KGRS	ae	1000	1
WAAB	ae	500	CH
WBGM	ae	500	C
WDAG	ae	1000	1
WHBL	ae	500	4
WHIS	ak	250	2
WRDX	ea	500	3CU
WRBX	ae	250	2
WSFA	ak	500	3C

Rockford, Ill.
Amarillo, Texas
Boston, Mass.
Bay City, Mich.
Amarillo, Texas
Sheboygan, Wis.
Bluefield, W. Va.
Mobile, Ala.
Roanoke, Va.
Montgomery, Ala.

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Rockford Broadcasters, Inc.
E. B. Gish
Bay State Broadcasting Corp.
James E. Davidson
National Radio & Bdtg. Corp.
The Press Publishing Co.
Daily Telegraph
Mobile Broadcasting Corp.
Richmond Development Corp.
Montgomery Broadcasting Co., Inc.

1420 kilocycles 211.1 meters

KABC	ak	100	.....
KBPS	aj	100	4
KCMC	ak	100	.....
KFIZ	ak	100	.....
KGFF	ak	100	.....
KGGC	ak	100	5
KGIW	ak	100	1
KGIX	ak	100	.....
KGKX	z	100	.....
KICK	z	100	Y
KIDW	ak	100	1
KORE	ae	100	.....
KUMA	ak	100	.....
KWCR	ae	100	B(.25)
KXL	ae	100	4
WAGM	ae	100	.....
WAMC	ae	100	.....
WAZL	z	100	P2
WEHS	ak	100	a
WELL	z	50	.....
WENC	ak	100	D
WERE	ae	100	.....
WHDL	ae	100	D
WHFC	ae	100	a
WILM	ae	100	2
WJBO	z	100	D
WJMS	ak	100	.....
WKBI	ak	100	a
WLBf	ae	100	.....
WMAS	ak	100	CH
WMBC	ae	100	(.25)
WMBH	ak	100	(.25)
WPAD	ak	100	.....
WSPA	ae	100	(.25)
WTBO	ae	100	(.25)

San Antonio, Texas
Portland, Ore.
Texarkana, Ark.
Fond du Lac, Wis.
Shawnee, Okla.
San Francisco, Calif.
Trinidad, Colo.
Las Vegas, Nevada
Lewiston, Idaho
Red Oak, Iowa
Lamar, Colo.
Eugene, Ore.
Yuma, Arizona
Cedar Rapids, Iowa
Portland, Ore.
Presque Isle, Maine
Anniston, Ala
Hazleton, Pa.
Cicero, Ill.
Battle Creek, Mich.
Americus, Ga.
Erie, Pa.
Tupper Lake, N. Y.
Cicero, Ill.
Wilmington, Del.
New Orleans, La.
Ironwood, Mich.
Cicero, Ill.
Kansas City, Kans.
Springfield, Mass.
Detroit, Mich.
Joplin, Mo.
Paducah, Ky.
Spartanburg, S. C.
Cumberland, Md.

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Alamo Bctg. Co., Inc. (Texas Theatre)
Student Body Benson Polytech. School
Texarkana Gazette & Daily News
Reporter Printing Co.
KGFF Bdtg. Co. (Aldridge Hotel)
Golden Gate Broadcasting Co.
Leonard E. Wilson
J. M. Heaton
Sand Point Broadcasting Co.
Red Oak Radio Corp.
Southwest Broadcasting Co.
Frank L. Hill & Curtis G. Phillips
Dr. Albert H. Schermann
Cedar Rapids Broadcast Co.
KXL Broadcasters (Hotel Multnomah)
Aroostook Broadcasting Corp.
Raymond C. Hammett (Alabama Hot.)
Herman G. Halsted
WEHS, Inc.
Enquirer-News Co.
Americus Broadcast Co.
Erie Bdtg. Corp. (Lawrence Hotel)
Tupper Lake Broadcasting Co., Inc.
WHFC, Inc.
Delaware Broadcasting Co.
Valdemar Jensen
WJMS, Inc. (St. James Hotel)
WKBI, Inc.
WLBf Bdtg. Co. (Aladdin Hotel)
Albert S. Moffet
Michigan Broadcasting Co.
W. M. Robertson
Paducah Bdtg. Co. (Ritz Hotel)
The Voice of South Carolina
Interstate Broadcasting System, Inc.

1430 kilocycles 209.7 meters

KECA	ah	1000	N
KGNF	ak	500	D
WBAK	ak	500	1(1)

Los Angeles, Calif.
North Platte, Neb.
Harrisburg, Pa.

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Earle C. Anthony, Inc.
Great Plains Broadcasting Co.
Pennsylvania State Police

INDEX BY FREQUENCIES AND DIAL NUMBERS

-WCAH	ae	500	CA	Columbus, Ohio
WFEA	ae	500	CHA	Manchester, N. H.
WHEC	ae	500	CA	Rochester, N. Y.
-WHP	ak	500	1CA(1)	Harrisburg, Pa.
WNBR	ae	500	.....	Memphis, Tenn.
WOKO	ae	500	CA	Albany, N. Y.

Commercial Radio Service Co.
New Hampshire Broadcasting Co.
WHEC, Inc. (Roch. Sav. Bank Bldg.)
WHP, Inc. (Harrisburg Telegraph)
Memphis Bdctg. Co. (WGBC)
WOKO, Inc. (Hotel Ten Eyck)

1440 kilocycles 208.2 meters

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CMBL	ak	20	1445	Havana, Cuba
CMBN	ak	30	1445	Havana, Cuba
KDFN	ak	500	Casper, Wyo.
KLS	ae	250	D	Oakland, Calif.
KXYZ	ak	250	.....	Houston, Texas
WBIG	ae	500	C(1)	Greensboro, N. C.
WCBA	ah	250	.....	Allentown, Pa.
WMBD	ae	500	3C(1)	Peoria, Ill.
WSAN	z	250	a	Allentown, Pa.
WTAD	ak	500	3	Quincy, Ill.

Julio C. Hidalgo
Armando Romeu Marrero
Donald L. Hathaway
Warner Bros.
Harris County Broadcast Co.
No. Carolina Broadcasting Co., Inc.
B. Bryan Musselman
Peoria Broadcasting Co.
Allentown Call Publishing Co., Inc.
Illinois Broadcasting Corp.

1450 kilocycles 206.8 meters

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KTBS	ae	1000	N	Shreveport, La.
WBMS	ak	250	1	Hackensack, N. J.
WGAR	ak	500	B	Cleveland, Ohio
-WHOM	ae	250	1	Jersey City, N. J.
WNJ	ak	250	1	Newark, N. J.
WSAR	ae	250	.....	Fall River, Mass.
WTFI	ak	500	.....	Athens, Ga.

Tri-State Bdctg. System, Inc.
WBMS Broadcasting Corp.
WGAR Broadcasting Co., Inc.
New Jersey Broadcasting Corp.
The Radio Investment Co., Inc.
Doughty & Welch Electric Co., Inc.
Liberty Broadcasting Co.

1460 kilocycles 205.4 meters

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-KSTP	ae	10000	N	St. Paul, Minn.
WJVS	ck	10000	C	Washington, D. C.

National Battery Broadcasting Co.
Old Dominion Broadcasting Co.

1470 kilocycles 204.0 meters

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KGA	ak	5000	B	Spokane, Wash.
WLAC	ae	5000	C	Nashville, Tenn.

Northwest Broadcasting System
Life & Casualty Insurance Co.

1480 kilocycles 202.6 meters

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CMBK	z	15	1485	Havana, Cuba
CMBR	z	40	Havana, Cuba
KOMA	ak	5000	C	Oklahoma City, Okla.
WKBW	ae	5000	C	Buffalo, N. Y.

Alberto Alvarez
Tomas Basall
National Radio Mfg. Co.
Buffalo Broadcasting Corp.

1490 kilocycles 201.2 meters

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WKY	ae	5000	N	Covington, Ky.
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L. B. Wilson, Inc. (Mabley & Carew)

1500 kilocycles 199.9 meters

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KBD	ak	100	CT	Santa Barbara, Calif.
KGFI	aj	100	(.25)	Corpus Christi, Texas
KGFK	ak	50	Moorhead, Minn.
KGIZ	ak	100	.....	Grant City, Mo.
KGKB	bk	100	.....	Tyler, Texas
KGKY	ck	100	.....	Scottsbluff, Neb.
KNOW	ak	100	.....	Austin, Texas
KPJM	ak	100	.....	Prescott, Arizona
KPO	aj	50	.....	Wenatchee, Wash.
KREG	ak	100	.....	Santa Ana, Calif.
KXO	z	100	.....	El Centro, Calif.
WFDV	ak	100	.....	Rome, Ga.
WHEF	ak	100	(.25)	Kosciusko, Miss.
WKBV	z	100	.....	Connersville, Ind.
WKBZ	ak	100	.....	Ludington, Mich.
WLOB	ae	100	(.25)	Boston, Mass.
WMBQ	ae	100	1	Brooklyn, N. Y.
WMIL	ak	100	1	Brooklyn, N. Y.
WMPC	ak	100	.....	Lapeer, Mich.
WNBF	ae	100	.....	Binghamton, N. Y.
WOPI	ae	100	.....	Bristol, Tenn.
WPEN	ce	100	(.25)	Philadelphia, Pa.
WRDW	ae	100	.....	Augusta, Ga.
WYB	ae	100	.....	Rutland, Vt.
WYRL	ak	100	1	Woodside, N. Y.
WWSW	ae	100	X(.25)	Pittsburgh, Pa.

Santa Barbara Broadcasters, Ltd.
Eagle Broadcasting Co., Inc.
Red River Broadcasting Co., Inc.
Grant City Park Corp.
East Texas Broadcasting Co.
Hilliard Co., Inc.
KUT Bdctg. Co. (Driskill Hotel)
Scott & Sturm
Wescoast Broadcasting Co.
J. S. Edwards
E. R. Irey and F. M. Bowles
Rome Broadcasting Corp.
Attala Milling & Produce Co.
William O. Knox
K. L. Ashbacher
Boston Broadcasting Co. (WRSC)
Paul J. Gollhofer
Arthur Faske
First Methodist Protestant Church
Howitt-Wood Radio Co., Inc.
Radiophone Bdctg. Station WOPI
Wm. Penn Broadcasting Co.
Musicov, Inc. (Relays WLW)
Philip Weiss Music Co.
Long Island Broadcasting Corp.
Walker & Downing Radio Corp.

KCYS.
1500
MTRS.
199.9
DIAL

INDEX BY LOCATIONS WITH MAP KEY

Columbia: C. National: Red, R; Blue, B; Both, N.

	Watts		Keys.		Watts		Keys.				
ALABAMA											
Anniston O-21 tr	100	WAMC	1420	San Jose J-1	500	KOW	1010				
Birmingham O-21	5000	WAPI	N 1140	Santa Ana M-3	100	KREG	1500				
	500	WBRC	N 930	Santa Barbara M-2	100	KDB	C 1500				
	100	WKBC	1310	Stockton J-2	250	KGDM	C 1100				
Gadsden O-21	100	WJBY	1210		100	KWG	C 1200				
Huntsville N-21 c	100	WBHS	1200	COLORADO							
Mobile Q-20	500	WODX	C 1410	Colorado Springs K-11	1000	KVOR	C 1270				
Montgomery P-21	500	WSFA	C 1410	Denver K-11	500	KFEL	920				
Troy P-21 rc	100	WHET	1210		500	KFXF	920				
					1000	KLZ	N 560				
					12500	KOA	N 830				
ALASKA											
Anchorage	250	KFOD	1230	Fort Morgan J-11	500	KPOF	880				
Ketchikan	500	KGBU	900	Grand Junction K-9 lc	100	KGEW	1200				
				Greeley J-11	100	KFXJ	1310				
ARIZONA											
Jerome M-6	100	KCRJ	1310	Lamar L-12 lc	100	KIDW	1420				
Phoenix N-6	500	KOY	C 1390	Pueblo L-11	250	KGHF	1320				
	500	KTAR	N 620	Trinidad L-11	100	KGIW	1420				
Prescott M-6	100	KPJM	1500	Yuma J-12	100	KGEK	1200				
Tucson O-7	100	KGAR	1370								
	500	KVOA	1260	CONNECTICUT							
Yuma O-5 tl	100	KUMA	1420	Bridgeport H-27	250	WICC	C 600				
				Hartford H-27	500	WDRG	C 1330				
					50000	WTIC	R 1060				
				Storrs H-28	250	WCAC	600				
ARKANSAS											
Blytheville M-19	50	KLCN	1290	DELAWARE							
Fayetteville M-16	1000	KUOA	1390	Wilmington J-26	250	WDEL	1120				
Fort Smith N-16	100	KFPW	1210		100	WILM	1420				
Hot Springs N-17	10000	KTHS	N 1040	DISTRICT OF COLUMBIA							
Little Rock N-17	250	KARK	890	Washington J-26	10000	WJSV	C 1460				
	100	KGHI	1200		250	WMAL	630				
	1000	KLRA	C 1390		500	WRC	N 950				
Paragould M-18	100	KBTM	1200		100	WOL	1310				
Texarkana O-17 bl	100	KCMC	1420	FLORIDA							
				Clearwater R-24	1000	WFLA	N 620				
CALIFORNIA											
Bakersfield L-2 br	100	KERN	C 1200	Gainesville Q-24	5000	WRUF	C 830				
Berkeley J-2	100	KRE	1370	Jacksonville Q-24	1000	WJAX	N 900				
Beverly Hills M-3 bl	500	KMPC	710	Miami T-25	1000	WTOG	N 1300				
Burbank M-3	500	KELW	780		1000	WQAM	C 560				
El Centro N-4	100	KXO	1500	Orlando R-24	250	WDBO	C 580				
Eureka H-1 tc	100	KIEM	1210	Pensacola Q-21	500	WCOA	1340				
Fresno K-2	500	KIEM	C 580	St. Petersburg S-24	1000	WSUN	N 620				
Glendale M-3	100	KIEV	850	Tampa R-24	1000	WDAE	C 1220				
Hollywood M-3	500	KMTR	570		100	WMBR	1370				
	25000	KNX	C 1050	GEORGIA							
Long Beach M-3	1000	KFOX	C 1250	Americus P-22 c	100	WENC	1420				
	1000	KGER	1360	Athens N-23 bc	500	WTFI	1450				
Los Angeles M-3	1000	KECA	N 1430	Atlanta O-22	250	WGST	C 890				
	1000	KFAC	1300		100	WJTL	1370				
	50000	KFI	N 640	Augusta O-23	5000	WSB	N 740				
	500	KFSG	1120	Columbus O-22	100	WRDW	1500				
	250	KFVD	1000	Macon O-23	100	WRBL	1200				
	1000	KFWB	950	Rome N-22	500	WMAZ	1180				
	100	KGFJ	1200	Savannah O-24	100	WFDV	1500				
	1000	KHJ	C 900	Thomasville Q-22	500	WTOC	C 1260				
	500	KRDK	1120		100	WQDX	1210				
	500	KTM	780	HAWAII							
Oakland J-1	250	KLS	1440	Honolulu	250	KGMB	C 1320				
	500	KLY	880		1000	KGU	N 750				
	500	KRW	930	IDAHO							
Pasadena M-3	50	KPPC	1210	Boise G-5	1000	KIDO	1350				
Sacramento J-2	100	KFBK	C 1310	Idaho Falls G-7	250	KID	1320				
San Bernardino M-3	100	KFXM	1210	Nampa G-5	100	KFXD	1200				
San Diego N-3	500	KFSD	N 600	Pocatello H-7	250	KSEI	890				
	1000	KGB	C 1330	Lewiston E-5 rc	100	KGKX	1420				
San Francisco J-1	1000	KFRC	C 610	Twin Falls H-6	500	KTFI	1240				
	500	KFWI	930								
	100	KGGC	1420								
	7500	KGO	N 790								
	100	KJBS	1070								
	5000	KPO	N 680								
	1000	KTAB	560								
	1000	KYA	N 1230								

INDEX BY LOCATIONS WITH MAP KEY

Columbia: C. National: Red, R; Blue, B; Both, N.

ILLINOIS

	Watts		Keys.
Carthage J-18	50	WCAZ	1070
Chicago I-20	10000	KFKX	1020
	10000	KYW N	1028
	500	WAAF	920
	25000	WBBM C	778
	1500	WCFL R	970
	100	WCRW	1210
	100	WEDC	1210
	50000	WENR N	870
	500	WGES	1360
	25000	WGN C	720
	1000	WIBO	560
	20000	WJJD	1130
	50000	WLS N	870
	5000	WMAQ N	670
	5000	WMBI	1080
	500	WPCC	560
	100	WSBC	1210
Cicero I-20	100	WEHS	1420
	100	WHFC	1420
	100	WKBI	1420
	100	WJBL	1200
Decatur K-19	100	WKBS	1310
Galesburg J-18	100	WEBQ	1210
Harrisburg L-19	100	WCLS	1310
Joliet I-19	100	WKBB	1310
	100	WJBC	1200
La Salle J-19	100	WJBC	1200
Peoria J-19	500	WMBD C	1440
Quincy K-18	500	WTAD	1440
Rockford I-19	500	KFLV	1410
Rock Island I-18	100	WHBF	1210
Springfield K-19	100	WCBS	1210
	100	WTAX	1210
	100	WDZ	1070
Tuscola K-20	100	WILL	890
Urbana J-20	250	WILL	890
Zion I-20	5000	WCBD	1080

INDIANA

Anderson J-21	100	WHBU	1210
Connersville K-21	100	WKBV	1500
Culver I-20	500	WCMA	1400
Elkhart I-21 bc	50	WTRC	1310
Evansville L-20	500	WGBF	630
Fort Wayne J-21	100	WGL	1370
	10000	WOWO C	1160
Gary I-20	1000	WJKS	1360
Hammond I-20 bc	100	WWAE	1200
Indianapolis J-21	1000	WFEM C	1230
	500	WKBF	1400
Lafayette J-20	500	WBAA	1400
Muncie J-21	50	WLBC	1310
South Bend I-20	100	WFAM C	1200
	500	WSBT C	1230
Terre Haute K-20	100	WBOW	1310

IOWA

Ames I-17	5000	WOI	640
Boone I-17	100	KFGQ	1310
Cedar Rapids I-18	100	KWCR B	1420
Clarinda J-16	100	KSO B	1380
Council Bluffs J-16	1000	KOIL B	1268
Davenport I-18	5000	WOC R	1000
Decorah H-18	100	KGCA	1270
	100	KWLC	1270
Des Moines I-17	5000	WHO R	1000
Iowa City I-18	500	WSUI	880
Marshalltown I-17	100	KFJB	1200
Ottumwa J-17	100	WIAS	1310
Red Oak J-16	100	KICK	1420
Shenandoah J-16	500	KFNF	890
	500	KMA	930
Sioux City I-15	1000	KSCJ C	1330
Waterloo I-17	500	WMT C	600

KANSAS

	Watts		Keys.
Abilene K-15 b1	5000	KFBI	1050
Coffeyville M-15 tr	500	KGGF	1010
Dodge City L-13	100	KGNO	1210
Kansas City K-16	100	WLBF	1420
Lawrence K-16	500	KFKU	1220
	1000	WREN B	1220
Manhattan K-15	500	KSAC	580
Topeka K-16	1000	WIBW C	580
Wichita L-15	1000	KFH C	1300

KENTUCKY

Covington K-22	5000	WCKY N	1490
Hopkinsville M-20	1000	WFIW C	940
Louisville L-21	25000	WHAS C	820
	100	WLAP	1200
Paducah M-19	100	WPAD	1420

LOUISIANA

Monroe P-18	100	KMLB	1200
New Orleans R-19	100	WABZ	1200
	1000	WDSU C	1250
	100	WJBO	1420
	100	WJBW	1200
	500	WSMB N	1328
	5000	WWL	850
Shreveport P-17	100	KRMD	1310
	1000	KTBS N	1450
	100	KWEA	1210
	10000	KWKH	850

MAINE

Augusta F-28	100	WRDO	1370
Bangor F-29	100	WABI	1200
	500	WLBZ C	620
Portland F-28	1000	WCSH R	940
Presque Isle D-29 lc	100	WAGM	1420

MARYLAND

Baltimore J-26	10000	WBAL B	1060
	250	WCAO C	600
	100	WCBM	1370
	500	WFBR R	1270
Cumberland J-25	100	WTBO	1420
Hagerstown J-25 rc	100	WJEJ	1210

MASSACHUSETTS

Babson Park G-28	500	WBSO	920
Boston G-28	500	WAAB	1410
	25000	WBZ B	990
	1000	WEEI R	590
	1000	WHDH	830
	100	WLOE	1500
	1000	WNAC C	1230
	250	WSAR	1450
Fall River H-28	100	WLEY	1370
Lexington G-28	100	WNBH	1310
New Bedford H-28	100	WNBH	1310
Springfield H-27	1000	WBZA B	990
	100	WMAS	1420
Worcester G-28	100	WORC C	1200
	250	WTAG R	580

MICHIGAN

Battle Creek I-21	50	WELL	1420
Bay City H-22	500	WBCM C	1410
Calumet E-19	100	WHDF	1370
Detroit H-22	50	WJBK	1370
	10000	WJR B	750
	100	WMBC	1420
	1000	WWJ R	920
	1000	WXYZ	1240
East Lansing H-21	1000	WKAR	1040

INDEX BY LOCATIONS WITH MAP KEY

Columbia: C. National: Red, R; Blue, B; Both, N.

	Watts		Keys.		Watts		Keys.
FLINT H-22	100	WDFD	1310	NEVADA	100	KGIX	1420
Grand Rapids H-21	500	WASH	1276	Las Vegas L-5	500	KOH	C 1380
	500	WOOD	1270				
Ironwood F-18 rc	100	WJMS	1420	NEW HAMPSHIRE			
Jackson I-21	100	WIBM	1370	Laconia G-28 1c	100	WKAV	1310
Kalamazoo I-21 tl	1000	WKZO	590	Manchester G-28	500	WFEA	C 1430
Lapeer H-22	100	WMPC	1500	Portsmouth G-28 tc	250	WHEB	740
Ludington H-20	100	WKBZ	1500				
Marquette F-19	100	WBEO	1310	NEW JERSEY			
Royal Oak H-22	50	WEXL	1310	Asbury Park I-27	500	WCAP	C 1280
MINNESOTA				Atlantic City J-27	5000	WPG	C 1100
Fergus Falls F-15	100	KGDE	1200	Camden I-26	500	WCAM	1280
Minneapolis G-17	50000	WCCO	C 810	Hackensack I-27	250	WBMS	1450
	1000	WDGY	1180	Jersey City I-27	300	WAAT	940
	1000	WLB	1250	Newark I-27	250	WHOM	1450
	1000	WRHM	1250		1000	WAAM	1250
Moorhead F-15	50	KGFK	1500		250	WGCP	1250
Northfield G-17	1000	KFMX	1250		250	WNJ	1450
	1000	WCAL	1250		5000	WOR	710
St. Paul G-17	10000	KSTP	N 1460	Paterson I-27	1000	WODA	1250
MISSISSIPPI				Red Bank I-27	100	WJBI	1210
Greenville O-18	100	WKFI	1210	Trenton I-26	500	WOAX	1280
Gulfport Q-19	100	WGCM	1210	Zarephath I-27	250	WAWZ	1350
Hattiesburg Q-19	100	WPFB	1370				
Jackson P-19	1000	WJDX	N 1270	NEW MEXICO			
Kosciusko O-19 bc	100	WHEF	1500	Albuquerque N-7	250	KGGM	1230
Laurel P-19 br	100	WTSL	1310	Clovis Q-11 tr	10000	KOB	1180
Meridian P-20	500	WCOC	880	Santa Fe M-10	100	KICA	1370
Vicksburg P-18	500	WQBC	1360		100	KGFL	1370
MISSOURI							
Cp. Girardeau L-19	100	KFVS	1210	NEW YORK			
Columbia K-17	500	KFRU	630	Albany G-27 bl	500	WOKO	C 1430
Grant City J-16	100	KGIZ	1500	Auburn H-25	100	WMBO	1310
Jefferson City L-17	500	WOS	630	Binghamton H-26	100	WMBF	1500
Joplin M-16	100	WMBH	1420	Brooklyn I-27	500	WBBC	1400
Kansas City K-16	1000	KMBC	C 950		1000	WBBR	1300
	100	KWKC	1370		500	WCGU	1400
	1000	WDAF	R 610		500	WFOX	1400
	500	WHB	860		500	WLTH	1400
	1000	WQQ	1300		100	WMBQ	1500
St. Joseph K-16	2500	KFEQ	680	Buffalo H-24	1000	WBEN	R 900
St. Louis L-18	500	KFUO	550		100	WBEH	1310
	100	KFWF	1200		1000	WGR	C 550
	50000	KMOX	C 1090		5000	KKBW	C 1480
	500	KSD	R 550		50	WSVS	1370
	1000	KWK	B 1350	Canton F-26	500	WCAD	1220
	1000	WEW	760	Chester Twp.	50	WGNV	1210
	100	WIL	1200	Elmira H-25 c	1000	WESG	1270
Springfield M-17	100	KGBX	1310	Freeport I-27	100	WGBB	1210
				Glens Falls G-27	50	WGLC	1370
MONTANA				Jamestown H-24	50	WOCL	1210
Billings F-9	1000	KGHL	N 950	New York City I-27	50000	WABC	C 860
Butte F-7	500	KGIR	N 1360		250	WBNX	1350
Great Falls E-8	1000	KFBZ	1280		50000	WBOQ	860
Kalispell D-7	100	KGEZ	1310		250	WCDA	1350
Missoula E-7	100	KGVO	1200		50000	WEAF	R 660
Wolf Point E-11	100	KGCX	1310		500	WEVD	1300
					1000	WFAB	1300
					500	WINS	1180
NEBRASKA					250	WHN	1010
Clay Center J-14	1000	KMMJ	740		30000	WJZ	B 760
Kearney J-14 bc	100	KGFW	1310		5000	WLWL	1100
Lincoln J-15	5000	KFAB	C 770		500	WMCA	570
	100	KFOR	1210		250	WMSG	1350
	500	WCAJ	590		500	WNYC	570
Norfolk I-15	1000	WJAG	1060		1000	WOV	1130
North Platte J-13	500	KGNF	1430		250	WPAP	1010
Omaha J-15	500	WAAW	660		500	WPCH	810
	1000	WOW	R 590		250	WQAO	1010
Scottsbluff I-11	100	KGKY	1500	Rochester G-25	5000	WHAM	B 1150
York J-15	500	KGBZ	930		500	WHEC	C 1430

INDEX BY LOCATIONS WITH MAP KEY

Columbia: C. National: Red, R; Blue, B; Both, N.

	Watts		Keys.
Saranac Lake F-26	50	WMBZ	1290
Schenectady G-27	50000	WGY R	790
Syracuse G-25	1000	WFBL C	1360
	250	WMAC	570
	250	WSYR R	570
Troy G-27	500	WHAZ	1300
Tupper Lake F-26	100	WHDL	1420
Utica G-26	100	WIBX	1200
Woodside I-27	100	WWRL	1500
White Plains H-27 bl	100	WFAS	1210

NORTH CAROLINA

Asheville M-23	1000	WWNC N	570
Charlotte M-24	25000	WBT C	1080
Gastonia M-24	100	WSOC	1210
Greensboro M-24	500	WBIG C	1440
Raleigh M-25	1000	WPTF N	680
Wilmington N-26	100	WRAM	1370
Winston-Salem M-24	100	WSJS C	1310

NORTH DAKOTA

Bismarck F-13	1000	KFYR N	550
Devils Lake E-14	100	KDLR	1210
Fargo F-15	1000	WDAY N	940
Grand Forks E-15	100	KFJN	1370
Mandan F-13	250	KGCU	1240
Minot E-13	250	KLPM	1240

OHIO

Akron I-23	1000	WADC C	1320
	100	WJW	1210
Canton I-23	10	WHBC	1200
Cincinnati K-22	100	WFBE	1200
	1000	WKRC C	550
	50000	WLW B	700
	500	WSAI R	1330
Cleveland I-23	500	WGAR B	1450
	1000	WHK C	1390
	500	WJAY	610
Columbus J-22	50000	WTAM R	1070
	500	WAIU	640
	750	WCAH C	1430
	500	WEAO	570
	100	WSEN	1210
Dayton J-22	200	WSMK	1380
Mount Orab K-22	100	WHBD	1370
Toledo I-22	1000	WSPD C	1340
Youngstown I-23	500	WKEN C	570
Zanesville J-23	100	WALR	1210

OKLAHOMA

Chickasha N-14	250	KOCW	1400
Elk City N-13	100	KASA	1210
Enid M-14	100	KCRC	1370
Norman N-15	500	WNAD	1010
Oklahoma N-15	100	KFXR	1310
	100	KGFG	1370
	5000	KOMA C	1480
	1000	WKY N	900
Ponca City M-15	100	WBBZ	1200
Shawnee N-15	100	KGFF	1420
Tulsa M-15	5000	KVOO N	1140

OREGON

Corvallis E-2	1000	KOAC	550
Eugene F-2	100	KORE	1420
Klamath Falls G-3 c	100	KFJJ	1210
Marshfield F-1	100	KOOS	1370
Medford G-2	100	KMED	1310

	Watts		Keys.
Portland E-3	500	KALE C	1300
	5000	KEX N	1180
	100	KBPS	1420
	500	KFJR	1300
	1000	KGW N	620
	1000	KOIN C	940
	500	KWJJ	1060
	100	KXL	1420

PENNSYLVANIA

Allentown I-26	250	WCBA	1440
	250	WSAN	1440
Altoona I-25	100	WFBG	1310
Carbondale H-26	10	WNBW	1200
Erie H-24	100	WERE	1420
	500	WLBW C	1260
	25	WIBG	930
Glenside I-26 rc	100	WSAJ	1310
Grove City I-24	500	WBAK	1430
Harrisburg I-25	100	WCOD	1200
	500	WHP C	1430
	100	WAZL	1420
Hazleton I-26 lc	100	WJAC	1310
Johnstown J-24	100	WGAL	1310
Lancaster I-26	100	WKJC	1200
	100	WJBU	1210
Lewisburg I-26	50000	WCAU C	1170
Philadelphia I-26	100	WDAS	1370
	500	WFAN C	610
	500	WFI R	560
	100	WHAT	1310
	500	WIP C	610
	500	WLIT R	560
	100	WPEN	1500
	250	WRAX	1020
	100	WTEL	1310
Pittsburgh J-24	50000	KDKA B	980
	500	KQV	1380
	1000	WCAE R	1220
	1000	WJAS C	1290
	100	WWSW	1500
Reading I-26	1000	WEEU	830
	100	WRAW	1310
Scranton H-26	250	WGBI	880
	250	WQAN	880
Washington J-24	100	WNBO	1200
Wilkes-Barre I-26	100	WBAX	1210
	100	WBRE	1310
Williamsport I-25	100	WRAK	1370
	100	WJEQ	1370
York J-25 tr	1000	WORK	1000

PHILIPPINES

Cebu	500	KZRC	937.5
Manila	1000	KZKA	1110
	50000	KZRM	618.5

PORTO RICO

San Juan W-34	1000	WKAQ	1240
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RHODE ISLAND

Providence H-28	250	WEAN C	780
	250	WJAR R	890
	100	WPAW	1210
	100	WPRO	1210

SOUTH CAROLINA

Charleston O-25	500	WCSC	1360
Columbia N-24	500	WTS N	1010
Spartanburg N-23	100	WSPA	1420

INDEX BY LOCATIONS WITH MAP KEY

Columbia: C. National: Red, R; Blue, B; Both, N.

SOUTH DAKOTA				VIRGINIA			
	Watts		Keys.		Watts		Keys.
Brookings H-15	500	KFDY	550	Arlington J-25	1000	NAA	690
Huron H-14	100	KG DY	1200	Danville L-25	100	WB TM	1370
Mitchell H-14	100	KG DA	1370	Emory L-23	500	WE HC	1350
Pierre G-13	200	KG FX	630	Lynchburg L-25	100	WL VA	1370
Rapid City H-12	100	WC AT	1200	Newport News L-26	100	WG H	1310
Sioux Falls H-15	1000	KSO O	1110	Norfolk L-26	500	WT AR	C 780
Vermillion I-15	500	KUS D	890	Petersburg L-26	100	WP HR	1200
Watertown G-15	100	KG CR	1210	Portsmouth L-26 tc	500	WP OR	780
Yankton I-15	1000	WN AX	C 570	Richmond K-26	100	WB BL	1210
					100	WM BG	C 1210
					5000	WR VA	N 1110
				Roanoke L-24	250	WDB J	C 930
					250	WR BX	1410
TENNESSEE				WASHINGTON			
Bristol L-23	100	WO PI	1500	Aberdeen D-2	100	KX RO	1310
Chattanooga N-21	1000	WDO D	C 1280	Bellingham C-3	100	KV OS	1200
Jackson M-19 br	100	WT JS	1310	Everett C-3	50	KF BL	1370
Knoxville M-22	1000	WNO X	C 560	Olympia D-3 tl	100	KG Y	1210
	100	WR OL	1310	Pullman E-5	1000	KW SC	1220
Memphis N-19	100	WH BQ	1370	Seattle C-3	5000	KJ R	N 970
	500	WMC	N 780		1000	KOL	C 1270
	500	WN BR	1430		1000	KOMO	N 920
	500	WREC	600		100	KPC B	650
Nashville M-21	5000	WL AC	1470		100	KR SC	1120
	50000	WS M	C 650		1000	KT W	1220
Springfield M-20	100	WS IX	1210		100	KV L	1370
					250	KX A	760
TEXAS					100	KF IO	1120
Amarillo N-12	1000	KG RS	1410	Spokane D-5	1000	KFP Y	C 1340
	1000	WD AG	1410		5000	KG A	B 1470
Austin Q-14	100	KN OW	1500		1000	KH Q	N 590
Beaumont R-17	100	KF DM	560	Tacoma D-3	250	KM O	1330
Brownsville U-15	500	KW WG	1260		500	KV I	C 570
College Sta. Q-15	500	WT AW	1120	Walla Walla E-5	100	KU J	1370
Corpus Christi S-14	100	KG FI	1500	Wenatchee D-4	50	KP Q	1500
Dallas P-15	10000	KR LD	C 1040	Yakima D-4	100	KIT	1310
	50000	WFA A	N 800				
	500	WRR	C 1280	WEST VIRGINIA			
Dublin P-14	100	KF PL	1310	Bluefield L-24	250	WH IS	1410
El Paso P-9	100	KT SM	1310	Charleston K-23	250	WOB U	580
	100	WD AH	1310	Fairmont J-24	250	WMM N	890
Fort Worth P-15	100	KF JZ	1370	Huntington K-23	250	WS AZ	580
	1000	KT AT	1240	Wheeling J-24	5000	WW VA	C 1160
	10000	WB AP	N 800	WISCONSIN			
Galveston R-16	100	KFL X	1370	Eau Claire G-18	1000	WTA Q	C 1330
	500	KFUL	1290	Fond du Lac H-19	100	KF IZ	1420
Greenville O-15	15	KF PM	1310	Green Bay G-19	100	WH BY	1200
Harlingen T-14	500	KR GV	1260	Janesville I-19	100	WC LO	1200
Houston R-16	1000	KPR C	N 920	La Crosse H-18	1000	WK BH	C 1380
	500	KTR H	C 1120	Madison H-19	1000	WH A	940
	250	KXY Z	1440	Manitowoc H-20	500	WIB A	N 1280
Lubbock O-12 tr	100	KFY O	1310	Milwaukee H-19	100	WOM T	1210
San Angelo Q-13	100	KG KL	1370		250	WH AD	C 1120
San Antonio R-14	100	KABC	1420		250	WIS N	C 1120
	100	KMAC	1370		1000	WT MJ	N 620
	100	KMO C	1370	Poynette H-19	100	WIB U	1210
	1000	KT SA	C 1290	Racine I-20	100	WR JN	1370
	50000	WO AI	N 1190	Sheboygan H-20	500	WH BL	1410
Tyler P-16 rc	100	KG GB	1500	Stevens Point G-19	2000	WL BL	900
Waco Q-15	1000	WAGO	C 1240	Superior F-17	1000	WE BC	N 1290
Wichita Falls O-14	250	KG KO	570	WYOMING			
				Casper H-10	500	KDF N	1440
UTAH				CANADA			
Salt Lake City I-7	2500	KD YL	N 1290	ALBERTA			
	500	KLO	1400	Calgary B-7	500	CF AC	690
	50000	KSL	C 1130		10000	CF CN	985
					500	CJ CJ	690
VERMONT							
Burlington F-27	100	WC AX	1200				
Rutland G-27	100	WS YB	1500				
St. Albans F-27	100	WQ DM	1370				
Springfield G-27	250	WN BX	1260				
Waterbury F-27 c	500	WDE V	550				

INDEX BY LOCATIONS WITH MAP KEY

Columbia: C. National: Red, R; Blue, B; Both, N.

	Watts		Kcys.		Watts		Kcys.
Edmonton A-8	250	CHMA	580	Quebec D-27	100	CHRC	645
	500	CJCA	745		100	CKCI	645
	500	CKUA	580		100	CKCV	880
Le hbridge C-8	100	CJOC	1120	SASKATCHEWAN			
Rea Deer A-8	1000	CKLC	840	Canora B-13 tl	15	10-BU	1200
BRITISH COLUMBIA				Fleming C-13	1000	CJRW	665
Chilliwack B-3	100	CHWK	665	Moose Jaw C-11	500	CJRM	665
Kamloops B-5	100	CJFC	1120		25	10-AB	1200
Kelowna C-6 tl	100	CKOV	1200	Prince Albert A-11 rc	25	10-BI	1200
Trail C-6 c	25	10-AT	1155	Regina C-12	500	CHWC	960
Vancouver B-3	100	CHLS	730	Saskatoon B-11	500	CKCK	960
	500	CJOR	1210	Yorkton B-13	500	CJQC	910
	100	CKCD	730		500	CKGX	630
	50	CKFC	730	NEWFOUNDLAND			
	100	CKMO	730	St. Johns A-35	200	VOAS	810
	100	CKWX	730		500	VOGY	910
	500	CNRV	1030		100	VONA	950
Victoria C-3	500	CFCT	630		500	VONF	1115
					750	VOWR	750
MANITOBA				Wabana A-35	400	VOGT	893
Brandon D-14	500	CKX	930	CENTRAL AMERICA			
Winnipeg D-15	5000	CKY	780	COSTA RICA			
NEW BRUNSWICK				San Jose FF-23	50	TICR	911
Fredericton D-29	100	CFNB	1210	GUATAMALA			
Moncton D-30	700	CNRA	630	Guatamala CC-18 tr	50	TGW	570
St. John D-30	500	CFBO	890	SALVADOR			
NOVA SCOTIA				Salvador CC-19 br	500	RUS	664
Glace Bay C-32	2000	VAS	685	MEXICO			
Halifax E-31	500	CHNS	815	AGUASCALIENTES			
	500	CNRH	815	Aguascalientes W-11 bc	250	XFC	810
	100	VCX	690	BAJA CALIFORNIA			
Sydney C-32	100	CJCB	880	Tiajuana N-3 bc	300	XEFD	1020
Wolfville D-31	50	CKIC	1010	CHIHUAHUA			
ONTARIO				Chihuahua R-9	100	XEFI	1000
Brantford H-23 tr	15	10-BQ	1200		250	XFF	875
Chatham H-22	250	CFCO	1210	Juarez P-9	101	XEJ	1000
Cobalt E-23	100	CKMC	1210		5000	XEQ	750
Ft. William E-19 bl	100	CKPR	890	COAHUILA			
Hamilton H-24	50	CHML	880	Salttillo, Coah. U-12	25	XEL	1000
	1000	CKOC	635	Torreon U-11 tl	125	XETB	1380
Kingston G-25	50	CFRC	930		100	XETG	1000
London H-23	5000	CJGH	595	Villa Acuna R-12 c	75000	XER-XEF	735
North Bay F-23 c	100	CFCH	930	D. F.			
Ottawa F-25	100	CKCO	890	Coyoacan Y-13	100	XEFZ	1370
	500	CNRO	600	Mexico City Y-13	1000	XEB	1030
	100	CFLC	915		250	XEFA	1250
Prescott F-25	100	CKPC	880		250	XEG	1070
Preston H-23	100	CKTB	635		101	XEK	990
St. Catharines H-24 tl	1000	CKNC	960		1000	XEN	711
Stratford H-23 tc	15	10-AK	1200		5000	XEFO	940
Toronto G-24	500	CFCA	1120		500	XETA	1140
	10000	CFRB	690		100	XETQ	1230
	5000	CHNC	840		2500	XETR	610
	500	CKCL	580		5000	XEW	910
	5000	CKGW	846		500	XEX	1210
	500	CKNC	960		500	XEZ	780
	5000	CPRY	840		2000	XFG	638
Waterloo G-23	100	CKCR	645		500	XFX	867
Windsor I-22 tc	5000	CKOK	540		50	XEC	1000
Wingham G-23	25	10-BP	1199				
PRINCE EDWARD ISLAND				Toluca Y-12			
Charlottetown C-31	500	CFCY	980				
	100	CHCK	960				
Summerside C-31	100	CHGS	1120				
QUEBEC							
Montreal E-26	500	CFCF	N 1030				
	100	CHCH	1200				
	5000	CHYC	730				
	5000	CKAC	C 730				

INDEX BY LOCATIONS WITH MAP KEY

	Watts		Keys.		Watts		Keys.
JALISCO							
Guadalajara, Jal. X-10	500	XEA	1155	Guantanamo X-28 tc	20	CMKJ	1300
MICHOACAN				Havana W-23	500	CMAF	680
Morelia, Mich. Y-12	150	XEI	1310		150	CMAY	965
NEUVO LEON					150	CMBG	965
Monterrey, N. L. U-13	100	XEFB	1315		150	CMBD	1270
	1000	XEH	1132		225	CMBF	1365
	500	XET	690		150	CMBG	1070
OAXACA					150	CMBJ	1140
Oaxaca, Oax. AA-14	105	XEE	1000		15	CMBK	1485
PUEBLA					20	CMBL	1445
Puebla Z-13	101	XEV	1000		30	CMBN	1445
QUERETARO					40	CMBR	1485
Queretaro X-12 br	40	XEFS	1000		150	CMBT	780
TAMAULIPAS					150	CMBW	1140
N. Laredo S-13	101	XEFE	1000		350	CMBY	1230
	50000	XENT	1115		150	CMBZ	1010
	200	XEP	1400		500	CMC	840
Reynosa, Tams. T-14	10000	XED	965		150	CMCA	1230
Tampico, Tams. W-14	500	XEM	730		150	CMCB	1070
	500	XES	1055		250	CMCD	925
VERA CRUZ					250	CMCF	890
Jalapa Y-14	100	XETC	1000		50	CMCH	1405
Vera Cruz, Ver. Z-14	500	XETF	630		250	CMCJ	1180
	100	XEU	1007		15	CMCM	1405
YUCATAN					250	CMCN	1270
Merida, Yuc. X-19	10	XEFC	1050		1000	CMCO	780
	105	XEY	1000		150	CMCR	1325
					150	CMCU	630
WEST INDIES					150	CMCW	1365
CUBA					150	CMCX	1010
Caibarien W-25	250	CMHD	950		1000	CMCY	1325
Camaguey W-26	150	CMJC	1382		40	CMDB	1405
	50	CMJE	1175		150	CMDD	588
	200	CMJF	930		250	CMDE	925
	50	CMJG	1050		3150	CMK	730
	300	CMJK	790		250	CMO	630
	50	CMJL	960		1400	CMW	1185
	50	CMJN	1270		500	CMX	890
Cardenas W-24	30	CMGE	1375	Matanzas W-24	30	CMGB	1205
Ciego de Avila W-26	50	CMJH	1150		30	CMGC	820
	5	CMJI	1260		100	CMGF	987
	15	CMJO	1110		15	CMGH	1040
Cienfuegos W-25	40	CMHJ	1125	Moron	7.5	CMJP	1310
	20	CMHL	1290	Pinar del Rio W-22	20	CMAB	1249
Colon W-24	100	CMGA	834	Santa Clara W-25	30	CMHI	1030
Cruces	15	CMHK	1225	Santiago X-28	150	CMKC	1034
				Tuinucu W-25 rc	250	CMHC	790
				DOMINICAN REPUBLIC			
				Santo Domingo X-31	1000	HIX	630
				HAITI			
				Port au Prince X-30	1000	HHK	920
				SOUTH AMERICA			
				Caracas Venezuela	DD-31	YV1BC	960

TIME CONVERSION TABLE

American	Atlantic	Eastern	Central	Mountain	Pacific	Atlantic	Eastern	Central	Mountain	Pacific
1:00	12:00	11:00	10:00	9:00	7:00	6:00	5:00	4:00	3:00	
2:00	1:00	12:00	11:00	10:00	8:00	7:00	6:00	5:00	4:00	
3:00	2:00	1:00	12:00	11:00	9:00	8:00	7:00	6:00	5:00	
4:00	3:00	2:00	1:00	12:00	10:00	9:00	8:00	7:00	6:00	
5:00	4:00	3:00	2:00	1:00	11:00	10:00	9:00	8:00	7:00	
6:00	5:00	4:00	3:00	2:00	12:00	11:00	10:00	9:00	8:00	

CFAC INDEX BY CALL LETTERS AND WEDNESDAY TIME KBTM

<p>CFAC 690 Calgary, Alta., <i>MST</i>. 7:30-9 a.m.; 11:30 a.m.-1:30 p.m.; 4:30-6 p.m.</p> <p>CFBO 890 St. John, N. B.</p> <p>CFCA 1120 Toronto, Ont., <i>EST</i>. 7:15-noon; 1-11 p.m.</p> <p>CFCF 1030 Montreal, Que., <i>EST</i>. 8 a.m.-mid.</p> <p>CFCH 930 North Bay, Ont., <i>EST</i>. 8-8:30 a.m.; noon-1 p.m.; 5-8</p> <p>CFCN 985 Calgary, Alta., <i>MST</i>. 7:30 a.m.-1:30 p.m.; 5-11 p.m.</p> <p>CFCO 1210 Chatham, Ont., <i>EST</i>. 7:15-7:30 p.m.; 8:15-8:30 p.m.</p> <p>CFCT 630 Victoria, B. C., <i>PST</i>. 8 a.m.-12:30 p.m.; 6-8 p.m.; 10-11 p.m.</p> <p>CFCY 580 Charlottetown, P. E. I., <i>AST</i>. 11:30 a.m.-noon; 4:30-8 p.m.</p> <p>CFJC 1120 Kamloops, B. C., <i>PST</i>. 7:30-9:30 a.m.; noon-2 p.m.; 5:30-7 p.m.</p> <p>CFLE 915 Prescott, Ont., <i>EST</i>. 8-10 a.m.; noon-2 p.m.; 5-7:30</p> <p>CFNB 1210 Fredericton, N. B., <i>AST</i>. 8:30-9:30 a.m.; 12:30-2 p.m.</p> <p>CFQC 810 Saskatoon, Sask.</p> <p>CFRB 690 Toronto, Ont., <i>EST</i>. 8 a.m.-mid.</p> <p>CFRC 930 Kingston, Ont.</p> <p>CHCH 1200 Montreal, Que.</p> <p>CHCK 960 Charlottetown, P. E. I. Noon-2 p.m.; 5-7:30 p.m., <i>AST</i>.</p> <p>CHGS 1120 Summerside, P. E. I. 10 a.m.-2 p.m.; 4-8 p.m., <i>AST</i>.</p> <p>CHLS 730 Vancouver, B. C., <i>PST</i>. 8:50-9:30 p.m.</p> <p>CHMA 500 Edmonton, Alta., <i>MST</i>. Silent.</p> <p>CHML 880 Hamilton, Ont., <i>EST</i>. 3-11 p.m. <i>EST</i></p> <p>CHNC 840 Toronto, Ont. 7:15-7:30 p.m.;</p> <p>CHNS 815 Halifax, N. S., <i>AST</i>. 8 a.m.-2 p.m.; 6 p.m.-mid.</p> <p>CHRC 645 Quebec, Que., <i>EST</i>. 9 a.m.-2 p.m.; 5 p.m.-mid.</p> <p>CHWC 960 Regina, Sask., <i>MST</i>. 7-9 a.m.; 10-11 a.m.; noon-1 p.m.; 3:30-mid.</p> <p>CHWK 665 Chilliwack, B. C., <i>PST</i>. Noon-8 p.m.</p> <p>CHYC 730 Montreal, Que.</p> <p>CJCA 745 Edmonton, Alta., <i>MST</i>. 7:45-9:15 a.m.; noon-1 p.m.; 3:30-4:30 p.m.; 5-7:30 p.m.</p> <p>CJCB 880 Sydney, N. S., <i>AST</i>. 10 a.m.-2 p.m.; 6-10 p.m.</p> <p>CJJC 690 Calgary, Alta., <i>MST</i>. 9-11:30 a.m.; 1:45-3 p.m.; 6-7:30</p> <p>CJGC 595 London, Ont., <i>EST</i>. 8:45 a.m.-1:15 p.m.; 5:30-10.</p> <p>CJGX 630 Yorkton, Sask., <i>CST</i>. 8:30-9:15 a.m.; 10:30-10:45 a.m.; 12:40-1:15 p.m.; 6:45-8.</p> <p>CJOC 1120 Lethbridge, Alta., <i>MST</i>. 8:45-10 a.m.; noon-1:15 p.m.; 3-4 p.m.; 6-8 p.m.</p> <p>CJOR 1210 Vancouver, B. C., <i>PST</i>. 7:30 a.m.-1 p.m.; 4-10 p.m.</p> <p>CJRM 665 Moose Jaw, Sask., <i>MST</i>. 8-10:30 a.m.; noon-2:30 p.m.; 7:30-10:30 p.m.</p> <p>CJRW 665 Fleming, Sask., <i>MST</i>. Noon-1 p.m.; 4:30-7:30 p.m.</p> <p>CKAC 730 Montreal, Que., <i>EST</i>. 7:30 a.m.-mid.</p> <p>CKCD 780 Vancouver, B. C.</p>	<p>CKCI 845 Quebec, Que., <i>EST</i>. 1-1:30 p.m.</p> <p>CKCK 960 Regina, Sask., <i>MST</i>. 9-10 a.m.; 11 a.m.-noon; 1-3:30.</p> <p>CKCL 580 Toronto, Ont., <i>EST</i>. 8:30 a.m.-mid.</p> <p>CKCO 890 Ottawa, Ont.</p> <p>CKCR 645 Waterloo, Ont., <i>EST</i>. 10 a.m.-1:15 p.m.; 4-10 p.m.</p> <p>CKCV 880 Quebec, Que., <i>EST</i>. Noon-2 p.m.; 6:30-11 p.m.</p> <p>CKFC 730 Vancouver, B. C. Silent.</p> <p>CKGW 840 Toronto, Ont., <i>EST</i>. 6:45 a.m.-mid.</p> <p>CKIC 1010 Wolfville, N. S., <i>AST</i>. 7:30-8:30 a.m.; 12:15-1:15 p.m.; 6-7 p.m.</p> <p>CKLC 840 Red Deer, Alta., <i>MST</i>. 8 a.m.-7:45 p.m.</p> <p>CKMC 1210 Cobalt, Ont., <i>EST</i>. 7-8 p.m.</p> <p>CKMO 730 Vancouver, B. C.</p> <p>CKNC 960 Toronto, Ont., <i>EST</i>. 8 a.m.-12:30 p.m.; 2:30-11:15.</p> <p>CKOC 635 Hamilton, Ont., <i>EST</i>. 8 a.m.-10:30 p.m.</p> <p>CKOK 640 Windsor, Ont., <i>EST</i>. 7:30 a.m.-mid.</p> <p>CKOV 1200 Kelowna, B. C., <i>PST</i>. 8-9 a.m.; 11:30 a.m.-2 p.m.; 4:30-7:30 p.m.</p> <p>CKPC 880 Preston, Ont., <i>EST</i>. 10 a.m.-2 p.m.</p> <p>CKPR 890 Ft. William, Ont., <i>EST</i>. 9 a.m.-2 p.m.; 5:30-11 p.m.</p> <p>CKTB 635 St. Catharines, Ont., 1:30-5 p.m.; 6:30-8 p.m., <i>EST</i>.</p> <p>CKUA 580 Edmonton, Alta., <i>MST</i>. 4-9 p.m.</p> <p>CKWX 730 Vancouver, B. C., <i>PST</i>. 8-8:30 a.m.; 10:30 a.m.-noon; 4:30-8:30 p.m.; 9:30-mid.</p> <p>CKX 930 Brandon, Man., <i>CST</i>. 8:30-9:30 a.m.; 8-10 p.m.</p> <p>CKY 780 Winnipeg, Man., <i>CST</i>. 8:30 a.m.-2 p.m.; 3:30-11:45 p.m.</p> <p>CMAB 1245 Pinar del Rio, Cuba.</p> <p>CMAF 680 Havana, Cuba, <i>EST</i>. 5-11:30 p.m.</p> <p>CMAY 965 Havana, Cuba.</p> <p>CMBC 965 Havana, Cuba, <i>EST</i>. 4 a.m.-mid.</p> <p>CMBO 1270 Havana, Cuba.</p> <p>CMBF 1365 Havana, Cuba.</p> <p>CMBG 1070 Havana, Cuba.</p> <p>CMBJ 1140 Havana, Cuba.</p> <p>CMBK 1485 Havana, Cuba.</p> <p>CMBL 1445 Havana, Cuba, <i>EST</i>. 7-9 p.m.</p> <p>CMBN 1445 Havana, Cuba, <i>EST</i>. 2-3 p.m.; 9:15-11 p.m.</p> <p>CMBR 1485 Havana, Cuba.</p> <p>CMBS 780 Havana, Cuba.</p> <p>CMBW 1140 Havana, Cuba.</p> <p>CMBY 1230 Havana, Cuba.</p> <p>CMCZ 1010 Havana, Cuba, <i>EST</i>. 9-10:30 a.m.; noon-2 p.m.; 4-5 p.m.; 6-7 p.m.; 8-11 p.m.</p> <p>CMCA 840 Havana, Cuba.</p> <p>CMCC 1230 Havana, Cuba.</p> <p>CMCB 1070 Havana, Cuba, <i>EST</i>. 11:30 a.m.-1 p.m.; 5-6 p.m.; 7-10 p.m.</p> <p>CMCO 925 Havana, Cuba, <i>EST</i>. Noon-3 p.m.; 8 p.m.-mid.</p> <p>CMCF 890 Havana, Cuba, <i>EST</i>. 5-8 p.m.</p>	<p>CMCH 1405 Havana, Cuba, <i>EST</i>. 5-9 p.m.</p> <p>CMCJ 1180 Havana, Cuba.</p> <p>CMCM 1405 Havana, Cuba.</p> <p>CMCN 1270 Havana, Cuba.</p> <p>CMCQ 780 Havana, Cuba.</p> <p>CMCR 1325 Havana, Cuba.</p> <p>CMCU 630 Havana, Cuba.</p> <p>CMCW 1365 Havana, Cuba, <i>EST</i>. 1-3 a.m.; 11 a.m.-6 p.m.</p> <p>CMCX 1010 Havana, Cuba.</p> <p>CMCY 1325 Havana, Cuba, <i>EST</i>. 8:30-10:30 p.m.</p> <p>CMDB 1405 Havana, Cuba.</p> <p>CMDD 588 Havana, Cuba.</p> <p>CMDE 925 Havana, Cuba.</p> <p>CMGA 834 Colon, Cuba.</p> <p>CMGB 1205 Matanzas, Cuba.</p> <p>CMGC 820 Matanzas, Cuba.</p> <p>CMGE 1375 Cardenas, Cuba.</p> <p>CMGF 987 Matanzas, Cuba.</p> <p>CMGH 1040 Matanzas, Cuba.</p> <p>CMHG 790 Tuinucu, Cuba.</p> <p>CMHD 950 Caibarien, Cuba.</p> <p>CMHI 1030 Santa Clara, Cuba, <i>EST</i>. 11 a.m.-1 p.m.; 8-10 p.m.</p> <p>CMHJ 1125 Cienfuegos, Cuba, <i>EST</i>. 11 a.m.-1 p.m.; 7-9 p.m.</p> <p>CMHK 1225 Cruces, Cuba.</p> <p>CMHL 1290 Cienfuegos, Cuba.</p> <p>CMJG 1382 Camaguey, Cuba.</p> <p>CMJE 1175 Camaguey, Cuba.</p> <p>CMJF 830 Camaguey, Cuba.</p> <p>CMJG 1050 Camaguey, Cuba.</p> <p>CMJH 1150 Ciego de Avila, Cuba. 10 a.m.-2 p.m.; 5-10 p.m., <i>EST</i>.</p> <p>CMJI 1260 Ciego de Avila, Cuba. 10 a.m.-1:30 p.m.; 6-10, <i>EST</i>.</p> <p>CMJK 790 Camaguey, Cuba.</p> <p>CMJL 860 Camaguey, Cuba.</p> <p>CMJM 1270 Camaguey, Cuba.</p> <p>CMJN 1110 Ciego de Avila, Cuba.</p> <p>CMJP 1310 Moron, Cuba.</p> <p>CMK 730 Havana, Cuba, <i>EST</i>. 10 a.m.-noon; 6 p.m.-mid.</p> <p>CMKC 1034 Santiago, Cuba.</p> <p>CMKQ 1300 Guantanamo, Cuba.</p> <p>CMKJ 1300 Havana, Cuba.</p> <p>CMW 1185 Havana, Cuba, <i>EST</i>. 7:30 a.m.-11:30 p.m.</p> <p>CMX 890 Havana, Cuba, <i>EST</i>. 11 a.m.-2 p.m.; 7-11 p.m.</p> <p>CNRA 630 Moncton, N. B., <i>AST</i>. 12:30-2 p.m.; 6:15-7:15 p.m.; 9-10 p.m.</p> <p>CNRH 815 Halifax, N. S., <i>AST</i>. Silent.</p> <p>CNRO 800 Ottawa, Ont., <i>EST</i>. Noon-1 p.m.; 6-11 p.m.</p> <p>CNRV 1030 Vancouver, B. C., <i>PST</i>. 2-3:30 p.m.; 5:30-8:30 p.m.</p> <p>CPRY 840 Toronto, Ont., <i>EST</i>. 1-1:30 p.m.; 7:45-8:30 p.m.; 10-10:30 p.m.</p> <p>HHK 920 Port-au-Prince, Haiti.</p> <p>HIX 630 Santo Domingo, <i>EST</i>. Silent.</p> <p>KABC 1420 San Antonio, Tex., <i>CST</i>. 6:45 a.m.-1:30 p.m.; 3:30-11:30.</p> <p>KALE 1300 Portland, Ore., <i>PST</i>. 7-10:30 a.m.; 2:30-5; 6-7 p.m.</p> <p>KARK 890 Little Rock, Ark., <i>CST</i>. 7:30 a.m.-9 p.m.</p> <p>KASA 1210 Elk City, Okla., <i>CST</i>. 7 a.m.-8 p.m.</p> <p>KBPS 1420 Portland, Ore., <i>PST</i>. 11 a.m.-12:30 p.m.; 3-5 p.m.</p> <p>KBTM 1200 Paragould, Ark., <i>CST</i>. 7:30 a.m.-1:30 p.m.; 3:15-6:15.</p>
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KCMC 1420 Texarkana, Ark., <i>CST.</i> 6:45 a.m.-2 p.m.; 4-9 p.m.	KFMX 1250 Northfield, Minn., <i>CST.</i> 8-9 p.m.	KGCR 1210 Watertown, S. D., <i>CST.</i> 6:30 a.m.-3 p.m.; 5-9.
KCRC 1370 Enid, Okla., <i>CST.</i> 10 a.m.-2 p.m.; 3:45-7:45 p.m.	KFNF 890 Shenandoah, Iowa, <i>CST.</i> 5-8 a.m.; 9-10 a.m.; 12:15-5 p.m.; 6-8 p.m.; 9-10 p.m.	KGCU 1240 Mandan, N. D., <i>MST.</i> Noon-5 p.m.; 6:45-9 p.m.
KCRJ 1310 Jerome, Ariz., <i>MST.</i> 7:30-9:30 a.m.; noon-1 p.m.; 3:45-6 p.m.	KFOR 1210 Lincoln, Nebr., <i>CST.</i> 7 a.m.-10 p.m.	KGCX 1310 Wolf Point, Mont., <i>MST.</i> 6:30-9 a.m.; 11:30-3; 6-9 p.m.
KDB 1500 Santa Barbara, Calif., 8 a.m.-mid., <i>PST.</i>	KFOX 1250 Long Beach, Calif., <i>PST.</i> 6 a.m.-mid.	KGDA 1370 Mitchell, S. D., <i>CST.</i> 8 a.m.-4:30 p.m.; 5:30-9.
KDFN 1440 Casper, Wyo., <i>MST.</i> 9 a.m.-9 p.m.	KFPL 1310 Dublin, Texas, <i>CST.</i> 6 a.m.-10:30 p.m.	KGDE 1200 Fergus Falls, Minn. 7 a.m.-9 p.m., <i>CST.</i>
KDKA 980 Pittsburgh, Pa., <i>EST.</i> 7 a.m.-12:30 a.m. next day.	KFPM 610 Greenville, Texas, <i>CST.</i> 7:45-9 a.m.; 1-2:45 p.m.; 6-9 p.m.;	KGDM 1100 Stockton, Calif., <i>PST.</i> 6 a.m.-sunset.
KDLR 1210 Devils Lake, N. D., <i>CST.</i> 7 a.m.-3 p.m.; 5:30-9:30 p.m.	KFPW 1210 Fort Smith, Ark., <i>CST.</i> 6:30 a.m.-2 p.m.; 5-10:30 p.m.	KGDY 1200 Huron, S. D., <i>CST.</i> 7 a.m.-2 p.m.; 4-9 p.m.
KDYL 1290 Salt Lake City, Utah. 6:30 a.m.-1 a.m., <i>MST.</i>	KFPY 1340 Spokane, Wash., <i>PST.</i> 7 a.m.-12:30 a.m. next day.	KGEE 1200 Yuma, Colo., <i>MST.</i> 11 a.m.-1:30 p.m.
KECA 1430 Los Angeles, Calif., <i>PST.</i> 9 a.m.-11 p.m.	KFQD 1230 Anchorage, Alaska. 6 p.m.-mid. (Zone 6)	KGER 1360 Long Beach, Calif., <i>PST.</i> 6 a.m.-mid.
KELW 780 Burbank, Calif., <i>PST.</i> 10 a.m.-1 p.m.; 5-8 p.m.	KFRD 610 San Francisco, Calif. 7 a.m.-1 a.m., <i>PST.</i>	KGEW 1200 Ft. Morgan, Colo., <i>MST.</i> 6:30-9:30 p.m.
KERN 1200 Bakersfield, Calif., <i>PST.</i> 7:30 a.m.-mid.	KFRU 630 Columbia, Mo., <i>CST.</i> 6:30-9 a.m.; 4-7:30 p.m.; 9-mid.	KGEZ 1310 Kalispell, Mont., <i>MST.</i> 8 a.m.-9 p.m.
KEX 1180 Portland, Ore., <i>PST.</i> 7 a.m.-noon; 1 p.m.-mid.	KFSB 600 San Diego, Calif., <i>PST.</i> 7:30 a.m.-mid.	KGGF 1420 Shawnee, Okla., <i>CST.</i> 7:30 a.m.-9 p.m.
KFAB 770 Lincoln, Neb., <i>CST.</i> 6 a.m.-10:30 p.m.	KFSG 1120 Los Angeles, Calif., <i>PST.</i> 1:30-3 p.m.; 7:30-mid.	KGGH 1370 Oklahoma City, Okla. 7:15-10 a.m.; 3-3:45 p.m.; 7:45-10 p.m., <i>CST.</i>
KFAC 1300 Los Angeles, Calif., <i>PST.</i> 7 a.m.-mid.	KFUL 1290 Galveston, Texas, <i>CST.</i> 8-9:30 a.m.; 11 a.m.-1 p.m.; 2:30-4 p.m.; 5:30-7 p.m.; 10-15 p.m.-mid.	KGGI 1500 Corpus Christi, Texas. 7 a.m.-3 p.m.; 6-10 p.m., <i>CST.</i>
KFBB 1280 Great Falls, Mont., <i>MST.</i> 8 a.m.-3 p.m.; 5-10 p.m.	KFUO 550 St. Louis, Mo., <i>CST.</i> 6:30-7 a.m.; 12:15-12:40 p.m.; 9:30-10:30 p.m.	KGGJ 1200 Los Angeles, Calif. 24 hours daily.
KFBI 1050 Abilene, Kans., <i>CST.</i> 5 a.m.-9 p.m.	KFVD 1000 Los Angeles, Calif., <i>PST.</i> 6 a.m.-6:45 p.m.; 10 p.m.-mid.	KGGK 1500 Moorhead, Minn., <i>CST.</i> 8 a.m.-9 p.m.
KFBK 1310 Sacramento, Calif., <i>PST.</i> 7 a.m.-11 p.m.	KFVS 1210 Cape Girardeau, Mo. 9 a.m.-noon; 4-8:30 p.m., <i>CST.</i>	KGGL 1370 Santa Fe, N. M., <i>MST.</i> 9-10 a.m.; 11 a.m.-3 p.m.; 4-5:30 p.m.; 7-9:30.
KFBL 1370 Everett, Wash., <i>PST.</i> 8:30 a.m.-noon; 3-6 p.m.; 3-6 a.m.	KFWB 950 Los Angeles, Calif., <i>PST.</i> 7:30 a.m.-mid.	KGFM 1310 Kearney, Neb., <i>CST.</i> 7:30 a.m.-1:30 p.m.; 5-10:30 p.m.
KFDM 560 Beaumont, Tex., <i>CST.</i> 7 a.m.-2 p.m.; 4:30-10:30 p.m.	KFWF 1200 St. Louis, Mo., <i>CST.</i> Silent.	KGGX 1420 San Francisco, Calif. 9 a.m.-9 p.m., <i>PST.</i>
KFDY 550 Brookings, S. D., <i>CST.</i> 12:30-2 p.m.	KFWI 930 San Francisco, Calif. 7-8 a.m.; 9 a.m.-1 p.m.; 6-7:30 p.m.; 8:30-1 a.m., <i>PST.</i>	KGGY 1010 Coffeyville, Kans., <i>CST.</i> 7:30 a.m.-2 p.m.; 5-10:30.
KFEL 920 Denver, Colo., <i>MST.</i> 7-8:30 a.m.; 10 a.m.-12:30 p.m.; 3-4:30 p.m.; 6-7:30 p.m.	KFXD 1200 Nampa, Idaho, <i>MST.</i> 7 a.m.-9 p.m.	KGGZ 1230 Albuquerque, N. M. 8 a.m.-2 p.m.; 4-10 p.m., <i>MST.</i>
KFEQ 680 St. Joseph, Mo., <i>CST.</i> 6 a.m.-7:45 p.m.	KFXE 920 Denver, Colo., <i>MST.</i> 8:30-10 a.m.; 12:30-3; 4:30-6; 7:30-mid.	KGHF 1320 Pueblo, Colo., <i>MST.</i> 7 a.m.-1 p.m.; 4-10 p.m.
KFGQ 1310 Boone, Iowa, <i>CST.</i> 6:7-30 a.m.; 1:30-2:30 p.m.	KFXJ 1310 Grand Jet, Colo., <i>MST.</i> 8 a.m.-2 p.m.; 6-9 p.m.	KGHI 1200 Little Rock, Ark., <i>CST.</i> 8:30 a.m.-1:30 p.m.; 5-9; mid.-3 a.m.
KFHH 1300 Wichita, Kans., <i>CST.</i> 7-8:30 a.m.; 9-11 a.m.; 11:30 a.m.-2 p.m.; 3-6; 7-9; 10-11 p.m.	KFXM 1210 San Bernardino, Calif. 7 a.m.-7 p.m., <i>PST.</i>	KGHJ 950 Billings, Mont., <i>MST.</i> 7:30 a.m.-4 p.m.; 5:30-11.
KFI 640 Los Angeles, Calif., <i>PST.</i> 6:30 a.m.-mid.	KFXR 1310 Oklahoma City, Okla. 7:30 a.m.-2 p.m.; 4-10, <i>CST.</i>	KGIR 1360 Butte, Mont., <i>MST.</i> 7 a.m.-mid.
KFIO 1120 Spokane, Wash., <i>PST.</i> 6 a.m.-sunset.	KFYO 1310 Lubbock, Texas.	KGIW 1420 Trinidad, Colo., <i>MST.</i> 6-8 a.m.; 10-2 p.m.; 5-8 p.m.
KFIZ 1420 Fond du Lac, Wis., <i>CST.</i> 10 a.m.-1 p.m.; 4-10 p.m.	KFYR 550 Bismarek, N. D., <i>CST.</i> 6:30 a.m.-12:30 p.m.; 2-11 p.m.	KGIX 1420 Las Vegas, Nev., <i>PST.</i> 6-9 a.m.; noon-3 p.m.; 6-9 p.m.
KFJB 1200 Marshalltown, Iowa. 6-9 a.m.; noon-3 p.m.; 6-9 p.m.	KGA 1470 Spokane, Wash., <i>PST.</i> 6 a.m.-mid.	KGIZ 1500 Grant City, Mo., <i>CST.</i> 7-11 a.m.; noon-5 p.m.; 6-9 p.m.
KFJI 1210 Klamath Falls, Ore. 7:30 a.m.-9 p.m., <i>PST.</i>	KGAR 1370 Tucson, Ariz., <i>MST.</i> 7 a.m.-1:30 p.m.; 4-11.	KGKB 1500 Tyler, Texas, <i>CST.</i> 7 a.m.-2 p.m.; 4-10 p.m.
KFJM 1370 Grand Forks, N. D. 7 a.m.-9 p.m., <i>CST.</i>	KGB 1330 San Diego, Calif., <i>PST.</i> 7 a.m.-mid.	KGKL 1370 San Angelo, Texas, <i>CST.</i> 8 a.m.-9:30 p.m.
KFJR 1300 Portland, Ore., <i>PST.</i> 10:30 a.m.-2:30 p.m.; 5-6 p.m.; 7-mid.	KGBU 900 Ketchikan, Alaska. (Zone 8), 10 a.m.-3 p.m.; 5-7; 10 p.m.-3 a.m.	KGKO 570 Wichita Falls, Texas.
KFJZ 1370 Fort Worth, Texas, <i>CST.</i> 7 a.m.-11 p.m.	KGBX 1310 Springfield, Mo., <i>CST.</i> 6:30-9:30 a.m.; 11 a.m.-2 p.m.; 4-10 p.m.	KGKX 1420 Lewistown, Idaho.
KFKA 880 Greeley, Colo., <i>MST.</i> 6-7:30 a.m.; 9 a.m.-2:30 p.m.; 6-7:30 p.m.; 9-11 p.m.	KGBZ 930 York, Neb., <i>CST.</i> 7:30-9:30 a.m.; 11 a.m.-12:30 p.m.; 2-3:30 p.m.; 5-6:30 p.m.; 8:30-10 p.m.	KGKY 1500 Scottsbluff, Neb., <i>MST.</i> 6:30 a.m.-2 p.m.; 4:30-9.
KFKU 1220 Lawrence, Kans., <i>CST.</i> 2:30-3 p.m.; 6-6:30 p.m.	KGCA 1270 Decorah, Iowa, <i>CST.</i> 8:30-9:45 a.m.; 10:45-11:30 a.m.; 12:30-2:30.	KGMB 1320 Honolulu, Hawaii. 7-9 a.m.; 10:40 a.m.-11 p.m. (Zone 5)
KFKX 1020 Chicago, Ill.		KGNF 1430 North Platte, Neb. 7 a.m.-sunset, <i>MST.</i>
KFLV 1410 Rockford, Ill., <i>CST.</i> 10 a.m.-12:30 p.m.; 3-6 p.m.; 8-10 p.m.		KGNO 1210 Dodge City, Kans. 7:30 a.m.-3:30 p.m.; 5-9, <i>MST.</i>
KFLX 1370 Galveston, Texas.		KGO 790 San Francisco, Calif. 7 a.m.-12:30 a.m., <i>PST.</i>

KGRS INDEX BY CALL LETTERS AND WEDNESDAY TIME KXRO

KGRS 1410 Amarillo, Texas, <i>CST</i> . 6-8 a.m.; 10 a.m.-12:30 p.m.; 3-4:30 p.m.; 6-7:30 p.m.; 9- 10 p.m.	KNX 1050 Hollywood, Calif., <i>PST</i> . 6:30 a.m.-1 a.m. next day.	KSEI 890 Pocatello, Idaho, <i>MST</i> . 8 a.m.-11 p.m.
KGU 750 Honolulu, Hawaii. 6:15-10:30 a.m.; noon-1; 4:45- 11:30 p.m. (Zone 5).	KOA 830 Denver, Colo., <i>MST</i> . 7 a.m.-mid.	KSL 1130 Salt Lake City, Utah. 7 a.m.-mid., <i>MST</i> .
KGVO 1200 Missoula, Mont., <i>MST</i> . 6 a.m.-mid.	KOAC 550 Corvallis, Ore., <i>PST</i> . 6:30 a.m.-4 p.m.; 6-8:30 p.m.	KSO 1380 Clarinda, Iowa.
KGW 620 Portland, Ore., <i>PST</i> . 6:30 a.m.-mid.	KOB 1180 Albuquerque, N. M. 7 a.m.-9 p.m., <i>MST</i> .	KSOO 1101 Sioux Falls, S. D., <i>CST</i> . 6 a.m.-8 p.m.
KGY 1210 Olympia, Wash., <i>PST</i> . 6 p.m.-mid.	KOCW 1400 Chickasha, Okla. KOH 1380 Reno, Nev., <i>PST</i> . 8 a.m.-9 p.m.	KSTP 1460 St. Paul, Minn., <i>CST</i> . 6:30 a.m.-12:30 a.m. next day.
KHJ 900 Los Angeles, Calif., <i>PST</i> . 7 a.m.-1 a.m. next day.	KOIL 1260 Council Bluffs, Ia., <i>CST</i> . 6 a.m.-1 a.m. next day.	KTAB 560 San Francisco, Calif. 6:45 a.m.-1 a.m., <i>PST</i> .
KHQ 590 Spokane, Wash., <i>PST</i> . 7 a.m.-mid.	KOIN 940 Portland, Ore., <i>PST</i> . 6 a.m.-1 a.m. next day.	KTAR 620 Phoenix, Ariz., <i>MST</i> . 7 a.m.-11:15 p.m.
KICA 1370 Clovis, N. M.	KOL 1270 Seattle, Wash., <i>PST</i> . 6:45 a.m.-mid.	KTAT 1240 Ft. Worth, Texas. 7-9 a.m.; noon-1:30 p.m.; 4-7 p.m.; 9-mid.
KICK 1420 Red Oak, Iowa. Silent.	KOMA 1480 Oklahoma City, Okla. 7 a.m.-11 p.m., <i>CST</i> .	KTBS 1450 Shreveport, La., <i>CST</i> . 6 a.m.-mid.
KID 1320 Idaho Falls, Idaho, <i>MST</i> 9 a.m.-mid.	KOMO 920 Seattle, Wash., <i>PST</i> . 6:55 a.m.-12:30 a.m. next day.	KTFI 1240 Twin Falls, Idaho, <i>MST</i> . 6:30 a.m.-11 p.m.
KIDO 1350 Boise, Idaho, <i>MST</i> . 7 a.m.-9:30 p.m.	KONO 1370 San Antonio, Tex., <i>CST</i> . 8:30-10 a.m.; 11 a.m.-noon; 1:30-4 p.m.; 6-7 p.m.; 8-10.	KTHS 1040 Hot Springs, Ark., <i>CST</i> . 9-10 a.m.; 11 a.m.-12:30 p.m.; 4:30-5:30 p.m.; 6:45-7:30; 8:30-9:30; 10:30-11:30 p.m.
KIDW 1420 Lamar, Colo., <i>MST</i> . 6-8 a.m.; 2-6 p.m.; 8-10.	KOOS 1370 Marshfield, Ore., <i>PST</i> . 9 a.m.-9 p.m.	KTM 780 Los Angeles, Calif., <i>PST</i> . 6-10 a.m.; 1-5 p.m.; 8 p.m.- 4 a.m. next day.
KIEM 1210 Eureka, Calif., <i>PST</i> .	KORE 1420 Eugene, Ore., <i>PST</i> . 7:45 a.m.-8:30 p.m.	KTRH 1120 Houston, Texas, <i>CST</i> . 6:30-11 a.m.; noon-11:30 p.m.
KIEV 850 Glendale, Calif., <i>PST</i> .	KOY 1390 Phoenix, Ariz., <i>MST</i> . 7 a.m.-10 p.m.	KTSA 1290 San Antonio, Tex., <i>CST</i> . 6-8 a.m.; 9:30-11:30 a.m.; 3-5 p.m.; 7-10 p.m.
KIT 1310 Yakima, Wash., <i>PST</i> . 7 a.m.-11 p.m.	KPCB 650 Seattle, Wash., <i>PST</i> . 5:30 a.m.-8 p.m.; 10 p.m.-4 a.m.	KTSM 1310 El Paso, Texas.
KJBS 1070 San Francisco, Calif. Mid. to local sunset, <i>PST</i> .	KPJM 1500 Prescott, Ariz., <i>MST</i> . 9 a.m.-9 p.m.	KTW 1220 Seattle, Wash.
KJR 970 Seattle, Wash., <i>PST</i> . 7 a.m.-mid.	KPO 580 San Francisco, Calif. 7:30 a.m.-mid., <i>PST</i> .	KUJ 1370 Walla Walla, Wash. 6 a.m.-sunset, <i>PST</i> .
KLCN 1290 Blytheville, Ark.	KPOF 880 Denver, Colo., <i>MST</i> . 7:30-9 a.m.; 2:30-4:30 p.m.; 7:30-9 p.m.	KUMA 1420 Yuma, Ariz., <i>MST</i> . 7-9 a.m.; noon-3 p.m.; 6-9 p.m.
KLO 1400 Salt Lake City, Utah. 8:30 a.m.-10:30 p.m., <i>MST</i> .	KPPC 1210 Pasadena, Calif., <i>PST</i> . 7-9 p.m.	KUOA 1390 Fayetteville, Ark., <i>CST</i> . 7-8 a.m.; 11 a.m.-1 p.m.; 5-6:30.
KLPM 1240 Minot, N. D., <i>CST</i> . 7 a.m.-1 p.m.; 6-7:45 p.m.; 10- 11:30 p.m.	KPQ 1500 Wenatchee, Wash., <i>PST</i> . 7 a.m.-10 p.m.	KUSD 890 Vermillion, S. D., <i>CST</i> . 8-9 p.m.
KLRA 1390 Little Rock, Ark., <i>CST</i> . 8:11 a.m.; 1-5 p.m.; 6:30-11 p.m.	KPRC 920 Houston, Texas, <i>CST</i> . 6:30 a.m.-mid.	KVI 570 Tacoma, Wash., <i>PST</i> . 6:30 a.m.-mid.
KLS 1440 Oakland, Calif., <i>PST</i> . 8:30 a.m.-7:30 p.m.	KQV 1380 Pittsburgh, Pa., <i>EST</i> . 8:30 a.m.-1 p.m.; 2-11 p.m.	KVL 1370 Seattle, Wash.
KLX 880 Oakland, Calif., <i>PST</i> . 7 a.m.-11 p.m.	KQW 1010 San Jose, Calif., <i>PST</i> . 6:45 a.m.-3 p.m.; 4:30-10 p.m.	KVOA 1260 Tucson, Ariz. 6-9 a.m.; noon-3 p.m.; 6-9 p.m.
KLZ 560 Denver, Colo., <i>MST</i> . 6:30 a.m.-11:30 p.m.	KRE 1370 Berkeley, Calif., <i>PST</i> . 6:30-9:30 a.m.; noon-3 p.m.; 6-9 p.m.	KVOO 1140 Tulsa, Okla., <i>CST</i> . 7 a.m.-1:45 p.m.; 3-9 p.m.
KMA 930 Shenandoah, Iowa, <i>CST</i> . 6-7:30 a.m.; 9:30-11 a.m.; 12:30- 2 p.m.; 3:30-5 p.m.; 6:30-8:30; 10-mid.	KREG 1500 Santa Ana, Calif., <i>PST</i> . 9 a.m.-11 p.m.	KVOR 1270 Colorado Springs, Colo. 7 a.m.-10 p.m., <i>MST</i> .
KMAC 1370 San Antonio, Tex., <i>CST</i> . 7-8:30 a.m.; 10-11 a.m.; noon- 1:30 p.m.; 4-6 p.m.; 7-8 p.m.; 10 p.m.-mid.	KRGV 1260 Harlingen, Texas, <i>CST</i> . 7-9:30 a.m.; 12:30-3:30 p.m.; 6:30-9:30 p.m.	KVOS 1200 Bellingham, Wash.
KMBC 950 Kansas City, Mo., <i>CST</i> . 6:15 a.m.-mid.	KRKD 1120 Los Angeles, Calif., <i>PST</i> . 6 a.m.-1:30 p.m.; 3-7:30 p.m.	KWCR 1420 Cedar Rapids, Ia., <i>CST</i> . 6:30 a.m.-mid.
KMED 1310 Medford, Ore., <i>PST</i> . 8 a.m.-9:30 p.m.	KRLD 1040 Dallas, Texas, <i>CST</i> . 6-7:15 a.m.; 7:45-9 a.m.; 10-11 a.m.; 12:30-4:30 p.m.; 5:30- 6:45; 7:30-8:30; 9:30-10:30.	KWEA 1210 Shreveport, La.
KMJ 580 Fresno, Calif., <i>PST</i> . 7 a.m.-mid.	KRMD 1310 Shreveport, La., <i>CST</i> . 7 a.m.-1 p.m.; 5-8 p.m.	KWG 1200 Stockton, Calif., <i>PST</i> . 7 a.m.-mid.
KMLB 1200 Monroe, La., <i>CST</i> . 7 a.m.-10 p.m.	KROW 930 Oakland, Calif., <i>PST</i> . 8-9 a.m.; 1-6 p.m.; 7:30-8:30.	KWJJ 1060 Portland, Ore.
KMMJ 740 Clay Center, Neb., <i>CST</i> . 5:45 a.m.-sunset.	KRSC 1120 Seattle, Wash., <i>PST</i> . Sunrise to local sunset.	KWK 1350 St. Louis, Mo., <i>CST</i> . 6:55 a.m.-12:15 a.m. next day.
KMO 1330 Tacoma, Wash., <i>PST</i> . 6:30 a.m.-11 p.m.	KSAC 580 Manhattan, Kans., <i>CST</i> . 8-9 a.m.; 10-10:30 a.m.; 12:30- 1:30 p.m.; 4:30-5:30 p.m.	KWKC 1370 Kansas City, Mo.
KMOX 1090 St. Louis, Mo., <i>CST</i> . 6:45 a.m.-12:45 a.m. next day.	KSCJ 1330 Sioux City, Iowa, <i>CST</i> . 6:30 a.m.-11 p.m.	KWKH 850 Shreveport, La., <i>CST</i> . 8:30 p.m.-mid.
KMPK 710 Beverly Hills, Calif. 6:30 a.m.-5:15 p.m.; 8-1 a.m. <i>PST</i> .	KSD 550 St. Louis, Mo., <i>CST</i> . 7 a.m.-12:15 p.m.; 12:40-9:30; 10:30-11 p.m.	KWLC 1270 Decorah, Iowa, <i>CST</i> . 6:45-8 a.m.; 10:30-9:30 p.m.; 11:30 a.m.-12:30 p.m.
KMTR 570 Hollywood, Calif., <i>PST</i> . 6:30 a.m.-mid.		KWSC 1220 Pullman, Wash., <i>PST</i> . 6:45-8 a.m.; 10:30-9:30 p.m.
KNOW 1500 Austin, Texas, <i>CST</i> . 7:30 a.m.-1 p.m.; 5-11 p.m.		KXAA 760 Seattle, Wash., <i>PST</i> . 7 a.m.-sundown; 9 p.m.-mid.

KXYZ INDEX BY CALL LETTERS AND WEDNESDAY TIME WEHC

KXYZ 1440 Houston, Texas, <i>CST.</i> 7:10 a.m.; 11 a.m.-1:15 p.m.; 3:30-10:30 p.m.	WBAX 1210 Wilkes Barre, Pa., <i>EST.</i> 7:30 a.m.-noon.	WCDA 1350 New York City, <i>EST.</i> 9 a.m.-3 p.m.
KYA 1230 San Francisco, Calif. 7:30 a.m.-mid., <i>PST.</i>	WBBC 1400 Brooklyn, N. Y., <i>EST.</i> 9-10 p.m.	WCFL 970 Chicago, Ill., <i>CST.</i> 6 a.m.-mid.
KYW 1020 Chicago, Ill., <i>CST.</i> 7 a.m.-1 a.m. next day.	WBBL 1210 Richmond, Va., <i>EST.</i> Silent.	WCGU 1400 Brooklyn, N. Y., <i>EST.</i> 8 a.m.-11:15 a.m.; 7:30-9 p.m.
KZRM 618.5 Manila, P. I. 6:30-7:30 a.m.; 12:15-1:15; 3- 10:30 p.m.	WBBM 770 Chicago, Ill., <i>CST.</i> 6:45 a.m.-10 p.m.; 11:30 p.m.- 2 a.m.	WCKY 1480 Covington, Ky., <i>CST.</i> Mid.-mid.
NAA 690 Arlington, Va.	WBBR 1300 Brooklyn, N. Y., <i>EST.</i> 10 a.m.-noon: 6-8 p.m.	WCLO 1200 Janesville, Wis., <i>CST.</i> 7:30 a.m.-3:30 p.m.; 5-9 p.m.
RUS 664 Salvador.	WBBZ 1200 Ponca City, Okla., <i>CST.</i> 6 a.m.-10 p.m.	WCLS 1310 Joliet, Ill., <i>CST.</i> 11 a.m.-noon; 3-8 p.m.-10-mid.
TGW 570 Guatemala.	WBCM 1410 Bay City, Mich., <i>CST.</i> 8 a.m.-mid.	WCMA 1100 Culver, Ind., <i>CST.</i> 6-6:30 a.m.; 1:15-4:15 p.m.; 10:30-mid.
TICR 911 San Jose, C. R.	WBEN 900 Buffalo, N. Y., <i>EST.</i> 6:45 a.m.-mid.	WCOA 1340 Pensacola, Fla., <i>CST.</i> 9 a.m.-10:30 p.m.
VAS 685 Glace Bay, N. S., <i>AST.</i> 1-1:15 p.m.; mid.-12:15 a.m.	WBEO 1310 Marquette, Mich.	WCOC 880 Meridian, Miss., <i>CST.</i> 7:30 a.m.-2 p.m.; 5-11 p.m.
VOAS 810 St. Johns, N. F. 11 a.m.-12:30 p.m.; 4-5:30 p.m. (Zone 19).	WBHS 1200 Huntsville, Ala., <i>CST.</i> 8 a.m.-2 p.m.; 5-9:30 p.m.	WCOD 1200 Harrisburg, Pa., <i>EST.</i> 8-11 a.m.; 3-6 p.m.; 8-11 p.m.
VOGT 893 Wabana, N. F. Silent.	WBIG 1440 Greensboro, N. C., <i>EST.</i> 8 a.m.-3 p.m.; 5-11 p.m.	WCRW 1210 Chicago, Ill., <i>CST.</i> 7-8:30 a.m.; 11:30 a.m.-1:30 p.m.; 6-7 p.m.; 9-10 p.m.
VOGY 910 St. Johns, N. F.	WBMS 1450 Hackensack, N. J., <i>EST.</i> 6-9 p.m.	WCSC 1360 Charleston, S. C., <i>EST.</i> 8 a.m.-3 p.m.; 6-11 p.m.
VONA 950 St. Johns, N. F. 12:30-2 p.m.; 6:30-8 p.m. (Zone 19).	WBNX 1350 New York City, <i>EST.</i> 4-6 p.m.	WCSH 940 Portland, Maine, <i>EST.</i> 7:45 a.m.-1 p.m.; 2:10-4:15 p.m.
VONF 1115 St. Johns, N. F. 1-2 p.m.; 6:30-8 p.m. (Zone 19)	WBQO 860 New York City.	WDAE 1220 Tampa, Fla., <i>EST.</i> 8 a.m.-mid.
VOWR 750 St. Johns, N. F.	WBOW 1310 Terre Haute, Ind., <i>CST.</i> 7 a.m.-2 p.m.; 4-11 p.m.	WDAF 610 Kansas City, Mo., <i>CST.</i> 6:26 a.m.-mid.
VOX 690 Halifax, N. S.	WBRC 930 Birmingham, Ala., <i>CST.</i> 7 a.m.-11 p.m.	WDAG 1410 Amarillo, Texas, <i>CST.</i> 8-10 a.m.; 12:30-3 p.m.; 4:30-6 p.m.; 7:30-9 p.m.; 10 p.m.- mid.
VPN 610 Nassau, B. I.	WBRE 1310 Wilkes Barre, Pa.,	WDAH 1310 El Paso, Texas.
WAB 1410 Boston, Mass., <i>EST.</i> 7:45 a.m.-mid.	WBSO 920 Babson Park, Mass., 7 a.m.-5 p.m., <i>EST.</i>	WDAS 1370 Philadelphia, Pa., <i>EST.</i> 9 a.m.-10:30 p.m.
WAAF 920 Chicago, Ill., <i>CST.</i> 6 a.m.-local sunset.	WBT 1080 Charlotte, N. C., <i>EST.</i> 7 a.m.-mid.	WDAY 940 Fargo, N. D., <i>CST.</i> 6 a.m.-11 p.m.
WAAM 1250 Newark, N. J., <i>EST.</i> 7-9 a.m.; 10 a.m.-noon: 2-4:30 p.m.; 9- mid.	WBTM 1370 Danville, Va., <i>EST.</i> 7:30 a.m.-1 p.m.; 4-6:30 p.m.	WDBJ 830 Roanoke, Va., <i>EST.</i> 8 a.m.-mid.
WAAT 940 Jersey City, N. J., <i>EST.</i> 6 a.m.-6 p.m.	WBZ 990 Boston, Mass., <i>EST.</i> 7 a.m.-mid.	WDBO 580 Orlando, Fla., <i>EST.</i> 7 a.m.-mid.
WAAW 660 Omaha, Neb., <i>CST.</i> 6 a.m.-6 p.m.	WBZA 990 Springfield, Mass., <i>EST.</i> 7 a.m.-mid.	WDEL 1120 Wilmington, Del., <i>EST.</i> 9 a.m.-10 p.m.
WABC 860 New York City, <i>EST.</i> 7:30 a.m.-2 a.m. next day.	WCAC 600 Storrs, Conn., <i>EST.</i> 12:30-1 p.m.; 4:30-5; 7-8 p.m.	WDEF 550 Waterbury, Vt., <i>EST.</i> 9:30-11 a.m.; noon-2 p.m.
WABI 1200 Bangor, Maine, <i>EST.</i> 6-9 a.m.; noon-3 p.m.; 6-9 p.m.	WCAD 1220 Canton, N. Y., <i>EST.</i> 12:36-1:20 p.m.; 4-5 p.m.	WDGY 1180 Minneapolis, Minn. 6:30 a.m.-8:15 p.m., <i>CST.</i>
WABZ 1200 New Orleans, La., <i>CST.</i> Noon-4 p.m.; 8 p.m.-mid.	WCAE 1220 Pittsburgh, Pa., <i>EST.</i> 6:45 a.m.-mid.	WDDD 1280 Chattanooga, Tenn. 7:30 a.m.-11 p.m., <i>CST.</i>
WACO 1240 Waco, Texas, <i>CST.</i> 6-7 a.m.; 9-noon; 1:30-4 p.m.; 7-9 p.m.	WCAH 1430 Columbus, Ohio, <i>EST.</i> 7:45 a.m.-mid.	WDRC 1330 Hartford, Conn., <i>EST.</i> 8 a.m.-mid.
WADC 1320 Akron, Ohio, <i>EST.</i> 8:30 a.m.-mid.	WCAJ 590 Lincoln, Neb., <i>CST.</i> 10-10:45 a.m.; 3:30-4 p.m.	WDSU 1250 New Orleans, La., <i>CST.</i> 7 a.m.-11:45 p.m.
WAGM 1420 Presque Isle, Me., <i>EST.</i> 7 a.m.-1 p.m.; 3-9 p.m.	WCAL 1250 Northfield, Minn., <i>CST.</i> 9:45-10:15 a.m.	WDZ 1070 Tuscola, Ill., <i>CST.</i> 7 p.m.-4:30 p.m.
WAIU 640 Columbus, Ohio, <i>EST.</i> 7 a.m.-sunset.	WCAM 1280 Camden, N. J., <i>EST.</i> 11 a.m.-noon; 2-5 p.m.	WEAF 660 New York City, <i>EST.</i> 6:45 a.m.-1 a.m. next day.
WALR 1210 Zanesville, Ohio, <i>EST.</i> 9 a.m.-10 p.m.	WCAO 600 Baltimore, Md., <i>EST.</i> 7 a.m.-mid.	WEAN 780 Providence, R. I., <i>EST.</i> 7:30 a.m.-1 a.m. next day.
WAMC 1420 Anniston, Ala., <i>CST.</i> 7-10:30 a.m.; noon-9 p.m.	WCAP 1280 Asbury Park, N. J., <i>EST.</i> 9-11 a.m.; 5-8 p.m.	WEAO 570 Columbus, Ohio, <i>EST.</i> 9-11 a.m.; 1-3 p.m.; 8-mid.
WAPI 1140 Birmingham, Ala., <i>CST.</i> 6:30 a.m.-sunset; 9 p.m.-mid.	WCAT 1200 Rapid City, S. D., <i>CST.</i> 1:30-2:30 p.m.	WEBC 1290 Superior, Wis., <i>CST.</i> 7 a.m.-11 p.m.
WASH 1270 Gd. Rapids, Mich., <i>CST.</i> 7 a.m.-mid.	WCAU 1170 Philadelphia, Pa., <i>EST.</i> 8 a.m.-1 a.m. next day.	WEBQ 1210 Harrisburg, Ill., <i>CST.</i> 6-9 a.m.; noon-4 p.m.; 8:30 mid.
WAWZ 1350 Zarephath, N. J., <i>EST.</i> 6-9 a.m.; 3-4 p.m.; 6-9 p.m.	WCAX 1200 Burlington, Vt., <i>EST.</i> Noon-1 p.m.; 6-9 p.m.	WEBR 1310 Buffalo, N. Y., <i>EST.</i> 7 a.m.-2 a.m. next day.
WAZL 1420 Hazelton, Pa., <i>EST.</i>	WCAZ 1070 Carthage, Ill., <i>CST.</i> 9:30 a.m.-3:30 p.m.	WEEI 590 Boston, Mass., <i>EST.</i> 6:45 a.m.-mid.
WBAA 1400 Lafayette, Ind., <i>CST.</i> Silent.	WCBA 1440 Allentown, Pa., <i>EST.</i> 7:30 a.m.-1 a.m.	WEEU 830 Reading, Pa., <i>EST.</i> 8 a.m.-8 p.m.
WBAK 1430 Harrisburg, Pa., <i>EST.</i> 10:30-11:15; a.m.; 1:30-2:30 p.m.; 4-4:30 p.m., 8-9:45 p.m.	WCBD 1080 Zion, Ill., <i>CST.</i> 6-7 a.m.; 7:30-10:30 a.m.; 1:30-3 p.m.; 4:30-5:30 p.m.	WEHC 1350 Emory, Va., <i>EST.</i> 6-8 a.m.; 11 a.m.-2 p.m.; 4-7.
WBAL 1060 Baltimore, Md., <i>EST.</i> 7 a.m.-mid.	WCBM 1370 Baltimore, Md., <i>EST.</i> 7 a.m.-1:30 p.m.; 5-11 p.m.	
WBAP 800 Ft. Worth, Texas, <i>CST.</i> 8:30-10:30 a.m.; 12:30-3 p.m.; 4:30-5:30 p.m.; 9-mid.	WCBS 1210 Springfield, Ill., <i>CST.</i> 11:30 a.m.-3 p.m.; 6:45-9 p.m.	
	WCCO 810 Minneapolis, Minn. 6:45 a.m.-mid., <i>CST.</i>	

WEHS 1420 Cicero, Ill., <i>CST.</i> 4-6 p.m.	WGH 1310 Newport News, Va. 7 a.m.-2 p.m.; 5-11 p.m. <i>EST.</i>	WIBG 930 Glenside, Pa., <i>EST.</i> Daybreak to sunset.
WELL 1420 Battle Creek, Mich.	WGL 1370 Fort Wayne, Ind., <i>CST.</i> 6:15 a.m.-9:30 p.m.	WIBM 1370 Jackson, Mich., <i>CST.</i> 7:30 a.m.-8:15 p.m.; 11 p.m.-mid.
WENC 1420 Americus, Ga., <i>EST.</i> 7 a.m.-2 p.m.; 4 p.m.-sunset.	WGLC 1370 Glens Falls, N. Y., <i>EST.</i> WGN 720 Chicago, Ill., <i>CST.</i> 7:30 a.m.-1:30 a.m. next day.	WIBO 560 Chicago, Ill., <i>CST.</i> 6:30 a.m.-mid.
WENR 870 Chicago, Ill., <i>CST.</i> 10:15-11:45 a.m.; 3:30-7 p.m.; 8:30 p.m.-1 a.m. next day.	WGNV 1210 Chester, N. Y., <i>EST.</i> WGR 550 Buffalo, N. Y., <i>EST.</i> 7:30 a.m.-mid.	WIBU 1210 Poyntette, Wis., <i>CST.</i> 9 a.m.-9 p.m.
WERE 1420 Erie, Pa., <i>EST.</i> 8 a.m.-1:30 p.m.; 3:45-10:45.	WGST 890 Atlanta, Ga., <i>CST.</i> 7 a.m.-11 p.m.	WIBW 580 Topeka, Kans., <i>CST.</i> 6 a.m.-mid.
WESG 1270 Elmira, N. Y. Variable.	WGY 790 Schenectady N.Y., <i>EST.</i> 6:45 a.m.-1 a.m. next day.	WIBX 1200 Utica, N. Y. WICC 800 Bridgeport, Conn., <i>EST.</i> 7:30 a.m.-12:30 p.m.; 1-7 p.m.; 8-mid.
WEVD 1300 New York City, <i>EST.</i> 8-9 a.m.; 3-6 p.m.; 8-9 p.m.; 10-11 p.m.	WHA 940 Madison, Wis., <i>CST.</i> 8 a.m.-3:30 p.m.	WIL 1200 St. Louis, Mo., <i>CST.</i> 7 a.m.-mid.
WEW 760 St. Louis, Mo., <i>CST.</i> 8 a.m.-5 p.m.	WHAD 1120 Milwaukee, Wis., <i>CST.</i> 9:30-10:15 a.m.; 3-4 p.m.; 8:30- 9:30 p.m.	WILL 890 Urbana, Ill., <i>CST.</i> 10 a.m.-12:15 p.m.; 5-6 p.m.
WEXL 1310 Royal Oak, Mich., <i>EST.</i> 8 a.m.-11 p.m.	WHAM 1150 Rochester, N. Y., <i>EST.</i> 7:45 a.m.-mid.	WILM 1420 Wilmington, Del., <i>EST.</i> 7:30 a.m.-2 p.m.; 4:30-10 p.m.
WFAA 800 Dallas, Texas, <i>CST.</i> 6:45-8:30 a.m.; 10:30 a.m.-12:30 p.m.; 3-5 p.m.; 5:30-9 p.m.	WHAS 820 Louisville, Ky., <i>CST.</i> 7 a.m.-mid.	WINS 1180 New York City, <i>EST.</i> 7 a.m.-10:15 p.m.
WFAB 1300 New York City.	WHAT 1310 Philadelphia, Pa., <i>EST.</i> 9-11 a.m.; 1-2; 5-mid.	WIOD 1300 Miami, Fla., <i>EST.</i> 7 a.m.-1 a.m. next day.
WFAM 1200 South Bend, Ind., <i>CST.</i> 7:30-10:15 a.m.; noon-3 p.m. 5:30-8:30 p.m.	WHAZ 1300 Troy, N. Y., <i>EST.</i> Silent.	WIP 610 Philadelphia, Pa., <i>EST.</i> 9 a.m.-mid.
WFAN 610 Philadelphia, Pa., <i>EST.</i> 9 a.m.-mid.	WHB 860 Kansas City, Mo., <i>CST.</i> 6 a.m.-sunset,	WIS 1010 Columbia, S. C., <i>EST.</i> 7 a.m.-1:30 p.m.; 5:30-11 p.m.
WFAS 1210 White Plains, N. Y. 3-5 p.m., <i>EST.</i>	WHBC 1200 Canton, Ohio, <i>EST.</i> 6-9 a.m.; noon-3 p.m.; 6-9 p.m.	WISN 1120 Milwaukee, Wis., <i>CST.</i> 7-9:30 a.m.; 10:15 a.m.-3 p.m.; 4-8:30 p.m.; 9:30 p.m.-mid.
WFBE 1200 Cincinnati, Ohio, <i>EST.</i> 7 a.m.-11:30 p.m.	WHBD 1370 Mt. Orab, Ohio, <i>EST.</i> 7-11 a.m.; noon-5 p.m.; 6-9 p.m.	WJAC 1310 Johnstown, Pa., <i>EST.</i> 8:30-10:30 a.m.; 4:30-8:45 p.m.
WFBG 1310 Altoona, Pa. 10:30 a.m.-4:30 p.m.; 8:45-12:45 a.m.	WHBF 1210 Rock Island, Ill., <i>CST.</i> 10 a.m.-3 p.m.; 5 p.m.-mid.	WJAG 1060 Norfolk, Neb., <i>CST.</i> 6 a.m.-sunset.
WFBL 1360 Syracuse, N. Y., <i>EST.</i> 7:30 a.m.-mid.	WHBL 1410 Sheboygan, Wis., <i>CST.</i> 7-10 a.m.; 12:30-3 p.m.; 6-8 p.m.; 10 p.m.-mid.	WJAR 890 Providence, R. I., <i>EST.</i> 8 a.m.-mid.
WFBM 1230 Indianapolis, Ind., <i>CST.</i> 7:30-10:15 a.m.; noon-3 p.m.; 5:30 p.m.-mid.	WHBQ 1370 Memphis, Tenn., <i>CST.</i> 7:55 a.m.-10:30 p.m.	WJAS 1290 Pittsburgh, Pa., <i>EST.</i> 7:30 a.m.-11:30 p.m.
WFBR 1270 Baltimore, Md., <i>EST.</i> 7 a.m.-mid.	WHBU 1210 Anderson, Ind., <i>CST.</i> 7 a.m.-1 p.m.; 3-9:15 p.m.	WJAX 800 Jacksonville, Fla., <i>EST.</i> 7 a.m.-11 p.m.
WFDF 1310 Flint, Mich., <i>CST.</i> 7 a.m.-11 p.m.	WHBY 1200 Green Bay, Wis., <i>CST.</i> 7 a.m.-10 p.m.	WJAY 610 Cleveland, Ohio, <i>EST.</i> 6 a.m.-8:45 p.m.
WFDV 1500 Rome, Ga., <i>CST.</i> 6-9 a.m.; noon-3 p.m.; 6-9 p.m.	WHDF 1370 Calumet, Mich., <i>CST.</i> 9-10 a.m.; noon-1 p.m.; 4:40-7.	WJBC 1290 LaSalle, Ill., <i>CST.</i> 8-9 a.m., 10 a.m.-12:30 p.m. 6:30-10 p.m.
WFEE 1430 Manchester, N. H., <i>EST.</i> 9 a.m.-11 p.m.	WHDH 830 Boston, Mass., <i>EST.</i> 8 a.m.-12:45 p.m.; 2:45-7:15.	WJBI 1210 Red Bank, N. J., <i>EST.</i> 5-7 p.m.
WFI 560 Philadelphia, Pa., <i>EST.</i> 6:45-9 a.m.; 9:45-11 p.m.; 1-2 p.m.; 3-4:30 p.m.; 6 p.m.-7 p.m.	WHDL 1420 Tupper Lake, N. Y., <i>EST.</i> 7:45 a.m.-1 p.m.; 3-7:45 p.m.	WJBK 1370 Detroit, Mich., <i>EST.</i> 7 a.m.-11 p.m.
WFIW 940 Hopkinsville, Ky., <i>CST.</i> 6 a.m.-3 p.m.; 5 p.m.-mid.	WHEB 740 Portsmouth, N. H., <i>EST.</i> 10 a.m.-sunset.	WJBL 1200 Decatur, Ill., <i>CST.</i> 6:30-8 a.m.; 9-10 p.m.; 12:30-3 4:30-6:30 p.m.
WFLA 620 Clearwater, Fla., <i>EST.</i> 7:15 a.m.-mid.	WHEC 1430 Rochester, N. Y., <i>EST.</i> 8 a.m.-mid.	WJBO 1420 New Orleans, La. WJBU 1210 Lewisburg, Pa., <i>EST.</i> Noon-2 p.m.; 4-10 p.m.
WFOX 1400 Brooklyn, N. Y., <i>EST.</i> 11:15 a.m.-1:30; 6-7:30 p.m.	WHET 1210 Troy, Ala., <i>CST.</i> 6-8 a.m.; 11 a.m.-5 p.m.	WJBW 1200 New Orleans, La., <i>CST.</i> 8 a.m.-noon; 4-8 p.m.
WGAL 1310 Lancaster, Pa., <i>EST.</i> 10 a.m.-noon; 1:30-6 p.m.; 7-11 p.m.	WHFC 1420 Cicero, Ill., <i>CST.</i> 7 a.m.-1:30 p.m.; 6-9 p.m.; 11 p.m.-1 a.m. next day.	WJBY 1210 Gadsden, Ala., <i>CST.</i> 6 a.m.-12:10 next day.
WGAR 1450 Cleveland, Ohio, <i>EST.</i> 6 a.m.-1 a.m. next day.	WHIS 1410 Bluefield, W. Va., <i>EST.</i> 8-9 a.m.; noon-2 p.m.; 6-8 p.m.	WJDX 1270 Jackson, Miss., <i>CST.</i> 6:15-10 a.m.; 11:30 a.m.-10 p.m.
WGBB 1210 Freeport, N. Y., <i>EST.</i> 9 a.m.-noon; 7-mid.	WHK 1390 Cleveland, Ohio, <i>EST.</i> 7 a.m.-mid.	WJEF 1210 Hagerstown, Md. WJEQ 1370 Williamsport, Pa.
WGBF 630 Evansville, Ind., <i>CST.</i> 6:30 a.m.-3:30 p.m.; 4-8:45 p.m.; 7-9 p.m.	WHN 1010 New York City, <i>EST.</i> 4 p.m.-1 a.m.	WJJD 1130 Chicago, Ill., <i>CST.</i> 6 a.m.-8:30 p.m.
WGBI 880 Scranton, Pa., <i>EST.</i> 9:30 a.m.-12:30 p.m.; 1:30-4:30 p.m.; 5:30-10:30 p.m.	WHO 1000 Des Moines, Iowa. WHOM 1450 Jersey City, N. J., <i>EST.</i> 8-noon; 3-6; 9-mid.	WJKS 1360 Gary, Ind., <i>CST.</i> 12:30-6-15 p.m.; 8:30 p.m.-mid.
WGCM 1210 Gulfport, Miss., <i>CST.</i> 8 a.m.-2 p.m.; 3-9 p.m.	WHP 1430 Harrisburg, Pa., <i>EST.</i> 8:30-10:30 a.m.; 11:15 a.m.-1:30 p.m.; 2:30-4 p.m.; 4:30-8; 9:45-1 a.m.	WJMS 1420 Ironwood, Mich., <i>CST.</i> 7 a.m.-2:30 p.m.; 4:30 p.m.-sun- set.
WGCP 1250 Newark, N. J., <i>EST.</i> 2-5 p.m.; 8-10 p.m.	WIAS 1310 Ottumwa, Iowa, <i>CST.</i> 7:30 a.m.-1:30 p.m.; 4-9 p.m.	WJR 750 Detroit, Mich., <i>EST.</i> 6:00 a.m.-1 a.m. nextday.
WGES 1360 Chicago, Ill., <i>CST.</i> 8 a.m.-12:30 p.m.; 6:15-8:30	WIBA 1280 Madison, Wis., <i>CST.</i> 6:30 a.m.-11:30 p.m.	WJSV 1460 Washington, D. C., <i>EST.</i> 7:30 a.m.-1 a.m. next day.
		WJTL 1370 Atlanta, Ga., <i>CST.</i> 6:45 a.m.-mid.

WJW 1210 Akron, Ohio, <i>EST.</i> 8 a.m.-10 p.m.	WMAL 630 Washington, D. C., <i>EST.</i> 8 a.m.-mid.	WODA 1250 Paterson, N. J.
WJZ 760 New York City, <i>EST.</i> 7:30 a.m.-1 a.m. next day.	WMAQ 670 Chicago, Ill., <i>CST.</i> 7 a.m.-1 a.m. next day.	WODX 1410 Mobile, Ala., <i>CST.</i> 9 a.m.-4 p.m.; 5:30-9 p.m.
WKAQ 1240 San Juan, P. R., <i>AST.</i> 2:30-4:30 p.m.; 6:30-10 p.m.	WMAS 1420 Springfield, Mass., <i>EST.</i> 7:45 a.m.-mid.	WOI 840 Ames, Iowa, <i>CST.</i> 6:30 a.m.-1:30 p.m.
WKAR 1040 E. Lansing, Mich., <i>CST.</i> Noon-12:30 p.m.	WMAZ 1180 Macon, Ga., <i>EST.</i> 7 a.m.-9:30 p.m.	WOKO 1430 Albany, N. Y., <i>EST.</i> 9 a.m.-1 a.m. next day.
WKAV 1310 Laconia, N. H., <i>EST.</i> 9 a.m.-1 p.m.; 3-8 p.m.	WMBC 1420 Detroit, Mich., <i>EST.</i> 7:30 a.m.-mid.	WOL 1310 Washington, D. C., <i>EST.</i> 7 a.m.-1 p.m.; 3-9 p.m.
WKBB 1310 Joliet, Ill., <i>CST.</i> 8-11 a.m.; noon-3 p.m.; 8 p.m.-10 p.m.	WMBD 1440 Peoria, Ill., <i>CST.</i> 6-9:30 a.m.; 1-2:30 p.m.; 8-mid.	WOMT 1210 Manitowoc, Wis., <i>CST.</i> 7 a.m.-9 p.m.
WKBC 1310 Birmingham, Ala.	WMBG 1210 Richmond, Va., <i>EST.</i> 7:30 a.m.-1:30 p.m.; 5-11 p.m.	WOOD 1270 Gd. Rapids, Mich., <i>CST.</i> 12 a.m.-mid.
WKBF 1400 Indianapolis, Ind., <i>CST.</i> 6:30 a.m.-1:15 p.m.; 3:45-10:30 p.m.	WMBH 1420 Joplin, Mo. Noon-2 p.m.; 6-9:30 p.m., <i>CST.</i>	WOPI 1500 Bristol, Tenn., <i>EST.</i> 7 a.m.-mid.
WKBH 1380 LaCrosse, Wis., <i>CST.</i> 7:30 a.m.-10 p.m.	WMBI 1080 Chicago, Ill., <i>CST.</i> 7-7:30 a.m.; 10-1:30; 3-4; 5:30-8 p.m.	WOQ 1300 Kansas City, Mo., <i>CST.</i> 6-7 a.m.; 8:35-9:05 a.m.; 11-11:30 a.m.; 2-3 p.m.; 6-7; 9-10; 11-mid.
WKBI 1420 Cicero, Ill., <i>CST.</i> 1:30-4 p.m.; 9-11 p.m.	WMOB 1310 Auburn, N. Y., <i>EST.</i> 9 a.m.-9 p.m.	WOR 710 Newark, N. J., <i>EST.</i> 6:45 a.m.-mid.
WKBN 570 Youngstown, Ohio, <i>EST.</i> 7-9 a.m.; 11 a.m.-1 p.m.; 3-8 p.m.	WMBQ 1500 Brooklyn, N. Y., <i>EST.</i> 9-11 a.m.	WORC 1200 Worcester, Mass., <i>EST.</i> 8 a.m.-mid.
WKBS 1310 Galesburg, Ill.	WMBR 1370 Tampa, Fla., <i>EST.</i> 6:45 a.m.-10 p.m.	WORK 1000 York, Pa., <i>EST.</i> 7:55 a.m.-sunset.
WKBV 1500 Connersville, Ind., <i>CST.</i> 10 a.m.-noon; 6-10 p.m.	WMC 780 Memphis, Tenn., <i>CST.</i> 7 a.m.-11 p.m.	WOS 630 Jefferson City, Mo. 9 a.m.-1 a.m., <i>CST.</i>
WKBW 1480 Buffalo, N. Y., <i>EST.</i> 9:15 a.m.-1 a.m. next day.	WMCA 570 New York City, <i>EST.</i> 8-11 a.m.; noon-6 p.m.; 10-2 a.m.	WOV 1130 New York City, <i>EST.</i> 8 a.m.-6 p.m.
WKBZ 1500 Ludington, Mich., <i>CST.</i> 9 a.m.-9 p.m.	WMIL 1500 Brooklyn, N. Y., <i>EST.</i> 2-6 p.m.; 10 p.m.-2:30 a.m.	WOW 590 Omaha, Neb., <i>CST.</i> 6:15-10 a.m.; 10:45 a.m.-3 p.m.; 4-mid.
WKFI 1210 Greenville, Miss., <i>CST.</i> 7 a.m.-2 p.m.; 4-9 p.m.	WMMN 890 Fairmont, V. Va., <i>EST.</i> 7 a.m.-9 p.m.	WOWO 1160 Fort Wayne, Ind., <i>CST.</i> 7:30 a.m.-7:45 p.m.; 9:15 p.m.-mid.
WKJC 1200 Lancaster, Pa., <i>EST.</i> 11 a.m.-3 p.m.; 6-8 p.m.	WMPC 1500 Lapeer, Mich., <i>EST.</i> 10 a.m.-2 p.m.; 3-3:30-6 p.m.; 7-10:30 p.m.	WPAD 1420 Paducah, Ky., <i>CST.</i> 7-9:30 a.m.; 11 a.m.-2:10 p.m. 4-mid.
WKRC 550 Cincinnati, Ohio, <i>EST.</i> 6:45 a.m.-mid.	WMSG 1350 New York City, <i>EST.</i> 9 p.m.-mid.	WPAP 1010 New York City, <i>EST.</i> 9:30 a.m.-1 p.m.
WKY 900 Oklahoma City, Okla., 6:30 a.m.-11:30 p.m., <i>CST.</i>	WMT 600 Waterloo, Iowa, <i>CST.</i> 7 a.m.-11 p.m.	WPAW 1210 Providence, R. I., <i>EST.</i> 9 a.m.-1:45 p.m.; 3 p.m.-mid.
WKZO 590 Kalamazoo, Mich., <i>CST.</i> 6:30 a.m.-8:15 p.m.	WNAC 1230 Boston, Mass., <i>EST.</i> 8 a.m.-1 a.m. next day.	WPCC 560 Chicago, Ill. Silent.
WLAC 1470 Nashville, Tenn., <i>CST.</i> 7 a.m.-11 p.m.	WNAD 1010 Norman, Okla. 8:15-9:15 p.m.	WPCH 810 New York City, <i>EST.</i> 8 a.m.-sunset.
WLAP 1200 Louisville, Ky., <i>CST.</i> 6:30 a.m.-11 p.m.	WNAX 570 Yankton, S. D., <i>CST.</i> 6 a.m.-mid.	WPEN 1500 Philadelphia, Pa., <i>EST.</i> 7:30 a.m.-10:30 p.m.
WLB 1250 Minneapolis, Minn., 10:30-11:30 a.m.; 12:30-1 p.m., <i>CST.</i>	WNB 1500 Binghamton, N. Y., <i>EST.</i> 7 a.m.-10 p.m.	WPFB 1370 Hattiesburg, Miss., <i>CST.</i> 7 a.m.-2 p.m.; 4-9 p.m.
WLBC 1310 Muncie, Ind., <i>CST.</i> 7 a.m.-11 p.m.	WNBH 1310 New Belford, Mass., <i>EST.</i> 8:30 a.m.-1:10 p.m.; 3-11 p.m.	WPG 1100 Atlantic City, N. J., <i>EST.</i> 8:15 a.m.-6 p.m.; 8 p.m.-1 a.m.
WLBF 1420 Kansas City, Kans. 7 a.m.-11 p.m., <i>CST.</i>	WNBO 1200 Washington, Va., <i>EST.</i> 9 a.m.-noon; 3-6 p.m.; 9 p.m.-mid.	WPHR 1200 Petersburg, Va., <i>EST.</i> 7-11 a.m.; noon-5 p.m.; 6-9 p.m.
WLBL 900 Stevens Point, Wis. 8 a.m.-3:30 p.m., <i>CST.</i>	WNBZ 1430 Memphis, Tenn., <i>CST.</i> 7:30 a.m.-12:30 p.m.; 3-10:15 p.m.	WPOR 780 Norfolk, Va.
WLBW 1260 Erie, Pa., <i>EST.</i> 8 a.m.-1 a.m. next day.	WNBW 1200 Carbondale, Pa.	WPRO 1210 Providence, R. I., <i>EST.</i> 9 a.m.-1:45 p.m.; 3 p.m.-mid.
WLBZ 620 Bangor, Maine, <i>EST.</i> 8:30 a.m.-mid.	WNBX 1260 Springfield, Vt., <i>EST.</i> 6 a.m.-sunset.	WPTF 680 Raleigh, N. C., <i>EST.</i> 6:45 a.m.-7:45 p.m.
WLEY 1370 Lexington, Mass., <i>EST.</i> Noon-3 p.m.; 6-9 p.m.	WNBZ 1290 Saranac Lake, N. Y.	WQAM 560 Miami, Fla., <i>EST.</i> 7 a.m.-mid.
WLIT 560 Philadelphia, Pa., <i>EST.</i> 9-9:45 a.m.; 11 a.m.-1 p.m.; 2-3 p.m.; 4:30-6 p.m.; 7-mid.	WNJ 1450 Newark, N. J., <i>EST.</i> noon-3 p.m.	WQAN 880 Scranton, Pa., <i>EST.</i> 9-9:30 a.m.; 12:30-1:30 p.m.; 4:30-5:30 p.m.
WLOE 1500 Boston, Mass., <i>EST.</i> 10 a.m.-1:30 p.m.; 4:30-10 p.m.	WNOX 560 Knoxville, Tenn., <i>CST.</i> 6:45 a.m.-11 p.m.	WQAO 1010 New York City, <i>EST.</i> 7:30-8:30 p.m.
WLS 870 Chicago, Ill., <i>AST.</i> 6-10:15 a.m.; 11:45 a.m.-3:30 p.m.; 7-8:30 p.m.	WNYC 570 New York City, <i>EST.</i> 11 a.m.-noon; 6-10 p.m.	WQBC 1360 Vicksburg, Miss., <i>CST.</i> 7:30 a.m.-2:30 p.m.; 5-10 p.m.
WLTH 1400 Brooklyn, N. Y., <i>EST.</i> 4-6 p.m.; 10-mid.	WNOI 1190 San Antonio, Tex., <i>CST.</i> 6:30-9:30 a.m.; 11:15 a.m.-3 p.m.; 4:45-10:45 p.m.	WQDM 1370 St. Albans, Vt., <i>EST.</i> 8-9 a.m.; 11 a.m.-2 p.m.
WLVA 1370 Lynchburg, Va., <i>EST.</i> 1-3 p.m.; 6:30-10 p.m.	WOAX 1280 Trenton, N. J., <i>EST.</i> Noon-2 p.m.; 8-mid.	WQDX 1210 Thomasville, Ga.
WLW 700 Cincinnati, Ohio, <i>EST.</i> 6:30 a.m.-1 a.m. next day.	WOBU 580 Charleston, W. Va., <i>EST.</i> 9 a.m.-noon; 2-4 p.m.; 8:30 p.m.-mid.	WRAK 1370 Williamsport, Pa., <i>EST.</i> 8:30 a.m.-2:30 p.m.; 4:30-10:30.
WLWL 1100 New York City. 6-8 p.m., <i>EST.</i>	WOC 1000 Davenport, Iowa, <i>CST.</i> 7 a.m.-11 p.m.	WRAM 1370 Wilmington, N. C., <i>EST.</i> 7:30 a.m.-3 p.m.; 6:30-11 p.m.
WMAC 570 Syracuse, N. Y.	WOCL 1210 Jamestown, N. Y., <i>EST.</i> Noon-mid.	WRAW 1310 Reading, Pa., <i>EST.</i> 7-9:30 a.m.; 6-7 p.m.

WRAX 1020 Philadelphia, Pa., <i>EST.</i> 7 a.m.-sunset.	WTAD 1440 Quincy, Ill., <i>CST.</i> 9:30 a.m.-1 p.m.; 2:30-8 p.m.	XEK 990 Mexico City, Mex.
WRBL 1200 Columbia, Ga., <i>CST.</i> 7 a.m.-9 p.m.	WTAG 580 Worcester, Mass., <i>EST.</i> 8 a.m.-11:15 p.m.	XEL 1000 Saultillo, Mex., <i>CST.</i> 11 a.m.-1 p.m.; 6-9 p.m.
WRBX 1410 Roanoke, Va., <i>EST.</i> 9 a.m.-noon; 3-6 p.m.; 8 p.m.-1.	WTAM 1070 Cleveland, Ohio, <i>EST.</i> 6:30 a.m.-1 a.m. next day.	XEM 1300 Tampico, Mex.
WRC 950 Washington, D.C., <i>EST.</i> 6:45 a.m.-1 a.m. next day.	WTAQ 1330 Eau Claire, Wis., <i>CST.</i> 7 a.m.-8 p.m.	XEN 711 Mexico City, Mex., <i>CST.</i> 10 a.m.-noon; 2-4 p.m.; 7-11
WRDO 1370 Augusta, Maine, <i>EST.</i> 7-9:30 a.m.; 10:30 a.m.-1:30 p.m.; 3:30-10 p.m.	WTAR 780 Norfolk, Va., <i>EST.</i> 7 a.m.-mid.	XENT 1115 Nuevo Laredo, Mex.
WRDW 1500 Augusta, Ga., <i>EST.</i> 8 a.m.-2 p.m.; 5-11 p.m.	WTAW 1120 College Station, Texas. 12:30-1:30 p.m.; 8-9 p.m., <i>CST.</i>	XEP 1400 Laredo, Mex.
WREC 600 Memphis, Tenn.	WTAX 1210 Springfield, Ill., <i>CST.</i> 7-11:30 a.m.; 3-6:45; 9-mid.	XEQ 750 Juarez, Mex., <i>MST.</i> 9 a.m.-2 p.m.; 5-11 p.m.
WREN 1220 Lawrence, Kans., <i>CST.</i> 7 a.m.-mid.	WTBO 1420 Cumberland, Md., <i>EST.</i> 7 a.m.-1:30 p.m.; 2:30-8 p.m.	XER 735 Villa Acuna, Mex. 24 hours daily.
WRHM 1250 Minneapolis, Minn. 6:15-9:45 a.m.; 11:30-12:30; 1-8; 9-1 a.m., <i>CST.</i>	WTEL 1310 Philadelphia, Pa., <i>EST.</i> 7 a.m.-9; noon-1 p.m.	XES 1065 Tampico, Mex., <i>CST.</i> 9-10:30 a.m.; noon-2 p.m.; 7-15-10 p.m.
WRJN 1370 Racine, Wis., <i>CST.</i> 8 a.m.-10:30 p.m.	WTFI 1450 Athens, Ga., <i>EST.</i> 8 a.m.-4 p.m.; 6-10 p.m.	XET 690 Monterrey, Mex., <i>CST.</i> 9 a.m.-2 p.m.; 6-10 p.m.
WRNY 1010 New York City.	WTC 1060 Hartford, Conn., <i>EST.</i> 4 p.m.-12:30 a.m.	XETA 1140 Mexico City, Mex.
WROL 1310 Knoxville, Tenn., <i>CST.</i> 7 a.m.-10 p.m.	WTJS 1310 Jackson, Tenn., <i>CST.</i> 7 a.m.-1 p.m.; 3-9 p.m.	XETB 1380 Torreón, Mex.
WRR 1280 Dallas, Texas, <i>CST.</i> 6:30 a.m.-11 p.m.	WTMJ 620 Milwaukee, Wis., <i>CST.</i> 6:45 a.m.-mid.	XETC 1000 Jalapa, Mex.
WRUF 830 Gainesville, Fla., <i>EST.</i> 8 a.m.-6:30 p.m.	WTOC 1260 Savannah, Ga., <i>EST.</i> 7 a.m.-mid.	XETF 630 Veracruz, Mex., <i>CST.</i> 7-8 a.m.; noon-2 p.m.; 7 p.m. mid.
WRVA 1110 Richmond, Va., <i>EST.</i> 7 a.m.-mid.	WTRC 1310 Elkhart, Ind., <i>CST.</i> 7:30 a.m.-7:30 p.m.	XETG 1000 Torreón, Mex.
WSAI 1330 Cincinnati, Ohio, <i>EST.</i> 8 a.m.-11 p.m.	WTSL 1310 Laurel, Miss.	XETQ 1230 Mexico City, Mex.
WSAJ 1310 Grove City, Pa. Silent.	WWAE 1200 Hammond, Ind., <i>CST.</i> 7 a.m.-8:30; 11-1 p.m.; 4-11:30 p.m.	XETR 1007 Veracruz, Mex., <i>CST.</i> 7-8 a.m.; 19-11 a.m.; noon-3 p.m.; 6-mid.
WSAN 1440 Allentown, Pa., <i>EST.</i> Silent.	WWJ 920 Detroit, Mich., <i>EST.</i> 7:30 a.m.-mid.	XEV 1000 Pueblo, Mex.
WSAR 1450 Fall River, Mass., <i>EST.</i> 8 a.m.-3:30 p.m.; 5-10 p.m.	WWL 850 New Orleans, La., <i>CST.</i> 8 a.m.-8:30 p.m.	XEW 910 Mexico City, Mex., <i>CST.</i> 10 a.m.-mid.
WSAZ 580 Huntington, W. Va., <i>EST.</i> 6-9 a.m.; noon-2 p.m.; 4-8:30.	WWNC 570 Asheville, N. C., <i>CST.</i> 7 a.m.-mid.	XEX 1210 Mexico City, Mex.
WSB 740 Atlanta, Ga., <i>CST.</i> 7 a.m.-mid.	WWRL 1500 Woodside, N. Y., <i>EST.</i> 8-9 a.m.; 11 a.m.-noon; 8-10 p.m.	XEY 1000 Mexida, Mex.
WSBC 1210 Chicago, Ill.	WWSW 1500 Pittsburgh, Pa., <i>EST.</i> 8 a.m.-1:30 p.m.; 3-11:30 p.m.	XEZ 780 Mexico City, Mex.
WSBT 1230 South Bend, Ind., <i>CST.</i> 6-7:30 a.m.; 10:15 a.m.-noon; 3-5:30 p.m.	WWVA 1160 Wheeling, W. Va., <i>EST.</i> 7:30 a.m.-7:45 p.m.	XFC 815 Aguascalientes, Mex.
WSEN 1210 Columbus, Ohio, <i>EST.</i> 8 a.m.-11 p.m.	WXYZ 1240 Detroit, Mich., <i>EST.</i> 7:30 a.m.-mid.	XFF 870 Chihuahua, Mex.
WSFA 1410 Montgomery, Ala., <i>CST.</i> 6:30 a.m.-sunset; 9-11 p.m.	XEA 1155 Guadalajara, Mex., <i>CST.</i> 11 a.m.-noon; 2-3 p.m.; 5-11.	XFG 683.3 Mexico City, Mex.
WSIX 1210 Springfield, Tenn., <i>CST.</i> 6 a.m.-3 p.m.; 6-9 p.m.	XEB 1030 Mexico City, Mex., <i>CST.</i> 8 a.m.-mid.	XFX 867 Mexico City, Mex.
WSJS 1310 Winston-Salem, N. C. 8 a.m.-mid., <i>EST.</i>	XEC 1000 Toluca, Mex.	YVIBC 960 Caracas, Venez.
WSM 650 Nashville, Tenn., <i>CST.</i> 6:30 a.m.-mid.	XED 965 Reynosa, Mex.	10-AB 1200 Moose Jaw, Sask., <i>MST.</i> 5:30-7 p.m.
WSMB 1320 New Orleans, La., <i>CST.</i> 7 a.m.-mid.	XEE 1000 Oaxaca, Mex.	10-AK 1200 Stratford, Ont., <i>EST.</i> 6-8 p.m.
WSMK 1380 Dayton, Ohio, <i>EST.</i> 7 a.m.-8 p.m.; 10 p.m.-mid.	XEF 735 Villa Acuna, Mex. 24 hours daily.	10-AT 1155 Trail, B. C.
WSOC 1210 Gastonia, N. C., <i>EST.</i> 8 a.m.-10 p.m.	XEFA 1250 Mexico City, Mex.	10-BI 1200 Prince Albert, Sask. Noon-1 p.m.; 6-8 p.m., <i>MST.</i>
WSPA 1420 Spartanburg, S. C., <i>EST.</i> 7:30 a.m.-11 p.m.	XEFB 1315 Monterrey, Mex., <i>CST.</i> 11 a.m.-2 p.m.; 6-10 p.m.	10-BP 1199 Wingham, Ont., <i>EST.</i> Silent.
WSPD 1340 Toledo, Ohio, <i>EST.</i> 7:30 a.m.-mid.	XEFC 1050 Merida, Mex.	10-BQ 1200 Brantford, Ont., <i>EST.</i> Noon-1 p.m.; 6-7; 8-10 p.m.
WSUI 880 Iowa City, Iowa, <i>CST.</i> 9-10 a.m.; 11-12:30; 2-4; 6-10 p.m.	XEFD 1020 Tijuana, Mex.	10-BU 1200 Canora, Sask.
WSUN 620 St. Petersburg, Fla., <i>EST.</i> 7:15 a.m.-mid.	XEFE 1000 Laredo, Mex.	
WSVS 1370 Buffalo, N. Y., <i>EST.</i> 8:30 a.m.-10 a.m.; 2-3 p.m.	XEFI 1000 Chihuahua, Mex.	
WSYB 1500 Rutland, Vt., <i>EST.</i> 10 a.m.-1 p.m.; 5-9 p.m.	XEFO 940 Mexico City, Mex., <i>CST.</i> 2-3 p.m.; 7-11 p.m.	
WSYR 570 Syracuse, N. Y., <i>EST.</i> 7 a.m.-3 p.m.; 4-11 p.m.	XEFS 1000 Queretaro, Mex., <i>CST.</i> 7:30-10:30 p.m.	
	XEFI 1370 Coyoacan, Mex., <i>CST.</i> 8-11 p.m.	
	XEG 1070 Mexico City, Mex.	
	XEH 1132 Monterrey, Mex., <i>CST.</i> 9 a.m.-1:30 p.m.; 6-10 p.m.	
	XEI 1310 Morelia, Mex., <i>CST.</i> 2-3:30 p.m.; 8:30-10 p.m.	
	XEJ 1000 Juarez, Mex., <i>CST.</i> 11 a.m.-4 p.m.; 6-11 p.m.	

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ALPHABETICAL INDEX TO SHORT WAVE STATIONS OF THE WORLD

Call	Megs.	Meters	City	Call	Megs.	Meters	City
CAA to CEZ—CHILE				DHO	20.028	14.97	Nauen
CEC	10.664	28.12	Santiago	DIH	19.950	15.03	Nauen
CEC	19.678	15.24	Santiago	DIQ	5.144	58.33	Nauen
CFA to CKZ—CANADA				DIZ	10.150	29.58	Nauen
CFA	6.840	43.83	Drummondville, Que.	DJA	9.552	31.38	Zeesen
CFH	9.030	33.20	Halifax, N. S.	DJA	9.560	31.36	Konigswusterhausen
CGA	4.782	62.70	Drummondville, Que.	DJB	15.190	19.73	Zeesen
CGA	9.340	32.10	Drummondville, Que.	DJB	15.200	19.72	Konigswusterhausen
CGA	13.296	22.55	Drummondville, Que.	DJC	6.020	49.80	Konigswusterhausen
CGA	18.170	16.50	Drummondville, Que.	DJD	11.760	25.50	Konigswusterhausen
CGE	7.520	39.87	Calgary, Alta.	DJE	17.760	16.88	Konigswusterhausen
CGE	7.550	39.71	Calgary, Alta.	DWG	20.140	14.88	Nauen
CKS	7.550	39.71	Calgary, Alta.	D4AFF	6.875	43.61	Colthen
CLA to CMZ—CUBA				EAA to EHZ—SPAIN			
CMCI	6.057	49.50	Havana	EAJ1	15.760	19.02	Barcelona
CM2LA	10.013	29.94	Havana	EAJ7	10.090	29.70	Madrid
CM2MK	7.184	41.75	Havana	EAJ25	6.000	49.97	Barcelona
CM2MK	9.350	32.07	Havana	EAM	9.772	30.68	Madrid
CM5RY	7.312	41.00	Matanzas	EAQ	9.862	30.40	Madrid
CM6DW	7.300	41.07	Cienfuegos	EAQ	19.684	15.23	Madrid
CNA to CNZ—MOROCCO				EAR25	6.120	48.99	Barcelona
CN8MC	5.875	51.03	Casablanca	EAR58	7.207	41.60	Tenerife, Canary Island
CN8MC	6.250	47.97	Casablanca	EAR110	6.976	43.00	Madrid
CPA to CPZ—BOLIVIA				EAR125	7.020	42.71	Madrid
CRA to CRZ—PORTUGUESE COLONIES				EATH	8.100	37.01	Vienna, Austria
CSA to CUZ—PORTUGAL				EATH	8.900	33.69	Posen, Poland
CT1AA	9.592	31.25	Lisbon	EATH	10.800	27.76	Posen, Poland
CT1BO	10.710	28.00	Lisbon	EIA to EIZ—IRELAND			
CT2AG	6.380	46.99	Madeira Islands	ELA to ELZ—LIBERIA			
CT3AQ	9.370	32.00	Funchel, Madeira	ESA to ESZ—ESTONIA			
CT3AQ	12.490	24.00	Funchel, Madeira	ETA to ETZ—ETHIOPIA			
CVA to CVZ—ROUMANIA				F—FRANCE AND COLONIES AND PROTECTORATES			
CWA to CUZ—URUGUAY				FIUI	5.689	52.70	Tansrive, Madagascar
CZA to CZZ—MOROCCO				FL	6.120	48.99	Paris
D—GERMANY				FL	9.230	32.48	Paris
DAN	8.328	36.00	Norden	FMRKR	3.750	79.95	Constantine, Algeria
DAN	11.340	26.44	Nordeich	FQE-FQE	12.150	24.68	St. Assise
DAN	12.490	24.00	Norden	FRE-PRO	18.240	16.44	St. Assise
DAN	16.601	18.06	Norden	FRE-PRO	19.400	15.45	St. Assise
DDAC	8.328	36.00	S. S. Europa	FSR	20.680	14.50	Paris-Saigon, Indo China
	13.040	23.00		FTE	18.240	16.44	St. Assise
DDAS	8.328	36.00	S. S. Bremen	FTF	7.770	38.59	St. Assise
	13.040	23.00		FTI	9.840	30.47	St. Assise
DDBR	8.328	36.00	S. S. Berlin	FTK	15.860	18.90	St. Assise
	13.040	23.00		FTL	7.650	39.14	St. Assise
DDCB	8.328	36.00	S. S. Columbus	FTM	19.292	15.55	St. Assise
	13.040	23.00		FTN	12.250	24.46	St. Assise
DDCG	8.328	36.00	S. S. Resolute	FW4	12.700	23.61	St. Assise
	13.040	23.00		FYA	11.308	26.51	Paris
DDCP	8.328	36.00	S. S. Cap Polonio	FYA	11.680	25.67	Paris
	13.040	23.00		FYA	11.898	25.20	Paris
DDDT	8.328	36.00	S. S. Deutschland	FYA	15.234	19.68	Paris
	13.040	23.00		FZA	18.365	16.32	Saigon, Indo-China
DDDX	8.328	36.00	S. S. Hamburg	FZG	12.000	24.99	Saigon, Indo-China
	13.040	23.00		FZG	13.010	23.04	Saigon, Indo-China
DDEA	8.328	36.00	S. S. Cap Arcona	FZR	16.200	18.51	Saigon, Indo-China
	13.040	23.00		FZS	18.310	16.38	Saigon, Indo-China
DDED	8.328	36.00	S. S. New York	FZU	19.400	15.40	Tamatore, Madagascar
	13.040	23.00		F31CD	15.750	19.03	Saigon, Indo-China
DDFF	8.328	36.00	S. S. Reliance	F8BP	5.450	55.01	Ruggles
	13.040	23.00		F8BZ	7.775	38.57	Paris
DDFT	8.328	36.00	S. S. Oceana	F8BZ	13.628	22.00	Paris
	13.040	23.00		F8BZ	15.456	19.40	Paris
DDNY	8.328	36.00	S. S. Albert Ballin	F8KR	3.750	79.95	Constantine, Tunis
	13.040	23.00		F8KR	6.650	45.02	Constantine, Algeria
DFA	19.240	15.58	Nauen	F8KR	7.005	42.80	Constantine, Algeria
DGK	6.675	44.91	Nauen	F8MC	6.875	43.61	Casablanca, Morocco
DHC	10.160	29.51	Nauen	F8MC	10.710	28.00	Casablanca
DHC	11.435	26.21	Nauen	G—GREAT BRITAIN			
DHI	10.054	29.82	.....	GBA	20.400	14.70	Rugby, England

Call	Mega.	Meters	City
GBB-GBC	13.591	22.06	Rugby
GBC	4.975	60.27	Rugby
GBC	9.310	32.30	Rugby
GBC	12.780	23.46	Rugby
GBC	17.080	17.55	Rugby
GBJ	18.620	16.10	Bodmin, England
GBK	9.250	32.41	Bodmin
GBK	11.490	26.10	Bodmin
GBK	18.100	16.56	Bodmin
GBS	6.989	42.90	Rugby
GBS	6.995	42.85	Rugby
GBS	9.022	33.25	Rugby
GBS	9.200	32.59	Rugby
GBS	12.190	24.60	Rugby
GBS	12.250	24.46	Rugby
GBS	18.310	16.38	Rugby
GBU	9.942	30.15	Rugby
GBU	12.290	24.40	Rugby
GBU	18.620	16.10	Rugby
GBW	9.790	30.63	Rugby
GBW	14.450	20.75	Rugby
GBW	18.124	16.54	Rugby
GBX	10.390	28.85	Rugby
GBX	10.800	27.76	Rugby
GBX	12.190	24.60	Rugby
GBX	16.150	18.56	Rugby
GCW	9.798	30.60	Rugby
GDLJ	4.174	71.82	S. S. Homeric
	8.830	33.95	
	13.220	22.68	
	17.580	17.05	
GFVV	4.174	71.82	S. S. Majestic
	8.830	33.95	
	13.220	22.68	
	17.580	17.05	
GKFY	4.174	71.82	S. S. Minnetonka
	8.830	33.95	
	13.220	22.68	
	17.580	17.05	
GLSQ	4.174	71.82	S. S. Olympic
	8.830	33.95	
	13.220	22.68	
	17.580	17.05	
GMBJ	4.174	71.82	S. S. Empress of Britain
	8.830	33.95	
	13.220	22.68	
	17.580	17.05	
GMJQ	4.174	71.82	S. S. Belgenland
	8.830	33.95	
	13.220	22.68	
	17.580	17.05	
GTSD	4.174	71.82	S. S. Monarch of Ber-
muda			
	8.830	33.95	
	13.220	22.68	
	17.580	17.05	
G2AA	8.570	34.98	London
G2GN	16.320	18.37	S. S. Olympic
G2NM	3.583	83.68	Sonning-on-Thames
G2NM	14.310	20.95	Sonning-on-Thames
G5SW	11.750	25.51	Chelmsford
G5SW	25.960	11.55	Chelmsford
HAA to HAZ—HUNGARY			
HAT	9.125	32.86	Szekesvehervar
HBA to HBZ—SWITZERLAND			
HBJ	14.550	20.60	Geneva
HBP	7.790	38.49	Geneva
HB9OC	9.130	32.84	Berne
HB9XD	3.488	85.96	Zurich
HB9XD	7.220	41.53	Zurich
HB9XD	9.380	31.96	Zurich
HCA to HCZ—ECUADOR			
HCJB	5.710	52.51	Quito
HC1DR	6.380	46.99	Quito
HC2JM	8.570	34.98	Guayaquil
HHA to HHZ—HAITI			
HIA to HIZ—DOMINICAN REPUBLIC			
HIX	4.610	65.04	Santo Domingo

Call	Mega.	Meters	City
HJA to HKZ—COLUMBIA			
HJY	9.928	30.20	Bogota
HJY	18.444	16.25	Bogota
HKA	6.131	48.90	Barranquilla
HKB	5.879	51.00	Tunja
HKC	6.205	48.35	Bogota
HKD	5.996	50.00	Barranquilla
HKD	6.993	42.87	Barranquilla
HKF	7.143	41.95	Bogota
HKF	7.610	39.40	Bogota
HKF	8.690	34.50	Bogota
HKL	7.402	40.50	Bogota
HKK	7.122	42.10	Cali
HKM	6.625	45.25	Bogota
HKN	7.105	42.20	Medellin
HKN	11.712	25.59	Medellin
HKO	5.925	50.60	Medellin
HKS	6.378	47.00	Cali
HKT	7.139	42.00	Manizales
HKX	7.140	41.99	Bogota
HRA to HRZ—HONDURAS			
HSA to HSZ—SIAM			
HS1PJ	17.750	16.89	Bangkok
HS2PJ	6.080	49.31	Bangkok
HS2PJ	10.167	29.48	Bangkok
HS4PJ	8.100	37.01	Bangkok
HVA to HVZ—VATICAN CITY			
HVJ	5.968	50.26	Vatican City
HVJ	14.850	20.19	Vatican City
HVJ	15.120	19.83	Vatican City
I—ITALY AND COLONIES			
IAC	6.648	45.09	Coltana
IAC	12.785	23.45	Coltana
IBDK	11.470	26.15	S. S. Electra
IMA	6.900	43.45	Rome
I1AX	6.667	44.98	Rome
I2RO	6.220	48.20	Rome
I2RO	11.800	25.40	Rome
I3RO	3.750	79.95	Rome
J—JAPAN			
JB	6.094	49.20	Johannesburg, So. Africa
J1AA	7.876	38.07	Kemikawa-Cho
J1AA	7.890	38.00	Tokyo
J1AA	8.100	37.01	Tokyo
J1AA	13.074	22.93	Kemikawa-Cho
J1AA	15.760	19.02	Tokyo
J1AA	17.380	17.25	Tokyo
K—UNITED STATES			
KA1XR	12.245	24.49	Manila, P. I.
KDD	3.170	94.58	Pasco, Wash.
KDD	5.600	53.53	Pasco, Wash.
KDK-KKH	7.518	39.89	Kahuku, Hawaii
KEE	7.715	38.86	Bolinas, Calif.
KEJ	9.012	33.27	Bolinas, Calif.
KEL	8.860	43.71	Bolinas, Calif.
KEQ	6.888	43.54	Kahuku, Hawaii
KEU	3.189	94.01	Burbank, Calif.
KEU	5.657	53.00	Burbank, Calif.
KEZ	10.410	28.80	Bolinas, Calif.
KFO	3.170	94.58	Oakland, Calif.
KFO	5.690	53.54	Oakland, Calif.
KFM	3.178	94.34	Sacramento, Calif.
KFM	5.657	53.00	Sacramento, Calif.
KGE	3.178	94.34	Medford, Ore.
KGE	5.657	53.00	Medford, Ore.
KGJX	1.712	175.13	Pasadena, Calif.
KGOZ	2.470	121.40	Cedar Rapids, Iowa
KGPA	2.414	124.20	Seattle, Wash.
KGPB	2.416	124.09	Minneapolis, Minn.
KGPC	1.712	175.13	St. Louis, Mo.
KGPD	1.558	192.43	San Francisco, Calif.
KGPD	2.470	121.40	San Francisco, Calif.
KGPE	2.422	123.79	Kansas City, Mo.
KGPG	2.422	123.79	Vallejo, Calif.

Call	Megs.	Meters	City
KGPH	2.450	122.40	Oklahoma City, Okla.
KGPI	2.470	121.40	Omaha, Neb.
KGPI	1.712	175.13	Beaumont, Texas
KGPK	2.470	121.40	Sioux City, Iowa
KGPL	1.712	175.13	Los Angeles, Calif.
KGPL	3.100	96.72	Kingman, Ariz.
KGPL	5.560	53.92	Kingman, Ariz.
KGPM	2.470	121.40	San Jose, Calif.
KGPN	2.470	121.40	Davenport, Iowa
KGPO	2.450	122.40	Tulsa, Okla.
KGPP	2.422	123.79	Portland, Ore.
KGPR	2.450	122.40	Honolulu, Hawaii
KGPR	1.712	175.13	Fort Worth, Texas
KGPS	2.414	124.20	Bakersfield, Calif.
KGPV	2.502	119.83	Des Moines, Iowa
KGPW	2.470	121.40	Salt Lake City, Utah
KGPX	2.422	123.79	Denver, Colo.
KGPY	1.574	190.48	Shreveport, La.
KGZ	2.450	122.40	Wichita, Kans.
KGT	3.178	94.34	Fresno, Calif.
KGT	5.657	53.00	Fresno, Calif.
KGTD	3.100	96.72	Wichita, Kans.
KGTD	5.560	53.92	Wichita, Kans.
KGTE	3.100	96.72	Las Vegas, Nev.
KGTE	5.560	53.92	Las Vegas, Nev.
KGTR	3.100	96.72	St. Louis, Mo.
KGTR	5.560	53.92	St. Louis, Mo.
KGUA	3.490	85.91	El Paso, Texas
KGUA	5.630	53.25	El Paso, Texas
KGUC	3.490	85.91	Fort Worth, Texas
KGUC	5.630	53.25	Fort Worth, Texas
KGUF	3.490	85.91	Dallas, Texas
KGUF	5.630	53.25	Dallas, Texas
KGUG	3.490	85.91	Big Springs, Tex.
KGUG	5.630	53.25	Big Springs, Tex.
KGUK	3.490	85.91	Shreveport, La.
KGUK	5.630	53.25	Shreveport, La.
KGUL	3.490	85.91	Abilene, Texas
KGUL	5.630	53.25	Abilene, Texas
KGZA	2.416	124.09	Fresno, Calif.
KGZB	1.712	175.13	Houston, Texas
KIO	11.690	25.65	Hahuku, Hawaii
KIXR	9.560	31.36	Manila, P. I.
KIXR	11.440	26.20	Manila, P. I.
KIXR	11.820	25.39	Manila, P. I.
KIXR	12.250	24.46	Manila, P. I.
KJE	3.170	94.58	Reno, Nev.
KJE	5.600	53.54	Reno, Nev.
KKO	3.170	94.58	Elko, Nev.
KKO	5.600	53.54	Elko, Nev.
KKP	16.024	18.71	Kahuku, Hawaii
KKQ	11.945	25.10	Bolinas, Calif.
KKQ	11.989	25.05	Bolinas, Calif.
KKW	13.776	21.77	Dixon, Calif.
KKX	13.690	21.90	Bolinas, Calif.
KKZ	14.150	21.17	Bolinas, Calif.
KMP	3.170	94.58	Omaha, Neb.
KMP	5.600	53.54	Omaha, Neb.
KMR	3.170	94.58	No. Platte, Neb.
KMR	5.600	53.54	No. Platte, Neb.
KQC	3.170	94.58	Rock Springs, Wyo.
KQC	5.600	53.54	Rock Springs, Wyo.
KQD	3.170	94.58	Salt Lake City, Utah
KQD	5.600	53.54	Salt Lake City, Utah
KQE	3.170	94.58	Cheyenne, Wyo.
KQE	5.600	53.54	Cheyenne, Wyo.
KQJ	18.000	16.67	Bolinas, Calif.
KQM	3.170	94.58	Des Moines, Iowa
KQM	5.600	53.54	Des Moines, Iowa
KQQ	3.170	94.58	Iowa City, Iowa
KQQ	5.600	53.54	Iowa City, Iowa
KQX	3.178	94.34	Bakersfield, Calif.
KQX	5.657	53.00	Bakersfield, Calif.
KRA	3.170	94.58	Boise, Idaho
KRA	5.600	53.54	Boise, Idaho
KRF	3.170	94.58	Lincoln, Neb.
KRF	5.600	53.54	Lincoln, Neb.
KSI	3.100	96.72	Los Angeles, Calif.
KSI	5.560	53.92	Los Angeles, Calif.
KST	3.100	96.72	Kansas City, Mo.
KST	5.560	53.92	Kansas City, Mo.
KSW	2.422	123.79	Berkeley, Calif.

Call	Megs.	Meters	City
KSW	3.100	96.72	Amarillo, Texas
KSW	5.560	53.92	Amarillo, Texas
KSX	3.100	96.72	Albuquerque, N. M.
KSX	5.560	53.92	Albuquerque, N. M.
KSY	3.100	96.72	Tulsa, Okla.
KSY	5.560	53.92	Tulsa, Okla.
KVO	3.178	94.34	Portland, Ore.
KVO	5.657	53.00	Portland, Ore.
KVP	1.712	175.13	Dallas, Texas
KWO	15.410	19.46	Dixon, Calif.
KWU	15.344	19.54	Dixon, Calif.
KWV	10.830	27.68	Dixon, Calif.
KWX	7.605	39.42	Dixon, Calif.
KWY	7.562	39.65	Dixon, Calif.
KZJ	3.178	94.34	Seattle, Wash.
KZJ	5.657	53.00	Seattle, Wash.
KZRM	6.140	48.83	Manila, P. I.
KZRM	9.570	31.33	Manila, P. I.
KZRM	11.840	25.34	Manila, P. I.

LAA to LNZ—NORWAY

LGN	9.600	31.23	Bergen
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LOA to LVZ—ARGENTINE

LQA	9.600	31.23	Buenos Aires
LSA	9.890	30.32	Buenos Aires
LSA	14.530	20.65	Buenos Aires
LSG	19.895	15.07	Buenos Aires
LSJ	15.000	19.99	Buenos Aires
LSL	9.993	30.00	Buenos Aires
LSM	21.129	14.19	Buenos Aires
LSN	9.895	30.30	Buenos Aires
LSN	10.300	29.00	Buenos Aires
LSN	14.480	20.70	Buenos Aires
LSN	20.680	14.50	Buenos Aires
LSN	21.020	14.27	Buenos Aires
LSOR	9.810	30.56	Buenos Aires
LSR	18.958	15.82	Buenos Aires
LSRD	9.810	30.56	Buenos Aires
LSX	10.300	29.00	Buenos Aires
LSX	10.345	28.98	Buenos Aires
LSX	20.680	14.50	Buenos Aires
LSY	10.410	28.80	Buenos Aires
LSY	20.710	14.47	Buenos Aires

LZA to LZZ—BULGARIA

M—GREAT BRITAIN

N—UNITED STATES

NAA	4.105	73.03	Arlington, Va.
NAA	8.872	33.79	Arlington, Va.
NAA	12.045	24.89	Arlington, Va.
NAA	16.060	18.66	Arlington, Va.
NPO	8.872	33.79	Cavite, Manila, P. I.
NSS	12.045	24.89	Annapolis, Md.

OAA to O CZ—PERU

OBE	13.043	22.98	La Punta
OCI	10.962	27.35	Lima
OCI	18.670	16.06	Lima

OHA to OHZ—FINLAND

OKA to OKZ—CZECHOSLOVAKIA

OHKZ	4.280	70.05	Vienna, Austria
OKI	21.000	14.28	Podebrady
OKIMPI	5.169	58.00	Prague

ONA to OTZ—BELGIUM AND COLONIES

OPL	20.028	14.97	Leopoldsville, Belgian
Congo			
OPM	10.090	29.70	Leopoldsville, Belgian
Congo			
ORG	19.194	15.62	Brussels
ORK	10.340	28.99	Brussels

OUA to OZZ—DENMARK

OXO-ONZ	6.057	49.50	Copenhagen
OXO-ONZ	9.488	31.60	Copenhagen
OXO-ONZ	15.300	19.53	Copenhagen
OXO-ONZ	9.520	31.49	Copenhagen
OXY	15.300	19.53	Lyngby
OZ7MK	9.375	31.97	Copenhagen
OZ7R	3.560	84.22	Copenhagen
OZ7RL	9.500	31.56	Copenhagen

Call	Megs.	Meters	City	Call	Megs.	Meters	City
PAA to PIZ—NETHERLANDS				RYA to RYZ—LITHUANIA			
PBF5	6.438	46.58	Hague	SAJ	6.065	49.44	Motala
PCJ	5.590	31.26	Eindhoven	SAS	11.760	25.50	Kulsborg
PCJ	15.220	19.71	Hilversum	SBG	6.065	49.44	Motala
PCK	7.770	38.59	Kootwijk	SPA to SRZ—POLAND			
PCK	18.400	16.29	Kootwijk	SR1	9.570	31.33	Poznan
PCL	16.300	18.39	Kootwijk	SUA to SUZ—EGYPT			
PCM	6.430	46.63	Hague	SUS	9.110	32.91	Cairo
PCP	10.800	27.76	Kootwijk	SUV	10.051	29.83	Cairo
PCV	17.830	16.82	Kootwijk	SUZ	13.816	21.70	Cairo
PDK	10.410	28.80	Kootwijk	SVa to SZZ—Greece			
PDM	18.600	16.12	Kootwijk	TAA to TCZ—TURKEY			
PDV	7.830	38.29	Kootwijk	TFA to TFZ—ICELAND			
PHI	17.775	16.87	Huizen	TGA to TGZ—GUATEMALA			
PHO	17.775	16.87	Huizen	TGCA	13.043	22.98	Guatemala City
PJA to PJZ—CURACAO				TGGA	9.370	32.00	Guatemala City
PKA to POZ—DUTCH EAST INDIES				TGW	6.480	46.27	Guatemala City
PKP	10.410	28.80	Medan, Sumatra	TGW	6.678	44.90	Guatemala City
PK1AA	3.998	75.00	Batavia, Java	TGW	10.800	27.76	Guatemala City
PK2AF	6.000	49.97	Dioecjoarta, Java	TGX	8.950	33.50	Guatemala City
PK2AG	3.156	95.00	Semarang, Java	TGX	9.516	31.52	Gautemala City
PK2AG	7.890	38.00	Semarang, Java	TIA to TIZ—COSTA RICA			
PK3AN	6.040	49.64	Surabaya, Java	TIRA	6.080	49.31	Electra Cartago
PK3CH	6.662	45.00	Surabaya, Java	TIRA	9.590	31.26	Electra Cartago
PK4PA	59.964	5.00	Palembang, Sumatra	TITR	11.790	25.42	S. Jose
PK6K	11.720	25.58	Makassar, Celebes	TI4NRH	9.670	31.00	Heredia
PK6KZ	11.993	25.09	Makassar, Celebes	TI4NRH	15.066	19.00	Heredia
PLE	9.410	31.86	Bandoeng, Java	TSA to TSZ—SAAR BASIN			
PLE	18.820	15.93	Bandoeng, Java	UHA to UHZ—HEDJAZ			
PLF	17.640	16.99	Malabar	UIA to UKZ—DUTCH EAST INDIES			
PLF	17.850	16.80	Bandoeng, Java	ULA to ULZ—LUXEMBURG			
PLG	15.950	18.80	Bandoeng, Java	UOA to UNZ—JUGOSLAVIA			
PLM	12.290	24.40	Bandoeng, Java	UOA to UOZ—AUSTRIA			
PLR	10.630	28.20	Bandoeng, Java	UOR2	6.072	49.37	Vienna
PLV	9.410	31.86	Bandoeng, Java	UOR2	11.800	25.40	Vienna
PLW	8.120	36.92	Bandoeng, Java	UWA to UWZ—CANADA			
PLW	9.480	31.65	Bandoeng, Java	VAA to VGZ—CANADA			
PMB	5.170	57.99	Surabaya, Java	VAS	10.700	28.02	Glace Bay, N. S.
PMB	20.600	14.55	Bandoeng, Java	VBS	8.400	35.69	Glace Bay, N. S.
PMC	18.170	16.50	Bandoeng, Java	VE9AF	2.850	105.20	Montreal, Que.
PMY	5.143	58.30	Bandoeng, Java	VE9AK	2.830	105.90	Red Deer, Alta.
PPA to PYZ—BRAZIL				VE9AP	6.335	47.35	Drummondville, Que.
PPQ	11.644	25.75	Rio de Janeiro	VE9AR	2.850	105.20	Saskatoon, Sask.
PFU	19.270	15.57	Rio de Janeiro	VE9AR	3.030	98.95	Saskatoon, Sask.
PRADO	6.618	45.31	Riobamba, Ecuador	VE9BA	6.130	48.91	Montreal, Que.
PRAG	8.450	35.48	Porto Alegre	VE9BA	11.705	25.63	Montreal, Que.
PRBA	9.492	31.58	Rio de Janeiro	VE9BA	15.190	19.73	Montreal, Que.
PSA	16.162	19.55	Rio de Janeiro	VE9BJ	6.090	49.23	St. John, N. B.
PSA	10.212	29.35	Rio de Janeiro	VE9BY	4.792	62.56	London, Ont.
PSK	8.180	36.65	Rio de Janeiro	VE9BY	6.426	46.65	London, Ont.
PSK	8.180	36.65	Rio de Janeiro	VE9BY	8.645	34.68	London, Ont.
PSS	14.682	20.42	Rio de Janeiro	VE9BZ	2.750	109.00	Vancouver, B. C.
PTH	6.120	48.99	Rio de Janeiro	VE9CA	11.860	25.28	Calgary, Alta.
PZA to PZZ—SURINAM				VE9CF	6.050	49.56	Halifax, N. S.
Q—RESERVED FOR CODE				VE9CI	2.735	109.62	London, Ont.
RAA to RQZ—U. S. S. R. (RUSSIA)				VE9CL	5.710	52.51	Winnipeg, Man.
REN	6.000	49.97	Moscow	VE9CL	6.150	48.75	Winnipeg, Man.
REN	6.430	46.63	Moscow	VE9CS	6.070	49.39	Vancouver, B. C.
REN	6.611	45.35	Moscow	VE9CX	6.015	49.84	Wolfville, N. S.
RFN	6.000	49.97	Moscow	VE9DN	6.005	49.93	Montreal, Que.
RFN	6.560	45.70	Moscow	VE9DN	9.580	31.30	Montreal, Que.
RW38	5.614	53.40	Moscow	VE9DR	11.895	25.21	Montreal, Que.
RW3KAA	8.333	35.98	Leningrad	VE9DR	6.005	49.93	Drummondville, Que.
RW15	4.273	70.65	Khabarovsk	VE9DR	11.780	25.44	Drummondville, Que.
RW15	8.570	34.98	Khabarovsk	VE9EH	6.080	49.31	Charlottetown, P. E. I.
RW19	8.111	36.96	Tomsk	VE9GW	6.092	49.22	Bowmanville, Ont.
RW38	5.515	54.38	Moscow	VE9GW	24.380	12.30	Bowmanville, Ont.
RW50	11.923	25.16	Moskva Imeni Popova	VE9HX	6.050	49.56	Halifax, N. S.
RW54	4.273	70.65	Moscow	VE9JR	11.720	25.58	Winnipeg, Man.
RW59	6.000	49.97	Moscow	VE9OS	2.100	142.80	Montreal, Que.
RW61	51.724	5.79	Moskva Vei	VE9RM	2.004	149.61	Toronto, Ont.
RW62	6.420	46.70	Minsk	VHA to VMZ—AUSTRALIA			
RW65	3.560	84.22	Peredvijka	VK2BL	9.230	32.43	Sydney
RW69	1.900	157.80	Odessa	VK2FC	10.520	28.50	Sydney
RW71	5.000	59.96	Petropavlovsk Kam-tchatski				
RW72	6.610	45.36	Moskva				
RVA to RVZ—PERSIA							
RXA to RXZ—PANAMA							

Call	Megs.	Meters	City	Call	Megs.	Meters	City
VK2ME	7.940	37.76	Sydney	WNA	9.162	32.72	Lawrenceville, N. J.
VK2ME	9.585	31.28	Sydney	WNB	5.968	51.09	Lawrenceville, N. J.
VK2ME-VLK	9.750	30.75	Sydney	WNC	9.760	30.75	Deal, N. J.
VK2ME	9.940	30.16	Sydney	WNC	14.480	20.70	Deal, N. J.
VK2ME	10.520	28.50	Sydney	WNC	19.220	15.60	Deal, N. J.
VK2ME	16.320	18.37	Sydney	WND	6.753	44.40	Deal, N. J.
VK2ME	19.400	15.45	Sydney	WND	13.400	22.37	Deal, N. J.
VK3LO	9.369	32.01	Melbourne	WND	18.350	16.35	Deal, N. J.
VK3ME	9.090	32.98	Melbourne	WOA	6.752	44.41	Lawrenceville, N. J.
VK3ME	9.548	31.40	Melbourne	WOB	6.752	44.41	Lawrenceville, N. J.
VK3UZ	8.820	33.99	Melbourne	WOF	9.742	30.77	Lawrenceville, N. J.
VK3VZ	9.375	31.97	Melbourne	WOK	10.540	28.44	Lawrenceville, N. J.
VK6AG	7.195	41.67	Perth	WON	9.862	30.40	Lawrenceville, N. J.
VK6AG	15.000	19.99	Perth	WOO	3.124	95.97	Deal, N. J.
VLK	10.540	28.44	Sydney	WOO	4.116	72.87	Deal, N. J.
VLK	16.320	18.37	Sydney	WOO	4.748	63.13	Deal, N. J.
				WOO	6.515	46.02	Deal, N. J.
				WOO	8.582	35.02	Deal, N. J.
				WOO	8.630	34.74	Deal, N. J.
				WOO	12.836	23.36	Deal, N. J.
				WOO	17.110	17.52	Deal, N. J.
				WPDA	2.414	124.20	Tulare, Calif.
				WPBE	1.712	175.13	Chicago, Ill.
				WPDC	1.712	175.13	Chicago, Ill.
				WPDE	1.712	175.13	Chicago, Ill.
				WPDE	2.422	123.79	Louisville, Ky.
				WPDF	2.422	122.77	Flint, Mich.
				WPDG	2.458	121.97	Youngstown, Ohio
				WPDH	2.422	123.79	Richmond, Ind.
				WPDI	2.430	123.45	Columbus, Ohio
				WPKD	2.450	122.40	Milwaukee, Wis.
				WPDL	2.422	122.77	Lansing, Mich.
				WPDN	2.458	121.97	Auburn, N. Y.
				WPDO	2.458	121.97	Akron, Ohio
				WPDP	2.470	121.40	Philadelphia, Pa.
				WPDR	2.458	121.97	Rochester, N. Y.
				WPDS	2.416	124.09	St. Paul, Minn.
				WPDT	2.470	121.40	Kokomo, Ind.
				WPDU	1.712	175.13	Pittsburgh, Pa.
				WPDV	2.458	121.97	Charlotte, N. C.
				WPDW	2.422	123.79	Washington, D. C.
				WPDY	2.414	124.20	Atlanta, Ga.
				WPDZ	2.470	121.40	Fort Wayne, Ind.
				WPEA	2.458	121.97	Syracuse, N. Y.
				WPEB	2.422	122.77	Grand Rapids, Mich.
				WPEC	2.470	121.40	Memphis, Tenn.
				WPEE	1.712	175.13	Arlington, Mass.
				WPEF	2.450	122.40	Brooklyn, N. Y.
				WPEG	2.450	122.40	Bronx, N. Y.
				WPEH	2.450	122.40	New York, N. Y.
				WPEI	1.712	175.13	Sommerville, Mass.
				WPDJ	2.414	124.20	Passaic, N. J.
				WPDK	2.414	124.20	Dayton, Ohio
				WQDF	3.490	85.91	Atlanta, Ga.
				WQDP	5.630	53.25	Atlanta, Ga.
				WQDU	3.170	94.58	Aurora, Ill.
				WQDU	5.600	53.54	Aurora, Ill.
				WRBH	2.450	122.40	Cleveland, Ohio
				WRDQ	2.470	121.40	Toledo, Ohio
				WRDR	2.414	124.20	Grosse Pt. Village, Mich.
				WRDS	1.574	190.48	E. Lansing, Mich.
				WRDU	1.596	187.85	Brooklyn, N. Y.
				WSBN	4.174	71.82	S. S. Leviathan
					8.830	33.95	
					13.220	22.68	
					17.580	17.05	
				WSDB	3.490	85.91	Jackson, Miss.
				WSDB	5.630	53.25	Jackson, Miss.
				WSDC	5.657	53.00	Newark, N. J.
				WSDE	3.490	85.91	Tuscaloosa, Ala.
				WSDE	5.630	53.25	Tuscaloosa, Ala.
				WSDM	5.657	53.00	Albany, N. Y.
				WSDO	5.657	53.00	Buffalo, N. Y.
				WSDQ	5.657	53.00	Cleveland, Ohio
				W1XAL	4.700	63.79	Portland, Me.
				W1XAB	11.790	25.42	Boston, Mass.
				W1XAZ	9.570	31.33	Springfield, Mass.
				W2XAC	8.690	34.50	Schenectady, N. Y.
				W2XAD	15.320	19.57	Schenectady, N. Y.
				W2XAF	9.530	31.46	Schenectady, N. Y.
				W2XAO	17.850	16.80	New Brunswick, N. J.
				W2XBB	34.600	8.67	New Brunswick, N. J.
VOA to VOZ—NEWFOUNDLAND							
V08Z	6.800	44.09	St. Johns				
VPA to VSZ—BRITISH COLONIES AND PROTECTORATES							
VPD	7.890	38.00	Suva, Fiji Islands				
VPD	14.420	20.80	Suva, Fiji Islands				
VQ7LO	6.060	49.48	Nairobi, Kenya, Africa				
VQ7LO	9.616	31.18	Nairobi, Kenya				
VRT-ZFA	5.045	59.42	Hamilton, Bermuda				
VRT-ZFB	10.060	29.80	Hamilton, Bermuda				
VS1AB	7.195	41.67	Singapore, Straits Settle-				
ment							
VS3AB	7.055	42.50	Johore Baru, British				
Malaya							
VTA to VWZ—BRITISH INDIA							
VUC	11.870	25.27	Calcutta				
VVD	6.110	49.07	Bombay				
W—UNITED STATES							
WAEA	3.100	96.72	Indianapolis, Ind.				
WAEA	5.560	53.92	Indianapolis, Ind.				
WAEB	3.100	96.72	Columbus, Ohio				
WAEB	5.560	53.92	Columbus, Ohio				
WAEC	3.100	96.72	Pittsburgh, Pa.				
WAEC	5.560	53.92	Pittsburgh, Pa.				
WAED	3.100	96.72	Harrisburg, Pa.				
WAED	5.560	53.92	Harrisburg, Pa.				
WAEE	3.100	96.72	Camden, N. J.				
WAEE	5.560	53.92	Camden, N. J.				
WAEF	3.100	96.72	Newark, N. J.				
WAEF	5.560	53.92	Newark, N. J.				
WCF	1.596	187.85	New York, N. Y.				
WCK-WPDX	2.414	124.20	Detroit, Mich.				
WEF-W2BJ	9.488	31.60	Rocky Point, N. Y.				
WEJ-W2XBJ	6.732	44.54	Rocky Point, N. Y.				
WEL-W2XBJ	8.945	33.52	Rocky Point, N. Y.				
WEM-W2XBJ	7.396	40.54	Rocky Point, N. Y.				
WES-W2XBJ	9.448	31.74	Rocky Point, N. Y.				
WEY	1.558	192.43	Boston, Mass.				
W1Y-W2XBJ	13.860	21.63	Rocky Point, N. Y.				
WKA	21.054	14.24	Lawrenceville, N. J.				
WKDT	1,596	187.85	Detroit, Mich.				
WKDU	1,712	175.13	Cincinnati, Ohio				
WKF	19.207	15.61	Lawrenceville, N. J.				
WKK	21.400	14.01	Lawrenceville, N. J.				
WKN	19.816	15.13	Lawrenceville, N. J.				
WKU-W2XBJ	14.796	20.27	Rocky Point, N. Y.				
WKW-W2XBJ	19.012	15.77	Rocky Point, N. Y.				
WLA	18.340	16.35	Lawrenceville, N. J.				
WLK	16.260	18.44	Lawrenceville, N. J.				
WLO	10.540	28.44	Lawrenceville, N. J.				
WLO	16.300	18.39	Lawrenceville, N. J.				
WLO	21.400	14.01	Lawrenceville, N. J.				
WMA	13.380	22.40	Lawrenceville, N. J.				
WMDZ	2.422	123.79	Indianapolis, Ind.				
WMF	14.464	20.73	Lawrenceville, N. J.				
WMI	19.850	15.10	Deal, N. J.				
WMJ	2.422	123.79	Buffalo, N. Y.				
WMN	14.582	20.56	Lawrenceville, N. J.				
WMO	2.414	124.20	Highland Park, Mich.				
WMP	1.475	190.48	Framingham, Mass.				

Call	Megs.	Meters	City
W2XBC	51.400	5.83	New Brunswick, N. J.
W2XBH	5.502	54.50	Brooklyn, N. Y.
W2XCU	8.650	34.66	Ampere, N. J.
W2XCU	12.850	23.33	Ampere, N. J.
W2XCU	17.300	17.33	Ampere, N. J.
W2XDJ	21.420	14.00	Deal, N. J.
W2XDO	8.630	34.74	Ocean Gate, N. J.
W2XDO	17.110	17.52	Ocean Gate, N. J.
W2XE	6.120	48.99	Richmond Hill, N. Y.
W2XE	11.840	25.34	Richmond Hill, N. Y.
W2XE	15.280	19.62	Richmond Hill, N. Y.
W2XX	17.300	17.34	Schenectady, N. Y.
W2XV	4.797	62.50	Long Island City, N. Y.
W2XV	4.975	60.27	Long Island City, N. Y.
W2XV	8.650	34.66	Long Island City, N. Y.
W3XAL	6.096	49.18	Boundbrook, N. J.
W3XAL	17.772	16.87	Boundbrook, N. J.
W3XE	8.650	34.66	Baltimore, Md.
W3XL	6.386	46.96	Boundbrook, N. J.
W3XX	8.650	34.66	Washington, D. C.
W3XZ	4.795	62.53	Washington, D. C.
W3XZU	9.585	31.28	Philadelphia, Pa.
W4XG	8.650	34.66	Miami, Fla.
W6XAJ	17.300	17.33	Oakland, Calif.
W6XD	27.800	10.78	Palo Alto, Calif.
W6XQ	24.000	12.48	San Mateo, Calif.
W7XA	17.300	17.33	Portland, Ore.
W7XC	17.300	17.33	Seattle, Wash.
W8XAG	8.650	34.66	Dayton, Ohio
W8XAL	6.060	49.48	Cincinnati, Ohio
W8XI	31.000	9.67	Pittsburgh, Pa.
W8XX	6.140	48.83	Pittsburgh, Pa.
W8XX	11.872	25.25	Pittsburgh, Pa.
W8XX	14.480	20.70	Pittsburgh, Pa.
W8XX	15.204	19.72	Pittsburgh, Pa.
W8XX	17.780	16.87	Pittsburgh, Pa.
W8XX	21.540	13.92	Pittsburgh, Pa.
W8XL	17.300	17.33	Dayton, Ohio
W9XAA	6.076	49.34	Chicago, Ill.
W9XAA	11.840	25.34	Chicago, Ill.
W9XAA	18.105	16.56	Chicago, Ill.
W9XAM	4.795	62.53	Elgin, Ill.
W9XF	6.020	49.80	Chicago, Ill.
W9XF	6.095	49.19	Chicago, Ill.
W9XF	20.500	14.63	Chicago, Ill.
W9XL	3.676	97.47	Chicago, Ill.
W9XL	3.256	92.08	Chicago, Ill.
W9XL	4.795	62.53	Chicago, Ill.
W9XL	6.425	46.66	Anoka, Minn.
W9XL	8.650	34.66	Chicago, Ill.
W9XL	12.850	23.33	Anoka, Minn.
W9XL	17.300	17.33	Anoka, Minn.
XAA to XFZ—MEXICO			
XAM	5.766	52.00	Merida, Yucatan
XAM	11.530	26.00	Merida, Yucatan
XDA	5.357	55.96	Mexico City
XDA	5.879	51.00	Mexico City
XDA	6.818	44.00	Mexico City
XDA	9.375	31.97	Mexico City
XDA	11.760	25.50	Mexico City
XDA	14.620	20.51	Mexico City
XDA	6.020	49.80	Mexico City
XEW	6.667	44.98	Mexico City
XFD	9.091	32.97	Mexico City
XFD	11.111	26.98	Mexico City
XIF	6.380	46.99	Mexico City
XGA to XUZ—CHINA			
XGTE	5.000	59.96	Shanghai
YAA to YAZ—AFGHANISTAN			
YHA to YHZ—NEW HEBRIDES			
YIA to YIZ—IRAQ			
YLA to YLZ—LATVIA			
YMA to YMZ—DANZIG			
YNA to YNZ—NICARAGUA			
YSA to YSZ—EL SALVADOR			
YVA to YVZ—VENEZUELA			
YVQ	11.680	25.67	Maracay
YVQ	18.296	16.39	Maracay
YV2BC	6.000	49.97	Caracas
YV4BV	11.700	25.62	Valencia

Call	Megs.	Meters	City
YV11BMO	6.125	48.95	Maracaibo
ZAA to ZAZ—ALBANIA			
ZKA to ZMZ—NEW ZEALAND			
ZLT	8.897	33.70	Wellington
ZLW	10.980	27.30	Wellington
ZLW	12.290	24.40	Wellington
ZLW	18.340	16.35	Wellington
ZL2XX	4.770	62.86	Wellington
ZL2XX	9.560	31.36	Wellington
ZL2ZX	6.057	49.50	Wellington
ZL3ZC	6.000	49.97	Christchurch
ZPA to ZPZ—PARAGUAY			
ZSA to ZUZ—UNION OF SOUTH AFRICA			
ZTD	7.400	40.52	Durban
ZTJ	6.072	49.37	Johannesburg
ZTJ	7.329	40.90	Johannesburg

Short Wave Stations of Canada

Call	Megs.	Meters	City
CGE	7.520	39.87	Calgary—ALBERTA Tues., & Thurs., test- ing.
CKS	7.550	39.71	Western Broadcasting
CGE	7.550	39.71	Western Broadcasting
Co., Ltd.			
VE9CA	11.860	25.28	Western Broadcasting
Co., Ltd.			
Red Deer			
VE9AK	2.830	105.90	
Vancouver—BRITISH COLUMBIA			
VE9BZ	2.750	109.00	
VE9CS	6.070	49.39	United Church of Can- ada, Sun., 3:30 p. m. to midnight. Fri., 0 to 1:30 a. m. (6148 kc.)
Winnipeg—MANITOBA			
VE9CL	5.710	52.51	
VE9CL	6.150	48.75	Jas. Richardson & Sons, Ltd. Daily, ex. Sun., 6 to 8:30 p. m. (6148 kc.)
VE9JR	11.720	25.58	Jas. Richardson & Sons, Ltd. Daily, ex. Sat., Sun., 11:45 a. m. to 1:20 p. m.; 5:30 to 7:30 p. m.
St. John—NEW BRUNSWICK			
VE9BJ	6.090	49.23	C. A. Munro, Ltd. Relays CFBO (6020?)
Glace Bay—NOVA SCOTIA			
VBS	8.400	33.69	
VAS	10.700	28.02	7 a. m. to 4 p. m.
Hallfax			
VE9HX	6.050	49.56	Wm. C. Borrett (6100 kc.?). 6 to 10 p. m. Tues., Thur., Fri; 8 to 9 p. m. Wed.; 6:30 to 8:15 p. m. Sunday.
VE9HX	6.050	49.56	Relays CHNS Mon. Tues. 6 to 10 p. m. Other days, 6 to 7 p. m.
CFH	9.030	33.20	
Wolfville			
VE9CX	6.015	48.85	Acadia University.
Bowmanville—ONTARIO			
VE9GW	6.092	49.22	Gooderham & Worts, Ltd., Toronto. Sunday, 12:30 p. m. to 6 p. m.; Weekdays, 4 to 10 p. m.
VE9GW	24.380	12.30	
London			
VE9CI	2.735	109.60	Sun., 11 a. m. to 7 p. m. Daily, 9 to 11 p. m.
VE9BY	4.792	62.56	Saturday midnight on.
VE9BY	6.426	46.67	Wed., 8:30 to 9:30 p. m.; Fri., 7 to 7:55 a. m.; Sat., 8 to 11 p. m.
VE9BY	8.645	34.68	Monday, 3 to 4 p. m and irregular times.
Toronto			
VE9RM	2.004	149.80	
Charlottetown—PRINCE EDWARD ISLAND			
VE9EH	6.080	49.31	Island Radio Broad- casting Co., Ltd.

Call	Megs.	Meters	City
Drummondville—QUEBEC			
CGA	4.782	62.70	Phones to ships irregularly.
VE9DR	6.005	49.93	Canadian Marconi Co. Montreal. Relays CFCF, 7 p. m. to midnight.
VE9AP	6.335	47.33	
CFA	6.840	43.83	
CGA	9.340	32.10	6 p. m. to 6 a. m. (9330 or 9335 kc.?)
VE9DR	9.555	31.37	Canadian Marconi Co., Montreal.
CGA	13.296	22.55	Tests with GBB Rugby by Eng.
VE9DR	11.780	25.44	Canadian Marconi Co., Montreal. Irregular.
CGA	18.170	16.50	Telephony to England.
Montreal			
VE9OS	2.100	142.80	
VE9AF	2.850	105.20	
VE9DN	6.005	49.93	Canadian Marconi Co., Montreal.
VE9BA	6.130	48.91	Canadian National Railways.
VE9DN	9.580	30.44	Canadian Marconi Co.
VE9BA	11.705	25.62	Canadian National Railways.
VE9DN	11.895	25.20	Canadian Marconi Co.
VE9BA	15.190	19.73	Canadian National Railways.
Saskatoon—SASKATCHEWAN			
VE9AR	2.850	105.20	
VE9AR	3.030	98.95	
St. Johns—NEWFOUNDLAND			
VO8Z	6.800	44.09	

The Month's Changes

POWER			
810	WCCO	Minneapolis, Minn., 5000 to 50000	
1050	KNX	Hollywood, Cal., 5000 to 25000	
1130	KSL	Salt Lake City, Utah, 5000 to 50000	
1380	KSO	Clarinda, Iowa, 500 to 100	
OWNERS			
910	XEW	Mexico City, to Cadena Radio-difusora Mexicana S. A.	
1210	WCBS	Springfield, Ill., to WCBS, Inc.	
1370	WGLC	Glens Falls, N. Y., to O. T. Griffin and G. F. Bissell	
1500	KPJM	Prescott, Ariz., to Scott & Sturm	
NEW			
790	CMJK	Camaguey, Cuba	
960	YVIBC	Caracas, Venezuela	
1210	WGNV	Chester Twp., N. Y.	
DELETED			
1210	WMRJ	Jamaica, N. Y.	
1230	WPSC	State College, Pa.	
LOCATION			
1010	KGGF	Coffeyville, Kans., from S. Coffeyville, Okla.	
1270	WESG	Elmira, N. Y., from Ithaca, N. Y.	
FREQUENCY			
1270	CMJN	Camaguey, Cuba, from 1245	
1365	CMCW	Havana, Cuba, from 1320	
PERMIT TO CHANGE LOCATION			
1310	WKBB	Joliet, Ill., to E. Dubuque, Ill.	
1350	WEHC	Emory, Va., to Charlottesville, Va.	
1370	WGLC	Glens Falls, N. Y., to Hudson Falls, N. Y.	
1380	KSO	Clarinda, Iowa, to Des Moines, Iowa	
PERMIT TO CHANGE FREQUENCY			
1310	WKBB	Joliet, Ill., to 1500	
1380	KSO	Clarinda, Iowa, to 1370	
CHAINS			
1380	KSO	Clarinda, Iowa, new NBC	

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY ACT OF CONGRESS OF AUGUST 24, 1912

Of Radio Index, published monthly except July and August, at Cleveland, Ohio, for October 1, 1932.
 State of Ohio }
 County of Cuyahoga }^{SS.}

Before me, a notary public in and for the State and county aforesaid, personally appeared Fred C. Butler, who, having been duly sworn according to law, deposes and says that he is the Editor and Publisher of the Radio Index, and that the following is to the best of his knowledge and belief, a true statement of the ownership, management, etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 411, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor managing editor, and business managers are:

Publisher, Fred C. Butler, 5005 Euclid Ave., Cleveland, O.
 Editor, Fred C. Butler, 5005 Euclid Ave., Cleveland, O.
 Managing Editor, none.
 Business Manager, none.

2. That the owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding one per cent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a firm, company, or other unincorporated concern, its name and address, as well as those of each individual member, must be given.)

The Radex Press, Inc., 5005 Euclid Ave., Cleveland, O.
 Fred C. Butler, 5005 Euclid Ave., Cleveland, Ohio.

3. That the known bondholders, mortgages and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: (If there are none so state.) None.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

5. That the average number of copies of each issue of this publication sold or distributed through the mails or otherwise, to paid subscribers during the six months preceding the date shown above is. (This information is required from daily publications only.)

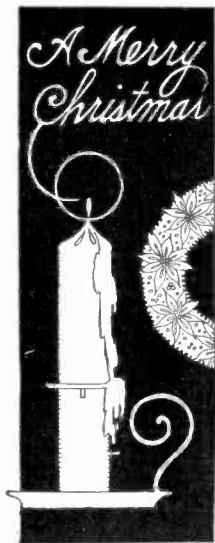
Fred C. Butler.

Sworn to and subscribed before me this 1st day of April, 1932.

(Seal) H. S. Craigle.
 (My commission expires April 13, 1933.)

"I received the Time Converter just in time to get 4QG, Brisbane, Australia, Friday morning, October 28th, the very first morning after I received the Converter. It surely is a handy arrangement."

—Philip R. Nichols, East Hartford, Conn.



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THE RADEX PRESS, INC.

5005 Euclid Avenue

Cleveland, Ohio





Sometimes I think there ought to be a law to make everyone do a little studying every week. I didn't think that a year ago because it looked like all the cards were stacked against me. But I am certainly rolling in the money now. Maybe my story will show you the way to larger earnings also.

I Thought Radio Was a Plaything

But Now My Eyes Are Opened, and I'm Making Over \$75.00 a Week!

\$50 a week! Man alive, a year ago I thought anyone making that much was just plain lucky.

Twelve months ago I was just barely getting by. It was the same old story—a little job; a salary as small as the job.

If you had told me that twelve months later I would be making \$75 a week in my own Radio business—I'd thought you were crazy.

But I am getting ahead of my story—let me tell you how it all started. I was hard up a year ago because I had been kidding myself—that's all—not because I had to be. I thought a fellow either had to be lucky or have a string of college degrees a half a mile long to make good money.

One day I picked up a magazine and the headline of an ad attracted me because it seemed to fit my case. It said, "I will show you how to start a spare time or full time Radio business of your own WITHOUT CAPITAL."

"They're trying to kid somebody," I thought, "but I'll find out what it is all about anyway."

I wrote in and within a few days received a 64-page book telling about the opportunities in Radio, how I could prepare right at home in my spare time, and how they would show me how to start making money in my neighborhood selling and repairing Radio sets. It would probably have sounded too good to be true if the promises had not been backed up by 100 letters from fellows who had taken their course and were very enthusiastic about it.

What has happened since seems almost like a dream to me now. I took their course and in about a month I was ready to start making money in my neighborhood—as much as \$5 and \$15 a week. It wasn't long until I had saved enough money to start a little business of my own.

That business has since grown to the point where I am clearing an average of \$75 a week. All this took place under the watchful guidance of my friends at the National Radio Institute. They also offered to train me for other lines—in case I wasn't interested in having my own business. Broadcasting stations, Radio Manufacturers, Operating on Board Ship, Servicing Sets, Aircraft Radio, Television and Talking Movies

are other fields their training covers. And to think, until the day I wrote for that book, I'd been wailing, "I have never had a chance—will never have one because I have no pull and have never had the advantage of a good education!"

Friend—you may not be as had off as I was—but think it over—are you satisfied? Are you making as much money as you need? Would you sign a contract to stay where you are for the next ten years at the same salary? Those are the things you have to think about—because no one is going to make it his business to push you ahead—you must make it your own business.

Take my tip—write for their book. It won't cost you anything—only a three-cent stamp. It shows you a lot of things which I don't believe you know now—a lot of facts and figures on the opportunities in this new, fast-growing field. Where the jobs are, what they pay, how to get ready for one. Beginners as well as experienced men are making as much as \$1,000 to \$2,000 a year more as a result of N. R. I. training. You place yourself under no obligation because the book is free and is gladly sent to anyone who is ambitious and wants to get ahead. Just address J. E. Smith, President National Radio Institute, Dept. 2NO, Washington, D. C.

J. E. Smith, President,
National Radio Institute,
Dept. 2NO, Washington, D. C.

Dear Mr. Smith: Send me your free book, "Reth Rewards in Radio," which points out the opportunities for spare time and full time jobs in Radio and your famous 50-50 method of training men to become Radio Experts through home study. I understand this request places me under no obligation.

Name

Address

City State