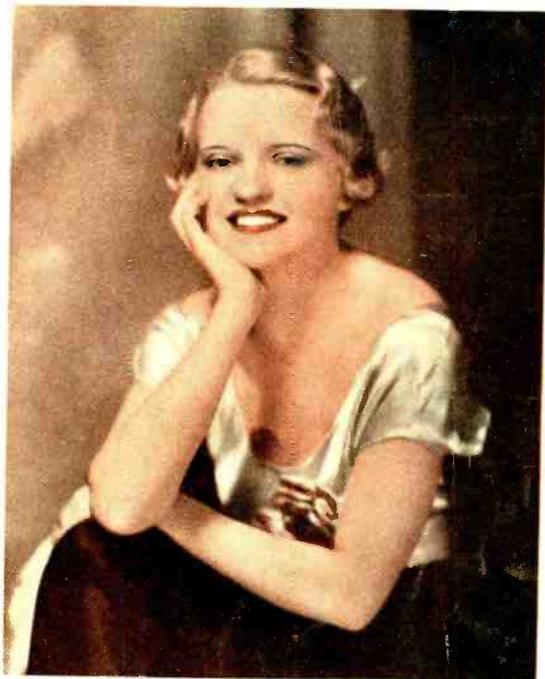


THE OCTOBER 1932

RADIO INDEX

THE ALL-WAVE RADIO MAGAZINE



25^c

Monday Time on the Air for All Stations
Short Wave Stations of the World by Frequencies
Index to Trans-Pacific Broadcast Stations
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What's What in the New Tubes

OCTOBER DX CALENDAR

1 — SATURDAY NIGHT

11:00- PST CHWK Chilliwack, B. C.
 11:30- PST CKWX Vancouver, B. C.
 11:30- EST KDKA Pittsburgh, Pa.
 11:30- 2:00 CST WBBZ Ponca City, Okla.
 Mid.-12:30 CST WKY Oklahoma City
 Mid.- EST WWRL Woodside, N. Y.
 Mid.- 2:00 PST CKOV Kelowna, B. C.
 Mid.- 2:00 EST CMCH Havana, Cuba
 Mid.- 2:00 CST WCAH Columbus, Ohio
 Mid.- 2:00 EST WGBI Scranton, Pa.
 Mid.- 3:00 EST CMCD Havana, Cuba
 12:30- 2:30 CST WOW Omaha, Neb.
 1:00- 2:00 EST CKOK Windsor, Ont.
 1:00- 4:00 MST KGCX Wolf Point, Mont.
 1:00- EST KQV Pittsburgh, Pa.
 1:00- 5:00 CST WJAK Elkhart, Ind.
 1:30- 3:30 EST YVIB Caracas, Venez. (960)
 2:00- 3:00 CST WKBZ Ludington, Mich.

2 — SUNDAY NIGHT

Mid.- 1:00 EST WSAZ Huntington, W. Va.
 1:00- 4:00 PST KPCB Seattle, Wash.

3 — MONDAY NIGHT

10:30-10:45 CST WMAQ Chicago, Ill.
 Mid.- 2:00 CST KFYR Bismarck, N. D.
 Mid.- 2:00 MST KOY Phoenix, Ariz.
 Mid.- 2:30 EST WMIL Brooklyn, N. Y.

4 — TUESDAY NIGHT

11:00-Mid. CST XEH Monterrey, Mex.
 Mid.- 2:00 PST CFJC Kamloops, B. C.
 3:00- EST WOPI Bristol, Tenn.

5 — WEDNESDAY NIGHT

11:00-Mid. CST WHBL Sheboygan, Wis.
 11:30- PST CKWX Vancouver, B. C.

6 — THURSDAY NIGHT

Mid.- 1:00 MST CFAC Calgary, Alta.
 Mid.- 2:00 PST CKOV Kelowna, B. C.
 Mid.- 2:30 EST WMIL Brooklyn, N. Y.

7 — FRIDAY NIGHT

11:30- 1:00 MST KGEK Yuma, Colo.
 11:30- 2:30 CST WCAJ Lincoln, Neb.
 Mid.- 2:00 PST CHJC Kamloops, B. C.
 1:00- 3:00 EST CKCL Toronto, Ont.
 1:00- 3:00 CST KGFK Moorhead, Minn.

8 — SATURDAY NIGHT

Same as Saturday the 1st, except CHWK not on; add
 Mid.- CST KUSD Vermillion, S. D.

9 — SUNDAY NIGHT

Mid.- 1:00 EST WSAZ Huntington, W. Va.
 2:00- 4:00 CST WHBF Rock Island, Ill.

10 — MONDAY NIGHT

Same as Monday the 3rd.

11 — TUESDAY NIGHT

Same as Tuesday the 4th, except WOPI not on.

12 — WEDNESDAY NIGHT

Same as Wednesday the 5th.

13 — THURSDAY NIGHT

Same as Thursday the 6th.

14 — FRIDAY NIGHT

Same as Friday the 7th.

15 — SATURDAY NIGHT

Same as Saturday the 1st, except CHWK not on; add
 3:00- 5:00 CST KFBI Abilene, Kans.

16 — SUNDAY NIGHT

Mid.- 1:00 EST WSAZ Huntington, W. Va.

17 — MONDAY NIGHT

Same as Monday the 3rd.

18 — TUESDAY NIGHT

Same as Tuesday the 11th.

19 — WEDNESDAY NIGHT

Same as Wednesday the 5th.

20 — THURSDAY NIGHT

Same as Thursday the 6th.

21 — FRIDAY NIGHT

Same as Friday the 7th.

22 — SATURDAY NIGHT

Same as Saturday the 8th.

23 — SUNDAY NIGHT

Mid.- 1:00 EST WSAZ Huntington, W. Va.

24 — MONDAY NIGHT

Same as Monday the 3rd.

25 — TUESDAY NIGHT

11:00-Mid. CST XEH Monterrey, Mex.
 Mid.- 2:00 PST CFJC Kamloops, B. C.
 1:30- 2:30 CST WCLD Janesville, Wis.
 2:00- 3:00 MST KPOF Denver, Colo.
 2:00- 4:00 CST KDLR Devils Lake, N. D.

26 — WEDNESDAY NIGHT

Same as Wednesday the 5th.

27 — THURSDAY NIGHT

Same as Thursday the 6th.

28 — FRIDAY NIGHT

Same as Friday the 7th.

29 — SATURDAY NIGHT

Same as Saturday the 1st, except CHWK not on.

30 — SUNDAY NIGHT

Mid.- 1:00 EST WSAZ Huntington, W. Va.

31 — MONDAY NIGHT

Same as Monday the 3rd.

OCTOBER 1, 1932

RADIO IN DEX

REG. U. S. PATENT OFFICE

FRED CLAYTON BUTLER

Editor and Publisher



NINTH YEAR

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NUMBER 62

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WHAT'S WHAT in NEW TUBES

DURING the past few months the tube manufacturers have been hard at work to see how many new types they could produce. Since it is needless to attempt to explain the merits of each of this avalanche of new tubes, we shall confine our remarks to those types having a wider range of usefulness.

The superiority of many of these tubes calls for radical circuit changes, and about one-half of the newer radio sets are now discarding the older and more familiar tubes. The late 1932 flood of so many new types has swept away a number of faithful tubes, such as the -24, -27, -45, -80, and the more recent -35 and -47.

Sixteen New Tube Types

The new types are: 41, 42, 43, 44, 46, 52, 55, 56, 57, 58, 82, 83, 85, 89, and the Wunderlich and Triple Twin. Each serves a definite purpose because of remarkable electrical possibilities. At least two of these tubes are very valuable in short-wave reception and will go far toward improving worldwide "all-wave" radio. Most new sets are now being designed and built around the characteris-



"Ramona," singer and pianist with Paul Whiteman, NBC-WJZ net 7:45 p.m., Tuesdays and Thursdays, EST.

The Technical Editor Describes Them

tics of certain of the new "50" series of tubes.

A number of these tubes are not of sufficient general interest to justify rather detailed descriptions. These are the types numbered 41, 42, 43, 44, 52, 85 and 89. They are more or less limited in use, being confined to auto-radio on 6.3 volts and d.c. sets. Of course, the tubes can be used in some cases on alternating current.

Automobile and D.C. Series

The new 41 is somewhat similar to the old -38, but is not interchangeable because of the 6-prong base. The 42 is a pentode with more power than the -47, but also having the 6-prong base. Type 43 is a special purpose audio power tube using 25 volts. The 44 is a new variable-mu tube with a 5-prong base and grid-cap, and may be substituted for the -35 or -39 if proper filament voltage changes are made. Types 52, and also the ER-LA are automobile and 110-volt d.c. power amplifier tubes with the standard 5-prong bases. The 85 is similar to the 55, which is more fully described below, but acts like the old -37. The 89 is an audio automobile tube with a 6-prong base and triple grids for connecting in various circuits.

Type 55 Duplex-Diode Triode

The 55 tube is essentially an a.c. heater using the new 6-prong small base connecting to two diode plates, a triode plate, two a.c. heater terminals, and the cathode. The control-grid is connected to the cap at the top of the bulb. This tube will act simultaneously as automatic volume control, detector, and audio amplifier. It is somewhat like a -27 with an extra plate surrounding a portion of the cathode, but it cannot be substituted for any other tube.

Many circuit arrangements will be devised with the 55, for it really consists of three tube-units combined as if in separate bulbs. The plate potential is 250 volts with a current of 8 milliam-

peres. The grid is held negative with 20 volts, and the heater consumes 1.0 ampere at 2.5 volts, either a.c. or d.c.

The 56 Also is Similar to -27

In appearance and usefulness the new 56 tube is similar to the older -27. The size of the bulb has been decreased, the plate colored a non-reflecting black, and the current consumption reduced to 1.0 ampere at 2.5 volts, a.c. or d.c. The plate takes 250 volts and 5 milliamperes. The 56 is a general purpose triode tube and will function as an oscillator, biased detector, grid-leak detector, and first audio amplifier.

The 56 tube has the same 5-prong base as the -27, and all internal parts and connections are identical. While this tube has no outstanding features for short-wave work, it will replace the -27 in broadcast receivers. It is interchangeable with the -27 in some circuits, but cannot be recommended as such since the gain is not appreciable. The new tube is best used in circuits designed for its characteristics.

Type 57 Improves On -24

In the type 57, a screen-grid pentode radio-frequency amplifier tube, we find a greatly improved substitute for the old -24 in new circuits. The tube has the small 6-prong base, and is fitted with a pentode suppressor-grid placed between the screen-grid and the plate. The pentode grid has a separate base connection so that it may or may not be attached to the cathode. The current consumption of the 57 tube is the same as the 56; the plate takes 250 volts and 2 milliamperes, while the screen-grid voltage is 100, with a current of 1.0 milliampere.

This tube may be used as a biased first detector in a.c. sets, as a screen-grid amplifier in radio-frequency circuits, or as an automatic volume control tube, and, very satisfactorily, as a detector in short-wave sets. Because of its base the 57 tube cannot be substituted for the -24.

The 57 has an internal shield within the upper dome of the glass bulb and connected to the cathode element. This shield, together with the odd dome-shape of the top of the glass, makes possible the close capacitive proximity of



Bernadine Flynn of the "Rin-Tin-Tin" programs on the NBC-WJZ net Thursdays, 8:30 p.m., EST.

the outer metallic shield that is fitted over the tube. This increases the value of the tube, especially in short-wave work, and the outer shield must always be in place.

The 58 is a Variable-Mu Pentode

Essentially the same in appearance to the 57 tube is the new type 58. It is a screen-grid pentode radio-frequency amplifier having excellent variable-mu characteristics — much better than the old -35 tube. It does not make a good detector, but is the most efficient radio-frequency and intermediate-frequency amplifier known. And it is also well adapted to short-wave work. Shielding of the 58 tube is the same as with the 57, but the construction of the grid is different.

This tube is capable of amplifying radio-frequency signals to a greater extent than previously has been possible. It consumes but 1.0 ampere at 2.5 volts and uses 250 volts on the plate with 8.2 milliamperes. A grid bias ranging from 3 to 50 volts negative is needed for proper control of volume. As is the case with the 57 tube, the small 6-prong base of the 58 prevents substitution for the older -35 variable-mu type.

New 46 Power Pentode

A year or so ago the old -45 power tube fell before the coming of the -47 pentode. Now, both of these tubes become obsolete with the advance of the 46 power pentode tube. Two of these 46 tubes will give far more power than can be obtained from -45s or -47s in push-pull. The 46 has a 5-prong base, similar to the -47, for which it can be substituted with some circuit changes. The 4-prong base of the -45 prevents the substitution of the 46 for the same reason that the -47 was not interchangeable with the -45 tube. The 46 uses 1.0 ampere at 2.5 volts, with 250 volts on the plate.

A Full-Wave Rectifier

The 82 type tube is an improved mercury-vapor full-wave rectifier and takes the place of the -80, which it closely resembles. It has a medium 4-prong base and needs considerable ventilation. It consumes 3.0 amperes at 2.5 volts, and a blue-white glow, due to the ionization of the mercury gas, can be seen between the plates.

The -95 Triple-Twin

The special purpose power tube, type -95, is a Triple-Twin power amplifier, and cannot be substituted for other power tubes. It appears to be a -27 and a -45 built in one bulb. The -95 has a very high power-sensitivity at rather small input voltages and, in fact, when used instead of the older -50 type, the input need be only about six percent of the required to work the -50 for similar results. When using the -95 only one previous stage of audio is required and matched transformers became unnecessary. The -95 has three times the output of a -45, and twice that of the -47 pentode, and considerably more than the new 46. It uses the 5-prong base, similar to the -47 and 46 tubes, but is a heavy consumer of electricity—4.0 amperes at 2.5 volts.

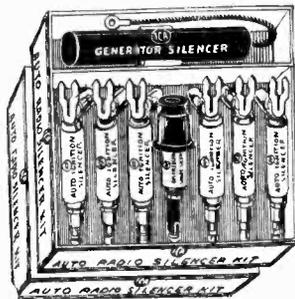
Wunderlich Special Detector

The new Wunderlich tube is a special detector having two uniform grids and characteristics somewhat like the new 56 tube. It works best as a grid-leak detector, but serves also as an automatic volume control tube. The output is reported to be about four times that of a standard triode tube.

With the Radio

MORE and more frequently the strains of a distant orchestra come to us as an automobile goes by. Your real radio fan is lost without his broadcast contacts even when enjoying the pleasures of motoring. Practically all of the better cars now come already wired for radio. It is useless to install a radio set in an automobile without making provision for eliminating the make and break of the spark plugs.

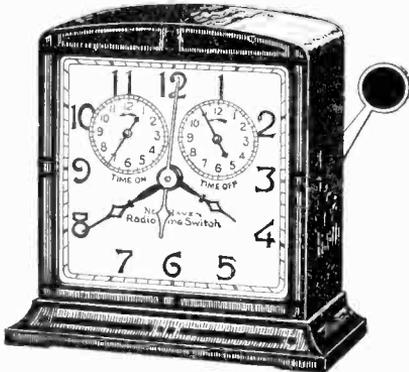
The Insuline Corp. of America, 23-25 Park Place, New York, N. Y., is now putting on the market a Silencer kit composed of four, six or eight spark plug silencers and one for the generator. These are, of course, equally adaptable to motor boats or airplanes. It is said that they do not detract in any way from the power of the motor but entirely suppress any interference with the radio set. This kit is but one item in a line of automobile-radio accessories. Others are a running-board antenna, an axle-to-axle antenna and a small flexible aerial which can be placed under the seat or in other out-of-the-way places.



Our readers are familiar with the adapters made by the Insuline Corp. for four and five prong tube sockets which permit the use of headphones. The same company is now bringing out new adapters for various purposes. One is to permit the use of '58 tubes in place of '35 or '51. The '58 is a variable-mu r.f. pentode which is claimed to give better results than the '35 type. Another adapter permits the use of the new PZH

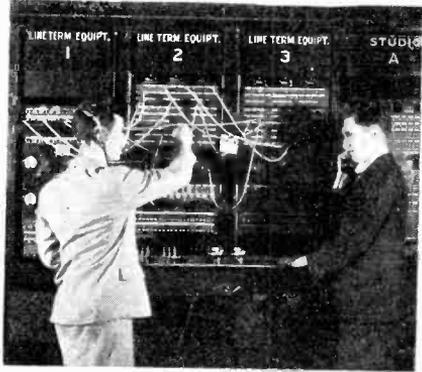
Manufacturers

tube in place of the PZ or '47 type. The PZH is claimed to give 20 per cent greater undistorted power output than the PZ. A third adapter permits the use of the '57 tube in place of an ordinary '24 detector. While the '57 tube is designed primarily for use as a biased detector, its triple grid structure and electrical characteristics also make it useful as a screen grid amplifier for low signal outputs. It is also satisfactory for short wave operation. A fourth adapter uses the new '41 type tube in place of the '38. The new '41 has an undistorted power output of 1200 milliwatts as compared with 525 for the '38. A fifth adapter is to permit the use of the new '82 full-wave mercury rectifier in place of the old-style '80 type.



Here is an electric clock that will turn your radio set on and off. Now you can let the loud speaker run and take your slumber music in bed. Manufactured by the New Haven Clock Co., New Haven, Conn., this device is a combination electric clock and radio control. It turns the radio set on and off at any predetermined time. Or it can be used for window lighting, sign lighting or any electrical operation where it is desired to make and break the current at certain times. The red flag peeping out from behind the clock is a signal which indicates that the clock has the radio set under its control. Push the flag back and the set is no longer operated by the clock. No wiring

WHAT YOU NEED TO SUCCEED IN RADIO



Courtesy of the National Broadcasting Company

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is necessary in connecting clock to set. The clock is self-starting.

When crashes, rattles, groans, buzzes, clicks and rushing sound like machine-gun fire — man-made static — try to get into your radio to spoil your favorite broadcast, you can laugh it off, says the manufacturer of the Filterizer, Tobe Deutschmann Corporation, Canton, Mass. We quote from their statement: The Tobe Filterizer Kit has been developed for radio set owners who have serious reception difficulties that are due to radio noises of unknown origin or to man-made static created by apparatus beyond the control of the broadcast listener. When the Filterizer kit is correctly installed, it should enable anyone to obtain clear, interference-free radio reception."

This matter of the elimination of noises is of so much general interest to our readers that we think it well to give them the story of the manufacturer of this device at some length.

Says the Maker:

"The fundamental principle on which the Filterizer operates is this: All radio noises are carried on wiring systems and are radiated from these wiring systems as well as from the electrical apparatus that is causing the interference. Consequently, almost every building, in which a receiver may be located, is full of radio noise. This noise may be picked up on the aerial, the lead-in, the ground wire, and even on the wiring of the radio set if the set is not completely shielded. Since the radio set is directly connected to the wiring on which noises are carried, some of the interference may reach the receiver through its power connection.

"Obviously an inside antenna, which may be carried along a wall that contains electric wiring circuits, is bound to pick up any radio noises that are present on these circuits. In the same way, the lead-in from an outdoor aerial may be located close to noise-carrying wiring circuits, with resultant transfer of radio noise to the receiver by way of this lead-in. Even the ground wire, which may parallel building wiring on its way to the water pipe or other pipe to which it is connected, may pick up radio noise.

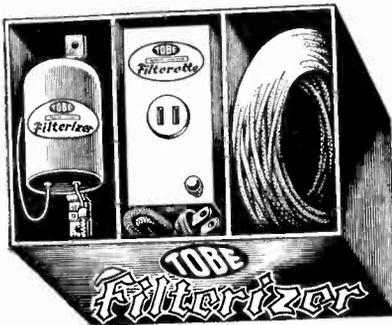
"The Filterizer avoids all of these radio noises by the simple method of filtering the power input to the receiver, providing an aerial outside the field of radio noises, and bringing the broadcast signals through a filtered lead-in to the receiver.

"Since the actual radiating power of most radio noises is extremely low, the influence of these noises seldom extends more than thirty feet from the wiring on which they are carried. This means that an aerial that is located approximately thirty feet from wiring circuits or other antenna systems should be relatively free from radio noise. Such an aerial, then, is the first part of the Filterizer installation.

"Having provided a means of collecting broadcast signals, without interference from local radio noises, it is next necessary to carry these signals to the receiver without giving them a chance to become mixed with noises that may be present on the wiring of the building in which the receiver is installed. This is accomplished by using Tobe Filterized Lead-in Wire.

"This wire consists of a flexible, insulated conductor having a layer of metallic braid outside the insulation. This metallic braid acts as a shield, preventing coupling of man-made static to the lead-in wire. In other words, the radio noises strike the metallic braid of the Filterized Lead-in and are carried to ground before they can reach the wire that is carrying the broadcast signals from the aerial to the receiver. This shielded wire is also used for making the ground connection to the receiver.

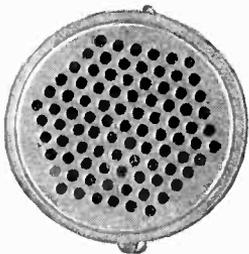
"In some of the earliest installations of shielded lead-in, the shielding tended to



by-pass some of the signal energy and thus to decrease the apparent sensitivity of the receiver. The Tobe Filterizer is entirely free from this condition as the lead-in Filterette, RF-1, prevents any loss of signal.

"After provision has been made for collecting broadcast signals and bringing them to the receiver without being affected by man-made static, it is necessary to filter the power supply line to the radio set. This is accomplished by installing Tobe Line Filterette RF-2 in series with the attachment cord of the receiver power supply. This completes the Filterizer installation.

"The Tobe Filterizer kit may be used with any type or make of receiver and may be depended upon to provide maximum freedom from local interference. The kit contains 1 Tobe Line Filterette RF-2, 1 Tobe Lead-in Filterette RF-1, and fifty-feet of Tobe Filterized Lead-in Wire."



A new powerizer Micromike for public address systems and home recording is presented by Radio Receptor Company, Inc., 106 Seventh Ave., New York City. The Micromike is a very sensitive, precision-built microphone of small size and weight which can be fastened to the lapel. A thin, flexible, twisted cord runs from mike to a connector. Between the Micromike and the amplifier a compact volume control is connected. This is called the Mikontrol. It is so small it may be held in the pocket and controlled with the hand. With fifteen feet of cord, the speaker may move about to make his delivery more forcible and natural. The same company makes a portable public address system. The equipment should be very popular with the political orators this fall.

A "B" Eliminator for automobile-



Nancy Garner, cousin of the Speaker of the House, in Musical Comedy Hits, NBC-WEAF net, Thursdays at 4 p.m., EST.

radio which has the advantage of containing a mercury-type rectifier is presented by Electronic Laboratories, Inc., 122 West New York St., Indianapolis, Ind. The Electronic B Eliminator is a vibrating type which incorporates several outstanding features. The new automatic load delay circuit completely protects the vibrator, the rectifier tube and insures long life. The mercury type rectifier naturally gives greater efficiency with a much higher degree of regulation. An automatic relay turns the unit on and off when the key is turned in the radio set. This Eliminator is supplied both as a completely assembled unit or in kit form so that the owner may assemble the unit himself thereby saving considerable money and acquiring a better knowledge of the device. The unit is about 6 by 7 by 2½ inches in size and may be installed in any convenient position in the automobile. The manufacturers claim that this Eliminator has corrected the defects which seemed to be inherent in other types of vibrating eliminators.

WITH YOUR FAVORITE ARTISTS

LANNY ROSS is a good-looking chap, six feet tall, dark gray eyes, brown hair, and unmarried. Born in Seattle, Wash., 26 years ago. His father, Douglas Ross, is well known as an actor and a producer. His mother is a talented musician, and played the piano for Pavlowa several seasons in London.

At Yale three years ago he was a track star, the holder of a national track record and a member of a championship relay team. He was an honor student, and featured soloist with the glee club. Today, although he does not compete in races, he still runs as a pastime. He is studying for a law degree at Columbia University, and in his musical activities he is devoting his time to operatic music, the German and Italian languages. Recently, he received a scholarship from the Juilliard Graduate School of Music.

When his college days were over, Lanny went to New York to seek a job in radio. He passed an audition for a broadcasting network, and began his gradual and undramatic climb up the



Lanny Ross, 26, and unmarried

Meet Them With "Betty"

ladder to fame as a national radio favorite.

Lanny lives with his family in an uptown Manhattan apartment, spending almost all his spare time at home. His hobby is study and reading.

Lanny's voice is heard with the Maxwell House programs over the NBC Red network every Monday, Wednesday and Friday, at 7:30 p.m., EST., for eastern listeners, and again at 11:15 p.m., EST., for western dial-twisters.

A Harmonizing Trio

Count the Do Re Mi girls, Columbia's latest feminine harmony team, among the youthful radio aspirants whose talent was recognized by Abe Lyman. An audition with the conductor won them a chance to appear on his programs for four consecutive weeks, and in April of this year they were signed to a contract with the CBS.

All three girls are graduates of the vaudeville and musical comedy stage. Their extensive repertory includes negro spirituals, ballads, hot numbers, and semi-classic selections. Their careers began with the first piping notes they sang in children's performances at the local schoolhouse.

Born in New York City, Evelyn and Maybelle Ross (the Do and Re) — incidentally no relation to Lanny — entered the entertainment field as pupils in the second grade when their teachers kept them after school primarily to hear them sing. Early parental objection kept them off the professional stage until their father went to Europe on business. Then, at the ages of 12 and 14, respectively, Evelyn and Maybelle got their first contract for vaudeville. On their father's return to New York, they found it necessary to secure out-of-town bookings in order to stay on the stage. After traveling on the leading circuits as a sister team, they added Ann Balthy and specialized in trio work.

Miss Balthy (the Mi) is a native of

Brooklyn. Before joining the Ross sisters, she appeared in such revues as "Blossom Time," "Three Musketeers," etc. She also has played in vaudeville and tabloid revues, traveling on the Keith and Paramount circuits throughout the country.

At present the Do Re Mi girls are heard over the CBS network each Friday, at 2:00 p.m., Saturday at 7:45 p.m., and Sunday at 8:00 p.m., EST., co-starred on the latter period with William Hall and Freddie Rich's Orchestra.

From the Oil Fields

"If fishing interferes with your business, quit your business." That's the principle which has rules the life of Ralph Kirbery, NBC's "Dream Singer," who would rather fish than eat. Fishing isn't Ralph's only hobby, though, he's an expert with the rifle or pistol and enjoys hunting almost as much as fishing.

Kirbery was born in Paterson, N. J., 32 years ago, and he still lives there. Although he had a natural interest in music as a boy, he never studied it. His singing ability he inherited from his mother who was a church choir singer.

At 18, Ralph enlisted in the army and served in the tank corps during the World War. After the armistice he went to Johns Hopkins to study medicine. About that time an oil boom developed



Do, Re and Mi

in Ranger, Texas, and Ralph hurried there to help swell that town's population. Oil drilling didn't interest him, but advertising did and he opened an agency. He also got out the first telephone directory there. But before the excitement of the oil boom died away, he sold his interest in the advertising agency upon finding that it kept him too busy to go fishing.

For the next ten years Ralph operated an automobile agency in Paterson. Later he abandoned this and became a flour salesman. But after getting on a local station, he found that the radio business and the flour business didn't mix.

He is very much the athlete in appearance. Is exactly six feet, weighs 175 pounds, and has brown hair and eyes and bronzed skin. "Sure, I like women," said Ralph, when queried on the subject. "I like them too much to play such a mean trick as to marry one of them, I'd leave her home alone while I went fishing and hunting." He likes brains in women, but also wants them beautiful and athletic, and he doesn't care to dance.

Ralph Kirbery is heard each midnight over the NBC Red network, and on



Ralph Kirbery, also eligible

Sunday evenings for Enna Jettick over the NBC Blue network.

Florida's Favorite

James Melton, tenor, is one of the notables of the air. He's a member of The Revelers, among the most famous of radio quartets, and has sung on many important programs. He's Florida's favorite entry in the nation's singing sweepstakes and is a constant source of concern to California's native sons. Three Southern colleges contributed to James' musical background. He was two years at the University of Florida, one year at the University of Georgia and one year at Vanderbilt University. He worked his way through these institutions by singing with the glee clubs and campus orchestras. In those days he played a saxophone but discarded that instrument with the passing of his college days.



James Melton of the Revelers

James has been in New York since July, 1927. He went there to continue his voice culture and land a job with "Roxy's Gang" under S. L. Rothafel. He has sung for musical pictures but sidetracked stage work to conserve his energy for radio.

You can hear the Revelers Quartet over the NBC Red network on Monday, at 8:30 p.m., EST.

Three Black Keys

It's a long step from comparative obscurity as entertainers in a "black and tan" cafe in Chester, Pa., to New York,

and its busy radio studios. But to the Three Keys it is the first step toward the realization of their individual ambitions.

Bon Bon, tenor; Slim, baritone and guitarist, and Bob, the nimble-fingered pianist, are Negro youths of humble heritage, but possessed with rare musical talents which have brought them fame, and overnight won the attention of radio listeners. None of the trio ever studied music. They know no written arrangements of their music. As Bon Bon expressed it: "We just get together and let loose." Bob, whose piano playing caused a sensation at the NBC's New York studios during his auditions, says, "I'd played the piano all my life, but not until some of my white friends insisted that I develop my style did I ever consider becoming a professional musician."

When Bob met Slim, they played together at several roadhouses near Philadelphia and Chester. They stopped the shows and dancers left the floor to crowd around them. They needed another tenor to develop their peculiar style of harmony. Bon Bon joined the act and their playing came to be the talk of Chester and Philadelphia. Bob is the oldest of the group — 25. Bon Bon flashes his white teeth and proudly smiles as he confesses he has just turned 20, while lanky Slim has just passed 19.

During the few weeks they have been in New York their life has been a constant round of work. While their unusual musical talents are natural, they spend hours daily rehearsing for their programs, which are heard at 10:30 p.m. Thursday, Friday and Saturday, and at 10:45 p.m., EST., on Sunday, over the NBC Blue network.

Florida's Other Favorite

From Main Street, Lakeland, Fla., to the bright lights of New York's Broadway, was an overnight hop for Frances Langford. Just eighteen months separated her first public appearance at a local fancy-dress ball and her stellar performance as soloist with Abe Lyman's Orchestra.

Miss Langford's mother, Annie Newbern, was a concert pianist, but Frances never learned "Chop-Sticks" on the piano. She was gifted with one of those natural voices, and as a child cultivated it

only by humming to herself. She even avoided amateur nights and social club performances which are commonly the lot of local talent. But when she appeared in the Lakeland American Legion's party idea of "A Night in Hollywood," an offer for radio followed the next morning. The director of a Tampa station happened to be present at the ball, and the next day Frances signed a 13-week contract for a commercial account.

Rudy Vallee chanced to hear her sing over the Tampa station and offered her a gueat appearance on a network program. Miss Langford traveled to New Orleans to fill the engagement. Six months later she was in New York appearing as a soloist on a local station. Next Frances gave an audition for Abe Lyman and was signed for his programs. Concurrently, Frances found time to make movie shorts, appeared in Peter Arno's musical comedy, "Here Goes the Bride," and toured metropolitan vaudeville houses.

Although she has no Spanish blood, Miss Langford bears a striking resemblance to both Lupe Valez and the Spanish dancer, Armida. Frances likes horseback riding and golf . . . receives mail regularly from a curious admirer asking to whom she sings her love songs . . . recently broke off engagment to appear in "Ballyhoo" because of winter contracts for radio.

The Heart of DX

(Continued from page 28)

referred to, we quote: "In the end you'll be responsible for many disillusioned young DXers. When they find that they cannot receive even the class A stations of New Zealand or Australia much less the absurd 2ZI, there is bound to be a huge disappointment." In observance of this responsibility to these young DXers, let us here and now state that they have about one chance in one thousand of ever hearing any station outside of North America in the broadcast band. These are the big prizes of radio and go only to the favored few. There are hundreds and thousands of DXers who have never received one of them, so if you sit up nights and don't receive 2ZI or even 2YA, remember we warned you.



The Three Keys — Slim, Bonbon and Bob

The Puzzle Corner

THE correct solution to the "G" puzzle of the four states submitted by Edward L. Walters, Roanoke, Va., in the September issue, is given below:

KQW	CKCK	WOW	
W	MARYLAND	H	
KCMC	WWSW	VONA	
ON	DE		KOA
WLW	WJSV	WBT	WPG
POF	KBPSC	NRA	<u>WGBB</u>
ERE	BD	BAC	KUOA
NAA	WWRL	OSW	CKUA
DW	WK		<u>CGPBAB</u>
WORK	WJKS	WCAL	
E	VIRGINIA	O	
XEA	WCDA	JNW	

The problem for this month is of the mathematical code type. In the above example in multiplication, seven station calls are used. Each of the letters stands for one of the ten figures. The problem is to change these letters into figures. The correct solution will appear in the November issue.

ALL SET for DX SEASON

HERE is the new season that we have been waiting for. With the new all-wave sets our readers have been buying and the new tubes, we look forward to some wonderful records this winter.

"Am all set for a big season this coming winter," announces Philip R. Nichols, P.O. Box 82, East Hartford, Conn. "Haven't got a very big log as yet, but hope to increase it materially this coming season. My "veries" total only 253 at present and my 'heard' list is at 490. Was lucky enough to win first prize last spring for farthest telephone call to KTFI in Idaho on one of their tests. Have twenty-six 2000-milers but no foreigners as yet, outside of HIX, Cuba and Mexico. I have a Philco 9-tube TRF Model 95 and would like to hear from owners of the same set as to their results." Mr. Nichols is greatly pleased with the new time-on-the-air and second column symbol information in the September issue.

"I had been using a Sonora radio, but this last year I obtained an 11-tube Philco, and just last month I added a Stewart-Warner short wave converter, which has been doing wonderful work," writes J. M. Newton, Box 330, Route 1, Hawthorne, Calif. "I have logged over 55 stations. All of these I have verified and now with the fall weather coming on I am ready for others. I am waiting for verifications from J1AA, Japan; VK3ME, Melbourne, Australia; and VK2ME, Sydney, Australia. I also have heard RV15, Khabarovsk, Siberia; VPD, Suva, Fiji; LSN, Buenos Aires; and W3XL, Bound Brook, N. J. On these last I didn't get enough of their programs to warrant sending for a verification, but hope to in the near future. I have built two towers 50 feet high and 90 feet apart with a lead-in wire about 50 feet long. I have a flat top aerial of eight wires of the 7-strand type, also a sunset cage aerial and an inside aerial around the border of the room. I use a six-foot copper rod and keep the ground wet."

Past Reports and Future Hopes

"My log is now enlarged to 442, with 207 verified, all the better ones, of course," reports Leslie G. Briscoe, 3743 Hutchison St., Montreal, Que. "DXing weather was poor here last season and so I could only report one fair catch, WRBL, 50 watts, Columbus, Ga., 1,075 miles from here. According to their honor roll, I am fourth for distance in the world, second in Canada, and the only listener in Montreal. It's a great little station. But how's this for a catch? WIEK, Atlantic Broadcasting Corp., a CBS portable used to bridge a gap of 15 miles in the pickup from Jones Beach, where the Olympic swimming trials took place. The station operated on 1542 kcys., with 50 watts. This was on a b.c. set as are all the stations in my log. Other stations I have received, outside the b.c. band, on this set are: W1XAU, W1XAV, Boston; W2XAR, W2XR, New York; W3XJ, W3XK, Silver Springs, Md. WIEK only operated one night from 11:45 to 11:55 p.m., EDST., and the following afternoon when it was used in the pick-up. I only heard the test. Could you tell me what station on 1220 kcys. has its transmitter at a place called Forest Hills?"

"The schedule of CHYC is as follows: Sunday, 10:30 a.m. to noon; 7:30 p.m. to 9 p.m., EST., church service. VE9DR, 4000 watts, 6000 kcys., 7 p.m. till midnight, EST. I would like to hear from readers of RADEX concerning reception of CFCF with a view to getting them to put on a DX program."

Uses a Converter

"Didn't do much DXing on the b.c. band this summer," reports George Nahas, 147 Seeley St., Brooklyn, N. Y. "KYA and KGHL were the only new stations, boosting my log on the b.c. band to 746 stations. In March I bought a Philco Short Wave Converter, and up to date I have verified the following stations: XAM, I2RO, FYA, CMCI, EAQ, W6EOO, GBS, LSN, LSX, VK3ME,

VK2ME, GBU, VE9BY, KEJ, GBC and El Prado. Kindly advise Harold Wagner, of Erie, Pa., the KEJ, located in Bolinas, Calif., calls 'Cocohead' every evening till 11:30 p.m., EST. Programs are rebroadcast from the NBC and CBS and sent to KGU and KGMB. Their frequency is 9010 keys. Tell W. F. Rendell, St. Johns, Nfld., the station he heard on 31.58 meters, owned by the Radio Club of Brazil, is PRDA and not PRBA. I am now hearing that station every evening about 8:30 p.m., CST., for the past three weeks."

"With my Westinghouse 8-tube receiving set I have already logged 34

capitals. Of the remaining 34 states that have radio stations at their capitals I have successfully logged 21."

"On December 25th I received a 5-tube Crosley 'Wigit' and I immediately became a DXer," says Walter Lindhardt, Jr., 145 Rockwell Ave., Long Branch, N. J. "I have received 189 stations on my Crosley and the family Atwater Kent, 7 tube. On the A.K. I have received: WRDS, East Lansing, Mich., police station on 1574, five k.w. power; W3XJ, Silver Springs television station on 1604, 50 watt power; W1XAU, Boston experimental sound station on 1550 keys. with 500 watt power; WKDU,

This is the trio that entertains you regularly over NBC from the Pennsylvania Grill in New York City. Buddy Rogers, Formerly of the movies, Jeanette Loff, vocalist, and John S. Young, master of ceremonies. NBC-WFAP, Mondays and Wednesdays at midnight, EST.



states, and confidently expect to pull in at least three more," says Walter W. Erneman, 108 Seventh Ave., Belmar, N. J. "I have been fortunate enough to bring in two states (New Hampshire and Utah) that I was unable to log other previous years, thanks to the invaluable help of RADEX. A few of my mileage prizes are as follows: Shreveport, La., 1230 miles; Oklahoma City, Okla., 1324 miles; Denver, Colo., 1628 miles; XER, Villa Acuna, Mexico, 1878 miles; Salt Lake City, Utah, 1972 miles. This year I have taken a great interest in seeing how many state capitals I could log and I am quite surprised to find that 14 have no broadcasting stations at their

Cincinnati police station on 1712, 500 watts power; KGPC, St. Louis police station on 1712, 500 watts power; WPDL, Lansing police station on 2442, 50 watts power. All verified, all on a b.c. set. I guess this keeps me even with Archie Ferrie."

"I bought a 5-tube Crosley radio at the beginning of the summer," reports John Strong, 1436 Meridan Place, N.W., Washington, D. C. "At first I thought I had made a mistake, but I didn't. I have picked up XER, XEN, CKAC, KGO, WBAP, WCCO, KOA, KWKH, XED, KJR, WFAA, XEW, CFCF, KNX and CKOK and many others east of the Mississippi, for a total of more than 150 during

a summer. Pretty good for a five-tuber. I also picked up WBOQ on 810 kcys. During the summer I read that Dr. Brinkley had sold and left XER. He may have sold it and left, but he is back again. He was talking last night. Can you identify WWX, Washington? I think it is an airport station. WJSV off the air, moving to Alexandria (from Mt. Vernon Hills), will be back on around November 1st with the Columbia network. At this time WMAL will start independent operation."

Won Prize from WTBO

"I have been DXing for about a year now," reports W. H. Lewis, 1328 Delaware St., Leavenworth, Kans. "I have on the regular broadcast band 331 stations so far. My best is 10AB, Moose Jaw. I have 290 amateur and police on short waves. Also 12 regular short-wave stations, including DI2 and DJB, Germans, also LSX, Buenos Aires. I was the winner of the cash prize offered by Station WTBO, Cumberland, Md., on August 14th. WTBO, according to a letter I have from them, are on all night every Saturday night. Although they are using only 100 watts, they have very strong signals. I am using a Midwest Superhet with a converter. Would like to correspond with other users of the Midwest."

David F. Thomas, Proctorville, Ohio, has just secured a Mercury Super Ten with which he hopes to carry his log well above the present figure which he gives as "above the 1000 mark." His two best verifications are from the Union of South Africa station on test on 309 meters and Radio Budapest on 550 kcs. Mr. Thomas tells us about a little outlaw station in his vicinity using the call WUMS which succeeded in picking up and rebroadcasting a program from KGU. He offers this as a record relay in answer to Eugene Martin's query in the May issue of this magazine.

A Seven-Story Antenna

"My set is a Philco Model 70 Baby Grand," writes Gordon Richardson, 10 Summer St., East Orange, N. J. "We (Phil and I) lay no claims to any records, but have managed to roster up about 300 stations in the U.S.A., Canada and Mexico. I recently have installed a new

thirty foot antenna, seven stories above the street. With this added feature, we hope to be able to do something this coming season, for which I am anxiously awaiting. I should like to correspond with other loyal sons of the ether waves, and I will gladly answer any letter received."

"I have a Marconi Junior, 8 tubes, and have an aerial about fifty feet in the air and about 70 feet long," says W. H. Warnicker, 766 Lipton St., Winnipeg, Man. "I am starting on another one about 150 feet long, also using the old length too, but am making them separate aeriels. If I find the longer one is too strong at times I can use the shorter one. My grounds are two iron rods about eight feet in the ground and eight feet apart. I do a lot of logging, but have never had them verified. Intend to this winter, however."

Batteries vs. A.C.

"I have a 9-tube General Electric, which has pentode tubes, tone equalizer, automatic volume control, and all other latest additions," says James Havel, 8113 Central Ave., Cleveland, Ohio. "During the winter months, I used a Freshman 5-tube battery set and got more stations on it than on my present G.E. And many of them being farther away, such as KFI and CNRC. Perhaps the cold weather has much to do with it. I use a long aerial, about 125 feet. When my G.E. was installed, the men attached the ground to a hot-water pipe. This created plenty of static, especially around WJAY. Then I changed the ground to another pipe, reducing the static considerably."

"Even if summer time is supposed to be useless as DX weather, I can get KFI and the more powerful Pacific stations every night that the weather is not unsettled. I find the summer a great help in making me get the stations close at home verified, as otherwise I don't pay any attention to them, but try to get DX. I also wonder how many DXers below the Mason-Dixon line have WEXL, 50 watts, verified. I had it verified when I was in Greensboro, North Carolina, at about 6:00 p.m., during summer months. That almost makes it

daylight reception," B. L. Ahman, 3313 Westerwald, Ave., Baltimore, Md.

Likes Monthly Calendar

"Just a line to congratulate you on your fine radio magazine," says Donald F. Logan, 17 Park Road, Truro, N. S. "A feature of it which I hope you will continue is the 'Monthly DX Calendar.' Having all the specials arranged together makes it much easier for the reader to find what specials are on any certain night. For the benefit of DXers, VCX is on daily at 7 a.m., EST. I would like to hear from any Newfoundland and European DXers."

"I've been DXing for almost three years and have over 200 stations, 100 miles or more away," writes Joseph Lang, 229 E. Kingsbridge Road, New York City. "This record is pretty bad, but I go to high school and haven't much time to try. I would like to correspond with DXers 16 years old. I have found that Canada comes in well in this locality, for I have received 17 stations in Eastern Canada."

"I think the September RADEX is fine, especially the DX calendar," says Charles C. Norton, 127 B St., Vallejo, Calif. "Last January I had a log of about 89 with three verified. Now I have a log of 145 with 113 verified. My radio is a 5-tube Echophone 1930 model S-3. My aerial is a 100-foot single wire, my ground is a copper tube 24 inches long and one inch in diameter and is filled with blue-stone and rock-salt, and wrapped with 'Gosilco' one-quarter inch apart from bottom to top."

Japan But Not Vermont

"I have just finished another DX season triumphantly by receiving my 340th verification, which was JOGK, Kumamoto, Japan," reports Harold E. Shade, 712½ Jefferson St., Waterloo, Iowa. "I have 475 stations logged. My best are KXRO, CHWK, HIX, KGMB, JOGK and WRDO. I still lack Vermont on my log. I have every edition of RADEX since 1930. I also find your RADEX map a great help."

"Did not know anything about this wonderful book until I joined the Newark News Radio Club last December," says George McDonald, 424 West 26th St., New York City, "and from

then on my catches came in so fast I could hardly keep record of them. Only DXing since November 12, 1931, to April 19, 1932, and my total catches 493 stations with 427 verified. So you can see what a wonderful help RADEX has been to me."

"I'm just letting you know that I, too, have a verification from WAIR in New Philly, Ohio," informs Glenn E. Mitchell, 1088 E. 16th Ave., Columbus, Ohio, "heard from Cambridge, however. Another outlaw, no doubt. I have a fair DX record on an odd receiver—4QG best catch. I heartily approved of your attitude toward DXers, etc., in the September issue. Enthusiastic over RADEX."

"It has been almost a year since I have written in to your DX page," comments Clarence A. Overhiser, P.O. Box 608, Hastings, Neb. "I have logged within a year's time 299 stations with 62 verifications and I am pleased to say that RADEX has given me a lot of good help and information on dialing for new stations."

Fine Foreign List

"I just received my 'veri' from YV1BC, Caracas, of July 3rd, testing, using 5000 watts," reports Charles J. Martin, 227-11 Burgoyne Ave., Springfield, N. Y. "I have 706 stations to date and 643 verified. Some are JOCK, KGBU, 2YA, LR3, LR4, YV1BC, HIX, RUS, XEFC, VPN, CKWX."

"In about a year's time I have brought in 214 stations on my 8-tube Radiotrope," writes 14-year-old Neil Redmond, 3414 E. 102nd St., Cleveland, Ohio. "One of my best catches is KGEK, a 100-watter, in Yuma, Colo."

"I see you have taken WNBX off 1200 kcs. and deleted him and you have transferred WHBC from 1200 to 1260," points out Henry Whittaker, 1988 Plymouth Street, Philadelphia, Pa. "If you will check up on these stations, I think you will find that WHBC is still on 1200 and WNBX is now on 1260 with 250 watts daytime only. The latter is due to test on 1260 about the middle of September." In answer to our questionnaires, WNBX advised us that he was off the air until a new license was secured from the FRC.

(Continued on page 33)

WHAT MAKES My SET Do THAT?

Mr. Dashiell
Answers SOS

Changing Power Tubes

I wish to replace the -71A tubes now in my Philco, model 20, baby grand receiver, with either -45s or -47s (pentodes) so that I can get greater power from this set. Is the change practicable?

The design of this set is such that the type -45 tube would be more suitable than the pentode style. The latter would require some rather extensive changes in design which will not be justified under the circumstances. The output impedance characteristics and the gain of the receiver are really the determining factors in making such a change.

For type -45 tubes the filaments are simply wired in series. No center tap resistor is required since the two filaments form the center which is used for the grid and plate returns. No other change is necessary, and the -45s will give somewhat more power when using 180 volts and the same bias resistor required for the two -71As. But since the speaker will not carry much more load than the -71As now supply, it will not pay to increase the plate voltage over what it now is when the -45s are used. For a midget set using a small speaker that is confined to considerable extent any great increase in power supply will create distortion due to microphonic disturbances and perhaps maladjustment due to unbalanced impedances.

Faulty Regeneration

I have a small 2-tube regenerative set which will oscillate only between 750 and 1500 kilocycles. It does not regenerate at all below 750 kcs., or on the higher waves. Why is this?

This happens in many cases where the circuits are not fully balanced. While we do not know what circuit you are using, you may feel sure this is a common trouble. The degree of regeneration or feed-back energy that is sent into the grid secondary coil or winding of the three-circuit tuner by the tickler coil is less near the 550 kilocycle end of the

dial than that fed back on the 1500 kilocycle end. This is one of the inherent faults of this type of regenerative circuit unless carefully designed and assembled.

We suggest a slight increase in the plate voltage on the detector tube and circuit including the tickler coil. Or it may be that the detector tube is worn and not functioning well as an oscillator. In a final attempt it may be necessary to add three to six turns of wire to the tickler coil so as to build up a somewhat stronger magnetic field for inducing regeneration in the secondary coil at lower frequencies.

Choking and Blurring

I have a Super-Zenith receiver, model 12, No. 8, and it gives me a good deal of trouble by choking up and blurring at times when in operation. I had it sent to a serviceman several times but outside of a new transformer and filter condenser they could find no trouble, yet it still blurs and chokes. We are at a loss to locate this annoying trouble, and hope you can set us on the correct trail.

We feel that we can definitely state that the above trouble will not be found in the power transformer unit nor in the radio-frequency system of the receiver. It is highly probable that some plate-bleeder or grid-resistor in the audio system has become defective. And, also, failure of a bias-resistor will cause this trouble, but the volume of annoyance will not be so decided. Failure of any audio grid-resistor, or any open grid circuit, will develop this annoyance of blocking and blurring sounds as you describe.

We advise you to have all the plate resistors wherever they may be placed in the receiver tested thoroughly for correct resistance in ohms.

Similar trouble may also be due to a shorted bias-resistor in some negative grid circuit which will cause the tube to operate at zero grid value. This defect causes serious distortion and blurring and loss of gain in the stages. It is essential that all grid leaks and bias resistors in grid circuits be tested and replaced

at the slightest sign of suspicion. See that all grid connections either to screen-grid tube tops or sockets and prongs of other tubes are clean and electrically perfect. It also may be necessary finally to check the voltage applied to the grids of the audio tubes from the negative side of the power unit, for too much or too low voltage bias on the audio power tubes will cause your difficulty.

Short Waves on Midget

I have the R.C.A. Superette receiver which is being used with a short-wave adapter. But I am not able to bring in many stations, except that here in South America, WGY at Schenectady, N. Y., comes through.

The broadcast receiver you are using is not as powerful as larger sets, and not so well adapted for long distance reception with a converter or adapter.

The set has one radio frequency tube, one i.f. tube, first and second detectors, oscillator, and two power tubes in push-pull. These are all you have with a converter, and the audio end is all you have with an adapter. The nine to 11-tube sets are more sensitive and better adapted for use with short waves. We feel that you are doing nicely with this combination, but if you get WGY you should also be hearing comparable stations elsewhere.

If you are using the old Radiola short-wave adapter we suggest that you test and inspect the 3,000 ohm antenna resistor, and replace it if even slightly defective. The tubes (-24, and two -27s) must be checked. Use a good ground and aerial.

Changing Types of Tubes

If I try some different types of tubes, such as those in the -30 series, or the 200 detector and the -71A amplifiers, in my Pilot Wasp set, do you think I will get better results and more power?

When this set was designed by the makers it was intended to operate with tubes having certain characteristics. Such things as impedance, etc., must be considered, and we feel the set will work best with recommended tubes.

To use a 200 detector and -71A amplifier would necessitate changes in wiring and potential supply. The -30 series of tubes may be used, but you will

not get as much power, for these tubes are used on sets taking 2 volts. Place a -32 in the r.f. socket, -30s in the detector and first audio, and a -31 in the second audio socket. Use a 2-volt Air Cell battery in place of the 6 volts now needed.

Short Wave Volume Control

The short wave adapter described in the January, 1931, issue of RADEX, has been built. But I cannot get the Tonatrol. I am using a 30-ohm rheostat instead for the volume control, and cannot get good results, the tuning is so very critical, and loud whistles are heard. Can you assist me in overcoming the trouble?

Your trouble is due to not having the proper volume control in the antenna circuit as shown in the circuit diagram in RADEX. You have stated that a 30-ohm rheostat is being used, but this is practically a dead short circuit between the aerial and the ground, and almost effectively prevents any signals from passing through the coil and circuit of the adapter. That little bit which does get through is so weak that the adapter tunes too critical and will tend to howl or whistle with regeneration noises.

The device recommended was the Electrad Tonatrol, but if you are unable to procure one, you may use any 25,000 ohm *non-inductive* variable resistance. The kind made of a sheet of high-resistance material with a contact arm swinging over the surface is best. Do not use a wire-wound unit as this introduces objectionable inductance and resonance in the circuit.

You might try removing one or two of the rotor plates from the oscillator or regenerative condenser to reduce some of the critical operation and tend to stop the sharp whistling noises.

Electrolytic Condenser Trouble

I built an a.c. receiver with power unit and 7 tubes, but the electrolytic condensers make peculiar sputtering and frying sounds. Why is this, and need I get new condensers or have these repaired?

There are three causes of faulty action in electrolytic condensers; overloading, reversed polarity, or failure to develop proper formation. Excess voltage will almost always cause frying noises in these condensers, and the remedy is obviously to reduce the voltage at once.

Any electrolytic condenser will carry heavy currents if its polarity is reversed. Your meter reading seems to indicate this. The condenser will not then function properly. The can or container should be connected to the negative power supply lead, and the isolated lug or lugs to the positive side of the circuit.

Electrolytic condensers require a formation period of 10 or more minutes before they are ready for continuous use. Sputtering or frying noises will be heard, but they should soon cease provided all the connections have been properly made previously.

An Old Style Choke Coil

I have a Grimes Inverse Duplex set with a bad choke coil. I have tried to have a new one wound but no one seems able to say what its value is. Can you tell me?

Only one thing gets wrong with a choke coil of the radio-frequency type. A wire becomes broken, and if unwound carefully the break can be soldered and the wire then rewound ready for use again. The break occurs when too much current is applied in that particular circuit. We suggest you get a new one having a value of 75 millihenries. Perhaps the nearest you can come to it in the radio supply houses will be one of 85 millihenries, which will suffice.

Using the Headphone Adapter

The I.C.A. headphone adapter which I recently purchased does not work so well on my Philco 112 receiver. The automatic volume control brings in some stations, but I can get more on the loud speaker. It seems to me that the headphones should pick up more distance than the speaker.

This adapter connects to the grid input circuit of the power tube and, therefore, the high gain in power which operates the loud speaker is lost in the telephones. By turning up your volume control you get distant stations because you give the grid input more power which is detected by the headphones. But there is a greater flow of energy passing through the plates of the tubes and into the loud speaker, and hence you get more stations on the speaker. The I.C.A. arrangement is the best scheme that can be worked out for the simple connection of headphones to any a.c. set. But, since headphones can use a limited amount of power without

being burned out, they must be connected to lower voltages than exist in the loud speaker and plate circuits of the audio power tubes.

Power Unit Condensers

I have a Knapp "A" eliminator, but I think the condensers require replacing. Is it possible for me to use the electrolytic type instead of the ones now in the unit, and, if so, what chemicals are necessary?

Before you replace these condensers they should be tested, for it is seldom that the trouble lies in all three at the same time. It does not matter whether electrolytic or standard types are used to replace the three Elkons now in use, except that you must obtain equal capacities and sizes. The dry electrolytics are more expensive, and will not give you any decided advantages. They are dry and sealed, and it will not be necessary to use any chemicals in them. But they must be connected correctly and given some time to become "seasoned." We advise you also — first — to check over the coils — transformer and chokes — and the dry rectifier unit on the front of the case, for frequently this needs replacing.

Microphone Amplifier for Speaker

How can I connect a microphone to two tubes for power amplification so a loud speaker can be operated?

We presume the microphone is a single button type which is commonly used in the home. You will need two audio type transformers — one of high ratio and one about 4 to 1 ratio; one 201A tube; one -71A tube; sockets for each; three dry cells; three 45-volt B batteries; one 22½-volt C battery; and a 6-volt filament battery.

Connect the microphone to the primary of the high ratio transformer with the dry cells in series. Run the G end of the secondary to the grid of the -01A tube; the plate of that tube to primary of second transformer; the G of the secondary to the grid of the -71A tube; the plate of that tube to the speaker and 135 volts B battery.

Connect the two tube filaments in parallel and then to the 6-volt source through a small rheostat for volume control. Connect -A to the F of the

(Continued on page 34)

RADIO DX AS A HOBBY

A Talk With Beginners

(Note — Station WGAR, Cleveland, recently gave a series of programs called the "WGAR DX Club." The first talk, designed particularly for beginners, was given by the Editor of RADEX. It is reproduced herewith.)

HAPPY is the man or woman who has a hobby to ride for it brings back many fold in pleasure and satisfaction, the interest and enthusiasm he puts into it. Many of these hobbies take the form of collecting — butterflies or postage stamps or old coins or souvenir spoons. In that radio set of your lies possibilities for a most fascinating hobby — that of collecting the human voice from all over North America or even the world. This hobby is known as DXing and there are some hundred thousand DXers in this country — men and women and boys and girls. Some of the men are executives of big businesses by day but at night they are fervid DXers. There are a number of big DX clubs throughout the United States and Canada and these have their ranks or degrees which they award to their members according to their scores. Many a big business man brags of his total log as other men do of their golf scores. They find DXing a tremendously interesting game.

Technical Knowledge Unnecessary

The DXer is not necessarily interested in the technique of radio. He may not, in fact, know the difference between an audio frequency transformer and a plate resistor. He is interested only in how many stations he can log, and picking up a distant hundred-watter gives him the same kick a golfer gets out of a birdie or eagle. He takes as much pride in a verification from a low-powered West Coaster or Cuban as others may in a grand slam.

It is of this game of DX that I am going to speak to you, of the records other men and women have made, of their development of skill in tuning a

radio set, of their patience as great as that of any fisherman. Among my listeners are undoubtedly many who are already proficient DXers with very creditable records but, on the other hand, there are probably many who are yet to know the thrills of DXing.

DX is the code or symbol for long distance and it has come to signify the art of tuning in distant stations on the radio. While DXing requires no technical knowledge of radio, there are some fundamental principles which one must understand in order that he may know just what he is doing.

Frequencies and Wavelengths

In the United States, the Federal Radio Commission assigns to each broadcasting station a certain frequency. This means that the station operator must adjust his apparatus to send out electrical vibrations at so many hundred thousand per second and he is not allowed to deviate more than 50 vibrations per second one way or the other. This frequency of vibration is known as a channel. In the vibration scale allotted to broadcasting — the broadcast band — there are 96 channels running from 550 kilocycles to 1500 kilocycles inclusive.

The channels are spaced ten kilocycles apart as radio engineers have found this separation necessary to prevent cross-talk in our present-day sets. Some Canadian and Mexican stations have chosen frequencies midway between our channels. These are known as split frequencies. In the early days of radio broadcasting, the difference between stations was designated in wave-lengths measured in meters, a procedure carried over from the practice among code stations. The term wave-length is no longer used in broadcasting, frequencies counted in kilocycles having entirely replaced it, but it is well to understand both terms.

One complete vibration is a cycle. A kilocycle is a thousand vibrations. Wave-length is the distance between one vibration and the next. Let me illustrate this: If you were to drop a handful of pebbles into the water, one at a time, a series of

rings or waves would be set up on the surface of the water. The faster you dropped the pebbles, that is the greater the frequency the shorter would be the distance from the crest of one wave to that of the next. In other words, the faster or higher the frequency, the lesser or lower the wave-length. Contrariwise the slower or lower the frequency, the greater or higher the wave-length.

Radio waves move with the speed of light — approximately three hundred million meters a second — some 186,300 miles. If we divide the speed of three hundred millions by the number of cycles of any station, we get its wave-length or if we divide the speed by the wave-length we get the frequency.

Marking the Dials

When meters were used as a term of measurement, radio manufacturers marked their dials from zero to 100 in the same progression. Today however, using kilocycles which have just the opposite progression from meters we find that the numbers on most of our dials progress opposite to the frequencies. That is, a station on a low frequency comes in at a high number on the dial and a station with a high frequency comes in on the low end. This is quite confusing and it is a mystery why our radio manufacturers who have been so progressive in other ways still give us the old wave-length dial. We now have to go through a sort of reverse arithmetic in reasoning out the location of a station on our dials. Thus we have to say to ourselves, if WLW which is on 700 kcs. comes in at 73 on our particular dial, then KFAB which is on 770 kcs. instead of coming in about 79 where it should, comes in about 67. Perhaps our radio manufacturers will wake up one of these days and give us a 1932 dial instead of one of 1922. Already a few are doing so.

A number of manufacturers are now marking their dials in frequencies and this is of course most convenient when it can be done accurately but very few seem to be able to calibrate their dials so stations will come in exactly at the proper point. Too often stations on 1400 kcs., for instance, will come in about 1380 and stations on 560 will come in at 580. Such a difference is most provoking.

Far better to mark the dials from zero to 100 than to give us merely an approximate marking in kilocycles.

As we have seen, the waves leave the transmitter at certain frequencies of vibration per second. These waves travel through the air and earth and when they pass the aerial we have erected on our roof or in our back yard, they set up within that aerial a tiny current which passes through our radio set and into our ground. In each set is a series of plates called the condenser which are rotated by the dial. These plates have the power of tuning our set to particular vibrations just as the musician tunes a violin to a certain tone by tightening or loosening the string. As we turn our dial we tune our set to any desired rate of vibration and we then pick up the station broadcasting at that rate if its signals are pronounced enough for us to hear. There is every probability that the signals of every broadcasting station within hundreds and even thousands of miles are right there in our room and if our set be sensitive enough, we can pick them up and amplify them and change them into air waves in the loud speaker and then we hear them.

Plenty of Stations

At the beginning of this year, three were in the United States, exactly 608 licensed broadcasting stations. Canada added 76 more. Mexico had 45, Cuba 54, and the other North American countries contributed another dozen with a grand total for this continent of nearly 800 stations. In addition to these, a number of the Japanese, Australian and New Zealand stations in our broadcast band, are picked up with considerable frequency particularly on our West Coast. The European stations are less seldom received. So all in all, it is obvious that our DXer has ample fields in which to pursue his hobby.

If your dial is marked in kilocycles, the stations will come in according to their rated frequencies in some approximate relation to the marks on your dial. If your dial is marked numerically from zero to 100, the stations on 1500 kcs. will come in at the lower end of your dial somewhere near zero. As already stated, a few manufacturers are now marking

their dials properly so that the lower frequencies will come in at the zero end but the big majority still mark them in the opposite progression. As there are 96 frequencies or channels in the broadcast band and 100 points on your dial, theoretically a different channel should come in at every point, but this is very seldom the case, the channels usually coming bunched and overlapping at some parts of the dial while at the opposite end, channels may be several marks apart.

At the opposite — the 100 end of your dial — the stations on 550 kcs. will be heard. There is now a new station, CKOK in Windsor, Ont., which has adopted 540 kcs. for its frequency. This station comes into Cleveland with much strength, almost like a local. It will come in at the extreme upper end of your dial. Some sets may fail to bring it in at all for this reason: While condensers are designed to bring in the full broadcast band of 96 channels, some of them "run off the dial" at one end or the other and sometimes at both ends — a very difficult fault to remedy.

Setting a Mark

DXers set various marks at which to shoot. Some try to complete a roster of the states and provinces, tuning in at least one station in every state. Others try to bring in all the 96 (now 97) channels. Others are interested only in their grand total and marvelous records have been made. Ripley, in his "Believe It or Not" recently printed the picture of a Californian who had, he said, tuned in a total of 1225 stations from 65 countries. Of course this is an astounding record and none of us may ever equal it.

No station should be logged, that is marked in your book to indicate that it has been received, unless the call letters have been clearly heard beyond any reasonable doubt. To assume that you heard a certain station because you caught a program on that channel, is like conceding yourself a hole in golf or cheating at solitaire.

Most broadcasting stations are glad to verify reception upon receipt of postage. You write them, giving the time heard (preferably according to the time standard in the station's own



Bewitching Frances Langford, contralto, with Abe Lyman, CBS-WABS Tuesdays and Thursdays at 8:15 p.m., EST.

zone), the titles of musical selections or talks, the statement of the announcer, and any other information that will enable the station to know definitely that it was their program you heard. Stations as a rule, will not verify chain programs because these are a matter of common knowledge and do not provide the necessary proof of actual reception. Return postage should always be sent. In Cuba, Mexico and Canada this is three cents the same as this country. For return postage from other foreign countries International Reply Coupons may be purchased at any postoffice which are good for the return of one first class letter from any country in the Postal Union.

Some stations issue souvenir stamps to those proving reception of their programs. For these they usually charge ten cents each. They contain the call letters of the station and DXers mount these stamps in books and save them exactly as postage stamp collectors do.

If you have been using your radio set

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More for DX Calendar

TOO late for inclusion in the October DX Calendar which, being on the cover, has already gone to press, comes the following information: From Daniel C. Looby, 5248 Oakland Street, Philadelphia, comes this list of stations which, he states, will broadcast special DX programs Saturday night, October 1st, or rather Sunday morning:

WTOC Savannah, Ga., 2-3 a.m., EST.
CHGS Summerville, P.E.I., 3-4 a.m., AST.

CHWC Regina, Sask., 1-2 a.m., MST.
KSCJ Sioux City, Ia., 2-3 a.m., CST.
WRBX Roanoke, Va., 3-4 a.m., EST.
KFBI Abilene, Kans., 3-4 a.m., CST.
WTAW College Station, Tex., 3-4 a.m., CST.

KVOR Colorado Spgs., 2-3 a.m., MST.

From Ralph H. Schiller, 4 Vincent St., Hawthorne, N. J., "All readers of RADEX are invited to tune in on the 'United States on the Air' DX Series for the Transcontinental DX Club, of Hawthorne, N. J., on October 15th. The time is from midnight to 6 a.m., EST. Stations in 48 states have been invited to join and it is assured that a great many of them will oblige. Many of these have had few, if any, DX broadcasts and it is hoped that the DXers will have success in tuning them in for the purpose of verification." Mr. Schiller

lists the following stations as among those expected to broadcast: Wkzo, Wdel, Wjbi, Koh, Kggm, Kfxi, Kpcb, Kggf, Kwjj, Wabi, Wtjs, Wtbo, Kuoa, Kdlr, Kfdy, Kgdg, Wbbz, Wbfc, Wjbo, Wnbf, Walr, Wmaz, Wwsu, Wgfk, Wqbc, Wmbr, Wilm, Wfdv, Kgff, Kvoa, Wsjs, Kono, Kgiw, Wrol, Kfpm, Wkbc, Wmal, Kark, Wlbi, Kghl, Wcaz, Kob, Whby, Wcaz, Wcat, Kfvs, Kdfn, Kgkl, Klo, Koin, Wobu.

Charles C. Norton, 127 B Street, Vallejo, Calif., also of the Transcontinental Club, adds to this: "All DXers wishing valuable tips on DX can tune in KPCB on Monday morning, October 3rd from 1:00 to 4:00 a.m., PST."

And here is a list of special frequency checks which will provide excellent opportunity for DX. Time is given in PST. Try for the first group on the morning of Saturday, October 1st:

1:00-1:15	KPJM	Prescott, Arizona
1:15-1:30	KXO	El Centro, Calif.
1:30-1:45	KGIX	Las Vegas, Nevada
1:45-2:00	KCRJ	Jerome, Ariz.
2:00-2:15	KGAR	Tucson, Arizona
2:15-2:30	KUMA	Yuma, Arizona
2:30-2:45	KGU	Honolulu, Hawaii
2:45-3:00	KGMB	Honolulu, Hawaii
3:00-3:15	KERN	Bakersfield, Calif.

The following group will be checked on Saturday morning, October 17th:

1:00-1:10	KPJM	Prescott, Arizona
1:10-1:20	KGIX	Las Vegas, Nevada
1:20-1:30	KCRJ	Jerome, Arizona
1:30-1:40	KERN	Bakersfield, Calif.
1:40-2:00	KGMB	Honolulu, Hawaii
2:00-2:20	KGU	Honolulu, Hawaii
2:20-2:30	KUMA	Yuma, Arizona

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| <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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OVER the EDITOR'S DESK

GOODBY for another year to the old nuisance, Daylight Saving Time. Of course it is mighty nice for the individual to have an extra hour of daylight for leisure time (although lately there has been too much leisure time) but what havoc it does play with radio. When a station gives it time we never know just what time his time is. And what a shake-up in programs comes with the return to standard time. If this issue of "the old reliable" is a day or two late, it will be because we held our presses to get the programs in EST rather than in EDST.

They Do It Better

How much simpler the Continental method of reckoning time than our confusin "a.m." and "p.m." and yet we wonder if this magazine would dare to use it. How it would simplify matters, for instance, if in the case of KRLD's time on the air for Mondays, we could say 6-7:15; 7:45-9; 10-11; 12:30-16:30; 17:30-18:30; 19-20:45; 21:45-23. Instead of this we must use a dozen or more "m's," "am's" and "pm's." On the Continent noon is 12 and midnight is 24, but here we have to say "12 Noon" and "12 midnight." We can't even use 12 n. and 12 m. for 12 m. really means noon and 12 n. might be 12 night. Yet so averse is the average person to change that we fear if we were to adopt the simple and understandable Continental system, thousands of our readers would object.

Too bad the whole world cannot have the same methods of reckoning. Perhaps this will be one of the big benefits Radio will bring to humanity. We ought not only to reckon our time in a uniform way but our money and all other measurements likewise. And what a Godsend it would be if we could only adopt a single language.

The World Language

We often wonder how many of our readers would like to learn Esperanto. This is the made-to-order world language. It is being widely used. Thousands of books have been reprinted in it and there

The Monthly Round Table

are many magazines and newspapers published in this synthetic language. It is extremely simple. It is said that all the rules can be printed on a postcard and there are no exceptions. Esperanto is very easily translated as it takes its roots from those common to many other languages. As a result many words can be instantly comprehended by those using other languages. With Esperanto it would be easy to correspond with radio listeners in other countries and we have no doubt that letters to foreign stations written in Esperanto would receive replies more promptly than those written in English. We do not refer, of course, to English-speaking stations. The Esperanto language could be presented to our readers in short and simple lessons and we would be glad to undertake this task if we felt that enough of our readers would be interested.

Those September Improvements

The improvements in the September issue of "the radio fan's own magazine" brought many comments. We can find space for but a few of them.

We can't forbear making a couple of quotations from a recent letter from an old friend, C. M. Falconer of Baltimore: "I congratulate you and compliment you upon the September number. You have, within your limit of eighty pages, put a tremendous amount of diversified information. I don't see how you have any competition at all, for even as far back as two years ago, there was nothing comparable to RADEX in the completeness and reliability of its listings. . . . I particularly compliment you on the article entitled 'Believe It or Not.' This is the best presentation of the spirit of fair play that I have ever seen in print."

"I have received the new leatherette cover, which is beautiful, and the new Radio Map of the World with Time Converter, and please allow me to say that the latter is something remarkable and

which should be of a world of use to any and all radio users," writes Paris C. Brown, Union Indemnity Bldg., New Orleans, La.

"I think your radio map and time converter is one of the finest things I have ever seen," writes Philip Cass, 40 North Fifth St., Philadelphia, Pa.

The Delinquent Stations

A number of our readers are calling our attention to some of the stations marked "z" which have verified their reception and they believe should be marked "a" instead. The z does not mean that these stations do not verify, but only that they failed to reply to two different requests for information. We hope to be able to secure official information from most of the missing stations soon and dislike to make changes based upon the experience of any one reader. We would like the information given in RADEX to be the authentic and official statement of the station concerned. Stations which fail to answer prepaid-postage requests from this magazine, cannot be very diligent in replying to our readers' reports of reception.

Many have suggested that we get out a supply of verification blanks which we can furnish to our readers at a reasonable price to which radio stations might be expected to give better attention than to letters which too often fail to contain all the information the station desires. We would be glad to hear from our readers in regard to this matter. We would welcome suggested blanks and comments as to whether letter and envelope would be preferred to a reply postcard.

A Sailor Wants Help

Here is an inquiry we will have to refer to our readers as we have had no experience whatever with receivers using direct current. Undoubtedly some of our readers can give us the information that will assist Mr. Sesto in choosing a new set. The inquiry is from Emil Sesto, S.S. E. M. Clark, in harbor at New York. "I'd appreciate it very much if you would let me know what, in your opinion, is the best d.c. set on the market right now. I am referring to those small, light, cheap portable sets, up to eight tubes. You see, I am a seafaring

man of the merchant marine and within the past four years I've owned several small all-electric d.c. sets but none of them gave satisfactory results. I've seen expensive sets of this type that could not pick up New York 500 miles out at sea. Right now I have an 8-tube . . . which I bought last June, a year ago, brand new, for \$80.00. At that time it was supposed to be the best buy in the d.c. field. It turned out to be the worst set I ever had or had seen on any ship that I've been on. It is good only for local, although I've spent at least \$25.00 for tubes and service men and the set hasn't improved a bit. I trust that you will help me out to the best of your knowledge by naming a set suitable for ships which must be long distance."

New Sets in November

Mr. Dashiell plans to attend the coming radio show at New York and will have an article in the November issue of this publication, telling us just what he finds that is new and interesting. He will pay particular attention to the direct current sets for the information of Mr. Sesto and the many others who do not have access to a.c. supply.

"I've been waiting for two months for this magazine of yours and was mighty well pleased to see all the new changes in the book," comments Russell M. Ballard, Rt. 3, Visalia, Calif. "The time idea is a very good one, as it will give everyone a change, and draw less criticism than any other way, as that of giving the times for every day in the week might be in error where this will be more up-to-date.

"KMJ has not changed waves yet but should do so any time now. I received KSEI very loud and clear for the first time August 30. They recently changed waves. I've been after them for two years now. KGKX in their new location should come in and I am going right out and get them."

When They Change Calls

"Recently I have been having quite a heated argument with one of your contributors, Mr. S. F. Owens, of Glenside, Pa., regarding the rather important matter of counting stations," advises Carleton Lord, 137 No. Highland Ave., Akron, Ohio. "He claims that when a station changes its call letters the new

call constitutes a new station for his log. I claim that unless the transmitter is actually moved to a new point the new call should not be counted. If the same call is used at a new location that, too, would constitute a new station on the log. He claims that 'everybody' is following his method and I think that most of the radio clubs fall in with my idea. Consequently, I'd be much obliged if you would bring this to the attention of your readers so that they may express their opinions. I remember an editorial statement sometime ago on the subject but, for the life of me, cannot locate it."

We agree with Mr. Lord. The log ought to be a measurement of results. Changing call letters in no way changes the station. We might as well count any station the second time we picked it up as to count one that had merely changed its call. An old station in a new location is a legitimate count regardless of the call letters, but just changing call is no different than changing announcers.

A Couple of DX Tips

"KFYR of Bismarck, N. D., is on the air every Monday night from 12 to 2 a.m. with a DX program," reminds Harvey Kees, Beulah, No. Dak. Also, 10AB of Moose Jaw, Sask., will be on the air with DX tests in October. Here is something that might help a lot of your readers on the selectivity question. A few days ago I placed a sheet of aluminum under the chassis of my radio and improved the selectivity of the set very much. Before this I was never able to separate WNAX, Yankton, on 570 kcys. from KFYR, Bismarck, on 550, but now I can do so. I believe that if I could complete shield all coils, condensers, etc., I would be able to get perfect 10 key. selectivity. Users of the Scott all-wave receiver often claim 10 key. on local stations, and I believe one reason for this is that on this set almost all the parts are shielded."

"You might be interested to know the results that I get now from changing my Majestic Model 52 super-het over from 245 power tubes to the new pentode tube (247)," suggests Russell M. Ballard, 409 Watson Ave., Visalia, Calif. "My radio can now be heard between three and four blocks away and there is no distortion from high volume. It is very



If you aren't listening to "Meyer the Buyer" Thursdays, 8:30 p.m., EST., over CBS, you are missing a good one. This is Ethelyn Holt, the "steno."

clear and unmuffled even on KFI, California's 50,000 watt station. KFI had been on the air 3,769 consecutive nights of broadcasting last night. I have had Cleveland and Pittsburgh lately, a strange occurrence for summer reception, coming in very clear and loud."

"Do you know anything about a station on 690 kcys. that interferes with CFRB (not being NAA)?" asks Guy B. Welsh, 114 Brown St., Reynoldsville, Pa. "Have heard it several times around 8 and 9 p.m., EST. What stations might interfere with WLW, WOR during different periods of the day?" Perhaps some one in Mr. Welsh's vicinity can answer.

"Would like your advice as to improving reception on my set," says C. H. Long, 1116 Denver St., Dalhart, Texas. "I have a 1928 Sarber 7-tube. I like the tone better than any I have heard. Could I use any of the new tubes or do anything to improve reception? My set uses the following tubes: one '80, one '71, four '26, one '27.

In this issue will be found not only an

article by Mr. Dashiell describing the new tubes, but another describing the adapters which have been brought out recently for using them in lieu of the older types.

"Could you tell me what station I heard on the morning of July 4th at about 12:30 a.m., EST., broadcasting between 600 and 610 kcys.?" asks Fred O. Erskine, Rainelle, W. Va. "They were broadcasting 'The Peanut Vendor' and other American popular recordings and the announcement was in Spanish." Respectfully referred to our readers.

"I should like you to explain the Kolster Electrostatic. It is claimed to suppress man-made static. Can it be used on various radios, and where may it be purchased?" inquires Jesse Lausman, 717 S. Shelby St., Louisville, Ky.

Who has used this device and with what results? In another article in this issue is a description of the "Tobe" method of eliminating man-made static.

Answers to Inquiries

"In answer to Harold Wagner's inquiry in regard to the station he heard calling 'Kokohead,'" informs Charles A. Perdicaro, Brooklyn, N.Y., "the call letters are KEJ, operates on 33.27 meters, and is located at Bolinas, Calif. KEJ acts as a relay station for both CBS and NBC programs, which are intended for the audiences of both chains in Hawaii. Hours are irregular. The call letters of that Rio de Janeiro station on 31.58 meters picked up by W. F. Rendell, of St. Johns, are PRDA. Mr. T. Colegrove is right in his write-up in the September issue. Many new s.w. fans will be disappointed because, though you have a large list of stations printed, most of them broadcast a few hours a day, some once a week, etc. Atmospheric conditions are also to be considered, queer quirks on s.w. that may let you hear everything one day and nothing the next. But as Mr. Colgrove says, there are time when you do get a thrill."

"In looking through the Midsummer RADEX I note that I had forgotten to write concerning Mrs. Robert McGrath's (Detroit) inquiry of DIQ, Nauen Germany," postcards Clement Van Velsor, 1033 Sanford Ave., Irvington, N. J. "DIQ is on 29.26 meters. The nearest to

13300 kcys. was reported by a listener who heard DFC on 23.1 meters calling Madrid. DJB, Zeesen, is on 19.73 meters and very fine. DGK is on 44.91 meters, while DJA (Zeesen) on 31.38 meters is best now in the late afternoons (5 to 7:30 EDST. closing time). It is unusually loud of late. DGU is on 31.08 meters. DIQ has been on 29.15 meters heretofore. The best waves are 19.73, 29.15 and 31.38 meters. I have DIQ verified by letter."

"Tell Alden P. Bowers that Tuinuco, Cuba, is located about 80 degrees west longitude and 22 degrees north latitude, just about the middle of Cuba." This informant calls himself "Mr. A. D. Exer, of Norfolk, Va."

Makes "Believe It or Not"

Well, another of our readers enters the DX Hall of Fame. In his "Believe It or Not" cartoon of August 24th, Ripley had a picture of George Lilley and his two-tube set with which our readers are familiar. And if you think it is easy to slip anything over on "Rip" just try and do it.

Radio Station KOIL is trying out a new stunt. It sends its announcer-reporter to the scene of a big news story which is too far to permit direct pick-up or to which lines have not been run. The announcer dictates an on-the-spot account into a dictaphone. The cylinder record is then rushed to the broadcasting station and the radio audience gets it direct from the record.

Adjoining the WHP transmitter is a wooded knoll which is the home of many birds. Listeners at breakfast recently heard from the station the cheery song of these birds from the sylvan bower. Two microphones were used, one deep in the woods and the second at the edge, where a bird expert described the "actors" as they took turns at the mike.

"Thompkins Corners" is going on the stage. George Frame Brown, author of the radio skits, has written a three-act play under the same title for presentation by the original NBC cast in a transcontinental tour which will start at Philadelphia on September 26.

CBS reports that three-cent postage has had no effect on radio enthusiasts, the first month's mail under the new

(Continued on page 33)

VERIFICATIONS the HEART of DX

WE have received so many interesting letters from our readers, both pro and con, regarding this matter of erratic and hard-to-believe reception, that we must give it this further space in this magazine. From Henry Whittaker, 1988 Plymouth St., Philadelphia, Pa., comes this comment: "I note that you are now relegating the extraordinary claims of DX reception to a section entitled 'Believe It or Not.' Undoubtedly some of the reports you receive belong under that title and I hope your critics will be satisfied now. I agree with you that a verified station is DX news and that taking the attitude that verifications do not verify, will do DX no good. May I add that I enjoyed reading your article 'Do Verifications Really Verify?' They do! Every DXer receives replies from stations similar to the following: 'Sorry, but it wasn't our station you heard as we were not broadcasting at the time you mention,' or 'We thank you for your report on our DX program but before we can send you a definite verification, it will be necessary for you to name three selections which you heard together with the time you heard each number as given by our announcer.' A verification finally received from such a station is doubly prized."

Three Times and Never Again

In the article in the September issue we said, "Probably every DXer in the country has at some time or other brought in a certain station which he had never before and has not since been able to get." An example of this is pointed out by "Miss C.A.B." of Oak Park, Ill., who says: "I agree about verifications. I tuned in WDZ, Tuscola, Ill., three different afternoons in May and wrote for verification. They were delighted as their friends in Oak Park had never been able to tune in WDZ. But — I have never tuned them in since!" What explanation is possible of such erratic reception? And as long as radio performs in such an inexplicable way, who shall say what is and what is not possible in the way of reception?

Even if They Can be Forged

One of the severest critics of the Editor in the matter of DX claims wrote us recently saying: "It would be sheer folly to try to force you to stop printing such idiotic claims, but won't you please give us, the decent DXers, a chance in your magazine so that we too can have our say and tell just what DX can be expected?" Ah, we thought, here is the Moses that will lead us out of the wilderness. Here at last is a man who knows just what DX is possible and what isn't. So we sat down and wrote him and asked him to please tell us in a one-page limit just what his formula was for telling the legitimate from the illegitimate.

An Infallible Test

And here is his reply: "I am very sure that my ability is the equal of any and my receiver is as sensitive as any super-hetrodyne of eight tubes. Therefore I will state what limits I have found to exist." He then goes on to say that he has received many fifty and 100-watt Pacific Coasters and therefore they are possible. From Australia and New Zealand he has never received anything less than 1000 watts, therefore "I would put 1000 watts as the minimum for any degree of consistent DX and, under no circumstances, do I believe anything less than 250 watts from there would be heard here." The formula to which we had looked forward so expectantly boils down to this — What I have received, is possible; what I haven't received is impossible.

Blind Spots and Live Spots

The more we think of it the more convinced we are that we touched upon the secret of exceptional reception in our previous article when we said: "It would seem that, just as there are 'blind spots' in which radio reception is practically impossible, so there are locations favored of the gods in which sets may reach out to unbelievable distances." If the peculiarities of radio provide certain sections which signals do not seem to penetrate

and other districts in which reception is excellent, is it not logical that there may be still other places where reception may be extraordinary? Here, we believe, is a factor far more important than the make of receiver or even the ability of the operator. Everyone who has traveled with a receiver finds that his reception varies with the locality thus proving that it is location and not set which makes the difference.

Effect of Locality

In this connection George Nahas, 147 Seeley Street, Brooklyn, N. Y., comments: "Last week I went traveling through northern Pennsylvania. My first stop was at Milford, with a friend who has a seven-tube Philco. I tried to get the ballgame from WINS but, to my surprise, I found that the only New York station I could get was WABC and even that could just be heard. That night I tried again. WABC, WJZ and WEFW were coming in about like California stations — fading in and out and very hard to tune in. On the other hand, WOR, WLW, WGN, CKAC, XER and XEN were coming in like WABC and WOR do in Brooklyn. At 9:10 p.m., EDST., KFI came in with terrific volume. At 9:25 p.m. I went looking for WBZ on 990 and was dazed to hear the sign-off of LR4 at Buenos Aires, Argentina. Just try to figure that out — WOR is only fifty miles from Milford and yet can scarcely be heard there."

From British Columbia

From Vancouver, B. C., comes an interesting letter by C. R. Caraven, 1840 Georgia Street, East:

"I have read with interest many articles in your magazine pertaining to DX reception, and notice that they have mostly been from readers in your own country.

"RADEX, I believe, is an international Magazine, so why not give your next door neighbor a break?

"As proof for some of your 'doubting Thomases' of what can be heard on an ordinary radio receiver, I am enclosing verifications from Rome, Switzerland, and Iceland. Besides these, I have heard and verified Australia, Tasmania, New Zealand, South America, Japan, and many others. These have all been heard

on the broadcast band, and are not short-wave.

"No doubt, some of the records published may seem a little short of being miraculous, but are these doubting persons aware of what is called the heavy-side layer?

"When a signal is transmitted by a radio station it may be reflected by the heavy-side layer to the earth many miles distant from the station. In such cases it may be almost impossible to hear a station 500 miles away, while at 5,000 it may come in with fine signal strength, due to the fact that it was reflected by this layer just to that point.

"My advice to those who have not yet had the thrill of pulling in a foreign station is to keep trying; have a perfect aerial and ground system, and solder all leads. Check your tubes and see that they are right up to the mark, know the time in foreign countries, and adhere closely to RADEX for without this wonderful little book, DX would most certainly be a thing of the past."

Mr. Caraven's Verifications

From Radio-Genossenschaft in Zurich (Studio Zurich der Schweizerischen Rundspruchgesellschaft) comes the following to Mr. Caraven: "Indeed, the station which you have heard was Beromunster of Zurich, Bern and Basel."

From Ríkisutvarp Islands (Icelandic State Broadcasting Service, Reykjavik), comes this verification: "We were interested to hear from you again and to learn that this time you actually picked up our station. The time corresponds exactly and your interpretation of what you heard is quite correct. Our station gets excellent reception in many parts of Europe and has been heard as far south as Central Africa, but we have never before received a reliable report of its reception as far west as Vancouver. From North America we have received reports from places in the states of Maine and Pennsylvania and from Chicago."

The verification from 1RO printed in Italian definitely confirms the reception of that station on 444.1 meters (about 675 kilocycles).

To return to our caustic critic already
(Continued on page 11)

What the SHORT WAVES are Saying

I NOTICE that it is a custom for many of your readers to tell in RADEX what their DX results have been, so here are mine," writes Gilbert Van Vranken, Jr., 2230 N. El Molino Ave., Pasadena, Calif. "My receiver is a National SW5 with plug-in coils covering from 9 to 550 meters. Considering the amount of time put in and my poor location, the results are good, but as compared with some of the DX reports in RADEX my list is very poor. On the b.c. band I have heard only 196 stations with 52 verified. The verifications include CMC, KGU (940 keys.), XEN, WKBW, WBZA, etc. Also numerous 100-watters, 1000 miles away, in Canada and U.S. In addition to these I have heard five Japanese, one Australian, one in Montreal, and have written to VK4BH, Brisbane (1380 keys., 600 watts) for a verification.

"On the short waves I have verifications from phone stations in the following countries: one Argentina, one Japan, one Australia, one Columbia, six Canada, one England, one France, one French Indo-China, one Mexico City. Am waiting for additional verifications from the following places to which I have also sent reports: two Argentina, one Siberia, one England, two Canada, one Australia, one Alaska, one Brazil, and one Cuba. Have only spent about one year DXing and, as you can probably see, most of it has been on short waves.

Summer vs. Winter

"I have noticed that the biggest thrills in short waves come in the summer when G5SW, LSN, LSL, VK2ME and BGS come in like locals on the b.c. band. These stations are between 14 and 32 meters and are not satisfactorily received in the winter, at least by me. The higher wave lengths seem to be best in the winter, at which time RV15, Siberia (70.2 meters) and F31CD, Saigon (49 meter band) and others, come in also like locals. The latter group is not anywhere as large as the stations received in the summer. My experience so far with my National, on short

DXing in the High Frequencies

waves, is that most every real weak station is a harmonic of a b.c. station and that the farther away the station is the better it comes in. I hear lots of stations on the short waves with good loud-speaker volume five to seven thousand miles away, when only three tubes of my National SW5 are used. I would be very glad to communicate with any other DXer especially with someone who can tell me when and how to get KGMB.

Kinks in the Power Socket

"On page 24-25 of the September RADEX you tell about changing the light socket plug around for better results. I have noticed that what you said was true, but that the catch was that the same generator or generators are not used all the time and thus both groups are not necessarily grounded on the same side. Therefore the prongs have to be changed back and forth every now and then. How about it?"

"I am writing to you to say how much I appreciate the list of short-wave stations which appeared in the back of RADEX," writes Robert Trufant, 23 S. Prospect St., Oberlin, Ohio. "Since the last of March I have been both a short and a long-wave fan. At first I was somewhat disappointed in the short-wave part, but since I have had more experience in the short waves I have come to prefer it to the broadcast band. Since the first of March I have got 942 stations on the all waves. Some of my best s.w. stations are: EAQ, Madrid; NRB, Honduras; FYA and F8BZ of France; GBU, GBX and G5SW of England, as well as stations in Germany, Italy, Hawaii, Columbia, Siam, Brazil and Argentina. I would have a far larger list of countries if I were able to understand the code.

"Short wave I have found is far more changeable than long wave. One hour you cannot hear a single station outside of the U.S., while the next hour you can hear three or four different countries.

There is only one foreign station which I am certain to hear every night and that is station EAQ, Madrid, Spain. For the benefit of your readers I wish to say that EAQ will be glad to verify reception of their station and will be glad to send their station card. This station on certain nights broadcasts special programs for the people in the Canary Islands and in the United States. Most of the short-wave stations are more than glad to verify any reception of their stations.

"I think that most people after they have become used to their s.w. sets will like them fully as well as their b.c. receiver. The set I use for s.w. reception is a Philco converter used with a Philco 11-tube set.

"In regard to b.c. stations I have some fairly good ones. Some of the 100-watt stations which I have got are KICK, WLBF, WOPI, WPEN, WWSW, WJTL, WNBD, WROL, WEBR, CKMC, KMLB, WCLO, WPMR and WJW. My list of b.c. stations also includes six Mexicans and five Cubans, also three in Manitoba, one of which is no longer in existence. I do not consider that I have done so badly considering that I have been away almost all summer, and due to the fact that I go to college am only able to DX on Sundays and holidays. I would be glad to hear from anyone using a short-wave set like mine, or anyone interested in short waves."

Wants Help in Tuning

"Some weeks ago I purchased a long and short-wave Echophone Radio," writes K. P. Williamson, 1610 Sherbrooke St., West, Montreal, Que. "It is of the regulation type with the long wave circuit and dial covering the b.c. band and in addition a converter with a separate dial covering approximately 5000 to 15000 keys. In the folder which accompanied this set, the instructions given to tune the short-wave unit were that the indicator on the b.c. dial should be placed on a frequency on which no station was broadcasting. This to me seems obviously impossible as there must at one time or another, be stations broadcasting on all channels regardless of whether the set is capable of bringing them in or not.

"The second method described was

that the indicator on the short-wave dial should be placed in one position where it was thought likely that a station could be brought through and that the b.c. indicator should be moved back and forth until the short-wave station was heard. This action seems unsatisfactory, as I find that my set is prone to pick up b.c. harmonics. In my observations while tuning the short-wave converter, I have noticed that when the b.c. indicator is placed on a channel where there is a station already broadcasting, better results are obtained with the short-wave dial than if a frequency at which no sound can be heard is employed.

"I must confess that as far as short waves are concerned, I am a rank amateur and I am aware that great patience and accuracy is required in order to bring in results. I consider that I have done my utmost in this connection, but the results to date have been very disappointing."

One from Germany

Robert McGrath, 14488 Faircrest Detroit, Mich., sends us the original verification he received from the Program Committee of the German Radio Co. This verification reads as follows:

"With our thanks, we received your letter of May 3rd, this year, and confirm to you with pleasure the correctness of your report.

"You will surely be interested to know that the weekly program of the German short wave stations is broadcasted on week days at 4 o'clock, p.m., in the German and English languages from the German short wave broadcasting stations.

"The German station, Konigs-Wusterhausen (Zeesen) transmits daily until 6 o'clock p.m. on the 19.73 meter wave-length (Name-DJB), from 6 o'clock on, sending is suspended on account of technical work on the broadcast. From 8 o'clock Zeesen operates on the 31.38 meter wave length (DJA); aside from this a second broadcast is made for the sake of safety for domestic use for special artistic programs. This is either station DJQ (Konigs Wusterhaven) on the 29.155 m. wave, or DGK (Nauen) on the 44.91 meter wave, or DGV (Nauen) on the 31.088 meter wave.

"Our broadcasting stations are some two years old. At the present time they are being remodelled in order to give you better current conditions. The Zeesen broadcasting stations are devoted exclusively to the transmission of radio programs, while the Nauen broadcasting stations are given over first of all to commercial — and experimental uses.

"The capacity of DGK, DGV and DGQ is 7.2 kilowatts, that of stations DJA and DJB, 5 kilowatts.

"We should appreciate it very much if you would continue to report to us the reception results you have."

Likes the S.W. List

"That list of shortwave stations in the last RADEX was fine," writes T. J.

Johnson, Bowlegs, Okla. "However, I am not able to do much good with short wave here. I have discovered that this is a very poor location. Right in the middle of the oil fields with a lot of machinery. I can even hear the sparks of the magnetos. And then we have direct current in this location and get considerable interference from this source. My rotary converter which I have to use to furnish my set with a.c. is well shielded, grounded and filtered on the output and input and I can still hear it faintly on short waves. Most of the shortwave stations in the U.S. come in above the interference, but foreign reception (excluding Canada) has not been accomplished by me. I have not done so badly on the broadcast band, as the interference does not bother much in that portion. At the present time I have 504 stations logged and 415 verifications. I have all but three states and have heard seven foreign countries. I expect to get about 150 more this next season and I am still using my old 1930 TRF set."

"I have just purchased one of the new Bosch Vibropower radios and have received close to 100 stations already, short-wave included, thanks to your magazine," comments Wm. Kirchmann, 274 Dewey Ave., Buffalo, N. Y. "I have received a few stations, the location and call of which I am not sure. The first is W8BOZ. I would like to know where it is located. Then I received a station, the call of which sounded like W3SN or W3SM located at some 'Heights' in New Jersey. I could not distinguish the name of the heights. I would be pleased to have you or some of your readers inform me correctly as to the above stations."

Claims S.W. Record on B.C. Set

"I am writing you a few lines telling you of my short wave record," advises Charles Kneer, 94 Maplewood Terrace, Rochester, N. Y. "I have had eight short-wave stations on a b.c. set (Philco, Model 76): W1XAG, W3XK, W3XJ, W2XAR, WMP, WRDS, WPDR, WPDT. I hold the record in my city. I think I hold the record of 'Radex Listener' for short-wave stations received on b.c. sets. If anyone has more, I would be pleased if they would write me. I would like to ask you one more question. I had

station CQ1 during the early part of August and do not know its location. Will you please tell me its location?"

"Here's my shortwave DX record," says 14-year-old Melvin Botto, 62 Evelyn St., Buffalo, N. Y. "I have got about 500 short wave stations on my Baird converter since last December. This includes 400 amateurs from Halifax to California, 32 police, and 16 foreigners in France, Spain, England, Italy, Argentina, Columbia, Venezuela, Bermuda, Hawaii, and Cuba. I wonder if anyone my age can beat this record."

Another Converter Record

"Early this summer I acquired a Midwest 4-tube shortwave converter, with which I have had wonderful results. To date I have heard stations from all over the world. Some of my good catches are VK2ME, Sydney; VK3ME, Melbourne; and J1AA, Kemikawa, Japan. Every afternoon I get France, England, Italy, Germany and Spain," reports Benigno Contreras, Box 74, Marina Station, Mayaguez, Porto Rico.

"Here is a list of s.w. stations best heard in the U.S.A. at present," writes Richard Zorn, 927 East 6th St., Tucson, Ariz. "EAQ, 30.4 meters, Madrid, Spain, 6:30 p.m.-8 p.m., EST.; Pontoise, France, on 25.63 meters; I2RO, Rome Italy; LSX, Buenos Aires, Argentina; VE9GW, VE9JR, Canada; PRADO, PRBA, South America; VK2ME, VK3ME, Australia; XDA, XAM, Mexico."

Welcomes the Short Waves

"I am glad to note that you are delving into the short waves," comments Haskett H. Burton, 928 Grand Ave., St. Paul, Minn. "This, I believe, is splendid as at present there are a lot of short wave fans and their number is gradually increasing. I have a Scott all-wave receiver and certainly enjoy it."

In the list of foreign short wave stations published in the September issue of this magazine, we gave conflicting data in parenthesis followed by a question-mark. We find that various authorities vary greatly in their data on short wave stations and our readers can assist us materially by advising us promptly of data regarding frequency,

(Continued on page 33)

Radio and the Eclipse

By Karl J. Halpern

THE first total eclipse of the sun seen from the United States since the refinement of radio, found this DX astronomer all ready for the phenomenon. Prior to the eclipse, the NBC and the CBS asked listeners-in to report any changes in tone or volume noticeable during the period of totality. This may be accepted as a report on DX reception from one listener in an area of 95 per cent of totality.

At 2:30 p.m., EDST., one hour before the beginning of the eclipse, no change was noticed in reception. WBZ-A, WORK, WEEU and some of the other daytime DX stations heard daily here in Brooklyn, showed no change in volume. At 2:58 p.m., a half-hour before the opening exercises of the moon and sun, WGY boomed in for the first time in daylight in more than five months.

At 3:23 p.m., when the curtain arose, the writer took a snappy look at the beginning of the eclipse and dashed right back to the dials. With the moon already doing its work, the anticipated change did not materialize. WGY was still quite loud on the speaker. The "Big Four" and a number of other local stations were all going strong with astronomical talks. There was just one noticeable change — that was in static.

During the hour prior to 95 per cent totality, the only change was an increase in static. One or two of the DX stations were coming in louder but did not show enough change to warrant crediting the eclipse with the increase. Between 4:30 and 4:40 one of the greatest changes was noticed — WICC, WBZ, WORK completely faded out. It was very mysterious. One minute you would hear them; the next they were gone and they couldn't be brought back for about ten minutes.

During totality the static was like blanket covering the local stations. Even with both aerial and ground disconnected, the static was present. At 4:34 the din was terrific. On the ear phones reception was absolutely impossible. One

could hear only the roar of static. On the loud speaker the only station which broke through the static was WLTH, the local Brooklyn station. As the moon receded, the writer noticed that the static lessened and the stations began to roll in again. At 5:39 p.m., the conclusion of the great show, the static had almost entirely disappeared.

During the eclipse the weather was exceptionally clear aside from a heat haze. The temperature dropped three degrees. There was a rise in humidity and a decrease in atmospheric pressure.

Some Phone Problems

HOW can I wire phones into the detector of a Majestic super, Model 52?" asks Russell M. Ballard, Route 3, Visalia, Calif. "This is done on short waves but how about a b.c. set? Will this bring in stations that are too weak to actuate the audio tubes?" This matter of wiring a jack for phones into modern a.c. sets was fully described and illustrated in the September RADEX, 1931, No. 51, a few copies of which are still available.

Franklyn Hoyt, 777 William St., Bridgeport, Conn., has an 8-tube "Silver-tone" using two 247 power tubes. He has tried the phone-adaptor in the socket of the 247 tubes but, cutting down the volume one stage, reduces the power so that a powerful local station does not come in loud enough to be heard plainly. Usually the use of the adaptor in the 247 socket leaves all the volume the phones can stand without heating and all that the ears find comfortable. In some cases, however, this does reduce the volume too much. If any other readers have solved this problem with the Silvertone set, they might write Mr. Hoyt.

W. L. Moore, 244 N. Creighton St., Philadelphia, Pa., is also experiencing trouble with this same problem. He made an adaptor out of an old tube base and tried it in the socket of one 245 tube. His difficulty was that even with both 245s removed, the speaker kept on playing. When he disconnected speaker, the phones would not work. Has anyone had

a similar difficulty? If so, Mr. Moore would like to know how they solved it.

"How can I connect a pair of Frost phones to my Atwater Kent 60 (the model with four condensers behind each other in a gang)?" inquires B. L. Ahman, 3313 Westerwald Ave., Baltimore, Md. My loudspeaker has a four-plug socket.

DX as a Hobby

(Continued from page 21)

merely as a sort of automatic phonograph you have been missing one of the greatest thrills radio brings — that of distance. How many are interested in taking up this fascinating hobby? How many stations can you log with your set in one hour? In one evening? In a week or month?

The Editor's Desk

(Continued from page 26)

rate even showing a slight increase over the month before.

KOIL is getting jobs for the unemployed married men of Council Bluffs and Omaha. The first program secured work for 21 men.

So-long until November. Don't forget that the time on the air for all stations for Sundays was in the September issue. We ran an extra supply but they won't last long as subscribers are asking to have their subscriptions begin with the September issue so they will have the complete times for the week. The time for Tuesdays will be in the November edition.

With the Short Waves

(Continued from page 31)

power, owners or time on the air received by them direct from the station. We will not change our records upon hearsay, but want definite information from the stations themselves. If each of the readers of this magazine will make himself a committee of one to report such data, the short wave list in RADEX will soon become the one correct and authoritative index.

A complete list of the short wave sta-

tions in the United States and Canada will appear in the November issue of this magazine. In December we are planning to give our readers what we believe has never been given them before — an index to the world short wave stations arranged by call letters. This ought to fill a long felt need.

Another thing we would like to publish each month is "The Hundred Best Short Wave Stations of the World with their Time on the Air." The complete list will appear in almost every issue, first by frequencies and then by countries. But we want to condense this and choose the one hundred stations which are most easily tuned in. We ask our s.w. readers to help us compile this list.

All Set for DX

(Continued from page 15)

This has now been granted and we are reinstating him. WHBC gave his frequency clearly as 1260 and we thought he ought to know, although we had no record of a shift from 1200. We have written him again regarding his frequency but have not yet received a reply.

An excellent idea is that of Station WHBL, Sheboygan, Wis. They put on a special DX program every Wednesday from 11:00 p.m. to midnight. Each week the program is dedicated to listeners in different states. The October programs are as follows: October 5th, for Iowa; October 12th for Rhode Island; October 19th for North Carolina, and October 26th for North Dakota.

"I learned recently that one of Toledo's old time DXers, William Bowers, was killed in an automobile smash-up," writes Carleton Lord, 137 No. Highland Ave., Akron, Ohio. "He contributed a number of times to RADEX and I'm sure that the DXing fraternity will be sorry to learn of his passing."

October is one of the best months of the year for DX and we confidently expect to publish some good records in November. Remember we must have your letters before October 5th to make sure of getting them in the November issue. Good luck to everybody.

THE RADEX MARKET PLACE

Classified Advertising

A Department for the Use of Advertisers and Readers in bringing Used Sets and Parts, Merchandise, Books or Services to the Attention of the Public. Rate: 10 cents a word; minimum charge, \$4.00.

Ekko Verification Stamps Are Still Popular

If you are unable to obtain one from the station itself, send us your verification and dime. We will return your verification together with Ekko Stamp.

The Ekko Company, 605 W. Washington St., Chicago

The Technical Editor

(Continued from page 18)

secondary of the first transformer. Negative B battery and positive A battery connect together, and also to the positive end of the C battery. The negative C connects to the F end of the secondary of the second transformer. The open end of the primary of the high ratio transformer connects to 90 volts of B battery. A 15,000 ohm variable resistance may be shunted across the primary coil of the high ratio transformer for tone control.

The Month's Changes

OWNERS

- | | | |
|------|------|---|
| 610 | WIP | Philadelphia, Pa., to Pennsylvania Broadcasting Co. |
| 630 | KFRU | Columbia, Mo., to KFRU, Inc. |
| 890 | WMMN | Fairmont, W. Va., to A. M. Rowe, Inc. |
| 1120 | WISN | Milwaukee, Wis., to American Radio News Corp. |
| 1210 | WEBQ | Harrisburg, Ill., to Harrisburg Broadcasting Co. |
| 1240 | KTAT | Fort Worth, Texas, to KTAT Broadcast Co. |
| 1310 | KTSM | El Paso, Texas, to Tri-State Broadcasting Co., Inc. |
| | WDAH | El Paso, Texas, to Tri-State Broadcasting Co., Inc. |
| 1420 | WMBH | Joplin, Mo., to W. M. Robertson |

POWER

- | | | |
|------|------|--------------------------------|
| 570 | KMTR | Hollywood, Calif., 500 to 1000 |
| 1330 | KGB | San Diego, Calif., 500 to 1000 |
| 1440 | KXYZ | Houston, Texas, 100 to 250 |

CALLS

- | | | |
|------|------|-------------------------------------|
| 1420 | WAMC | Anniston, Ala., formerly WFDW |
| 1310 | WTRC | Elkhart, Ind., formerly WJAK |
| 1480 | KOMA | Oklahoma City, Okla., formerly KFJF |

DELETED

- | | | |
|------|------|--------------------|
| 600 | WJED | Indianapolis, Ind. |
| 1310 | KTLC | Houston, Texas |

FREQUENCY

- | | | |
|------|------|---------------------------|
| 680 | CMAF | Havana, Cuba, from 660 |
| 1440 | KXYZ | Houston, Texas, from 1420 |

NEW

- | | | |
|------|------|-------------------|
| 990 | WJEM | Tupelo, Miss. |
| 1370 | WJEB | Williamsport, Pa. |

LOCATION

- | | | |
|------|------|--|
| 1260 | WLBW | Erie, Pa., from Oil City, Pa. |
| 1310 | KGBX | Springfield, Mo., from St. Joseph, Mo. |

REINSTATED

- | | | |
|------|------|------------------|
| 1260 | WNBX | Springfield, Vt. |
|------|------|------------------|

CHAINS

1290 KDYL Salt Lake City, Utah. CBS to NBC

PERMIT TO CHANGE LOCATION

1210 WJW Mansfield, Ohio, to Akron, Ohio
1400 KLO Ogden, Utah, to Salt Lake City

Cuban Changes

As we go to press a new official list of Cuban stations comes to us with many changes. These will appear in the November issue. The principal ones are given here.

- | | |
|------|------------------------------|
| CMBD | Havana, from 965 to 1270 |
| CMBL | Havana, 1444 deleted |
| CMBL | Havana, 1444 to 1445 |
| CMBN | Havana, 1444 to 1445 |
| CMBQ | Havana, 1500 deleted |
| CMBR | Havana, 1500 to 1485 |
| CMB8 | Havana, 790 to 780 |
| CMBT | Havana, 790 deleted |
| CMBY | Havana, 1235 to 1230 |
| CMCA | Havana, 1235 to 1230 |
| CMCG | Havana, 1395 deleted |
| CMCH | Havana, 1395 to 1405 |
| CMCJ | Havana, 630 to 588 |
| CMCM | Havana, 1395 to 1405 |
| CMCN | Havana, 925 to 1270 |
| CMCO | Havana, 660 deleted |
| CMCQ | Havana, 1140 to 780 |
| CMCR | Havana, 1345 to 1325 |
| CMCU | Havana, 1270 to 630 |
| CMCW | Havana, 1270 to 1325 |
| CMCX | Havana, 1355 to 1365 |
| CMDB | Havana, 1395 to 1405 |
| CMGI | Colon, 1150 deleted |
| CMHJ | Cienfuegos, 1150 to 1125 |
| CMJE | Camaguey, 856 to 1175 |
| CMJI | Ciego de Avila, 1150 to 1017 |
| CMJI | Ciego de Avila, 1335 to 1260 |

NEW STATIONS

- | | | |
|------|------|----------------|
| 588 | CMDD | Havana |
| 834 | CMGA | Colon |
| 925 | CMDE | Havana |
| 965 | CMAY | Havana |
| 1010 | CMCX | Havana |
| 1110 | CMJO | Ciego de Avila |
| 1140 | CMBJ | Havana |
| 1225 | CMHK | Cruces |
| 1240 | CMJN | Camaguey |
| 1290 | CMHL | Cienfuegos |
| 1310 | CMJP | Moron |
| 1365 | CMBF | Havana |
| 1485 | CMBK | Havana |

Map of North America

Due to the great cost of new plates, it is quite out of the question to make up a new map whenever a new city adds a broadcasting station. Since our present map of North America was printed, a number of cities have added broadcasting stations. In the November RADEX, these will be indicated in the map key with directions for placing them in their proper squares. The price of the map has been reduced to 15c.

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-8:30 a.m., C-7:30, M-6:30, P-5:30

R — **Cheerio**
CFCH CKGW KFJR KPRC KSTP
KTBS WAFI WBEW WCAE WCFL
WKY WCSH WDAF WEAF WEEI
WFBR WFI WFLA WGY WJBA
WIOD WIS WJAR WJAX WJDX
WKY WOAI WOW WPTF WRC
WRVA WSB WSM WSMB WTAG
WTAM WWJ WUNC

E-9:00 a.m., C-8:00, M-7:00, P-6:00

C — **Little Jack Little**
CFRB CKOK KFJF KFJF KMBC
KTRH WAAB WABC WBCM WBIG
WBRC WBT WCAH WDAE WDAE
WDBO WDOD WDRC WDSU WEAN
WFBL WFEA WGR WGST WHAS
WHEC WHP WJAS WKBN WLWB
WMAL WMBD WOKO WORC WPG
WQAM WSFA WSPD WTAQ WTAR
WTOC WWVA

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

B — **Clara, Lu 'n' Em**
KDKA KFJR KOA KOIL KPRC
KSL KSTP KVOO KWK WAPI
WBAL WBT 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 WUNC

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

C — **Columbia Revue**
CFRB CKOK KDYL KFAB KFBK
KFH KFJF KPRC KHJ KLRA KLZ
KOL KRLL KSCJ KTRH KVOR
WABC WBBM WBIG WBT WCAH
WCAO WDBJ WDOD WDOD WDRC
WDSU WEAN WFAA WFBL WFEA
WGR WGST WHAS WHEC WHP
WIP WISN WJAS WKBN WKBN
WLWB WMAL WNAC WNOX WNOX
WODX WOKO WORC WOWO WPG
WQAM WREC WSFA WTAQ WTAR
WTOC WWVA

B — **National Farm and Home Hour**

KDKA KFJR 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 WTAM
WUNC

E-5:30 p.m., C-4:30, M-3:30, P-2:30

R — **Schirmer and Schmidt, Piano Duo**
KEX KFSD KFJR KGA KGO KJR
KOA KPRC KSD KSTP KTBS KVOO
WBEW WCKY WDAF WEAF WFBK
WHO WIBA WIOD WIS WKY WMAQ

WMC WOC WRC WRVA WSB WSM
WSMB WTAG WWNC

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

B — **Little Orphan Annie**
KDKA WBAL WBZ WBZA WJR
WJZ

R — **G.E. Circle**

KFI KFJR KGHK KGIR KGO KGW
KHQ KHQ KOMO KSD WBEW
WCAE WCSH WDAF WDAY WEAF
WEEI WENR WFBR WHO WJAR
WOC WRC WSAI WTAG WTAM
WTOC WWJ

E-6:00 p.m., C-5:00, M-4:00, P-3:00

C — **Irene Beasley**

CFRB CKOK KDYL KFAB KFH
KFJF KLRA KMBC KSCJ KTRH
KVOR WAAB WABC WBBM WBIG
WBRC WBT WDAE WDBJ WDOD
WDOD WDRG WDSU WFAA WFBL
WFEA WGST WHAS WIBW WIP
WISN WJAS WKBN WLWB
WMAL WNAX WNOX WOKO WORC
WOWO WQAM WREC WSFA WTAQ
WTAR WTOC

R — **Waldorf-Astoria Orchestra**

KSD KYW WBEW WCAE WDAF
WEAF WEEI WFBR WGY WIOD
WJAR WMAQ WRC WSM WTAG
WWJ WUNC

E-6:15 p.m., C-5:15, M-4:15, P-3:15

C — **Reis and Dunn**

CFRB CKOK KDB KDYL KFAB
KFH KLRA KLZ KMBC KRLL
KSCJ KTRH WAAB WABC WBIG
WBRC WBT WCAH WCAO WDAE
WDJH WDOD WDOD WDRC WDSU
WEAN WFAA WFBL WFEA WGR
WGST WHAS WHEC WHP WIBW
WIP WISN WJAS WKBN WKBN
WLWB WNAX WNOX WOKO WORC
WOWO WQAM WREC WSFA WTAQ
WTAR 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 WDOD WDOD WDSU
WFEA WGST WORC WREC WSFA
WTAR WTOC

R — **Harding Sisters, Piano Duo**

KSD KSTP WCKY WEAF WFBR
WFI WHO WIBA WIOD WJAR
WMAQ WMC WOC WRC WSB
WTAG WTAM WWJ WUNC

E-6:45 p.m., C-5:45, M-4:45, P-3:45

C — **The Funnyboners**

CFRB CKOK KDYL KFAB KFH
KFJF KLRA KLZ KSCJ KTRH
WAAB WABC WBBM WBIG WBRC
WBT WCAH WCAO WCAU WDAE
WDBJ WDOD WDOD WGST WHAS
WHP WISN WJAS WKBN WKBN
WKBW WLWB WNAX WNOX WNOX

WORC WOWO WQAM WREC WSFA

WSPD WTAQ WTAR WTOC WWVA

R — **Donald Norris, Tenor**

KFCA KEX KFSD KGA KJR KOA
KPO KSD WAPI WEAF WFBR WFI
WHO WIS WMAQ WOC WSAI WSB
WSM WWJ WUNC

B — **Lowell Thomas**

CKGW KDKA WBAL WBZ WBZA
WGAR WHAM WJR WJZ WLW

E-7:00 p.m., C-6:00, M-5:00, P-4:00

R — **Harriet Lee and Her Leaders**

KFI KFSD KGO KHQ KOA WHEN
WEAF WJAR WMAQ WTAG

C — **Myrt and Marge**

CKOK KRLL WABC WADC WBT
WCAO WCAU WDRC WEAN WFBL
WGR WHK WJAS WKRC WMAL
WNAC WOKO WSPD WWVA

B — **Anos '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

C — **Charles Carlile, Tenor**

CKOK KFAB KFBK KFH KFPY
KGB KLZ KMBC KMOX KOH
KRLL KSCJ KTRH KVI KVOR
WABC WACO WADC WBCM WBIG
WBRC WBT WCAH WCAO WCAU
WCCO WDBJ WDOD WDRC WEAN
WFBM WGR WISN WJAS WKBN
WLAC WLWB WLWB WMAL WMT
WNAC WNAX WNOX WOKO WORC
WQAM WSIS WTAQ WTAR WWVA

R — **Wheatensville, Ray Knight**

KHQ WDAF WEAF WEEI WGY
WHO WJAR WLIT WMAQ WOC
WOW WRC WTAM

B — **Tastyeast Jesters**

KDKA WBAL WBZ WBZA WCKY
WJZ

E-7:30 p.m., C-6:30, M-5:30, P-4:30

R — **Maxwell House Program**

WBEW WCAE WCSH WEAF WEEI
WFBR WFLA WGY WIOD WIS
WJAR WJAX WLIT WPTF WRC
WRVA WSAI WTAG WTIC WUNC

B — **Stebbins Boys**

KDKA KFI KGO KGW KHQ KOA
KOMO KSL KWK WBAL WBZ
WBZA WCKY WENR WGAR WHAM
WJR WJZ WREN

E-7:45 p.m., C-6:45, M-5:45, P-4:45

C — **Tito Guizar, Tenor**

CFRB CKOK KFAB KFH KLZ
KMBC KRLL KSCJ KTRH WABC
WBBM WBCM WBIG WDAE WBT
WCAH WCAO WCAU WDBE WDBJ
WDOD WDOD WDRC WEAN WFBL
WFBM WFEA WGR WGST WHAS
WHEC WHK WIP WISN WJAS
WKBN WMAL WNAC WNAX WNOX

Monday—Continued

WODX WOKO WORC WQAM WREC
WSFA WSPD WTAQ WTAR WTOG
WVVA

R — The Goldbergs

KSD WBEN WCAE WCSH WDAF
WEAF WEEL WENR WFBR WGY
WJAR WLIT WOV WRC WSAI
WTAG WTAM WWJ

E-8:00 p.m., C-7:00, M-5:00, P-5:00

C — Edwin C. Hill
COK KMCB KMOX KRLL K'ISA
WABC WADC WBBM WBT WCAO
WCAU WCOO WDRS WDSU WEAN
WFBL WFBM WGR WHAS WHK
WJAS WKRC WLAC WMAL WNAC
WOKO WSPD

R — Soconyland Sketches

WBEN WCSH WEAF WEEL WGY
WJAR WTAG WTIC

B — Carnation Contented Program

KDKA KOIL KWK WBAL WCKY
WHAM WJR WJZ WLS WREN

E-8:15 p.m., C-7:15, M-6:15, P-5:15

C — Singin' Sam
COK KMCB KMOX WABC WADC
WCAO WCAU WCCO WDBL WFBM
WFBL WFBM WGN WGR WHK
WJAS WKRC WMAL WNAC WOKO
WSPD

E-8:30 p.m., C-7:30, M-6:30, P-5:30

C — Kate Smith, La Palina
COK KFBF KFH KJF KMBC
KMOX WABC WADC WBCM WCAH
WCAO WCAU WCCO WFBM WFBM
WGN WGR WHAS WHC WHK
WISN WJAS WKBN WKRC WMAL
WOKO WSPD

R — The Revelers, Quartet

CFCF CKGW KPRC KSD KTBS
KTHS KVOO WAPI WBEN WCAE
WCSH WDAF WEAF WEEL WFAA
WFBF WFLA WGY WHO WIOD
WIS WJAR WJAX WJDX WKY
WLIT WMAQ WMC WOAI WOC
WOW WPTF WRC WRVA WSAI
WSB WSM WSBM 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 COK KFBK KFH KFPY
KGB KLRA KLZ KMBC KMOX
KOH KSCJ KTRH KVI KVOR WABC
WADC WBCM WBIG WBRC WBT
WCAH WCAU WCCO WDBJ WDOD
WEAN WFBM WFEA WGR WISN
WJAS WKBV WLAC WLWB WLZ
WMBD WMT WNAC WNAX WNOX
WORO WOVO WPG WQAM WRC
WSBT WSJS WTAQ WTAR

E-9:00 p.m., C-8:00, M-7:00, P-6:00

R — A. & P. Gypsies
KSD WBEN WCAE WCSH WEAF
WEEL WGY WHO WJAR WLIT
WMAQ WOC WOV WRC WSAI
WTAG WTAM WTIC WWJ

B — Sinclair Wiener Minstrels

KDKA KFYR KOIL KPRC KSTP
KTBS KVOO KWCR KWK WBAL
WBZ WBZA WDAY WEBC WFAA
WFLA WGAR WHAM WIRA WIOD
WIS WJAX WJDX WJZ WKY WLS
WMC WOAI WPTF WREN WRVA
WSB WSM WSBM WTAM WWNC

E-9:15 p.m., C-8:15, M-7:15, P-6:15

C — Mills Brothers
COK KMCB KMOX WABC WADC
WCAO WCAU WDRS WEAN WFBL
WGN WHAS WHC WHK WJAS
WKBV WKRC WMAL WNAC WOKO
WSPD

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

C — Evening in Paris Mystery
COK KMCB KMOX WABC WADC
WBL WCAO WCAU WCCO WEAN
WFBL WGN WHAS WHC WHK
WKBW WKRC WMAL WNAC
WOKO WOVO WSPD

R — Parade of the States

CFCF CKGW KDYL KFI KFYR
KGR KGO KGW KHQ KOA KOMO
KPRC KSD KSTP WBEN WCAE
WCSH WDAF WEAF WEEL WENR
WFAA WFBM WGY WHO WJAR
WKY WLIT WMC WOAI WOC
WOW WRC WSAI WSB WSM WTAG
WTAM WTIC WTMJ WWJ

B — Jack Benny, Geo. Olsen

CFCF CKGW KDKA KOIL KWCR
KWK WBAL WBZ WBZA WGAR
WHAM WJR WJZ WLW WMAQ
WREN

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

C — Music That Satisfies
COK KDB KDYL KERN KFBK
KFJ KJF KPY KPRC KGB KHJ
KLRA KLZ KMBC KMJ KMON
KOH KOIN KOL KRLL KTRH K'ISA
KVI KWG WABC WADC WBRC
WBT WCAO WCAU WCCO WDBJ
WDRS WDSU WEAN WFBL WFBM
WGN WGT WHAS WHC WHK
WISN WJAS WKBV WKRC WLAC
WLZ WMAL WMBG WMT WNAC
WOKO WOVO WPG WRC WRUF
WSPD WTAR

R — National Radio Forum

KFSD KFYR KGHJ KGR KGO
KGV KOA KOMO KPRC KSD KSL
KSTP KTBS KVOO WBEN WCSH
WDAY WEAF WEBC WEEL WENR
WFLA WGY WHO WIRA WIOD
WJAR WJDX WKY WLIT WMC
WOAI WOC WOV WPTF WRC
WRA WSAI WSB WSM WTAG
WTAM WWJ WWNC

B — Phillips Lord, Country Doctor

CFCF CKGW KDKA KOIL KWCR
KWK WBAL WBZ WBZA 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 COK KDB KERN KFBK
KFPY KPRC KGB KHJ KLZ KMBC
KMJ KMOX KOIN KOL KSL KVI
KWG WAAB WABC WADC WCAO
WCAU WCCO WDRS WEAN WFBL
WFBM WGN WHAS WHK WJAS
WKBW WKRC WMAL WNOX
WOVO WSPD

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

B — Dramatic Sketch
CFCF KDKA KFYR KOIL KTBS
KWCR KYW WBAL WBZ WBZA
WCKY WGAR WHAM WIRA 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 KFYR KPRC
KGB KHJ KLZ KMBC KMJ KMOX
KOIN KOL KSL KVI KWG WBSM
WCCO WDSU WFBM WHAS WLAC
B — Jane Froman and Orchestra
KWCR KYW WBAL WCKY WHAM
WJZ WREN

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

C — Edwin C. Hill
KERN KFBK KFPY KPRC KGB
KHJ KLZ KMJ KOIN KOL KSL
KVI KWG

C — Howard Barlow's Symphony

CFRB COK KDYL KFAB KFBK
KFJF KFCF KHJ KLRA KMBC
KMOX KSCJ KTRH KVOR WAAB
WABC WBCM WBIG WBRC WBT
WCAH WCAO WDAE WDBJ WDBO
WDOD WDRS WDSU WEAN WFBL
WFBM WGST WHAS WHK WHP
WIBW WJAS WKBN WKBW WLWB
WMAL WMBD WNAX WNOX
WOKO WORC WOVO WPG WQAM
WREC WSFA WSPD WTOG

R — Paul Whiteman and Orchestra

WEAF WEEL WFBR WJAR WLIT
WRC

B — Amos 'n' Andy

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

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

R — Maxwell House Program

KFI KFSD KGO KGW KHQ KOA
KOMO KPRC KSD KSL KSTP
KTAR KTBS KTHS WAPI WBAP
WDAF WENR WHO WJDX WKY
WMC WOAI WOC WBS WSM WSMB
WTAM WTMJ WWJ

B — Summer Symphony

CFCF KTBS KWCR WBAL WCKY
WENR WHAM WIOD WJZ WREN
WSB

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

C — Sid Gary, Baritone

CFRB COK KFBF KFBK KFH
KFPY KFCF KLRA KLZ KMBC
KOH KSCJ KTRH KVOR WAAB
WABC WACO WADC WBCM WBIG
WBRC WBT WCAH WCAO WCAU
WCCO WDBJ WDOD WDRS WEAN
WFBL WHAS WHC WHK WISN
WKBN WKBV WLAC WLZ WMAL
WMT WNAX WNOX WOKO WORC
WOVO WPG WQAM WREC WSBT
WSFA WSJS WTAR WWVA

E-11:45 p.m., C-10:45, M-9:45, P-8:45

C — Freddie Martin's Orchestra

CFRB COK KDYL KFAB KFBK
KFJF KPRC KHJ KLRA KMBC
KOL KSCJ KTRH KVOR WAAB
WABC WBCM WBIG WBRC WBT
WCAH WCAO WCCO WDAE WDBJ
WDBO WDOD WDRS WDSU WEAN
WFAN WFBL WFBM WGL WGST
WHAS WHC WHP WIBW WIP
WISN WKBN WKBV WLWB WMAL
WMBD WNAX WNOX WOKO WORC
WQAM WREC WSFA WSPD WTAR
WTOC WWVA

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

C — Eddie Duchin and Orchestra

COK KDYL KFAB KFBK KFH
KJF KLRA KMBC KMON KOL
KRLL KSCJ KTHS KVOR WABC
WBCM WBRC WBT WCAH WCAU
WCCO WDAE WDBJ WDBO WDOE
WDSU WEAN WFBL WFBM WGL
WGST WHAS WHC WHK WIBW
WISN WKBN WKBV WLWB WMAL
WMBD WNAX WNOX WOKO WOV
WPG WQAM WREC WSFA WSPD
WTAR WTOC WWVA

B — Clyde McCoys' Orchestra

KDKA KWCR KYW WBAL WJZ
WRC

E-12:05 a.m., C-11:05, M-10:05, P-9:05

R — Buddy Rogers and Orchestra

KSTP WAPI WCAE WCKY WDAF
WDAY WEAF WENR WJDX WLIT
WMAQ WRC WTAM WWJ

Monday—Continued

E-12:30 a.m., C-11:30, M-10:30, P-9:30
B—Lew Diamond's Orchestra
 KOIL KTBS KWCR KYW WBAL
 WHAM WJR WJZ WKY WLW
 WRC WREN

TUESDAY

E-8:30 a.m., C-7:30, M-6:30, P-5:30
R—Cheerio, See Monday

E-9:00 a.m., C-8:00, M-7:00, P-6:00
C—Little Jack Little, See Monday

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
R—G.E. Circle, See Monday

E-6:00 p.m., C-5:00, M-4:00, P-3:00
C—Current Events, Kaltenborn

CKOK KFH KGB KLZ KMBC KOH
 KSCJ KTRH KVOR WAAB WABC
 WACO WBIG WBRC WBT WCAH
 WCAO WDAE WDBJ WDBO WDDO
 WDRC WFAN WFBL WFEA WFDH
 WHCC WIBW WIP WISN WJAZ
 WKBN WKBW WLAC WLWB WLWZ
 WMAL WMT WNAX WNOX WOKO
 WORC WOWO WQAM WREC WBSB
 WSPA WSJS WTAQ WTAR WTOC
 WWVA

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 WDBJ
 WDBO WDDO WDSU WFEA WGST
 WNOX WORC WREC WSPA WTAR
 WTOC

B—Sheer Romance, Drama

KDKA KFI KFYR KGO KOA KOIL
 KSTP KTBS KWCR WBAL WHAM
 WIBA WIOD WJDX WJZ WKY
 WLW WMC WREN WSM WUNC

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 WFBR
 WFI WIOD WIS WJAR WJDX
 WMAQ WOW WPTF WRC WSM
 WSMB WTAG WUNC

B—Lowell Thomas, See Monday

E-7:00 p.m., C-6:00, M-5:00, P-4:00

R—Mid-Week Hymn Sing
 KFI KGR KGO KOA KSD KTAR
 WAPI WBSN WFAE WJAR WJDX
 WMAQ WSAL 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

C—Cliff Edwards, Ukelele Ike
 CKOK KFAB KFBK KFH KFPY
 KGB KHJ KLZ KMOX KOH KRLD
 KSCJ KTRH KVI KVOR WABC
 WACO WADC WBCM WBIG WBRC
 WCAH WCAO WCOO WDAE WDBJ
 WDBO WDDO WDRC WEAN WFBL
 WFBM WGR WHP WISN WJAS
 WKBN WLAC WLWB WMAL WMT
 WNAC WNAX WNOX WOKO WORC
 WQAM WSJS WTAQ WTAR WTOC
 WWVA

R—Ray Knight, See Monday

E-7:30 p.m., C-6:30, M-5:30, P-4:30

R—Ray Perkins
 KSD KYW WBSN WCAE WCHS
 WFAE WEEL WFBR WFI WGY

WHO WJAR WOC WOW WRC WSAI
 WTAG WTAM WWJ

B—Stebbins Boys, See Monday

E-7:45 p.m., C-6:45, M-5:45, P-4:45

C—Chase & Sanborn, George Price
 CKOK KMBC KMOX WABC WBBM
 WCAO WCAU WGR WHK WJAS
 WKRC WNAC WOKO

R—The Goldbergs, See Monday

B—Red and Ramona

KDKA KGO KOIL KTBS KWCR
 KWK WBAL WFAA WGAR WIBA
 WIOD WIS WJR WJZ WKY WMAQ
 WREN WUNC

E-8:00 p.m., C-7:00, M-6:00, P-5:00

C—Edwin C. Hill, See Monday

R—Blackstone, Sanderson-Crumit

KSD KSTP KYW WBSN WCAE
 WCHS WDAF WFAE WFCB WEEL
 WFI WGY WHO WJAR WOC WOW
 WRC WSAI WTAG WTAM WWJ

B—You and Your Government

CFCE CKGW KDKA KDYL KEX
 KFSD KGIR KJR KOA KOIL KPO
 KTAR KTBS KWCR KWK WBAL
 WRZ WBZA WCKY WENR WFLA
 WGAR WHAM WIOD WIS WJZ
 WKY WMC WPTF WREN WSB
 WSM WUNC

E-8:15 p.m., C-7:15, M-6:15, P-5:15

C—Abe Lyman and Orchestra

CKOK KMBC KMOX WABC WADC
 WCAO WCAU WDRC WEAN WFBL
 WFBM WGN WGR WHK WJAS
 WKRC WMAL WNAC WOKO WSPD

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

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

C—Musical Fast Freight

CKOK KFH KFJF KLRA KMBC
 KMOX WAAB WABC WADC WBBM
 WCAO WCAU WCOO WDAE WDBJ
 WDBO WDRC WEAN WFBL WFBM
 WHK WJAS WKBW WKRC WMAL
 WOKO WOWO WQAM WSPD 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 KFCR KGB KHJ KLRA
 KLZ KMBC KMJ KMOX KOH KOIN
 KOL KRLD KSL KTRH KVI KWG
 WABC WADC WBRB WBT WCAO
 WCAU WCCO WDBJ WDRG WDSU
 WEAN WFBL WFBM WGN WGST
 WHAS WHCC WHK WISN WJAS
 WKHW WKRC WLAC WLWB WMAL
 WMBG WMT WNAC WOKO WOWO
 WPG WREC WSPD WTAR

R—Ben Bernie and Orchestra

KFYR KPRC KSTP WBSN WCAE
 WCHS WDAF WDAY WFAE WEEL
 WFBR WFI WGY WHO WJAR
 WKY WLS WMC WQAI WOC WOW
 WRC WSAI WSM WSMB WTAG
 WTAM WWJ

B—Household Program

KDKA KWK WBAL WBSN WBZ
 WBZA WBCB WHAM WIBA WJR
 WJZ WLS WTMJ

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 KFCR KGB KHJ KLRA
 KLZ KMBC KMJ KMOX KOIN
 KOL KRLD KSL KTRH KVI KWG
 WABC WADC WBRB WBT WCAO
 WCAU WCCO WDDO WDRG WDSU

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

C—Eno Crime Club

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

R—Ed Wynon-Don Voorhees

CFCE KFI KFSD KFYR KGHL
 KGIR KGR KGW KHQ KOA KOMO
 KPRC KSD KSL KSTP KTAR KTBS
 KVOO WBAF WBSN WCAE WCHS
 WDAF WDAY WFAE WFCB WEEL
 WFBR WFI WGY WHO WIBA
 WIOD WIS WJAR WJAX WJDX
 WKY WMC WQAI WMC WQAI WOC
 WOW WPTF WRC WSAI
 WSB WSMB WTAG WTAM WTMJ
 WWJ WUNC

R—Friendship Town

KDKA KOIL KWK KYW WBAL
 WBZ WBZA WGAR WHAM WJR
 WJZ WREN

WEAN WFBL WFBM WGN WGST
 WHAS WHK WJAS WKBW WKRC
 WLAC WMAL WNAC WOKO WOWO
 WSPD WTAR

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

C—Eno Crime Club

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

R—Ed Wynon-Don Voorhees

CFCE KFI KFSD KFYR KGHL
 KGIR KGR KGW KHQ KOA KOMO
 KPRC KSD KSL KSTP KTAR KTBS
 KVOO WBAF WBSN WCAE WCHS
 WDAF WDAY WFAE WFCB WEEL
 WFBR WFI WGY WHO WIBA
 WIOD WIS WJAR WJAX WJDX
 WKY WMC WQAI WMC WQAI WOC
 WOW WPTF WRC WSAI
 WSB WSMB WTAG WTAM WTMJ
 WWJ WUNC

R—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. Flippen-cies

CFRB CKOK KDYL KFAB KFBK
 KFH KFJF KFPY KHJ KLRA KLZ
 KMBC KMOX KOL KRLD KTRH
 KVOR WABC WACO WBCM WBIG
 WBRC WBT WCAH WCAO WCAU
 WCCO WDAE WDRJ WDBO WDDO
 WDRG WDSU WFBL WFBM WFEA
 WFL WLW WGST WHAS WHCC WHP
 WIBW WISN WJAS WKBW WKBN
 WKBW WMAL WNAC WNAX WNOX
 WODX WORC WQAM WREC WRUF
 WSPD WTAQ WTAR WTOC WWVA
R—Lucky Strike Dance Hour

KFI KFSD KFYR KGO KGW KHQ
 KOA KOMO KPRC KSD KSL KSTP
 KTAR KTBS KTBS KVOO WBAF
 WBSN WCAE WCHS WDAF WDAY
 WFAE WFCB WEEL WENR WFBR
 WFI WFLA WGY WHO WIBA WIOD
 WIS WJAR WJAX WJDX WKY
 WMC WQAI 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

CFCE KWCR WBZ WBZA WGAR
 WJZ

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

B—Dramatic Sketch, See Monday

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

C—Myrt and Marge, See Monday

B—Jane Froman and Orch., See Mon.

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—Ralph Kirbyer, Dream Singer

CFCE CKGW KSD WBSN WCAE
 WCKY WFAE WEEL WFBM WFI
 WFLA WGY WHO WIOD WIS WJAR
 WOC WTAG WTAM WWJ WUNC

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

B—Cesare Sodero Concert Orchestra

CFCE CKGW KDKA KEX KFYR
 KGA KJR KOA KPO KSTP KTBS
 KWCR WBAL WCKY WENR WFLA
 WHAM WIOD WIS WJAX WJZ
 WKY WRC WREN WSM WUNC

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

C—Little Jack Little

CFRB CKOK KDYL KFAB KFBK
 KFH KFJF KFPY KFCR KGB KHJ

Tuesday—Continued

KLRA KLZ KMBC KMOX KHQ
KOL KRLD KSCJ KTRH K TSA
KVI KVOR WAAB WABC WACO
WBGM WBIG WBRC WBT WCAH
WCAO WCAU WCCO WDAE WDBJ
WDHO WDDO WDSU WDFL WFBM
WGST WHAS WHEC WHK WHP
WIBW WISN WKBN WKBW WLWB
WMAL WMBD WNAK WNOX
WORG WOVO WQAM WREC WSFA
WSPD WTAR WTOC

E-11:45 p.m., C-10:45, M-9:45, P-8:45
R — Freddie Martin's Orch., See Mon.

E-12:00 m., C-11:00, M-10:00, P-9:00
C — Harold Stern and Orchestra

CKOK KDYL KFAB KFH KFJF
KFPY KFRG KGB KLRA KLZ
KMBC KMOX KOH KSCJ KTRH
KVOR WABC WACO WBCM WBRC
WBT WCAH WCAU WDAE WDBJ
WDBO WDDO WDSU WEAN WFBM
WGST WHAS WHEC WHP WIBW
WISN WKBN WKBW WLWB WMBD
WNAK WNAW WNOX WOKO WOVO
WQAM WREC WSFA WSPD WTAR
WTOC

E-12:05 a.m., C-11:05, M-10:05, P-9:05
R — Paul Whiteman and Orchestra

CFCE KEY KGA KGO KGW KHQ
KJR KPO KTBS WBN WCAE
WDAF WFAA WFBM WFLA
WGY WKY WMAQ WMC WOV WRC
WSB WSM WTAM WWJ WWNC

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

WEDNESDAY

E-8:30 a.m., C-7:30, M-6:30, P-5:30
R — Cheerio, See Monday

E-9:00 a.m., C-8:00, M-7:00, P-6:00
C — Little Jack Little, See Monday

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
R — G.E. Circle, See Monday

E-6:00 p.m., C-5:00, M-4:00, P-3:00
B — B. A. Rolfe and Orchestra
WBAL WCKY WGAR WJZ WLW
WMAQ WREN

C — Irene Beasley, See Monday
R — Waldorf-Astoria Orch., See Monday

E-6:30 p.m., C-5:30, M-4:30, P-3:30
C — William Vincent Hall
KLRA WAAB WABC WBIG WBRC
WDAE WDBJ WDBO WDDO WDSU
WFEA WGST WORC WREC WSFA
WTAR WTOC

B — Dandies of Yesterday
KEX KGA KGIL KJR KOA KOIL
KWCR WBAL WGAR WJZ WLW
WMAQ WREN WSM

R — Harding Sisters, See Monday

E-6:45 p.m., C-5:45, M-4:45, P-3:45
C — Funnyboners, See Monday

R — Donald Novis, 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

E-7:15 p.m., C-6:15, M-5:15, P-4:15
C — Connie Boswell

CFRB CKOK KFAB KFH KFPY

KHJ KIZ KMBC KOH KRLD KSCJ
KTRH KVOR WABC WACO WBCM
WBIG WBRC WBT WCAH WCAO
WCAU WDBJ WDBO WDRG WDSU
WEAN WFBL WFBM WFEA WGR
WGST WHAS WHEC WHK WHP
WISN WJAS WKBN WNAK WNAW
WNOX WODX WOKO WORC WOVO
WQAM WREC WSFA WSPD WTAR
WTAR WTOC WWVA

B — Royal Vagabonds, Ward Wilson
KDKA KFI KGO KGW KHQ KOA
KOIL KOMO KPRC KWK WAPI
WBAL WBZ WBZA WCKY WECB
WGAR WIOD WJAX WJDX WJZ
WKY WMAQ WMC WOA1 WPTF
WREN WRVA WSB WSM WSBM
WTMJ WWNC

R — Ray Knight, See Monday

E-7:30 p.m., C-6:30, M-5:30, P-4:30
R — Maxwell House Program, See Mon.

B — Stebbins Boys, See Monday

C — Fray and Braggiotti

CFRB CKOK KFAB KTFBK KFPY
KGB KLRA KLZ KMBC KOH KRLD
KSCJ KTRH KVI KVOR WABC
WACO WADC WBBM WBIG WBRC
WBT WCAH WCAO WCAU WCCO
WDAE WDBJ WDBO WDDO WDRG
WEAN WFBM WFEA WGL WGR
WHAS WIHC WHK WHP WISN
WJAS WKBN WLWB WLZ WMAL
WNAK WNAW WNOX WOKO WORC
WQAM WREC WSBT WSJS WSPD
WTAR WTOC WWVA

E-7:45 p.m., C-6:45, M-5:45, P-4:45
C — Angelo Patri

CKOK KMBC KMOX WABC WCAO
WACO WCCO WFLR WGR WHAS
WHK WJAS WKRC WMAL WNAK
R — The Goldbergs, See Monday

E-8:00 p.m., C-7:00, M-6:00, P-5:00
C — Edwin C. Hill See Monday

R — Big Time, Johnny Hart

KSD WBN WCAE WCHS WDAF
WEAF WFEA WFBM WGY WHO
WJAR WLIT WLS WOC WOV
WRC WSAI WTAG WTAM WTIC
WWJ

B — American Taxpayers' League

KDKA KFSB KFYR KGIR KGO
KOA KOIL KOMO KTAR KTBS
KWCR KWK KYW WBAL WDAY
WFAA WFLA WIBA WIOD WJAX
WJDX WJZ WKY WMC WOA1
WPTF WREN WSM WWNC

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

B — Irene Taylor, Contralto

CKGW KFSB KGO KSTP KTBS
KWCR KYW WCKY WGAR WIBA
WJZ WKY WREN

E-8:30 p.m., C-7:30, M-6:30, P-5:30
R — Paul Whiteman and Orchestra

CFCE CKGW KFSB KFYR KGO
KGW KHQ KOA KOMO KSTP
WBN WCAE WCHS WFAE WBEI
WFBM WGY WHO WIBA WIOD
WLIT WOC WRC WSAI WTAG
WTAM WTIC

C — Kate Smith, See Monday

B — Jack Frost Melody Moments

KDKA WBAL WGAR WHAM WJR
WJZ WLS WLW

E-8:45 p.m., C-7:45, M-6:45, P-5:45
C — Musical Fast Freight, See Tuesday

E-9:00 p.m., C-8:00, M-7:00, P-6:00
C — Guy Lombardo-Burns and Allen

CKOK KFPY KMBC KMOX KTRH
KTSB WABC WADC WCAO WCAU
WCCO WDRG WEAN WFLB WFBM

WGN WHK WJAS WKBW WKRC
WMAL WNAC WOKO WOVO WRR
WSPD

R — Goodyear Program

KFYR KPRC KSD KSTP KTHS
KVOO KYW WBN WCAE WCHS
WDAY WEAF WFCB WFEA WFAA
WFRB WFLA WGY WHO WIBA
WIOD WIS WJAR WJAX WJDX
WKY WLIT WMC WOA1 WOC
WOW WPTF WRC WRVA WSAI
WSB WSM WSBM WTAG WTAM
WTIC WTMJ WJZ WWNC

B — G. Washington Coffee Concert

KDKA KWK WBAL WBZ WBZA
WGAR WHAM WJR WJZ WLW
WMAQ WREN

E-9:30 p.m., C-8:30, M-7:30, P-6:30
C — Eno Crime Club, See Tuesday

R — Mobilcon Concert

KFI KFYR KGO KGW KHQ KOA
KOMO KPRC KSD KSL KSTP
KTAR KVOO WBN WCAE WCHS
WDAF WDAY WFAE WFCB WEEI
WENR WFAA WFBM WFLA WGY
WHO WIBA WIOD WIS WJAR
WJAX WJDX WKY WLIT WMC
WOA1 WOC WOV WRC WSAI WSB
WSM WSBM WTAG WTAM WTIC
WTMJ WWJ WWNC

B — Jack Benny, Geo. Olsen, See Mon.

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 WBN WCAE
WCHS WDAF WFAE WFEI WENR
WFBM WGY WHO WJAR WLIT
WOC WOV WRC WRA1 WSAI
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

B — Andy Samella

KDKA KOIL KWCR 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
B — Dramatic Sketch, See Monday

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

B — Jane Froman and Orch., See Mon.

E-11:00 p.m., C-10:00, M-9:00, P-8:00
C — Columbia Sympth. Orch., See Mon.

R — Nellie Revell

CFCE CKGW KSD WEAF WGY
WLIT WRC WWJ

B — Amos 'n' Andy, See Monday
C — Edwin C. Hill, See Monday

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

KDB KFRN KFBK KFPY KFRG
KGB KHJ KMJ KOIN KOL KSL
KVI KWG

R — Maxwell House, See Monday

B — Cesare Soderro's Orch., See Tuesday
C — Ozzie Nelson and Orchestra

E-11:30 p.m., C-10:30, M-9:30, P-8:30
C — Charles Carile, Tenor

CFRB CKOK KFAB KFH KLRA
KLZ KMBC KMOX KOH KSCJ
KTRH KVOR WABC WACO WADC
WBCM WBIG WBRC WBT
WCAH WCAO WCAU WCCO WDAE
WDBJ WDBO WDRG WEAN WFBL
WHAS WHEC WHP WIBW WISN
WKHAW WLAZ WLZ WMBD WMT
WNAK WNOX WOKO WORC WOV
WPG WQAM WRC WRE WSFA WSJS
WSPD WTAR WTOC

Wednesday—Continued

E-12:00 p.m., C-11:00, M-10:00, P-9:00
 C — Eddie Duchin and Orch., See Monday
 B — Baron Lee and Orchestra
 KDKA KOIL KWCR WBAL WKCY
 WJZ WMAQ WRC

E-12:05 a.m., C-11:05, M-10:05, P-9:05
 R — Buddy Rogers, See Monday

THURSDAY

E-8:30 a.m., C-7:30, M-6:30, P-5:30
 R — Cheerio, See Monday

E-9:00 a.m., C-8:00, M-7:00, P-6:00
 C — Little Jack Little, See Monday

E-10:15 p.m., C-9:15, M-8:15, P-7:15
 B — Clare, 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 Monday

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

E-6:00 p.m., C-5:00, M-4:00, P-3:00
 C — H. V. Kaltenborn, 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
 KFX KFSO KGA KJR KOA KOIL
 KPO KTBS KWCR WBAL WGAR
 WJZ WKY WLW WMAQ WREN

E-6:45 p.m., C-5:45, M-4:45, P-3:45
 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 — The Rollickers, Male Quartet
 KGO KOA WAPI WBEN WFAF
 WFI WJAR WMAQ WTAM

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

E-7:30 p.m., C-6:30, M-5:30, P-4:30
 R — Ray Perkins, See Tuesday
 B — Stebbins Boys, See Monday

E-7:45 p.m., C-6:45, M-5:45, P-4:45
 C — Georgia Price, See Tuesday
 R — The Goldbergs, See Monday
 B — Red and Ramona, See Tuesday

E-8:00 p.m., C-7:00, M-6:00, P-5:00
 C — Edwin C. Hill, See Monday
 R — Fleischmann, Rudy Vallee
 CFCE CRGW KFI KFYZ KGO KGW
 KHQ KOA KOMO KPRC KSD KSL
 KSTP KTAR KVOO WAPI WBAP
 WBEN WCAE WCKY WCHP WDAF
 WDAY WFAF WIBC WEEL WFBR
 WFI WFLA WGY WHO WIOD WJAR
 WJAX WJDX WKY WMAQ WMC
 WQAI WOC WOP WPTF WRC
 WRVA WSAI WSB WSM WSMB
 WTAG WTAM WTMJ WJZ

E-8:15 p.m., C-7:15, M-6:15, P-5:15
 C — Abe Lyman and Orch., See Tuesday
 B — Sigmund Spaeth, Song Sleuth
 KDKA KOIL KWK WBZ WBZA
 WGAR WHAM WJR WJZ WLS WLW
 WREN

E-8:30 p.m., C-7:30, M-6:30, P-5:30
 B — Rio Tin Tin Thriller
 KDKA KOIL KWK WRZ WBZA
 WGAR WHAM WJZ WLS WLW
 WREN
 C — Meyer, the Buyer
 CFRB CKOK KFAB KFBK KFI
 KFPY KLRA KLZ KMBC KOH
 KRLL KSCJ KTRH KVI KVOR

WAAB WABC WADC WBCM WBTV
 WBRC WBT WCAH WCAO WCAU
 WCCO WDAE WDBJ WDBO WDDO
 WDRC WEAN WFBL WFBM WFEA
 WGR WHAS WHFC WHK WHF
 WIBW WISN WJAS WKBN WLWB
 WLWB WMAL WMT WNAZ WOKO
 WORC WOWO WPG WQAM WREC
 WSBT WSEA WSJS WSPD WTAR
 WTR WTCO

E-9:00 p.m., C-8:00, M-7:00, P-6:00
 C — Music That Satisfies, See Tuesday
 R — Detective Drama
 KFI KFYZ KGO KGW KOA KPRC
 KSD KSTP KTBS KTHS WBAP
 WBEN WCAE WCKY WDAF WDAY
 WFAF WIBC WEEL WFBR WFI
 WFLA WGY WHO WIBA WIOD WIS
 WJAR WJAX WKY WQAI WOC
 WOW WPTF WRC WRVA WSAI
 WTAG WTAM WTMJ WJZ WNC

E-9:15 p.m., C-8:15, M-7:15, P-6:15
 C — Mills Bros., See Monday

E-9:30 p.m., C-8:30, M-7:30, P-6:30
 R — Thompkins Corners
 KDKA KFI KFSO KGO KGW KHQ
 KOA KOIL KOMO KPRC KSL KSTP
 KTAR KWCR KWK KYW WAPI
 WBAL WBAP WBZ WBZA WIBC
 WFLA WGAR WHAM WIOD WJAX
 WJDX WJR WJZ WKY WLW WMC
 WQAI WREN WRVA WSB WSM
 WSMB WTMJ WNC

E-9:30 p.m., C-8:30, M-7:30, P-6:30
 R — America in Revue
 CFCE CRGW KSD WBEN WCAE
 WCHS WDAF WFAF WEEL WFNH
 WFI WGY WHO WJAR WOC WOV
 WRC WSAI WTAG WTAM WJZ

E-10:00 p.m., C-9:00, M-8:00, P-7:00
 C — Col. Stoopnagle and Budd
 CFRB CKOK KFBK KFPY KHJ
 KLRA KLZ KMBC KMOX KOH
 KSCJ KTRH KVI KVOR WAAB
 WADC WBCM WBIG WBRC WBT
 WCAH WCAO WCAU WCCO WDAE
 WDBJ WDBO WDDO WDRS WFLA
 WHAS WHFC WHK WHP WIBW
 WJAS WKBN WKBW WLAC WLWB
 WMAL WMBD WMT WNAZ WNOX
 WOKO WORC WOWO WPG
 WQAM WREC WSBT WSJS WSPD
 WTAR WTCO

R — Lucky Strike, See Tuesday
 B — Phillips Lord, See Monday

E-10:15 p.m., C-9:15, M-8:15, P-7:15
 C — Fray and Braggiotti
 CFRB CKOK KFBK KFPY KHJ
 KLRA KLZ KMBC KOH KSCJ
 KTRH KVI KVOR WAAB WABC
 WADC WBCM WBIG WBRC WBT
 WCAH WCAO WCAU WCCO WDAE
 WDBJ WDBO WDDO WDRS WFLA
 WHAS WHFC WHK WHP WIBW
 WJAS WKBN WKBW WLAC WLWB
 WMAL WMBD WMT WNAZ WNOX
 WOKO WORC WOWO WPG
 WQAM WREC WSBT WSJS WSPD
 WTAR WTCO

R — Lucky Strike, See Tuesday
 B — Phillips Lord, See Monday

E-10:30 p.m., C-9:30, M-8:30, P-7:30
 B — Three Keys
 CRGW EDKA KWCR WBAL WGAR
 WHAM WJZ WREN

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

E-11:00 p.m., C-10:00, M-9:00, P-8:00
 C — Columbia Symph. Orch., See Monday
 R — Paul Whiteman and Orch., See Monday
 B — Amos 'n' Andy, See Monday

E-11:15 p.m., C-10:15, M-9:15, P-8:15
 B — Cesare Sodero's Orch., See Tuesday

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

E-12:00 m., C-11:00, M-10:00, P-9:00
 C — Noble Sissle and Orchestra
 CKOK KDYL KFAB KFBK KFH
 KFJF KFPY KFRC KLRA KLZ
 KMBC KMOX KOH KOL KRLL
 KSCJ KTRH KTSK KVI KVOR
 WABC WBCM WBRC WBT WCAH
 WCAU WCCO WDAE WDBJ WDBO
 WDDO WDSU WEAN WFBL WFBM
 WGST WHAS WHFC WHP WIBW
 WISN WKBN WKBW WLWB WMBD
 WNAZ WNAZ WNOX WODX WOKO
 WOWO WQAM WREC WSPD WTAR
 WTCO

E-12:05 a.m., C-11:05, M-10:05, P-9:05
 R — Don Bester and Orchestra
 KSD WCAE WDAF WFAF WFBR
 WGY WHO WMAQ WOC WJZ

E-12:30 p.m., C-11:30, M-10:30, P-9:30
 B — Pacific Serenaders
 KFYZ KOA KOIL KPRC KTBS
 KTHS KVOO KWCR WBAL WENR
 WFLA WHAM WIBA WJR WJZ
 WKY WLW WMC WREN WSM
 WSMB WNC

FRIDAY

E-8:30 a.m., C-7:30, M-6:30, P-5:30
 R — Cheerio, See Monday

E-9:00 a.m., C-8:00, M-7:00, P-6:00
 C — Little Jack Little, See Monday

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 Monday

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

E-6:15 p.m., C-5:15, M-4:15, P-3:15
 B — Graham Prince and Orchestra
 KFYZ KOIL KSTP KTBS KWCR
 WBAL WHAM WIBA WJZ WKY
 WLW WMAQ WREN

E-6:30 p.m., C-5:30, M-4:30, P-3:30
 R — Merry Madcaps Dance Orchestra
 KFSO KGO KOA KSD KTBS WBEN
 WCKY WFAF WFI WIS WJAR
 WJDX WMAQ WMC WRC WSB
 WTAG WTAM WVIC WNC

E-6:45 p.m., C-5:45, M-4:45, P-3:45
 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

E-7:15 p.m., C-6:15, M-5:15, P-4:15
 B — Ward Wilson, See Wednesday

E-7:30 p.m., C-6:30, M-5:30, P-4:30
 C — Col. Stoopnagle and Budd
 CFRB CKOK KFAB KFBK KFPY
 KHJ KLRA KMOX KOH KRLL
 KSCJ KTRH KVI WABC WADC
 WBBM WBCM WBIG WBRC WBT
 WCAH WCAO WCCO WDAE WDBJ
 WDBO WDDO WDRS WFLA
 WFBM WGL WGR WHAS WHFC
 WHK WHP WIP WISN WJAS WLWB
 WMAL WMT WNAZ WNAZ WNOX
 WOKO WORC WQAM WREC WSBT
 WSEA WSJS WSPD WTAR
 WTCO WVVV
 R — Maxwell House Program, See Monday
 B — Stebbins Boys, See Monday

Friday—Continued

E-7:45 p.m., C-6:45, M-5:45, P-4:45
R—The Goldbergs, See Monday
C—Connie Boswell
 CFRB CKOK KFAB KFBK KHJ
 KLRA KMBC KMOX KRLD KSLD
 KSCJ KTRH KVI WABC WADC
 WBWM WBCM WBIG WBRC WBT
 WCAH WCAO WCOO WDAE WDBJ
 WDBO WDOO WDRC WDEAN WFAN
 WFBL WFPM WFEA WGL WGR
 WEAS WHK WHP WIP WISN WJAS
 WLBB WMAL WMT WNAC WNOX
 WOKO WORC WQAM WREC
 WSBT WSFA WSJS WSPD WTAQ
 WTRAR WTWC WWVA

E-8:00 p.m., C-7:00, M-6:00, P-5:00
C—Edwin C. Hill, See Monday
R—Cities Service Orchestra
 CKGW KOA KPRC KSD KSL KSTP
 KTBS KTHS KVOO KYW WBCN
 WCAE WCSH WDAF WFAF WFLA
 WHEI WFAP WFBR WGY WHO
 WJAR WKY WLIT WMO WOC
 WOW WRC WSAI WTAG WTAM
 WTMJ WTJJ WJW

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 KFFY KHJ KLRA KLZ KMBC
 KMOX KOH KSCJ KTRH KVI
 WABC WADC WBCM WBIG WBRC
 WBT WCAH WCAO WCAU WDAE
 WDBJ WDBO WDRC WEAN WFPM
 WFEA WGR WHEC WHK WHP
 WIBW WISN WJAS WLAC WLBB
 WMAL WMT WNAC WNOX WOKO
 WOKO WORC WOW WPG WQAM
 WREC WSBT WSFA WSJS WSPD
 WTAQ WTRAR WTWC

B—Adventures in Health, See Tuesday
 E-8:45 p.m., C-7:45, M-6:45, P-5:45
B—Candle Lightin' Time
 KDKA KOIL KWCR KWK WBAL
 WBZ WBZA WCKY WFLA WGAR
 WHAM WIOD WJZ WLS WMC
 WREN WSB WNNC

E-9:00 p.m., C-8:00, M-7:00, P-6:00
C—Football Show, Christy Walsh
 CKOK KDB KERN KFAB KFFY
 KFCR KGB KHJ KLZ KMBC KMJ
 KMOC KOIN KOL KRLD KSCJ
 KVI KWG WABC WBSA WADC
 WCAH WCAO WCAU WCOO WDRC
 WEAN WFBL WFPM WGN WHAS
 WHK WISN WJAS WKBW WKRC
 WMAL WNAC WOKO WORC WONO
 WSPD

R—Cluquet Club
 KSD WBN WCAE WCSH WDAF
 WFAF WHEI WFBR WGY WHO
 WJAR WLIT WMAQ WOC WOW
 WRC WSAI WTAG WTAM WTMJ
 WJW

B—First Nighter
 KFSD KOA KSL KSTP KTAR WBCB
 WJZ WTMJ

E-9:30 p.m., C-8:30, M-7:30, P-6:30
C—To the Ladies
 CKOK KMBC KMOX KRLD WABC
 WADC WCAO WCAU WCOO WDRC
 WEAN WFBL WFPM WGN WGST
 WEAS WHK WJAS WKBW WKRC
 WMAL WNAC WOKO WSPD
R—Pond's Program
 KSD WBN WCAE WCSH WDAF

WEAF WENR WFBR WGY WHO
 WJAR WLIT WOC WOW WRC
 WSAI WTAG WTAM WJW
B—Armour Program
 KDKA KFI KGO KGW KHQ KOA
 KOIL KOMO KPRC KSL KSTP
 KWK WAPI WBAL WBZ WBSA
 WBBE WFAP WGAR WHAM WIOD
 WJAX WJR WJZ WKY WMAQ
 WMC WOAI WREN WRVA WSB
 WSM WSBM WTMJ WNNC

E-10:00 p.m., C-9:00, M-8:00, P-7:00
C—Music That Satisfies, See Monday
R—Paul Whiteman and Orchestra
 KFI KFYZ KGO KGW KHQ KOA
 KOMO KSD KSL KSTP WBCN
 WCAE WCSH WDAF WDAY WFAF
 WBCB WEEI WFBR WGY WHO
 WJAR WLIT WOC WOW WRC
 WRVA WSAI WTAG WTAM WTMJ
 WTMJ WJW

B—Phillips Lord, See Monday
 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 WNNC

E-10:30 p.m., C-9:30, M-8:30, P-7:30
R—RKO Mystery Drama
 CFCF CKGW KFI KFSD KFYZ
 KGLH KGHR KGO KGW KHQ KOA
 KOMO KPRC KSD KSL KSTP
 KTAR KTBS WAPI WBCN WCAE
 WCSH WDAF WDAY WFAF WFLA
 WHEI WENR WFAP WFBR WFLA
 WGY WHO WIBA WIOD WIS
 WJAR WJAX WJDX WKY WLIT
 WMC WOC WOW WRC WRVA
 WSAI WSB WSM WSBM WTAG
 WTAM WTMJ WTMJ WJW WNNC

B—Three Keys, See Thursday
 E-10:45 p.m., C-9:45, M-8:45, P-7:45
C—Myrt and Marge, See Monday
B—Jane Froman and Orch., See Mon.
 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
C—Edwin C. Hill, See Monday

E-11:15 p.m., C-10:15, M-9:15, P-8:15
B—Maxwell House, See Monday
R—Cesare Soderio's Orch., See Tuesday
 E-11:30 p.m., C-10:30, M-9:30, P-8:30
C—Charles Carille, See Wednesday

E-11:45 p.m., C-10:45, M-9:45, P-8:45
C—Freddie Martin's Orch., See Mon.
 E-12:00 m., C-11:00, M-10:00, P-9:00
B—Baron Lee and Orch., See Wed.
C—Bernie Cummins and Orchestra

CKOK KFAB KFBK KFFY KHJ
 KLZ KMBC KMOX KOH KSCJ
 KTRH KVI WABC WADC WBCM
 WBRB WBT WCAH WCAU WCOO
 WDBO WEAN WFBL WHAS WHEC
 WHP WIBW WISN WKBW WLAC
 WMAL WMBD WMT WNAC WNOX
 WNOX WOKO WORC WONO WREC
 WSPD WWVA

SATURDAY

E-8:30 a.m., C-7:30, M-6:30, P-5:30
R—Cheerie, See Monday
 E-9:00 a.m., C-8:00, M-7:00, P-6:00
C—Little Jack Little, See Monday
 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 KFYZ KGA
 KJR KOA KPO KTAR KTBS KWCR
 WBAL WFLA WGAR WIBA WIOD
 WJZ WKY WREN WSB WNNC
C—Irene Beasley, See Monday

E-6:30 p.m., C-5:30, M-4:30, P-3:30
R—Opry House Tonight
 KEX KFSD KGA KJR KOA KPO
 KTBS WCAE WFAF WBA WKY
 WMC WRC WSM WTAM WNNC

E-6:45 p.m., C-5:45, M-4:45, P-3:45
C—Ozzie Nelson and Orchestra
 CFRB CKOK KDYL KFAB KFBK
 KFH KFJZ KFFY KFRC KGB KHJ
 KLRA KLZ KMOX KOH KOL KSCJ
 KTRH KTSK KVI KVOR WABC
 WACO WBBM WBCM WBIG WBRC
 WBT WCAH WCAO WCOO WDAE
 WDBJ WDBO WDOO WDRC WDSU
 WEAN WFAN WFBL WFEA WGST
 WHAS WHEC WHP WIBW WIP
 WISN WJAS WKBW WKBW WLBB
 WNAC WNOX WNOX WORC WONO
 WQAM WREC WSFA WSPD WTAQ
 WTRAR WTWC WWVA
R—Donald Novis, See Monday

E-7:00 p.m., C-6:00, M-5:00, P-4:00
C—Frederic William Wile
 KFBK KFFY KGB KHJ KMBC
 KMOX KOH KTRH KVI KVOR
 WABC WACO WADC WBCM WBIG
 WBRB WBT WCAH WCAO WCAU
 WDBO WDAE WDRC WFBM WFEA WGL
 WGN WGR WJAS WLAC WLBB
 WMAL WMT WNAC WNOX WOKO
 WQAM WSFA WSPD WTWC WWVA
B—Amos 'n' Andy, See Monday

E-7:15 p.m., C-6:15, M-5:15, P-4:15
C—William Vincent Hall
 CFRB CKOK KFBK KFH KFFY
 KFRC KGB KHJ KLZ KMBC KMOX
 KOH KOL KSCJ KTRH KTSK KVI
 KVOR WABC WACO WBBM WBCM
 WBG WBRC WBT WCAO WCAU
 WCOO WDAE WDBJ WDBO WDOO
 WDSU WEAN WGR WGST WHAS
 WHEC WHP WIBW WISN WJAS
 WKBW WNNC WNOX WNOX WOKO
 WORC WONO WQAM WREC WSFA
 WSPD WTAQ WTRAR WTWC WWVA
B—Jack Fulton, Jr., Tenor
 KDKA KOIL KWCR KWK WBAL
 WENR WFLA WHAM WIOD WIS
 WJR WJZ WREN WRVA WNNC

E-7:30 p.m., C-6:30, M-5:30, P-4:30
R—Rolicke's Male Quartet
 WREN WCSH WFAF WFBR WFI
 WGY WJAR WOW WRC WTAG
C—Keenan and Phillips
 CFRB CKOK KFAB KFBK KFH
 KFJZ KFFY KFRC KGB KHJ KLZ
 KMBC KOL KRLD KSCJ KTRH
 KTSK KVI KVOR WABC WACO
 WBBM WBCM WBIG WBRB WBT
 WCAO WCAU WDAE WDBJ WDBO
 WDOO WDSU WEAN WFBL WFEA
 WGL WGR WGST WHAS WHP
 WIBW WISN WJAS WMAL WNAC
 WNOX WNOX WOKO WORC WQAM
 WREC WSFA WSPD WTAQ WTRAR
 WTWC WWVA

B—Cuckoo Program, Ray Knight
 CKGW KEX KGA KJR KOA KTBS
 KWCR WBAL WFLA WGAR WHAM
 WIBA WJDX WJR WJZ WREN
 WRVA WSB WSM WNNC

E-7:45 p.m., C-6:45, M-5:45, P-4:45
C—Do Re Mi, Female Trio
 CFRB KFAB KFBK KFFY KFRC
 KGH KHJ KLZ KMBC KOH KOL

Saturday—Continued

KRLD KSCJ KTRH KVI KVOR
 WABC WACO WBBM WBCM WBIG
 WBRC WBT WCAH WCAO WCAU
 WCCO WDAE WDBJ WDBO WDDO
 WDSU WEAN WFBL WFBM WFEA
 WGR WGST WHAS WHEC WHP
 WIBW WISN WJAS WNAK WNAZ
 WNOX WOKO WORC WOWO WQAM
 WREC WSFA WSPD WTAQ WTAR
 WTOC WWVA

R — The Goldbergs, See Monday

E-8:00 p.m., C-7:00, M-6:00, P-5:00
B — "Whoopie"

KDKA KOIL KWCR KWK WBAL
 WKCY WGAR WHAM WJZ WLS
 WREN

C — Edwin C. Hill, See Monday

R — Harlem Fantasy

KFI KGO KGW KHQ KOA KOMO
 KSD KSL KSTP KVOO WBNB
 WCAE WCFB WDAF WFAF WEEI
 WFBR WFI WGY WHO WIOD WJW
 WJAR WJY WMAQ WOC WOV
 WRC WSAI WTAG WTAM WWJ
 WWNC

E-8:15 p.m., C-7:15, M-6:15, P-5:15
C — Abe Lyman, See Tuesday

E-8:30 p.m., C-7:30, M-6:30, P-5:30
B — Trio Romantic

KDKA KWK WJZ WBZA WGAR
 WHAM WJR WJY WMAQ WREN

C — Isham Jones and Orchestra

CFRB CKOK KDYL KFBK KFH
 KFJF KFIY KPRC KGB KHJ KLRA
 KLZ KMBC KMOX KOH KOL
 KSCJ KTRH KVI KVOR WABC
 WBCM WBIG WBRB WBT WCAH
 WCAO WCAU WCCO WDAE WDBJ
 WDBO WDDO WDSU WEAN WFBL
 WFBM WFEA WGL WGST WHEC
 WHK WHP WIBW WISN WJAS
 WKWB WLWB WMAL WNAK WNAZ
 WNOX WOKO WORC WPG WQAM
 WREC WSFA WSPD WTAQ WTAR
 WTOC WWVA

R — K-7. Drama

KFI KFYR KGO KGW KOA KOMO
 KSD KSL KSTP KTBS KVVO KYW
 WBNB WCAE WFSH WDAF WDAY
 WFAF WFCB WEEI WFBR WFI
 WFLA WGY WHO WIBA WIOD
 WJAR WJAX WJY WOC WOV
 WRE WSAI WSM WTAG WTAM
 WWJ WWNC

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

CFCF CKGW KFI KFYR KGO KGW
 KHQ KOA KPRC KSD KSTP KTR
 KTBS WBNB WCAE WCKY WFSH
 WDAF WFAF WEEI WFBR WFI
 WFLA WGY WHO WIBA WIOD
 WISWJAR WKY WMAQ WMC WOI
 WOC WRC WSAI WSM WSBM
 WTAG WTAM WWJ WWNC

B — Gus Van, Pickens Sisters

KDKA KOIL KPRC KWCR KWK
 WAPI WBAL WBPB WBZ WJAZ
 WGAR WHAM WJDX WJR WJZ
 WLS WMC WREN WSB WSM WSBM

E-9:15 p.m., C-8:15, M-7:15, P-6:15
C — Ann Leaf at Organ

CFRB CKOK KDYL KFAB KFBK
 KFH KFJF KPRC KGB KHJ KLRA
 KLZ KMBC KOH KOL KSCJ KTRH
 KVI KVOR WABC WACO WBCM
 WBIG WBRB WBT WCAH WCAO
 WCAU WCCO WDAE WDBJ WDBO
 WDDO WDSU WEAN WFBL WFBM
 WFEA WGL WGST WHAS WHEC

WHK WHP WIBW WISN WJAS
 WKBH WKBW WLWB WMAL
 WNAK WNAZ WNOX WOKO WORC
 WPG WQAM WREC WTAQ WTAR
 WTOC WWVA

E-9:30 p.m., C-8:30, M-7:30, P-6:30
B — S.R.O., Comedy Sketch

CFCF CKGW KDKA KWCR WJAL
 WJZ WJAZ WGAR WHAM WBR
 WJZ WLW WMAQ WREN

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

KDYL KFBK KFH KFJF KFIY
 KPRC KGB KHJ KLRA KLZ KMBC
 KMOX KOH KOL KSCJ KTRH
 KTSa KVI KVOR WAAB WABC
 WBBM WBCM WBIG WBRB WBT
 WCAO WCCO WDAE WDBJ WDBO
 WDDO WDSU WEAN WFBM WFEA
 WGST WHAS WHEC WHP WIBW
 WJAS WKBH WKBW WLWB WMAL
 WNAK 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 Keys, See Thursday

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

CFRB CKOK KDYL KFAB KFBK
 KFH KFJF KFIY KPRC KGB KHJ
 KLZ KMBC KOH KOL KSCJ KTRH
 KVI KVOR WABC WACO WBCM
 WBIG WBRB WCAO WCAU WCCO
 WDBJ WDBO WDDO WDSU WEAN
 WFBL WFEA WGR WGST WHP
 WJAS WKBH WMAL WNAK WNAZ
 WNOX WOKO WORC WOWO WQAM
 WSFA WSPD WTAQ WTAR WTOC
 WWVA

B — Twenty Fingers of Harmony

CFCF CKGW KDKA WCKY WGAR
 WHAM WJZ WREN

E-11:00 p.m., C-10:00, M-9:00, P-8:00
B — Amos 'n' Andy, See Monday

R — Ralph Kirbery, See Tuesday

C — Guy Lombardo and Orchestra

CKOK KDYL KFAB KFBK KFJF
 KFIY KPRC KGB KHJ KLRA KLZ
 KMBC KMOX KOH KOL KRLD
 KSCJ KTRH KTSa KVI KVOR
 WABC WBCM WBRB WBT WCAH
 WCAO WCAU WCCO WDAE WDBJ
 WDBO WDDO WDSU WEAN WFBL
 WFBM WGL WGST WHAS WHEC
 WHK WHP WIBW WISN WKBW
 WLWB WMAL WMBD WNAK WNAZ
 WNOX WODX WOKO WQAM WREC
 WSPD WTAR WTOC WWVA

E-11:15 p.m., C-10:15, M-9:15, P-8:15
B — Cesare Soderò's Orch., See Tuesday

E-11:30 p.m., C-10:30, M-9:30, P-8:30
C — Harold Stern and Orchestra

CFRB CKOK KDYL KFAB KFBK
 KFH KFJF KFIY KPRC KGB KHJ
 KLRA KLZ KMBC KMOX KOH
 KRLD KSCJ KTRH KTSa KVI
 KVOR WAAB WABC WBCM WBT
 WCAO WCAU WDAE WDBJ WDBO
 WDDO WDRB WDSU WEAN WFBM
 WFBM WGL WGST WHAS WHEC
 WHK WHP WIBW WISN WKBW
 WLWB WMAL WMBD WNAK WNAZ
 WNOX WODX WOKO WORC WQAM
 WREC WSPD WTAR WTOC WWVA

R — Paul Whiteman and Orchestra

KSD WCAE WCKY WFAF WEEI
 WFI WGY WJAR WMAQ WRC
 WTAM WWJ

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

KFBK KFIY KLZ KMBC KOH
 KTRH KVOR WABC WADC WBCM
 WBRB WBT WCAH WCAU WFBL
 WBCM WGL WHAS WISN WKBW
 WLAC WMAL WMBD WMT WNAK
 WNOX WOKO WPG WSPD WWVA
B — Jack Denny and Orchestra
 KWCR WBAL WHAM WJZ WRC
 WREN

E-12:30 a.m., C-11:30, M-10:30, P-9:30
R — College Inn Orchestra

KOA KPRC KSD KTBS KVOO
 WBNB WCAE WCKY WDAF WFAF
 WFCB WFBM WFLA WHO WJAZ
 WIOD WJY WOC WOW WRC WSB
 WSBM WTAM WWJ WWNC

SUNDAY

E-11:30 a.m., C-10:30, M-9:30 P-8:30
R — Major Bowes Family

KEL KFIY KGA KJR KOA KPO
 KSL KSTP KTBS WAFI WFSH WDAF
 WFAF WFLA WGY WIOD WLIT
 WMAQ WMC WPTF WRC WSM
 WTAM WWJ WWNC

E-12:00 n., C-11:00, M-10:00, P-9:00
C — Salt Lake Tabernacle Choir

CFRB CKOK KFAB KFBK KFIY
 KFRB KLZ KMBC KOH KSCJ KVOR
 WAAB WABC WADC WBIG WCAO
 WCCO WDBJ WDDO WFBL WFEA
 WGR WHAS WHEC WHK WISN
 WJAS WKBH WLWB WMAL WMBD
 WMT WNAK WNOX WOKO WORC
 WPG WQAM WREC WSBT WSJS
 WTAQ WTAR WWVA

E-12:30 p.m., C-11:30, M-10:30, P-9:30
R — Legion of the Lost

CKGW KEX KGA KJR KOA KPO
 KPRC KTBS WAFI WBNB WCKY
 WDAF WFAF WFBM WFI WFLA
 WGY WHO WIOD WJAR WKY
 WMC WOC WIC WSAI WSM WSM
 WSMB WSYR WTAG WTAM WWNC

C — Reis and Dunn

CFRB KDYL KFAB KFBK KFJF
 KFRB KIJ KLRA KMBC KMOX
 KOL KRLD KSCJ KTRH KVOR
 WAAB WABC WBBM WBRB WCAH
 WCAU WCCO WDAE WDBJ WDBO
 WDDO WDSU WFBL WFEA WGR
 WGST WHAS WHP WIBW WJAS
 WKBH WKBW WMAL WMBD
 WNAK WNOX WODX WOKO WORC
 WPG WQAM WREC WSFA WTAQ
 WTAR WWVA

E-12:45 p.m., C-11:45, M-10:45, P-9:45
C — Emery Deutsch and Orchestra

CFRB CKOK KDYL KFAB KFBK
 KFJF KPRC KHJ KLRA KMBC
 KOL KRLD KSCJ KTRH KVOR
 WAAB WABC WBBM WBCM WBRB
 WCAH WCAU WCCO WDAE WDBJ
 WDBO WDDO WDSU WFBL WGR
 WGST WHAS WHEC WIBW WISN
 WJAS WKBH WKBW WLWB WMAL
 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
R — Symphony Concert, Erno Rapee

KDYL KEX KFIY KGA KJR KOA
 KOMO KPO KTAR KTBS WBNB
 WCAE WCKY WDAF WDAY WFAF
 WEEI WFI WFLA WGY WHO WIOD
 WJAR WMAQ WOC WTAM WWJ
 WWNC

E-1:30 p.m., C-12:30, M-11:30, P-10:30
C — Columbia Church of the Air

CFRB CKOK KFAB KFBK KFIY

Sunday—Continued

KLZ KMBC KOH KSCJ KTRH KVI
KVOR WAAB WABC WADC WBCM
WBG WBCC WBT WCAH WCAO
WCAU WCOO WDBJ WDOO WDRC
WFBL WGR WHEC WHK WISN
WJAS WLWB WLWB WMAL WMT
WKO WOVO WPG WQAM WSBT
WSIS WTAQ WTAR WWVA

B—Clyde Doerr's Saxophone Octet
KDKA KFI KFSD KGO KHQ KOA
KOA KOMO KWCR WBAL WDAY WGAR
WHAM WJZ WLW

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

C—Ann Leaf at Organ
CFRB CKOK KDYL KFAB KFJF
KFRC KHJ KMOX KOL KSCJ KTRH
KVOR WABC WBBM WBCM WBRC
WBT WCAH WCAO WCCO WDAE
WDRJ WDBO WDOO WDRC WDSU
WEAN WFBL WFLA WGL WGR
WGST WHAS WHEC WHK WHP
WIBW WISN WJAS WKBH WLWB
WMAL WNAC WNOX WODX WOKO
WORC WQAM WSPD WTAQ WTAR
WTOC WWVA

R—Moonshine and Honeysuckle
KSD WCAE WCKY WCSH WDAF
WEAF WEEL WFBR WGY WHO
WJAR WLIT WMAQ WOC WOV
WRC WTAG WTAM WWJ

B—Yeast Foamers
KDKA KFI KFSD KFJR KGHL
KGO KGW KHQ KOIL KOMO KSTP
KTAR KTHS KVOO KWCR KWK
KYW WAPI WBAL WBSZ WBYA
WDAY WDBC WFAA WFLA WGAR
WHAM WIBA WIOD WIS WJAX
WJDX WJR WJZ WLW WPTF WRC
WRVA WSB WSM WSBM WTMJ
WWNC

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 KVOO KYW WBSN WCAE
WCSH WDAF WDAY WEAF WEBC
WEEL WFAA WFBR WGY WHO
WIBA WJAR WKY WLIT WOAI
WOC WOV WRC WSAI WTAG
WTAM WTMJ WWJ

C—Symphonic Hour

CFRB CKOK KDYL KFAB KFH
KFJF KFRC KHJ KLRA KMBC
KMOX KOL KSCJ KTRH KVOR
WABC WBCM WBIG WBRC WBT
WCAH WCAO WCAU WCCO WDAE
WDRJ WDBO WDOO WDRC WDSU
WEAN WFBL WFBM WFLA WGL
WGR WGST WHAS WHEC WHK
WHP WIBW WISN WJAS WKBH
WKBN WMAL WMBD WNAC WNOX
WODX WOKO WORC WQAM WREC
WTAQ WTAR WTOC WWVA

E-3:30 p.m., C-2:30, M-1:30, P-12:30

R—National Sunday Forum
KFJR KFHL KGIR KGO KGW
KHQ KOA KPRC KSL KSTP KTAR
KTHS KVOO KYW WBSN WCAE
WCSH WDAF WEAF WEBC WEEL
WFAA WFBR WFLA WGY WIBA
WIOD WIS WJAR WJAX WJDX
WKY WOAI WOV WPTF WRC
WRVA WSAI WSB WSM WSBM
WTAG WTAM WWJ WWNC

B—45th Highlanders Military Band

CKGW KDKA KOIL KWCR WBAL
WBZ WBZA WGAR WHAM WJR
WJZ WLW WMAQ WREN

E-4:00 p.m., C-3:00, M-2:00, P-1:00

C—Cathedral Hour
CFRB CKOK KDYL KFAB KFBC

KFH KFJF KFRC KHJ KLRA
KMBC KMOX KOL KSCJ KTRH
KVOR WABC WBCM WBIG WBRC
WBT WCAH WCAO WCAU WCCO
WDAE WDBJ WDBO WDOO WDRC
WDSU WEAN WFBL WFBM WFLA
WGR WGST WHAS WHEC WHK
WHP WIBW WISN WJAS WKBH
WKBN WMAL WMBD WNAC WNOX
WODX WOKO WORC WOVO WQAM
WREC WSPA WSPD WTAQ WTAR
WTOC WWVA

R—Jodent Program

KFI KFSD KFJR KGHL KGIR
KGO KGW KHQ KOA KOMO KPRC
KSD KSL KSTP KTAR KTBS KTHS
KVOO KYW WAPI WBSN WCAE
WCSH WDAF WDAY WEAF WEBC
WEEL WFAA WFBR WFLA WGY
WHO WIBA WIOD WIS WJAR WJAX
WJDX WKY WMC WOAI WOC
WOW WPTF WRC WRVA WSAI
WSB WSM WSBM WTAG WTAM
WTMJ WWJ WWNC

B—Temple of Song

KDKA KOIL KWCR WBAL WBZ
WBZA WCKY WFLA WGAR WHAM
WJR WJZ WMAQ WREN

E-4:30 p.m., C-3:30, M-2:30, P-1:30

B—Highlights of Bible
KDKA KFSD KFJR KGHL KGIR
KGO KGW KHQ KOIL KOMO
KPRC KSL KSTP KTAR KTBS
KTHS KVOO KWCR KWK WAPI
WBAL WBZ WBZA WCKY WDAY
WEBC WENR WFAA WFLA WGAR
WIBA WIOD WIS WJDX WJR
WJZ WKY WMC WOAI WPTF
WRFR WRVA WSB WSM WSTM
WWNC

R—Kremlin Art Quintet

CKGW KSD WBSN WCSH WDAF
WEAF WEEL WFBR WPI WGY
WHO WJAR WOC WOV WRC WSAI
WTAG WTAM WWJ

E-4:45 p.m., C-3:45, M-2:45, P-1:45

R—Pastels, String Quartet
CKGW KSD WBSN WCAE WCSH
WDAF WEAF WEEL WENR WFBR
WPI WGY WHO WJAR WOC WOV
WRC WSAI WTAG WTAM

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 WMAL

B—World of Religion

KFSD KFJR KGHL KGIR KGO
KGW KHQ KOA KOIL KPRC KTAR
KTBS KTHS KVOO KWCR KWK
KYW WAPI WBAL WBPB WBZ
WBZA WCKY WDAY WEBC WFLA
WGAR WHAM WIBA WIOD WIS
WJAX WJDX WJZ WMC WOAI
WPTF WREN WRVA WSB WSBM
WWNC

E-5:15 p.m., C-4:15, M-3:15, P-2:15

R—Le Trio Charmante
CKGW WBSN WCAE WCSH WDAF
WFAF WEEL WENR WFBR WPI
WGY WHO WJAR WOC WOV
WRC WSAI WTAG

E-5:30 p.m., C-4:30, M-3:30, P-2:30

C—Poet's Gold, David Ross

CFRB CKOK KDYL KFBC KFH
KFJF KFRC KHJ KLRA KMBC
KMOX KOL KRLD KSCJ KVOR
WABC WBCM WBIG WBRC WBT
WCAO WCAU WCCO WDAE WDBJ
WDBO WDOO WDRC WEAN WFBL
WFBM WFLA WGR WGST WHAS

WHEC WHP WIBW WISN WJAS
WKBH WKBN WLWB WQAM WNOX
WODX WOKO WORC WQAC WREC
WSPA WSPD WTAQ WTAR WTOC
WWVA

B—Road to Romany

KOIL KWCR KWK KYW WGAR
WHAM WJR WJZ WLW WREN

R—Big Ben's Dream Dramas

KDYL KFI KGO KOA KSD KSTP
WBSN WCAE WCSH WDAF WEAF
WEEL WENR WFBR WPI WGY
WJAR WOV WRC WSAI WTAG
WTAM WTMJ WWJ

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

R—Walter Logan, Pop Concert

CKGW KFSD KGO KGW KHQ
KOA KSTP KTAR KTBS WAPI
WBSN WCAE WCSH WDAF WEAF
WEBC WEEL WENR WFBR WPI
WFLA WGY WHO WIOD WJAR
WKY WMC WOC WOV WRC WRVA
WSAI WSB WSM WTAG WTAM
WJZ WWNC

C—Little Jack Little

CFRB CKOK KDYL KFBC KFH
KFJF KFRC KHJ KLRA KMBC
KOL KRLD KSCJ KVOR WABC
WBCM WBIG WBRC WBT WCAH
WCAO WCAU WCCO WDAE WDBJ
WDBO WDOO WDRC WEAN WFBL
WFBM WFLA WGR WGST WHAS
WHEC WHK WHP WIBW WISN
WJAS WKBH WKBN WLWB WNAC
WNOX WODX WOKO WQAM WQAM
WREC WSPA WSPD WTAQ WTAR
WTOC WWVA

E-6:00 p.m., C-5:00, M-4:00, P-3:00

C—Ballad Hour

CFRB CKOK KDYL KFAB KFBC
KFJF KFRC KHJ KLRA KMOX
KOL KRLD KSCJ KVOR WABC
WBCM WBIG WBRC WBT WCAH
WCAO WCAU WCCO WDAE WDRJ
WDOO WDRC WDSU WEAN WFBL
WFBM WFLA WGL WGR WGST
WHAS WHEC WHK WHP WIBW
WISN WJAS WKBH WKBN WLWB
WMAL WNAC WNOX WODX WOKO
WORC WPG WQAM WRC WSPA
WSPD WTAQ WTAR WTOC WWVA

R—Catholic Hour

KEX KFSD KFJR KGA KGHL
KGIR KJR KOA KPO KPRC KSTP
KVOO WAPI WBPB WBSN WCAE
WCSH WDAF WEAF WEBC WEEL
WENR WFBR WFLA WGY WHO
WIBA WIOD WJAR WJAX WJDX
WKY WLIT WMC WOAI WOC
WOW WRC WRVA WSAI WSM
WSMB WTAG WTAM WWJ WWNC

B—Paul Whiteman and Orchestra

KGW KOIL KWCR KWK WBAL
WBZ WBZA WCKY WGAR WHAM
WJR WJZ WMAQ WREN

E-6:30 p.m., C-5:30, M-4:30, P-3:30

R—L'Heure Exquisite

KEX KFSD KGA KJR KOA KPO
KSD KSTP KTAR KTBS KVOO
WBSN WCAE WDAF WEAF WEEL
WFBR WFLA WGY WHO WIBA
WIOD WIS WJAR WJAX WKY
WMAQ WMC WOC WOV WPTF
WKVA WSAI WSM WTAG WWJ

C—Irene Beasley, Round Towners

CFRB CKOK KDYL KFAB KFBC
KFH KFJF KFRC KHJ KLRA
KMBC KMOX KOL KRLD KSCJ
KVOR WABC WBCM WBIG WBRC
WBT WCAH WCAO WCAU WCCO
WDAE WDBJ WDBO WDOO WDRC

Sunday—Continued

WDSU WEAN WFBL WFBM WFEA
WGR WGST WHAS WHEC WHK
WHP WIBW WISN WJAS WKBW
WKBN WLWB WMBD WNAC WNOX
WODX WOKO WORC WOWO WQAM
WRFC WSPA WSPD WTAQ WTAR
WTOC WWVA

E-7:00 p.m., C-6:00, M-5:00, P-4:00

R — Donald Novis, Tenor
KFSD KFYR KGO KGW KHQ KOA
KSL KSTP KTAR KTBS KVOO
WBEN WBSN WDAF WEAJ WEEB
WEEI WFBR WFLA WGY WHO
WIBA WJOD WJAR WJDX WKY
WLIT WMAQ WOC WOV WSAI
WSM WTAG WTAM WWJ WWNC

B — Pickens Sisters
CKGW KOIL WBAL WCKY WHAM
WJZ WMAQ WREN

C — World's Business, Dr. Klein

KFAB KFJF KFPY KGB KLIZ KMOX
KOH KRLD KSCJ KTRH KVI
KVOR WABC WACO WADC WBBM
WBGM WBIG WBRC WBT WCAH
WCAO WCCO WDBJ WDOD WDRC
WEAN WFAN WFBL WFBM WFEA
WGL WGR WHAS WHEC WIP
WISN WJAS WLAC WLWB WLWB
WMAL WMT WNC WNAK WNOX
WOKO WORG WPG WQAM WRFC
WSBT WTAQ WTAR WWVA

E-7:15 p.m., C-6:15, M-5:15, P-4:15

R — Ray Knight, See Monday

C — Chicago Knights

CKOK KDYL KFAB KFJF KFPY
KFRC KHJ KMBC KMOX KOH
KRLD KSCJ KTRH KVOR WABC
WBGM WBIG WBRC WBT WCAH
WCAO WCCO WDAE WDBJ WDBO
WDOD WDRC WDSU WEAN WFBL
WFBM WFEA WGL WGR WGST
WHAS WHEC WHP WIBW WISN
WJAS WKBW WKBN WLWB WMAL
WNAC WNAK WNOX WODX WOKO
WORC WQAM WRFC WSPA WSPD
WTAQ WTAR WTOC WWVA

E-7:30 p.m., C-6:30, M-5:30, P-4:30

R — Orchestral Gems

KSD WBEN WCAE WDAF WEAJ
WFBR WGY WJAR WLS WOV
WSAI WTAG WTIC WWJ

B — Comediores, Male Quartet

CFCF KDKA KFI KFSJ KFYR
KGO KHQ KOA KOIL KSL KSTP
KTAR KTBS KWCR KWK WAPI
WBAL WFLA WGAR WHAM WJOD
WJR WJZ WKY WLS WLW WREN
WRVA WSB WSM WWNC

E-7:45 p.m., C-6:45, M-5:45, P-4:45

C — Angelo Patri, See Wednesday

E-8:00 p.m., C-7:00, M-6:00, P-5:00

B — Radio Luminaries

KDKA KPRC KTBS KVOO KWCR
KWK WBAL WFLA WGAR WIBA
WJOD WIS WJZ WKY WLS WMC
WREN WRVA WSMB WWNC

C — William Vincent Hall

CKOK KDYL KFAB KFJF KFPY
KFRC KHJ KMBC KMOX KOH
KSCJ KTRH KVOR WABC WBCM
WBGM WBIG WBT WCAH WCAO
WCCO WDAE WDBJ WDBO WDOD
WDRC WDSU WEAN WFBM WFEA
WGL WGR WGST WHAS WHEC
WHP WIBW WISN WJAS WKBW
WKBN WLWB WMAL WNAK WNOX
WODX WOKO WORC WQAM WRFC
WSPA WSPD WTAR WTOC WWVA

R — Chase and Sanborn Hour

CFCF CKGW KFI KFSJ KFYR

KGO KGW KHQ KOA KOMO KPRC
KSD KSL KSTP KTAR KTBS KVOO
WAPI WBEN WCAE WCKY WCSH
WDAF WDAY WEAJ WEEB WFAA
WFBR WFLA WGY WHO WIOD
WIS WJAR WJAX WJDX WKY
WLIT WLS WMC WQAI WOC WPTF
WRC WRVA WSAI WSB WSM
WSMB WTAG WTAM WTC WTMJ
WWJ WWNC

E-8:30 p.m., C-7:30, M-6:30, P-5:30

C — Roxy Theatre Symphony

CKOK KFAB KFPY KGB KLRA
KLZ KMBC KMOX KOH KRLD
KSCJ KTRH KVI KVOR WABC
WADC WBCM WBIG WBRC WBT
WCAH WCAO WCAU WCCO WDBJ
WDOD WDRC WEAN WFBL WFBM
WFEA WGR WHAS WHEC WHK
WISN WJAS WKBW WLWB WLWB
WMAL WMT WNAK WNAK WNOX
WOKO WORC WOWO WQAM WRFC
WSJS WTAR

B — Minneville Harmonica Rascals

KDKA KOIL KWCR KWK WBAL
WGAR WJR WJZ WLS WLW 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
WEAF 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 Jetlick Melodies

CFCF CKGW KDKA KFI KFSJ
KFYR KGHL KGIR KGO KGW KHQ
KOA KOIL KOMO KSTP KTAR
KWCR KWK KYW WBAL WBZ
WBZA WCKY WDAY WEEB WGAR
WHAM WIBA WJAX WJR WJZ
WREN WRVA WTMJ

E-9:15 p.m., C-8:15, M-7:15, P-6:15

R — Album of Familiar Music

KFI KFSJ KFYR KGO KGW KHQ
KOA KOMO KPRC KSD KSL KSTP
KTAR KTHS WAPI WBEN WCAE
WCSH WDAY WEAJ WEEB WENR
WFAA WFBR WFI WFLA WGY
WHO WIBA WJOD WJAR WJDX
WKY WMC WQAI WOC WOW
WRC WSAI WSB WSM WSMB
WTAG WTAM WTMJ WWJ

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

C — Pennoil Parade

CKOK KFJF KLRA KMBC KMOX
KTSB WABC WADC WBRC WBT
WCAO WCAU WCCO WDRC WEAN
WFBL WGN WGR WGST WHEC
WHK WJAS WKRC WLAC WLWB
WMAL WNAC WOKO WSPD

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 WEEB
WENR WGAR WHAM WIBA WJDX
WJR WJZ WKY WMC WQAI WREN
WSB WSM WSMB WTMJ

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

C — Ernest Hutcheson, Pianist

CFRC CKOK KFI KFPY KGB
KLRA KLZ KMBC KMOX KOH
KSCJ KTRH KVI KVOR WAAB
WABC WADC WBCM WBCM WBRC
WBT WCAH WCAO WCAU WCCO
WDBJ WDOD WDRC WEAN WFBL
WFBM WFEA WHAS WHEC WISN
WJAS WKBW WKBW WLAC WLWBZ

WMAL WMBG WMT WNAX WOKO
WORC WOWO WQAM WRFC WSPA
WSJS WTAR

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

B — Old Singing Master

KDKA KFI KGO KGW KHQ KOA
KOIL KOMO KSL KWK WBAL WBZ
WBZA WGAR WHAM WJR WJZ
WLWB WMAQ WREN

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

C — The Gauchos

CFRB CKOK KDYL KFAB KFBK
KFH KFJF KPRC KHJ KLRA KMBC
KMOX KOH KRLD KSCJ KTRH
KVOR WAAB WABC WBCM WBRC
WBT WCAH WCCO WDAE WDBJ
WDOB WDOD WDRC WDSU WEAN
WFAN WFBL WFBM WGL WGR
WHAS WHK WIP WJWB WIP WISN
WJAS WKBW WLWB WMAL WMBD
WNOX WOKO WPG WQAM WRFC
WSPA WSPD WTAR WTOC

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

R — Sunday at Seth Parker's

CFCF KPCA KFSJ KFYR KGHL
KGIR KGO KGW KHQ KOA KOMO
KPRC KSD KSL KSTP KTAR KTBS
KYW WAPI WBEN WCAE WCSH
WDAF WDAY WEAJ WEEB WEEI
WFAA WFBY WFI WFLA WGY
WHO WIBA WIOD WIS WJAR WJAX
WJDX WKY WMC WQAI WOC WOW
WPTF WRC WRVA WSAI WSB
WSM WTAM WTMJ WWJ

B — Three Keys

KDKA KOIL KWCR KWK WBAL
WCKY WGAR WHAM WJZ WMAQ

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

B — Malik Mystery Drama

KOIL KWCR WBAL WCKY WHAM
WJZ WMAQ WREN

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

R — Radio Rubes, Hit Billy Songs

KFYR KGHL KGO KGW KHQ
KTBS WCAE WEAJ WENR WFBR
WFI WFLA WGY WVA WJOD WIS
WJDX WMAQ WMC WOW WIC
WRVA WSAI WSB WSM WSMB
WTAG WTAM WTIC WWJ WWNC

C — Angelo Patri, See Wednesday

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

R — Melodic Serenade

KFSD KFYR KGO KHQ KSTP
KTAR KTBS WCAE WCKY WEAJ
WENR WFBR WFLA WGY WIBA
WJOD WIS WJAR WMC WRC WSAI
WSB WSM WTAM WWJ WWNC

C — Ozzie Nelson and Orchestra

CFRB CKOK KLRA WABC WBCM
WBRC WBT WCAU WCCO WDAE
WDBJ WDBO WDOD WDRC WDSU
WEAN WFBL WGL WGR WHEC
WHP WISN WKBW WLWB WMAL
WNAK WNOX WOKO WQAM WSPA
WSPD WTAR WTOC

C — Pennoil Parade

KDYL KERN KFBK KFPY KFRC
KGB KHJ KLZ KMJ KOIN KOL
KVI KWG

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

B — Wm. Stoess and Orchestra

KGHL KGO KGW KOA KOIL KOMO
KSTP KTBS KWCR WDAY WENR
WFLA WGAR WHAM WJOD WJR
WJZ WKY WLW WMC WREN
WSB WWNC

C — Bernie Cummins, See Friday

R — Eliot Everett and Orchestra

WCAE WCKY WDAF WEAJ WFBR
WHO WLIT WOC WTAM

CLASSIFIED INDEX to CHAIN PROGRAMS

Time in Eastern Standard

BANDS

48th Highlanders, 3:30 p.m., Sunday, B.
Little German Band, 6:00 p.m., Saturday, B.

CONCERTS

Ballad Hour, 6:00 p.m., Sunday, C.
Howard Barlow Symphony, 11:00 p.m., daily, ex. Sat. and Sun. C.
Cities Service, 8:00 p.m., Friday, R.
Gauchos, 10:30 p.m., Sunday, C.
Kremlin Art Quintet, 4:30 p.m., Sunday, R.
L'Heure Exquise, 6:30 p.m., Sunday, R.
Le Trio Charmante, 5:15 p.m., Sunday, R.
Walter Logan, 5:45 p.m., Sunday, R.
Melodic Serenade, 11:30 p.m., Sunday, R.
Mobiloil, 9:30 p.m., Wednesday, R.
New York Orchestra, 8:15 p.m., Sunday, B.
Orchestra Gems, 7:30 p.m., Sunday, R.
Pastels, Spring Quartet, 4:45 p.m., Sunday, R.
Erno Rapee, 1:00 p.m., Sunday; 9:00 p.m., Sat., R.
Roxy Symphony, 8:30 p.m., Sunday, C.
Cesare Sodero, 11:15 p.m., daily, ex. Sun. and Mon., B.
Summer Symphony, 11:15 p.m., Monday, B.
Symphonic Hour, 3:00 p.m., Sunday, C.
Waldorf-Astoria, 6:00 p.m., daily, ex. Sunday, R.
G. Washington, 9:00 p.m., Wednesday, B.

DANCE BANDS

Ben Bernie, 9:00 p.m., Tues.; 12:30 a.m., Wed., R.
Don Bestor, 12 mid., Thursday, R.
College, Inn, 12:30 a.m., Sunday, R.
Bernie Cummins, 12 mid., Sun. and Frid., C.
Jack Denny, 12 mid., Saturday, B.
Lew Diamond, 12:30 a.m., Monday, B.
Clyde Doerr, 1:30 p.m., Sunday, B.
Eliot Everett, 12 mid., Sunday, R.
Isham Jones, 8:30 p.m., Saturday, C.
Wayne King, 3:00 p.m., Sunday, R.
Baron Lee, 12 mid., Wed. and Fri., B.
Guy Lombardo, 9:00 p.m., Wed.; 11:00 p.m. Sat., C.
Lucky Strike, 10:00 p.m., Tues., Thurs. and Sat., R.
Abe Lyman, 8:15 p.m., Tues., Thurs. and Sat., C.
Freddie Martin, 11:45 p.m., Mon., Tues. and Fri., C.
Clyde McCoy, 12 mid., Monday, B.
Merry Madcaps, 6:30 p.m., Friday, R.
Ozzie Nelson, 11:30 p.m., Sun.; 6:45 p.m., Sat., C.
George Olsen, 9:30 p.m., Mon. and Wed., B.
Pacific Sorenaders, 12:30 a.m., Thurs., B.
Graham Prince, 6:15 p.m., Friday, B.
Buddy Rogers, 12 mid., Mon. and Wed., R.
B. A. Rolfe, 6:00 p.m., Wednesday, B.
Andy Sanella, 10:15 p.m., Wednesday, B.
Noble Sissle, 12 mid., Thursday, C.
Harold Stern, 12 mid., Tues.; 11:30 p.m., Sat., C.
William Stoess, 12 mid., Sunday, B.
Rudy Vallee, 8:00 p.m., Thursday, R.
Paul Whiteman, 11:00 p.m., Mon. and Thurs.; 12:05 a.m., Tues.; 10:00 p.m., Fri.; 11:30 p.m., Sat.; 8:30 p.m., Wed., R.; 6:00 p.m., Sun., B.

DIALOG

Amos 'n' Andy, 7:00 and 11:00 p.m., daily, ex. Sunday, B.
Big Time, 8:00 p.m., Wednesday, R.
Burn and Allen, 9:00 p.m., Wednesday, C.
Clara, Lu 'n' Em, 10:15 a.m., daily, ex. Sat. and Sun., B.
East Aces, 10:15 p.m., Mon., Wed. and Fri., C.
Funnyboners, 6:45 p.m., Mon. and Wed., C.
Ray Knight, 7:15 p.m., daily, ex. Fri. and Sat., R; 7:30 p.m., Sat., B.
Meyer the Buyer, 8:30 p.m., Thursday, C.
Opry House, 6:30 p.m., Saturday, R.
Ray Perkins, 7:30 p.m., Tues. and Thurs., R.
Reis & Dunn, 12:30 p.m., Sun.; 6:15 p.m., Mon., C.
S.R.O. Comedy, 9:30 p.m., Saturday, B.
Stebbins Boys, 7:30 p.m., daily, ex. Sat. and Sun., B.
Stoopnagle and Budd, 10:00 p.m., Thurs.; 7:30 p.m., Fri., C.
Tasteyast Jesters, 7:15 p.m., Monday, B.
Ward Wilson, 7:15 p.m., Wed., Thurs. and Fri., B.

DRAMA

Big Ben, 5:30 p.m., Sunday, R.
Detective Drama, 9:00 p.m., Thursday, R.
Dramatic Sketch, 10:30 p.m., Mon., Tues. and Wed., B.
Eno Crime Club, 9:30 p.m., Tues. and Wed., C.
Evening in Paris Mystery, 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.
K-7, 8:30 p.m., Saturday, R.
Legion of Lost, 12:30 p.m., Sunday, R.
Phillips Lord, 10:00 p.m., daily, ex. Sat. and Sun., B.
Malik Mystery, 11:00 p.m., Sunday, B.
March of Time, 9:30 p.m., Friday, C.
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.
RKO Mystery, 10:30 p.m., Friday, R.
Flowers and Drums, 5:00 p.m., Saturday, C.
Sheer Romance, 6:30 p.m., Tuesday, B.
Soonyland Sketches, 8:00 p.m., Monday, R.
Thompkins Corner, 9:30 p.m., Thursday, B.

PIANO AND ORGAN

Fray and Braggiotti, 7:30 p.m., Wed.; 10:15 p.m., Thurs., C.
Harding Sisters, 6:30 p.m., Mon. and Wed., R; 10:45 p.m., Sat., B.
Ernest Hutcheson, 10:00 p.m., Sunday, C.
Keenan and Phillips, 7:30 p.m., Saturday, C.
Ann Leaf, 2:30 p.m., Sunday; 9:15 p.m., Saturday, C.
Schirmer and Schmidt, 6:30 p.m., Monday, R.

POPULAR PROGRAMS

A. & P. Gypsies, 9:00 p.m., Monday, R.
America in Revue, 9:30 p.m., Thursday, R.
Armour Program, 9:30 p.m., Friday, B.
Jack Benny, 9:30 p.m., Mon. and Wed., B.
Major Bowes, 11:30 a.m., Sunday, R.
Carnation Contented, 8:00 p.m., Monday, B.
Chase and Sanborn, 8:00 p.m., Sunday, R.
Clicquot 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.
Jack Frost Melody, 8:30 p.m., Wednesday, B.
G.E. Circle, 5:45 p.m., daily, ex. Sat. and Sun., R.
Goodyear Program, 9:00 p.m., Wednesday, R.
Harlem Fantasy, 8:00 p.m., Saturday, R.
Household Program, 9:00 p.m., Tuesday, B.
Maxwell House, 7:30 and 11:15 p.m., Mon., Wed. and Fri., R.
Musical Fast Freight, 8:45 p.m., Tues. and Wed., C.
Borah Minnevitich, 8:30 p.m., Sunday, B.
Nestle's Program, 8:00 p.m., Friday, B.
Parade of the States, 9:30 p.m., Monday, R.
Pennzoil Parade, 9:30 and 11:30 p.m., Sunday, C.
Pond's Program, 9:30 p.m., Friday, R.
Road to Roman, 5:30 p.m., Sunday, B.
Sheaffer Revue, 9:45 p.m., Sunday, B.
Sinclair Wiener Minstrels, 9:00 p.m., Monday, B.
Whoopee, 8:00 p.m., Saturday, B.
Ed Wynn, 9:30 p.m., Tuesday, R.
Yeast Foamers, 2:30 p.m., Sunday, B.

QUARTETS

Candle Lightin' Time, 8:30 p.m., Friday, B.
Commodores, 7:30 p.m., Sunday, B.
Corn Cob Pipe Club, 10:00 p.m., Wednesday, R.
Dandies of Yesterday, 6:30 p.m., Wednesday, B.
Mills Bros., 9:15 p.m., Mon. and Thurs., C.
Revelers, 8:30 p.m., Monday, R.
Rollickers, 7:00 p.m., Thurs.; 7:30 p.m., Sat., R.

RELIGIOUS

Cathedral Hour, 4:00 p.m., Sunday, C.
Catholic Hour, 6:00 p.m., Sunday, R.
Chicago Knights, 7:15 p.m., Sunday, C.
Church of the Air, 1:30 p.m., Sunday, C.
Highlights of Bible, 4:30 p.m., Sunday, B.
Mid-Week Hymn Sing, 7:00 p.m., Tuesday, R.
National Sunday Forum, 3:30 p.m., Sunday, R.
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.
World of Religion, 5:00 p.m., Sunday, B.

SINGERS

Irene Beasley, 6:30 p.m., Sun.; 6:00 p.m., Mon., Wed., Fri. and Sat., C.
Connie Boswell, 7:15 p.m., Wed.; 7:45 p.m., Fri., C.
Boswell Sisters, 10 p.m., Mon.; 9:00 p.m., Thurs., C.
Charles Carlie, 7:15 p.m., Mon.; 11:30 p.m., Wed. and Fri., C.
Vaughn DeLeath, 6:30 p.m., Mon.; 10:45 p.m., Sat., C.
Do Re Mi, 7:45 p.m., Sat.; 8:00 p.m., Sun.; 2:00 p.m., Fri., C.
Cliff Edwards, 7:15 p.m., Tues. and Thurs., C.
Ruth Etting, 10:00 p.m., Wed.; 9:00 p.m., Sat., C.
Jane Froman, 4:00 p.m., Sun., R.; 10:45 p.m., daily, ex. Sat and Sun., B.
Jack Fulton, 7:15 p.m., Saturday, B.
Sid Gary, 11:30 p.m., Monday, C.
Tito Guizar, 7:45 p.m., Mon.; 9:30 p.m., Fri., C.
William Vincent Hall, 8:00 p.m., Sun.; 6:30 p.m., Wed.; 7:15 p.m., Sat., C.
Ralph Kirbery, 11:00 p.m., Tues. and Sat., R.
Harriet Lee, 7:00 p.m., Monday, R.
Little Jack Little, 5:45 p.m., Sun.; 9:00 a.m., daily, ex. Sun.; 11:30 p.m., Tues. and Thurs., C.
Tommy McLaughlin, 9:15 p.m., Tuesday, C.
Frank Munn, 9:15 p.m., Sunday, R.

Donald Novis, 7:00 p.m., Sun.; 6:45 p.m., Mon., Wed. and Sat., R.
Old Singing Master, 10:15 p.m., Sunday, B.
Pickens Sisters, 7:00 p.m., Sun.; 9:00 p.m., Sat., B.
Georgie Price, 7:45 p.m., Tues. and Thurs., C.
Radio Rubes, 11:15 p.m., Sunday, R.
Red and Ramona, 7:45 p.m., Tues. and Thurs., B.
Sanderson-Crumit, 8:00 p.m., Tuesday, R.
Singin' Sam, 8:15 p.m., Mon., Wed. and Fri., 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.
Irene Taylor, 8:15 p.m., Wednesday, B.
Temple of Song, 4:00 p.m., Sunday, B.
Three Keys, 10:45 p.m., Sun.; 10:30 p.m., Thurs., Fri. and Sat., B.
Trio Romantique, 8:30 p.m., Saturday, B.
Gus Van, 9:00 p.m., Saturday, B.

TALKS

Adventures in Health, 8:30 p.m., Tues. and Fri., B.
Cheerio, 8:30 p.m., daily, ex. Sunday, R.
Football Show, 9:00 p.m., Friday, C.
William Hard, 6:45 p.m., Tuesday, R.
Edwin C. Hill, 8:00 p.m., daily, ex. Sun.; 11:00 p.m., Mon., Wed. and Fri., C.
H. V. Kaltenborn, 6:00 p.m., Tues. and Thurs., C.
Dr. Julius Klein, 7:00 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., Wd. and Sun., C.
Poets Gold, 5:30 p.m., Sunday, C.
Public Affairs Institute, 10:15 p.m., Sat., C.
Nellie Revell, 11:00 p.m., Wednesday, R.
Sigmund Spaeth, 10:15 p.m., Tues.; 8:15 p.m., Thurs., B.
Taxpayers' League, 8:00 p.m., Wednesday, 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 station 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.
f	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 networks.	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

NOTICE OF COPYRIGHT

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FOR KEY TO SYMBOLS SEE PAGE 45

540 kilocycles 555.6 meters

CKOK ae 5000 CG

Windsor, Ont.

Essex Broadcasters, Ltd.

550 kilocycles 545.1 meters

KFDY ae 500 (11)
 KFUF ae 500 2(1)
 KFYR ah 1000 1N(2.5)
 KOAC ak 1000 -----
 KSD ak 500 2R
 WDEV ae 500 D
 WGR ae 1000 C
 WKRC ak 1000 C

Brookings, S. D.
 St. Louis, Mo.
 Bismarck, N. Dakota
 Corvallis, Ore.
 St. Louis, Mo.
 Waterbury, Vt.
 Buffalo, N. Y.
 Cincinnati, Ohio

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

560 kilocycles 535.4 meters

KFDM ak 500 (1)
 KLZ ae 1000 C
 KTAB ae 1000 -----
 WFI ae 500 1R
 WIBO ae 1000 (1.5)a
 WLIT z 500 1R
 WNOX ak 1000 C(2)
 WPCC ak 500 Sa
 WQAM ae 1000 C

Beaumont, Texas
 Denver, Colo.
 San Francisco, Calif.
 Philadelphia, Pa.
 Chicago, Ill.
 Philadelphia, Pa.
 Knoxville, Tenn.
 Chicago, Ill.
 Miami, Fla.

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)
 KMTR z 1000 C-----
 KVI ae 500 C
 TGW z 50 -----
 WEAO ae 750 1
 WKBN ak 500 1C
 WMCA ak 500 3
 WNAX ae 1000 C
 WNYC ak 500 3
 WSYR ak 250 R2a
 WWNC ae 1000 N

Wichita Falls, Texas
 Hollywood, Calif.
 Tacoma, Wash.
 Guatemala
 Columbus, Ohio
 Youngstown, Ohio
 New York, N. Y.
 Yankton, S. D.
 New York, N. Y.
 Syracuse, N. Y.
 Asheville, N. C.

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

CFCL agj 500 Sa
 CFCY z 500 E
 CHMA z 250 4S
 CKCL agj 500 a
 CKUA ak 500 4F
 KMJ ak 500 CT
 KSAC ak 500 2(1)
 WDBO ae 250 CU
 WIBW ae 1000 C2
 WOBW ak 250 1(.5)
 WSAZ ak 250 1(.5)
 WTAG ae 250 R(.5)

Toronto, Ont.
 Charlottetown, P. E. I.
 Edmonton, Alta.
 Toronto, Ont.
 Edmonton, Alta.
 Fresno, Calif.
 Manhattan, Kans.
 Orlando, Fla.
 Topeka, Kans.
 Charleston, W. Va.
 Huntington, W. Va.
 Worcester, Mass.

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

590 kilocycles 508.2 meters

CJGC ae 5000 595GZ
 KHQ ak 1000 N(2)
 WCAJ ae 500 1
 WEEI ak 1000 R
 WKZO ae 1000 D
 WOW aeh 1000 1R

London, Ont.
 Spokane, Wash.
 Lincoln, Neb.
 Boston, Mass.
 Kalamazoo, Mich.
 Omaha, Neb.

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

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600 kilocycles 499.7 meters

KNRO	ak	500	F	Ottawa, Ont.
KFSD	ah	500	N(1)	San Diego, Calif.
WCAC	ak	250	2	Storrs, Conn.
WCAC	ae	250	C	Baltimore, Md.
WICC	ae	250	2H(5)	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.

KCYS.
670
MTRS.
447.5
DIAL

610 kilocycles 491.5 meters

KFRC	ae	1000	C	San Francisco, Calif.
VPN	z	500	-----	Nassau, Bahama
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, Inc.
Development Board
Kansas City Star Co.
Pennsylvania Bdctg. Co. (WFAN)
Cleveland Radio Broadcasting Corp.
Cia. Difusora Mexicana S. A.

620 kilocycles 483.6 meters

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

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

630 kilocycles 475.9 meters

CFCT	ae	500	G	Victoria, B. C.
CJGX	ae	500	FL	Yorkton, Sask.
CKOC	ae	1000	635aG	Hamilton, Ont.
CKTB	aej	1000	635aL	St. Catharines, Ont.
CMCJ	z	250	-----	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.
KGFJ	z	200	D	Pierre, S. D.
WGBF	ae	500	W	Evansville, Ind.
WMAL	ae	250	C(5)	Washington, D. C.
WOS	z	500	1	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.
Rafael Rodriguez
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

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.
WATU	ae	500	1	Columbus, Ohio
WOI	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

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

CHWK	ak	100	665	Chilliwack, B. C.
CJRM	z	500	665	Moose Jaw, Sask.
CJRW	z	1000	665	Fleming, Sask.
CMCO	z	250	-----	Havana, Cuba
RUS	z	500	664	Salvador
WAAW	z	500	D	Omaha, Neb.
WEAF	ak	50000	R	New York City

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

670 kilocycles 447.5 meters

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

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680 kilocycles 440.9 meters

CMAF	z	500	-----	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

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

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
VCX	z	100	-----	Halifax, N. S.

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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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The Crosley Radio Corporation

710 kilocycles 422.3 meters

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

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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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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	5000	-----	Havana, Cuba
XEF-XER	z	75000	735	Villa Acuna, Mexico

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W. G. Hassell (Province Bldg.)
Northern Electric Co., Ltd.
La Presse Publishing Co., Ltd.
Vancouver Daily Province
United Church of Canada
Sprott-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	z	250	D	Portsmouth, N. H.

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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
VOWR	ak	500	-----	St. John's, N. F.
WJR	ak	10000	B	Detroit, Mich.
XEQ	aeH	5000	-----	Juarez, Chih., Mexico

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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

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

770 kilocycles 389.4 meters

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

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

780 kilocycles 384.4 meters

CKY	z	5000	-----	Winnipeg, Man.
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

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

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790 kilocycles 379.5 meters

CMBS	z	150	-----	Havana, Cuba
CMBT	z	150	-----	Havana, Cuba
CMHC	z	250	-----	Tuinucu, Cuba
KGO	ak	7500	N	San Francisco, Calif.
WGY	ak	50000	R	Schenectady, N. Y.

Enrique Artalejo
Emilio Perera
Frank H. Jones
General Electric Co. (Opr. NBC)
General Electric Co.

800 kilocycles 374.8 meters

WBAP	ak	10000	IN	Fort Worth, Texas
WFAA	ak	50000	IN	Dallas, Texas

Carter Publications, Inc.
Dallas News-Dallas Journal

810 kilocycles 370.2 meters

CHNS	ae	500	815aZG	Halifax, N. S.
CNRH	z	500	815aZ	Halifax, N. S.
VOAS	ak	75	D	St. John's, N. F.
WCCO	ak	5000	C	Minneapolis, Minn.
WPCB	ak	500	D	New York City
XFC	z	250	-----	Aguascalientes, Mex.

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

KCYS.

880

MTRS.

340.7

DIAL

820 kilocycles 365.6 meters

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

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

830 kilocycles 361.2 meters

KOA	ak	12500	NJ	Denver, Colo.
WBEU	ak	1000	D	Reading, Pa.
WHDH	z	1000	DY	Boston, Mass.
WRUF	ae	5000	DnC	Gainesville, Fla.

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

840 kilocycles 356.9 meters

CKGW	ae	5000	NEa	Toronto, Ont.
CKLC	ak	1000	G	Red Deer, Alta.
CMC	z	500	-----	Havana, Cuba
CPRY	ae	5000	L	Toronto, Ont.
XEFD	z	300	845	Tijuana, Mexico

Gooderham & Worts, Ltd.
Alberta Pacific Grain Co., Ltd.
Cuban Telephone Co.
Canadian Pacific Co., Royal York Hotel
Carlos de la Sierra

850 kilocycles 352.7 meters

CMJE	z	20	856	Camaguey, Cuba
KWKH	ak	10000	1	Shreveport, La.
WWL	ak	5000	1DnX	New Orleans, La.

Manuel Fernandez
Hello World Broadcasting Corp.
WWL Development Co. (Loyola Univ.)

860 kilocycles 348.6 meters

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

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

870 kilocycles 344.6 meters

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

Great Lakes Bdctg. Co., NBC Opr.
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.
CJCB	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.
WCOG	ae	500	(1)	Meridian, Miss.
WGBI	ah	250	Q1	Scranton, Pa.
WQAN	ak	250	1	Scranton, Pa.
WSUI	ae	500	-----	Iowa City, Iowa

Maple Leaf Radio Co., Ltd.
Nathansan's Radio Headquarters
Vandry, 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

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890 kilocycles 336.9 meters

CFBO	z	500	-----	St. John, N. B.
CKCO	z	100	3	Ottawa, Ont.
CKPR	ak	50	3G	Fort William, Ont.
CMCF	ak	250	1	Havana, Cuba
CMX	ae	3000	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.
VOGT	z	100	-----	Wabana, N. F.
WGST	ae	250	C(.5)	Atlanta, Ga.
WILL	ak	250	2(.5)	Urbana, Ill.
WJAR	ae	250	(.5)R	Providence, R. I.
WMMN	aeH	250	(.5)	Fairmont, W. Va.

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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
 The Gaiety Theatre
 Southern Broadcasting Co.
 University of Illinois
 The Outlet Co.
 A. M. Rowe, Inc.

900 kilocycles 333.1 meters

KGBU	z	500	-----	Ketchikan, Alaska
KHJ	ae	1000	C T	Los Angeles, Calif.
WBEN	ae	1000	R	Buffalo, N. Y.
WJAX	ach	1000	N	Jacksonville, Fla.
WKY	ae	1000	N	Oklahoma City, Okla.
WLBL	ae	2000	D	Stevens Point, Wis.

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Alaska Radio & Service Co.
 Don Lee, Inc.
 WBEN, Inc., Buffalo Evening News
 City of Jacksonville
 Oklahoma Publishing Co.
 Wis. Dept. Agriculture & Markets

910 kilocycles 329.6 meters

CFLC	ae	100	915	Prescott, Ont.
CFQC	z	500	-----	Saskatoon, Sask.
TICR	z	50	911	San Jose, Costa Rica
XEW	z	5000	-----	Mexico City, Mexico

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Radio Association of Prescott
 The Electric Shop, Ltd.
 Mexico Music Co.

920 kilocycles 325.9 meters

CMCD	aeH	250	925	Havana, Cuba
CMCN	z	250	925	Havana, Cuba
HIK	z	1000	-----	Port au Prince, Haiti
KPEL	ak	500	1	Denver, Colo.
KFXF	z	500	1	Denver, Colo.
KOMO	aj	1000	N	Seattle, Wash.
KPRC	ae	1000	N(2.5)	Houston, Texas
WAAF	ak	500	D	Chicago, Ill.
WBSO	ae	500	D	Babson Park, Mass.
WWJ	ak	1000	R	Detroit, Mich.

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Angel Berternaty y Garcia
 Antonio Ginard
 Republic of Haiti
 Gene O'Fallon (Albany Hotel)
 Colorado Radio Corp.
 Fisher's Blend Station, Inc.
 Houston Printing Co. (Houston Post)
 Drovers Journal Publishing Co.
 Broadcasting Service Org., Inc.
 The Detroit News

930 kilocycles 322.4 meters

CFCH	aj	100	3LM	North Bay, Ont.
CFRC	z	50	3(.25)	Kingston, Ont.
CKX	ak	500	E	Brandon, Manitoba
CMJF	z	225	-----	Camaguey, Cuba
KFWI	aj	500	1	San Francisco, Calif.
KGBZ	ak	500	2(1)	York, Neb.
KMA	ae	500	2(1)	Shenandoah, Iowa
KROW	ak	500	1(1)	Oakland, Calif.
WBRC	ak	500	C(1)	Birmingham, Ala.
WDBJ	ae	250	C(.5)	Roanoke, Va.
WIBG	aeH	25	D	Glenside, Penna.

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Northern Supplies, Ltd.
 Queen's University
 Manitoba Telephone System
 John L. Stowers
 Radio Entertainments, Ltd.
 Dr. Geo. R. Miller
 Earl E. May Seed & Nursery Co.
 Educational Broadcasting Corp.
 Birmingham Bdctg. Co., Inc.
 Times-World Corp.
 WIBG, Inc. (Keswick Bldg.)

940 kilocycles 319.0 meters

KOIN	zk	1000	CT	Portland, Ore.
WAAT	ae	300	D	Jersey City, N. J.
WCSH	ae	1000	R(2.5)	Portland, Maine
WDAY	ae	1000	N	Fargo, No. Dakota
WFIW	ae	1000	C	Hopkinsville, Ky.
WHA	ak	1000	D	Madison, Wis.
XEO	ak	5000	(35)	Mexico City, Mexico

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KOIN, Inc. (New Heathman Hotel)
 Bremer Broadcasting Corp.
 Congress Square Hotel Co.
 WDAY, Inc. (Black Bldg.)
 WFIW, Inc.
 University of Wisconsin
 National Revolucionario Party (XEFO)

950 kilocycles 315.6 meters

CMHD	z	250	-----	Caibarien, Cuba
KFWB	ak	1000	-----	Los Angeles, Calif.
KGHL	ak	1000	NJ(2.5)	Billings, Mont.
KMBC	ak	1000	C	Kansas City, Mo.
VONA	z	30	-----	St. John's, N. F.
WRC	z	500	R	Washington, D. C.

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Manual Alvarez
 Warner Bros. Broadcasting Corp.
 Northwestern Auto Supply Co.
 Midland Bdctg. Co. (Pickwick Hotel)
 Lane, Gillard & Avery
 National Broadcasting Co., Inc.

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960 kilocycles 312.3 meters

CHCK	ak	100	V	Charlottetown, P. E. I.
CHWC	ak	500	3FL	Regina, Sask.
CKKC	ak	500	3FL	Regina, Sask.
CKNC	ak	500	M	Toronto, Ont.
CMBC	ach	500	965a	Havana, Cuba
CMBD	z	150	965a	Havana, Cuba
CMJL	z	50	-----	Camaguey, Cuba
XED	z	10000	965	Reynosa, Mexico

23			
J. A. Gesner & W. E. Burke R. H. Williams & Sons, Ltd. Leader Post, Ltd. (Leader Bldg.) Canadian National Carbon Co., Ltd. Domingo Fernandez Luis Perez Garcia Enrique Artimes International Broadcasting Co.			

970 kilocycles 309.1 meters

KJR	ac	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
KDKA	ak	50000	B	Pittsburgh, Pa.

The Voice of the Prairies, Ltd. Westinghouse Elec. & Mfg. Co.			

990 kilocycles 302.8 meters

CMGF	z	50	987	Matanzas, Cuba
WBZ	ak	25000	BA	Boston, Mass.
WBZA	ak	1000	BA	Springfield, Mass.
WJEM	z	500	DP	Tupelo, Miss.
XEK	z	101	-----	Mexico City, Mexico

Bernabe R. de la Torre Westinghouse Elec. & Mfg. Co. Westinghouse Elec. & Mfg. Co. Britt A. Rogers, Jr. Arturo Martinez			

KCY.S.

1040

MTRS.

288.3

DIAL

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	-----	Torreón, 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.			

1010 kilocycles 296.8 meters

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

Acadia University Manuel & Guillermo Salas Powell & Platz Pacific Agricultural Foundation, Ltd. Marcus Loew Booking Agency South Carolina Bdctg. Co., Inc. University of Oklahoma Calvary Baptist Church Calvary Baptist Church Aviation Radio Station, Inc.			

1020 kilocycles 293.9 meters

KYW	ae	10000	N	Chicago, Ill.
WRAX	ae	250	D	Philadelphia, Pa.

Westinghouse Elec. & Mfg. Co. (KFKX) WRAX Broadcasting Co.			

1030 kilocycles 291.1 meters

CFCF	ae	500	NG	Montreal, Que.
CMHI	ck	200	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 M. P. Martinez Canadian National Railways El Buen Tono, S. A.			

1040 kilocycles 288.3 meters

CMGH	z	150	-----	Matanzas, Cuba
KRLD	ae	10000	1C	Dallas, Texas
KTHS	ae	10000	1N	Hot Springs, Ark.
WKAR	ae	1000	D	East Lansing, Mich.

Alberto Alvarez KRLD Radio Corp. (Adolphus Hotel) Chamber of Commerce Michigan State College			

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1050 kilocycles 285.5 meters

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

195		
Jose Antonio Lefran Farmers & Bankers Life Ins. Co. Western Broadcast Co. Hugo Molina Font Wendell Cox		

1060 kilocycles 282.8 meters

KWJJ	z	500	Dn	Portland, Ore.
WBAL	ae	10000	1B	Baltimore, Md.
WJAG	ak	1000	Dn	Norfolk, Neb.
WTIC	ak	50000	1R	Hartford, Conn.

19		
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	z	50	D	Carthage, Ill.
WDZ	ak	100	D	Tuscola, Ill.
WTAM	ak	50000	R	Cleveland, Ohio
XEG	z	250	-----	Mexico City, Mexico

Francisco Garrigo 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.

18		
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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172		
Voice of St. Louis, Inc.		

1100 kilocycles 272.6 meters

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

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

1110 kilocycles 270.1 meters

KSOU	ae	1000	Dn(2.5)	Sioux Falls, So. Dak.
WRVA	ae	5000	N	Richmond, Va.

Sioux Falls Broadcast Assn., Inc. Larus & Bros. Co., Inc.		

1120 kilocycles 267.7 meters

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

Toronto Daily Star The Kamloops Sentinel R. T. Holman, Ltd. Harold R. Carson 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
WJJD	ze	20000	Dn	Chicago, Ill.
WOW	z	1000	D	New York City
XEH	ak	1000	1132	Monterrey, Mexico

153		
Radio Service Corp. of Utah WJJD, Inc. (Palmer House) International Broadcasting Corp. Tarnava & Cia.		

1140 kilocycles 263.0 meters

CMBW	z	150	-----	Havana, Cuba
CMCO	z	1000	-----	Havana, Cuba
KVOO	ae	5000	1N	Tulsa, Okla.
WAPI	aj	5000	1N	Birmingham, Ala.
XETA	z	500	-----	Mexico City, Mexico

Alvarez-Moris Andres Martinez Southwestern Sales Corp. WAPI Broadcasting Corp. Manuel Espinosa Tagle		

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1150 kilocycles 260.7 meters

CMGI	z	30	-----	Colon, Cuba
CMJH	ae	75	-----	Cienfuegos, Cuba
CMJH	ak	50	-----	Ciego de Avila, Cuba
WHAM	ae	5000	B	Rochester, N. Y.
XEA	ak	500	K1155	Guadalajara, Mexico
10-AT	z	25	1155	Trail, B. C.

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Armando Lizama
Victorino Lopez (Hotel Bristol)
Luis Marauri Mendoza
Stromberg-Carlson Tel. Mfg. Co.
Radiofonografica de Guadalajara, S.A.
Trail Amateur Radio Assn.

1160 kilocycles 258.5 meters

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

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Main Auto Supply Co.
West Virginia Broadcasting Corp.

1170 kilocycles 256.3 meters

WCAU	ae	10000	C	Philadelphia, Pa.
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Universal Broadcasting Corp.

1180 kilocycles 254.1 meters

CMW	ae	1500	1185	Havana, Cuba
KEX	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.

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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

WOAI	ae	50000	N	San Antonio, Texas
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Southern Equipment Co.

1200 kilocycles 249.9 meters

CKOV	ak	100	-----	Kelowna, B. C.
CMGB	z	30	1205	Matanzas, Cuba
KBTM	ak	100	D	Paragould, Ark.
KERN	z	100	C	Bakersfield, Calif.
KFJB	z	100	(.25)	Marshalltown, Iowa
KFWF	z	100	5	St. Louis, Mo.
KFXD	ae	100	(.25)	Nampa, Idaho
KGDE	ae	100	(.25)	Fergus Falls, Minn.
KGDY	z	100	-----	Huron, S. D.
KGEK	ak	100	9	Yuma, Colo.
KGEW	ak	100	9	Ft. Morgan, Colo.
KGFJ	ae	100	-----	Los Angeles, Calif.
KGHI	z	100	-----	Little Rock, Ark.
KGVO	ak	100	-----	Missoula, Mont.
KMLB	z	100	D	Monroe, La.
KVOS	z	100	-----	Bellingham, Wash.
KWG	ae	100	CI	Stockton, Calif.
WABL	ak	100	-----	Bangor, Maine
WABZ	z	100	1	New Orleans, La.
WBBZ	ak	100	-----	Ponca City, Okla.
WBHS	z	100	4	Huntsville, Ala.
WCAT	ak	100	D	Rapid City, S. D.
WCAX	ak	100	-----	Burlington, Vt.
WCLO	ak	100	-----	Janesville, Wis.
WCOD	z	100	3	Harrisburg, Pa.
WFAM	z	100	8	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	ac	100	6	Decatur, Ill.
WJBW	ak	100	1	New Orleans, La.
WKJC	ak	100	3	Lancaster, Pa.
WLAP	ck	100	(.25)	Louisville, Ky.
WNBO	ae	100	1	Washington, Pa.
WNBW	z	10	(.1)	Carbondale, Pa.
WORC	ak	100	CI	Worcester, Mass.
WPHR	ak	100	(.25)	Petersburg, Va.
WRBL	ak	100	-----	Columbus, Ga.
WWAE	z	100	8	Hammond, Ind.
10-AB	z	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-BO	ak	15	-----	Brantford, Ont.
10-BU	z	15	-----	Canora, Sask.

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Okananga 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
Beehler Electrical Equipment Co.
City of Fort Morgan
Ben. S. McGlashan
O. A. Cook
Moshy's, Inc.
Liner's Broadcasting Station, Inc.
KVOS, Inc.
McClatchy Newspapers
First Universalist Society
Samuel D. Reeks
C. L. Carrell (R/C various cities)
The Hutchens Co.
State School of Mines
Burlington Daily News
WCLO Radio Corp. (R/C Beloit)
Keystone Broadcasting Corp.
South Bend Tribune
The Post Publishing Co., Opr.
Edward P. Graham
St. Norbert College (Belli # Bldg.)
WIBX, Inc.
Missouri Broadcasting Corp.
Kaskaskia Broadcasting Co.
Commodore Broadcasting, Inc.
C. C. Carlson
Lancaster Bldg. Service, Inc.
American Broadcasting Corp. of Ky.
Spriggs Symplex
Home Cut Glass & China Co.
A. F. Kleindinst
WLBG, Inc.
WRBL Radio Station, Inc.
Hammond-Calumet Bldg. 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.
1200
MTRS.
249.9
DIAL

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1210 kilocycles 247.8 meters

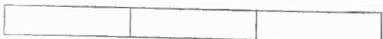
CFCO	ak	250	8G	Chatham, Ont.
CFNB	z	50	-----	Fredericton, N. B.
CJOR	ak	500	E	Vancouver, B. C.
CKMC	z	100	8	Cobalt, Ont.
KASA	ak	100	-----	Elk City, Okla.
KDLR	ak	100	-----	Devlam Lake, N. Dak.
KFJI	ak	100	-----	Klamath Falls, Ore.
KFOR	ak	100	(.25)	Lincoln, Neb.
KFPW	ak	100	-----	Fort Smith, Ark.
KFVS	ac	100	6	Cape Girardeau, Mo.
KFXM	ak	100	9	San Bernardino, Calif.
KGCR	ah	100	-----	Watertown, S. Dak.
KGNO	ak	100	-----	Dodge City, Kans.
KGY	ak	100	-----	Olympia, Wash.
KPPC	ak	50	9	Pasadena, Calif.
KWEA	z	100	-----	Shreveport, La.
WALR	ae	100	-----	Zanesville, Ohio
WBAX	ae	100	1	Wilkes-Barre, Pa.
WBBL	z	100	7S	Richmond, Va.
WCBS	ak	100	2	Springfield, Ill.
WCRW	ae	100	4	Chicago, Ill.
WEBQ	ac	100	6	Harrisburg, Ill.
WEDC	z	100	4	Chicago, Ill.
WFAS	ak	100	3	White Plains, N. Y.
WGBB	z	100	3	Freeport, N. Y.
WGCM	ae	100	5	Gulfport, Miss.
WHBF	ae	100	-----	Rock Island, Ill.
WHBU	aj	100	-----	Anderson, Ind.
WHET	ak	100	D	Troy, Ala.
WIBU	z	100	-----	Poynette, Wis.
WJBI	ak	100	3	Red Bank, N. J.
WJBU	ac	100	1	Lewisburg, Pa.
WJBY	z	100	-----	Gadsden, Ala.
WJEJ	z	100	PD	Hagerstown, Md.
WJW	ae	100	Y	Mansfield, Ohio
WKFI	z	100	5(.25)	Greenville, Miss.
WMBG	aj	100	7C	Richmond, Va.
WMRJ	ak	100	3	Jamaica, N. Y.
WOCL	ak	50	-----	Jamestown, N. Y.
WOMT	ae	100	-----	Manitowoc, Wis.
WPAW	z	100	a	Providence, R. I.
WPRO	z	100	a	Providence, R. I.
WQDX	z	100	-----	Thomasville, Ga.
WSBC	z	100	4	Chicago, Ill.
WSEN	ak	100	-----	Columbus, Ohio
WSIX	z	100	-----	Springfield, Tenn.
WSOC	ae	100	-----	Gastonia, N. C.
WTAX	z	100	2	Springfield, Ill.
XEX	z	500	-----	Mexico City, Mexico



John Beardall (Wm. Pitt Hotel)
 James S. Neill & Sons, Ltd.
 George C. Chandler
 R. L. McAdam
 E. M. Woody (Casa Grande Hotel)
 KDLR, Inc.
 KFJI Broadcasters, Inc.
 Howard A. Shuman
 Southwestern Hotel Co.
 Oscar C. Hirsch
 J. C. & E. W. Lee
 Greater Kampeska Radio Corp.
 Dodge City Broadcasting Co.
 KGY, Inc. (Capitol Park Bldg.)
 Pasadena Presbyterian Church
 Hello World Broadcasting Corp.
 WALR Broadcasting Corp.
 John H. Stenger, Jr. (Morris Bldg.)
 Grace Covenant Pres. Church.
 Chas. H. Messter & Harold L. Dewing
 Clinton R. White
 Harrisburg Broadcasting Co.
 Emil Denmark, Inc.
 Westchester Broadcasting Corp.
 Harry H. Carman
 Great Southern Land Co.
 Bardsley Specialty Co. (Harms Hotel)
 Anderson Broadcasting Corp.
 Troy Broadcasting Co.
 Wm. C. Forrest
 Monmouth Broadcasting Co., Inc.
 Bucknell University
 Gadsden Broadcasting Co., Inc.
 A. V. Tidmore
 John F. Weimer (to Akron)
 J. Pat Scully
 Havens & Martin, Inc.
 Peter J. Prinz
 A. E. Newton
 Francis Mangin Kadow
 Cherry & Webb Broadcasting Co.
 Cherry & Webb Broadcasting Co.
 Stevens Luke
 World Battery Co., Inc.
 Columbus Bdctg. Corp. (Seneca Hotel)
 638 Tire & Vulcanizing Co.
 WSOC, Inc.
 WTAX, Inc.
 Excelsior, Cia Editorial S. A.

1220 kilocycles 245.8 meters

KFKU	ae	500	1	Lawrence, Kans.
KTW	z	1000	2	Seattle, Wash.
KWSC	ae	1000	2(2)	Pullman, Wash.
WCAD	ak	500	D	Canton, N. Y.
WCAE	ae	1000	R	Pittsburgh, Pa.
WDAE	ak	1000	C	Tampa, Fla.
WREN	ak	1000	1B	Lawrence, Kans.



University of Kansas
 First Presbyterian Church
 State College of Washington
 St. Lawrence University
 WCAE, Inc. and Sun-Telegraph
 Tampa Daily Times (Tampa Terrace)
 Jenny Wren Co.

1230 kilocycles 243.8 meters

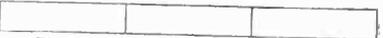
CMBY	z	350	1235	Havana, Cuba
CMCA	z	150	1235	Havana, Cuba
KFQD	aj	250	-----	Anchorage, Alaska
KGGM	ak	250	(.5)	Albuquerque, N. M.
KYA	ae	1000	N	San Francisco, Calif.
WFEM	ach	1000	1C	Indianapolis, Ind.
WNAC	ae	1000	CH	Boston, Mass.
WPSC	ah	500	D	State College, Pa.
WSBT	z	500	1C	South Bend, Ind.
XETQ	z	100	-----	Mexico, Mexico



Callejas-Estefani
 Manuel Cruz
 Anchorage Radio Club, Inc.
 New Mexico Broadcasting Co.
 Pacific Broadcasting Co.
 Indianapolis Power & Light Co.
 Shepard Broadcasting Service, Inc.
 Pennsylvania State College
 South Bend Tribune
 Carlos G. Caballero

1240 kilocycles 241.8 meters

CMAB	z	20	1249	Pinar del Rio, Cuba
KGCU	ak	250	3	Mandan, N. Dak.
KLPM	ak	250	3	Minot, N. Dak.



Francisco Martinez
 Mandan Radio Assn.
 John B. Cooley

INDEX BY FREQUENCIES AND DIAL NUMBERS

KTAT	z	1000	1	Fort Worth, Texas	KTAT Broadcast Co.
KTFI	ak	500	-----	Twin Falls, Idaho	Radio Broadcasting Corp. of Idaho
WACO	ak	1000	1C	Waco, Texas	Southwest Broadcasting Co.
WKAQ	z	1000	-----	San Juan, P. R.	Radio Corp. of Porto Rico
WXYZ	z	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

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	z	500	D	Tucson, Arizona	Robert M. Riculfi
KWWG	z	500	1	Brownsville, Texas	Frank P. Jackson
WLBW	ae	500	C(1)	Erie, Pa.	Radio-Wire Program Corp. of Amer.
WNBX	z	250	D	Springfield, Vt.	WNBX Broadcasting Corp.
WTOC	ae	500	CU	Savannah, Ga.	Savannah Broadcasting Co., Inc.

1270 kilocycles 236.1 meters

CMCU	z	150	-----	Havana, Cuba	Jorge Garcia Serra
CMCW	z	150	-----	Havana, Cuba	Jose Lorenzo
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.
WEAI	ae	1000	D	Ithaca, N. Y.	Cornell University
WFBR	ae	500	R	Baltimore, Md.	Baltimore Radio Show, Inc.
WJDX	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

KFBM	ae	1000	(2.5)	Great Falls, Mont.	Buttrely 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

KDYL	ak	1000	N	Salt Lake City, Utah	Intermountain Broadcasting Corp.
KFUL	ak	500	1	Galveston, Texas	News Publishing Co. (Buccaneer Hotel)
KLCN	z	50	D	Blytheville, Ark.	C. L. Lintzenich
KTSA	ae	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 & Mace

1300 kilocycles 230.6 meters

CMKJ	z	20	-----	Guantanamo, Cuba	Luis Morlote
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.
KTBR	z	500	3	Portland, Ore.	M. E. Brown
WBBR	aej	1000	1	Brooklyn, N. Y.	Peoples Pulpit Assn.
WEVD	ae	500	1	New York City	Debs Memorial Radio Fund, Inc.
WEAB	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.	Maria T. de Gutierrez

KCY.S.
1300
MTRS.
230.6
DIAL

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1310 kilocycles 228.9 meters

KCRJ	ak	100	D	Jerome, Arizona	Chas. C. Robinson
KFBK	z	100	C	Sacramento, Calif.	Jas. McClatchy Co.
KFGQ	z	100	7	Boone, Iowa	Boone Biblical College
KFFL	ck	100	-----	Dublin, Texas	C. C. Baxter
KFPM	ae	15	-----	Greenville, Texas	New Furniture Co.
KFXJ	ak	100	-----	Grand Junction, Colo.	Western Slope Broadcasting Co.
KFXR	z	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	Tri-State Broadcasting Co., Inc.
WBER	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.
WFDG	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.
WJAK	ak	50	6	Elkhart, Ind.	Elkhart Daily Truth
WKAV	ae	100	-----	Laconia, N. H.	Laconia Radio Club
WKBB	ae	100	b	Joliet, Ill.	Richard W. Hoffman
WKBC	z	100	-----	Birmingham, Ala.	R. B. Broyles Furniture Co.
WKBS	z	100	-----	Galesburg, Ill.	Permil N. Nelson
WLBC	ak	50	6	Muncie, Ind.	D. A. Burton—A. J. Marriott
WNBO	ak	100	-----	Auburn, N. Y.	WNBO, 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	z	100	5X	Reading, Pa.	Reading Broadcasting Co.
WRLO	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.	Foulrod Radio Eng. Co., Inc.
WTJS	ak	100	(.25)	Jackson, Tenn.	Sun Publishing Co. (Sun Bldg.)
WTSL	z	100	-----	Laurel, Miss.	G. A. Houseman
XEFB	ak	100	1315	Monterrey, N. L., Mex.	Quintanilla/Stevenson
XEI	ak	150	-----	Morelia, Mexico	Carlos Gutierrez M.

1320 kilocycles 227.1 meters

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

CMJI	ak	112	1335	Ciego de Avila, Cuba	Gilberto Gessa Lopez
KGB	ae	1000	CT	San Diego, Calif.	Don Lee, Inc. (Pickwick Hotel)
KMO	ak	250	-----	Tacoma, Wash.	KMO, Inc. (Hotel Winthrop)
KSCJ	ah	1000	1C(.25)	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

CMCR	z	150	1345	Havana, Cuba	Aurelio Hernandez
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)

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1350 kilocycles 222.1 meters

CMCY	ak	500	1355
KIDO	ak	1000	-----
KWK	ae	1000	B
WAWZ	ae	250	1
WBNX	ae	250	1a
WCDA	ae	250	1a
WEHC	ae	500	D
WMSG	ae	250	1a

Havana, Cuba
Boise, Idaho
St. Louis, Mo.
Zarephath, N. J.
New York City
New York City
New York City
Emory, Va.
New York City

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

1360 kilocycles 220.4 meters

KGER	ah	1000	-----
KGIR	ak	500	NJ
WCSC	z	500	-----
WFBL	ak	1000	C(2.2)
WGES	ae	500	1(1)
WJKS	agj	1000	12
WQBC	ak	500	-----

Long Beach, Calif.
Butte, Mont.
Charleston, S. C.
Syracuse, N. Y.
Chicago, Ill.
Gary, Ind.
Vicksburg, Miss.

Consolidated Bdtg. 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 Bdtg. Co.(Post-Herald Station)

1370 kilocycles 218.7 meters

CMGE	z	30	1375
KCRC	ak	100	2(.25)
KFBL	aj	50	3
KFJM	zk	100	-----
KFJZ	ae	100	-----
KFLX	z	100	-----
KGAR	ae	100	(.25)
KGDA	ak	100	2
KGFG	z	100	2
KGFL	zk	100	4
KGKL	ak	100	4
KICA	z	100	4
KMIAC	ak	100	5
KONO	ak	100	5
KOOS	ae	100	-----
KRE	ak	100	-----
KUJ	ak	100	D
KVL	z	100	3
KWKC	z	100	7
WBTM	z	100	7
WCBM	ae	100	Z(.25)
WDAS	ae	100	(.25)
WESG	z	50	-----
WGL	ae	100	C
WHBD	bk	100	-----
WHBQ	ak	100	-----
WHDF	ak	100	(.25)
WIBM	ae	100	1
WJBK	ae	50	1Q
WJEQ	z	100	6
WJTL	z	100	-----
WLEY	ae	100	(.25)
WLVA	ck	100	7
WMBR	ak	100	-----
WPFB	ak	100	-----
WQDM	z	100	-----
WRAK	ak	100	6
WRAM	ak	100	-----
WRDO	ae	100	-----
WRJN	ae	100	-----
WSVS	z	50	-----
XETB	ae	100	-----

Cardenas, Cuba
Enid, Okla.
Everett, Wash.
Grand Forks, N. Dak.
Fort Worth, Texas
Galveston, Texas
Tucson, Arizona
Mitchell, S. Dak.
Oklahoma City
Santa Fe, N. Mex.
San Angelo, Texas
Clovis, New Mexico
San Antonio, Texas
San Antonio, Texas
Marshfield, Ore.
Berkeley, Calif.
Walla Walla, Wash.
Seattle, Wash.
Kansas City, Mo.
Danville, Va.
Baltimore, Md.
Philadelphia, Pa.
Glens Falls, N. Y.
Fort Wayne, Ind.
Mount Orab, Ohio
Memphis, Tenn.
Calumet, Mich.
Jackson, Mich.
Detroit, Mich.
Williamsport, Pa.
Atlanta, Ga.
Lexington, Mass.
Lynchburg, Va.
Tampa, Fla.
Hattiesburg, Miss.
St. Albans, Vt.
Williamsport, Pa.
Wilmington, N. C.
Augusta, Maine
Racine, Wis.
Buffalo, N. Y.
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
Walmae 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 Bdtg. Sta., Inc. (Elks Hotel)
W. N. Parker and H. H. Metcalfe
F. C. Zieg
F. P. Moler
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 Bdtg. Corp. (Hotel Racine)
Stanley M. Krohn, Jr.
Manuel Zetina

KCY.S.
1380
MTRS.
217.3
DIAL

1380 kilocycles 217.3 meters

CMJC	z	75	1382
KOH	ak	500	C
KQV	ak	500	2
KSO	z	500	-----
WKBH	aj	1000	1C
WSMK	ak	200	2
XETB	z	125	-----

Camaguey, Cuba
Reno, Nevada
Pittsburgh, Pa.
Clarinda, Iowa
LaCrosse, Wis.
Dayton, Ohio
Torreon, Coah., Mex.

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

INDEX BY FREQUENCIES AND DIAL NUMBERS

1390 kilocycles 215.7 meters

CMCG	z	30	1395	Havana, Cuba
CMCH	ak	100	1395	Havana, Cuba
CMCM	z	15	1395	Havana, Cuba
CMDB	z	40	1395	Havana, Cuba
KLRA	ae	1000	1C	Little Rock, Ark.
KOY	ae	500	C	Phoenix, Arizona
KUOA	bk	1000	1	Fayetteville, Ark.
WHK	ae	1000	C	Cleveland, Ohio

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Jose Justo Moran
 Wifredo & Hum. Fontanals Sanchez
 Martinez-Madicu
 Julio Powers
 Arkansas Broadcasting Co.
 Nielson Radio & Sporting Goods Co.
 Southwestern Hotel Co. (Ft. Smith)
 Radio Air Service Corp. (Higbee Store)

1400 kilocycles 214.2 meters

KLO	ae	500	Y	Ogden, Utah
KOCW	z	250	(.5)	Chickasha, Okla.
WBAA	ak	500	1	Lafayette, Ind.
WBBC	z	500	2	Brooklyn, N. Y.
WCGU	ak	500	2	Brooklyn, N. Y.
WCMA	ak	500	1	Culver, Ind.
WFOX	z	500	2	Brooklyn, N. Y.
WKBF	ak	500	1W	Indianapolis, Ind.
WLTH	ae	500	2	Brooklyn, N. Y.
XEP	z	200	-----	Laredo, Mexico

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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	Rockford, Ill.
KGRS	ae	1000	1	Amarillo, Texas
WAAB	ae	500	CH	Boston, Mass.
WBGM	z	500	C	Bay City, Mich.
WDAG	ae	1000	1	Amarillo, Texas
WHBL	ae	500	4	Sheboygan, Wis.
WHIS	ak	250	2	Bluefield, W. Va.
WODX	ea	500	3CU	Mobile, Ala.
WRBX	z	250	2	Roanoke, Va.
WSFA	ak	500	3C	Montgomery, Ala.

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Rockford Broadcasters, Inc.
 E. B. Gish
 Bay State Broadcasting Corp.
 James E. Davidson
 National Radio & Bdctg. 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	-----	San Antonio, Texas
KBPS	aj	100	4	Portland, Ore.
KCMC	ak	100	-----	Texarkana, Ark.
KFZ	ak	100	-----	Fond du Lac, Wis.
KGFF	ak	100	-----	Shawnee, Okla.
KGGC	z	100	5	San Francisco, Calif.
KGIW	z	100	1	Trinidad, Colo.
KGIX	ak	100	-----	Las Vegas, Nevada
KGKX	z	100	-----	Lewiston, Idaho
KICK	z	100	Y	Red Oak, Iowa
KIDW	z	100	1	Lamar, Colo.
KORE	ae	100	-----	Eugene, Ore.
KUMA	ak	100	-----	Yuma, Arizona
KWCR	ae	100	B	Cedar Rapids, Iowa
KXL	ae	100	4	Portland, Ore.
WAGM	ae	100	-----	Presque Isle, Maine
WAMC	ae	100	-----	Anniston, Ala.
WEHS	ak	100	a	Cicero, Ill.
WELL	z	50	-----	Battle Creek, Mich.
WENC	ak	100	D	Americus, Ga.
WERE	ae	100	-----	Erie, Pa.
WHDL	ae	100	D	Tupper Lake, N. Y.
WHFC	ae	100	a	Cicero, Ill.
WILM	ae	100	-----	Wilmington, Del.
WJBO	z	100	D	New Orleans, La.
WJMS	ak	100	D	Ironwood, Mich.
WKBI	ak	100	a	Cicero, Ill.
WLBF	ae	100	-----	Kansas City, Kans.
WMAS	z	100	CP	Springfield, Mass.
WMBC	ae	100	(.25)	Detroit, Mich.
WMBH	z	100	(.25)	Joplin, Mo.
WPAD	ak	100	-----	Paducah, Ky.
WSPA	ae	100	(.25)	Spartanburg, S. C.
WTBO	ae	100	(.25)	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 Bdctg. 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)
 Aramstook Broadcasting Corp.
 Raymond C. Hammett (Alabama Hot.)
 WEHS, Inc.
 Enquirer-News Co.
 Americus Broadcast Co.
 Erie Bdctg. Corp. (Lawrence Hotel)
 Tupper Lake Broadcasting Co., Inc.
 WIFC, Inc.
 Delaware Broadcasting Co.
 Valdemar Jensen
 WJMS, Inc. (St. James Hotel)
 WKBI, Inc.
 WLBF Bdctg. Co. (Aladdin Hotel)
 Albert S. Moffet
 Michigan Broadcasting Co.
 W. M. Robertson
 Paducah Bdctg. Co. (Ritz Hotel)
 The Voice of South Carolina
 Associated Broadcasting Corp.

1430 kilocycles 209.7 meters

KECA	ah	1000	N	Los Angeles, Calif.
KGNF	ak	500	D	North Platte, Neb.
WBAK	ak	500	1(1)	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	Commercial Radio Service Co.
WFEA	ae	500	CH	Manchester, N. H.	New Hampshire Broadcasting Co.
WHEC	ae	500	CA	Rochester, N. Y.	WHEC, Inc. (Roch. Sav. Bank Bldg.)
WHP	ak	500	ICA(1)	Harrisburg, Pa.	WHP, Inc. (Harrisburg Telegraph)
WNBR	ak	500	-----	Memphis, Tenn.	Memphis Bdctg. Co. (WGBC)
WOKO	ae	500	CA	Albany, N. Y.	WOKO, Inc. (Hotel Ten Eyck)

1440 kilocycles 208.2 meters

CMBI	z	30	1444	Havana, Cuba
CMBL	ak	20	1444	Havana, Cuba
CMBN	ak	65	1444	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.
WBCA	ah	250	-----	Allentown, Pa.
WMBD	ae	500	3C(1)	Peoria, Ill.
WSAN	z	250	a	Allentown, Pa.
WTAD	ak	500	3	Quincy, Ill.

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Francisco Mayorquin
 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

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.

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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

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

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National Battery Broadcasting Co.
 Old Dominion Broadcasting Co.

1470 kilocycles 204.0 meters

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

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Northwest Broadcasting System
 Life & Casualty Insurance Co.

1480 kilocycles 202.6 meters

KOMA	ae	5000	C	Oklahoma City, Okla.
WKBW	ae	5000	C	Buffalo, N. Y.

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Pan American Bdctg. System, Inc.
 Buffalo Broadcasting Corp.

1490 kilocycles 201.2 meters

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

1500 kilocycles 199.9 meters

CMBQ	z	50	-----	Havana, Cuba
CMBR	z	15	-----	Havana, Cuba
KDB	ak	100	CT	Santa Barbara, Calif.
KGFI	aj	100	(.25)	Corpus Christi, Texas
KGFK	ak	50	-----	Moorhead, Minn.
KGIZ	z	100	-----	Grant City, Mo.
KGKB	bk	100	-----	Tyler, Texas
KGKY	ck	100	-----	Scottsbluff, Neb.
KNOW	ak	100	-----	Austin, Texas
KPJM	z	100	-----	Prescott, Arizona
KPQ	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	-----	Connerville, Ind.
WKBZ	ak	100	-----	Ludington, Mich.
WLOE	z	100	(.25)	Boston, Mass.
WMBQ	z	100	1	Brooklyn, N. Y.
WMIL	ak	100	1	Brooklyn, N. Y.
WMPC	ak	100	-----	Lapeer, Mich.
WNBF	ae	100	-----	Binghamton, N. Y.
WOP1	ae	100	-----	Bristol, Tenn.
WPEN	ae	100	(.25)	Philadelphia, Pa.
WRDW	ae	100	-----	Augusta, Ga.
WSYB	ae	100	-----	Rutland, Vt.
WWRL	ak	100	1	Woodside, N. Y.
WWSW	ae	100	X(.25)	Pittsburgh, Pa.

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Gali-Sardinas
 Tomas Basail
 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)
 A. P. Miller
 Westcoast 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.
 Paul J. Gollhofer
 Arthur Faske
 First Methodist Protestant Church
 Howitt-Wood Radio Co., Inc.
 Radiophone Bdctg. Station WOP1
 Wm. Penn Broadcasting Co.
 Musicove, 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.

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

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 1020
	500	WAAF	920
	25000	WBBM	C 770
	1500	WCFL	R 970
	100	WCRW	1210
	100	WEDC	1210
	50000	WENR	N 870
	500	WGES	1360
	25000	WGN	C 720
	1000	WBO	560
	20000	WJJD	1130
	50000	WLS	N 870
	5000	WMAQ	N 670
	5000	WMBI	1080
	500	WPCC	560
	100	WIBC	1210
Cicero I-20	100	WEHS	1420
	100	WHFC	1420
	100	WKBI	1420
Decatur K-19	100	WJBL	1200
Galesburg J-18	100	WKBS	1310
Harrisburg L-19	100	WEBQ	1210
Joliet I-19	100	WCLS	1310
	100	WKBB	1310
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
Tuscola K-20	160	WDZ	1070
Urbana J-20	250	WILL	890
Zion I-20	5000	WCBD	1080

INDIANA

Anderson J-21	100	WHBU	1210
Connersville K-21	100	WKVB	1500
Culver I-20	500	WCMA	1400
Elkhart I-21	50	WJAK	1310
Evansville L-20	500	WGBF	630
Fort Wayne J-21	100	WGL	C 1370
	10000	WOWO	C 1160
Gary I-20	1000	WJKS	1360
Hammond I-20	100	WWAE	1200
Indianapolis J-21	1000	WFBM	C 1230
	500	WKBF	1400
Lafayette J-20	500	WBAA	1400
Muncie J-21	50	WLBC	1310
South Bend I-20	100	WFAN	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	500	KSO	1380
Council Bluffs J-16	1000	KOIL	B 1260
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-14	5000	KFBI	1050
Coffeyville M-15	500	KGGF	1010
Dodge City L-13	100	KGNO	1210
Kansas City K-16	100	WLBK	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	KFII	C 1300

KENTUCKY

Covington K-22	5000	WKCY	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 1320
	5000	WWL	850
Shreveport P-17	100	KRMD	1310
	1000	KTBS	N 1450
	100	KWEA	1210
	10000	KWKII	850

MAINE

Augusta F-28	100	WRDO	1370
Bangor F-29	100	WABI	1200
	500	WLZB	C 620
Portland F-28	1000	WCSH	R 940
Presque Isle D-29	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	100	WJEJ	1210

MASSACHUSETTS

Babson Park G-28	500	WBOS	920
Boston G-28	500	WAAB	C 1410
	25000	WBZ	B 990
	1000	WEEL	R 590
	1000	WHDH	830
	100	WLOE	1500
	1000	WNAK	C 1230
Fall River H-28	250	WSAR	1450
Lexington G-28	100	WLEY	1370
New Bedford H-28	100	WNBH	1310
Springfield H-27	1000	WBZA	B 990
	100	WMAZ	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
	50	WJBK	1370
Detroit H-22	10000	WJR	B 750
	100	WIBC	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	WFDF	1310		NEVADA			
Grand Rapids H-21	500	WASH	1270		Las Vegas L-5	100	KGIX	1420
	500	WOOD	1270		Reno I-3	500	KOH	C 1380
Ironwood F-18	100	WJMS	1420		NEW HAMPSHIRE			
Jackson I-21	100	WIBM	1370		Laconia G-28	100	WKAV	1310
Kalamazoo I-21	1000	WKZO	590		Manchester G-28	500	WFEA	C 1430
Lapeer H-22	100	WMPC	1500		Portsmouth G-28	250	WHBB	740
Ludington H-20	100	WKBZ	1500		NEW JERSEY			
Marquette F-19	100	WBEO	1310		Asbury Park I-27	500	WCAP	C 1280
Royal Oak H-22	50	WEXL	1310		Atlantic City J-27	5000	WPG	C 1100
MINNESOTA					Camden I-26	500	WCAM	1280
Fergus Falls F-15	100	KGDE	C 1200		Hackensack I-27	250	WBMS	1450
Minneapolis G-17	5000	WCCO	C 810		Jersey City I-27	300	WAAT	940
	1000	WDGY	1180			250	WHOM	1450
	1000	WLB	1250		Newark I-27	1000	WAAM	1250
	1000	WRHM	1250			250	WGCP	1250
Moorhead F-15	50	KGFK	1500			250	WNJ	1450
Northfield G-17	1000	KFMX	1250			5000	WOR	710
	1000	WCAL	1250		Paterson I-27	1000	WODA	1250
St. Paul G-17	10000	KSTP	N 1460		Red Bank I-27	100	WJBI	1210
MISSISSIPPI					Trenton I-26	500	WOAX	1280
Greenville O-18	100	WKFI	1210		Zarephath I-27	250	WAWZ	1350
Gulfport Q-19	100	WGCM	1210		NEW MEXICO			
Hattiesburg Q-19	100	WPBB	1370		Albuquerque N-7	250	KGGM	1230
Jackson P-19	1000	WJDX	N 1270			10000	KOB	1180
Kosciusko O-19	100	WHBF	1500		Clovis N-11	100	KICA	1370
Laurel P-20	100	WTSL	1310		Santa Fe M-10	100	KGFL	1370
Meridian P-20	500	WCOC	880		NEW YORK			
Tupelo N-20	500	WJEM	990		Albany H-27	500	WOKO	C 1430
Vicksburg P-18	500	WQBC	1360		Auburn H-25	100	WMBO	1310
MISSOURI					Binghamton H-26	100	WNBF	1500
Cp. Girardeau L-19	100	KFVS	1210		Brooklyn I-27	500	WBBC	1400
Columbia K-17	500	KFRU	630			1000	WBBR	1300
Grant City J-16	100	KGJZ	1500			500	WCGU	1400
Jefferson City L-17	500	WOS	630			500	WFOJ	1400
Joplin M-16	100	WMBH	1420			500	WLTH	1400
Kansas City K-16	1000	KMBC	C 950			100	WMBQ	1500
	100	KWKC	1370		Buffalo H-24	1000	WBEN	R 900
	1000	WDAF	R 610			100	WEBR	1310
	500	WHB	860			1000	WGR	C 550
	1000	WOQ	1300			5000	WKBW	C 1480
St. Joseph K-16	2500	KFEQ	680			50	WSVS	1370
St. Louis L-18	500	KFUO	550		Canton F-26	500	WCAD	1220
	100	KFWF	1200		Freeport I-27	100	WGBK	1210
	50000	KMOX	C 1090		Glens Falls G-27	50	WESG	1370
	500	KSD	R 550		Ithaca H-25	1000	WEAI	1270
	1000	KWK	B 1350		Jamaica H-27	100	WMRJ	1210
	1000	WEW	760		Jamestown H-24	50	WOCL	1210
	100	WIL	1200		New York City I-27	50000	WABC	C 860
Springfield M-17	100	KG BX	1310			250	WB NX	1350
MONTANA						50000	WBOQ	860
Billings F-9	1000	KGHL	N 950			250	WCDA	1350
Butte F-7	500	KGIR	N 1360			50000	WEAF	R 660
Great Falls E-8	1000	KFBB	1280			500	WEVD	1300
Kalispell D-7	100	KG EZ	1310			1000	WFAB	1300
Missoula E-7	100	KGVO	1200			500	WINS	1180
Wolf Point E-11	100	KG CX	1310			250	WHN	1010
NEBRASKA						30000	WJZ	B 760
Clay Center J-14	1000	KMMJ	740			5000	WLWL	1100
Kearney J-14	100	KGFW	1310			500	WMCA	570
Lincoln J-15	5000	KFAB	C 770			250	WMSG	1350
	100	KFOR	1210			500	WNYC	570
	500	WCAJ	590			1000	WOV	1130
Norfolk I-15	1000	WJAG	1060			250	WPAP	1010
North Platte J-13	500	KGNF	1430			500	WPCH	810
Omaha J-15	500	WAAW	660			250	WQAO	1010
	1000	WOW	R 590			250	WRNY	1010
Scottsbluff I-11	100	KGKY	1500		Rochester G-25	5000	WHAM	B 1150
York J-15	500	KGBZ	930			500	WH EC	C 1430

INDEX BY LOCATIONS WITH MAP KEY

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

	Watts		Keys.
Saranac Lake F-26	50	WNBZ	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 I-27	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	KFJM	1370
Mandan F-13	250	KGCU	1240
Minot E-13	250	KLPM	1240

OHIO

Akron I-23	1000	WADC	C 1320
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	R 610
Columbus J-22	50000	WTAM	R 1070
	500	WATU	640
	500	WCAH	C 1430
	750	WEAO	570
	100	WSEN	1210
Dayton J-22	200	WSMK	1380
Mansfield J-22	100	WJW	1210
Mount Orab K-22	100	WHBD	1370
Toledo I-22	1000	WSPD	C 1340
Youngstown I-23	500	WKBN	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	100	KFJI	1210
Marshfield F-1	100	KOOS	1370
Medford G-2	100	KMED	1310

	Watts		Keys.
Portland E-3	5000	KEX	N 1180
	100	KBPS	1420
	500	KFJR	1300
	1000	KGW	N 620
	1000	KOIN	C 940
	500	KTBR	1300
	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
Glenside I-26	25	WIBG	930
Grove City I-24	100	WSAJ	1310
Harrisburg I-25	500	WBAK	1430
	100	WCOD	1200
	500	WHP	C 1430
	100	WJAC	1310
Johnstown J-24	100	WGAL	1310
Lancaster I-26	100	WKJC	1200
	100	WJU	1210
Lewisburg I-26	100	WCAU	C 1170
Philadelphia I-26	10000	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
State College I-25	500	WPSC	1230
Washington J-24	100	WNBO	1200
Wilkes-Barre I-26	100	WBAX	1210
	100	WBRE	1310
Williamsport I-25	100	WRAK	1370
	100	WJEO	1370
York J-26	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	WIS	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	KGDY	1200	Danville L-25	100	WBTM	1370
Mitchell H-14	100	KGDA	1370	Emory L-23	500	WEHC	1350
Pierre G-13	200	KGFX	630	Lynchburg L-25	100	WLVA	1370
Rapid City H-12	100	WCAT	1200	Newport News L-26	100	WGH	1310
Sioux Falls H-15	1000	KS00	1110	Norfolk L-26	500	WTAR	C 780
Vermillion I-15	500	KUSD	890	Petersburg L-26	100	WPIR	1200
Watertown G-15	100	KGCR	1210	Portsmouth L-26	500	WPOR	780
Yankton I-15	1000	WNAX	C 570	Richmond K-26	100	WBBL	1210
					100	WMBG	C 1210
					5000	WRVA	N 1110
				Roanoke L-24	250	WDBJ	C 930
					250	WRBX	1410
TENNESSEE				WASHINGTON			
Bristol L-23	100	WOPI	1500	Aberdeen D-2	100	KXRO	1310
Chattanooga N-21	1000	WDOD	C 1280	Bellingham C-3	100	KVOS	1200
Jackson N-20	100	WTJS	1310	Everett C-3	50	KFBL	1370
Knoxville M-22	1000	WNOX	C 560	Olympia D-3	100	KGY	1210
	100	WROL	1310	Pullman E-5	1000	KWSC	1220
Memphis N-19	100	WHBQ	1370	Seattle C-3	5000	KJR	N 970
	500	WMC	N 780		1000	KOL	C 1270
	500	WNBR	1430		1000	KOMO	C 920
	500	WREC	C 600		100	KPCB	650
Nashville M-21	5000	WLAC	C 1470		100	KRSC	1120
Springfield M-20	50000	WSM	N 650		1000	KTW	1220
	100	WSIX	1210		100	KVL	1370
					250	KXA	760
				Spokane D-5	100	KFIO	1120
					1000	KFPY	C 1340
					5000	KGA	B 1470
					1000	KHQ	N 590
				Tacoma D-3	250	KMO	C 1330
					500	KVI	C 570
				Walla Walla E-5	100	KUJ	1370
				Wenatchee D-4	50	KPQ	1500
				Yakima D-4	100	KIT	1310
TEXAS				WEST VIRGINIA			
Amarillo N-12	1000	KGRS	1410	Bluefield L-24	250	WHIS	1410
	1000	WDAG	1410	Charleston K-23	250	WOBU	580
Austin Q-14	100	KNOW	1500	Fairmont J-24	250	WMNIN	890
Beaumont R-17	500	KFDM	560	Huntington K-23	250	WSAZ	580
Brownsville U-15	500	KWWG	1260	Wheeling J-24	5000	WWVA	C 1160
College Sta. Q-15	500	WTAW	1120				
Corpus Christi S-14	1000	KGFI	1500				
Dallas P-15	10000	KRLD	1040				
	50000	WFAA	N 800				
	500	WRR	C 1280				
Dublin P-14	100	KFPL	1310				
El Paso P-9	100	KTSM	1310				
	100	WDAH	1310				
Fort Worth P-15	100	KFJZ	1370				
	1000	KTAT	1240				
	10000	WBAP	N 800				
Galveston R-16	100	KFLX	1370				
	500	KFUL	1290				
Greenville O-15	15	KFPM	1310				
Harlingen T-14	500	KRGV	1260				
Houston R-16	1000	KPRC	N 920				
	500	KTRH	C 1120				
	250	KNYZ	1440				
Lubbock O-12	100	KFYD	1310				
San Angelo Q-13	100	KGKL	1370				
San Antonio R-14	100	KABC	1420				
	100	KMAC	1370				
	100	KONO	1370				
	1000	KTSA	C 1290				
	5000	WOAI	N 1190				
Tyler P-16	100	KGKB	1500				
Waco Q-15	1000	WACO	C 1240				
Wichita Falls O-14	250	KGKO	570				
UTAH				WISCONSIN			
Ogden I-7	500	KLO	1400	Eau Claire G-18	1000	WTAQ	C 1330
Salt Lake City I-7	2500	KDYL	N 1290	Fond du Lac H-19	100	KFIZ	1420
	5000	KSL	C 1130	Green Bay G-19	100	WHBY	1200
				Janesville I-19	100	WCLO	1200
				La Crosse H-18	1000	WKBH	C 1380
				Madison H-19	1000	WHA	940
					500	WIBA	N 1280
				Manitowoc H-20	100	WOMT	1210
				Milwaukee H-19	250	WHAD	C 1120
					250	WISN	C 1120
					1000	WTMJ	N 620
				Poynette H-19	100	WBU	1210
				Racine I-20	100	WRJN	1370
				Sheboygan H-20	500	WHBL	1410
				Stevens Point G-19	2000	WLBL	900
				Superior F-17	1000	WEBC	N 1290
VERMONT				WYOMING			
Burlington F-27	100	WCAX	1200	Casper H-10	500	KDFN	1440
Rutland G-27	100	WSYB	1500				
St. Albans F-27	100	WQDM	1370				
Springfield G-27	250	WNBX	1260				
Waterbury F-27	500	WDEV	550				
				CANADA			
				ALBERTA			
				Calgary B-7	500	CFAC	690
					10000	CFCN	985
					500	CJ CJ	690

INDEX BY LOCATIONS WITH MAP KEY

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

	Watts		Keys.		Watts		Keys.
Edmonton A-8	250	CHMA	580	Quebec D-27	100	CHRC	645
	500	CJCA	745		100	CKCI	645
	500	CKUA	580		100	CKCV	880
Lethbridge C-8	100	CJOC	1120	SASKATCHEWAN			
Red Deer A-8	1000	CKLC	840	Canora A-13	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-5	100	CKOV	1200	Prince Albert A-11	25	10-BI	1200
Trail C-6	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	CFQC	910
	100	CKCD	730			CJGX	630
	50	CKFC	730	NEWFOUNDLAND			
	100	CKMO	730	St. Johns A-35	75	VOAS	810
	100	CKWX	730		30	VONA	950
Victoria C-3	500	CNRV	1030		500	VOWR	750
	500	CFCT	630	Wabana A-35	100	VOGT	893
MANITOBA				CENTRAL AMERICA			
Brandon D-14	500	CKX	930	COSTA RICA			
Winnipeg D-15	5000	CKY	780	San Jose FF-23	50	TICR	911
NEW BRUNSWICK				GUATAMALA			
Fredericton D-29	50	CFNB	1210	Guatamala CC-19	50	TGW	570
Moncton D-30	700	CNRA	630	SALVADOR			
St. John D-30	500	CFBO	890	Salvador CC-19	500	RUS	664
NOVA SCOTIA				MEXICO			
Glace Bay C-32	2000	VAS	685	AGUASCALIENTES			
Halifax E-31	500	CHNS	815	Aguascalientes W-10	250	XFC	810
	500	CNRH	815	BAJA CALIFORNIA			
	100	VCX	690	Tiajuana N-3	300	XEFD	845
Sydney C-32	100	CJCB	880	CHIHUAHUA			
Wolfville D-31	50	CKIC	1010	Chihuahua R-9	100	XEFI	1000
ONTARIO					250	XFF	875
Brantford H-23	15	10-BQ	1200	Juarez P-9	101	XEJ	1000
Chatham H-22	250	CFCO	1210		5000	XEQ	750
Cobalt E-23	100	CKMC	1210	COAHUILA			
Ft. William E-19	50	CKPR	890	Saltito, Coah. U-12	25	XEL	1000
Hamilton H-24	50	CHML	880	Torreón U-11	125	XETB	1380
	1000	CKOC	635		100	XETG	1000
Kingston G-25	50	CFRC	930	Villa Acuna R-12	75000	XER-XEF	735
London H-23	5000	CJGC	595	D. F.			
North Bay E-23	100	CFCH	930	Coyoacan Y-13	100	XEFZ	1370
Ottawa F-25	100	CKCO	890	Mexico City Y-13	1000	XEB	1030
	500	CNRO	600		250	XEFA	1250
Prescott F-25	100	CFLC	915		250	XEG	1070
Preston H-23	100	CKPC	880		101	XEK	990
St. Catharines H-24	1000	CKTB	635		1000	XEN	711
Stratford H-23	15	10-AK	1200		5000	XEO-XEFO	940
Toronto G-24	500	CFC A	1120		500	XETA	1140
	500	CFCL	580		100	XETQ	1230
	10000	CFRB	690		2500	XETR	610
	500	CKCL	580		5000	NEW	910
	5000	CKGW	840		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 H-22	5000	CKOK	540		50	XEC	1000
Wingham G-23	25	10-BP	1199	Toluca Y-12			
PRINCE EDWARD ISLAND							
Charlottetown C-31	500	CFCY	580				
	100	CHCK	960				
Summerside C-31	100	CHGS	1120				
QUEBEC							
Montreal E-26	500	CFCF	N 1030				
	5000	CHYC	730				
	5000	CKAC	C 730				

INDEX BY LOCATIONS WITH MAP KEY

	Watts		Kcys.		Watts	Kcys.
JALISCO						
Guadalajara, Jal. X-10	500	XE A	1155	Cienfuegos W-25	75	CMHJ 1150
MICHOACAN				Colon W-24	30	CMGI 1150
Morelia, Mich. Y-12	150	XEI	1310	Guantanamo X-28	20	CMKJ 1300
NEUVO LEON				Havana W-23	500	CMAF 680
Monterrey, N. L. U-13	100	XEFB	1315		500	CMBC 965
	1000	XEH	1132		150	CMBD 965
	500	XET	690		225	CMBG 1070
OAXACA					30	CMBI 1444
Oaxaca, Oax. AA-14	105	XEE	1000		20	CMBL 1444
PUEBLA					65	CMBN 1444
Puebla Z-13	101	XEV	1000		50	CMBQ 1500
QUERETARO					15	CMBR 1500
Queretaro X-12	40	XEFS	1000		150	CMBS 790
TAMAULIPAS					150	CMBT 790
N. Laredo S-13	101	XEFE	1000		150	CMBW 1140
	200	XEP	1400		350	CMBY 1235
Reynosa, Tams. T-14	10000	XED	965		150	CMBZ 1010
Tampico, Tams. W-14	500	XEM	730		500	CMC 840
	500	XES	1055		150	CMCA 1235
VERA CRUZ					150	CMCB 1070
Jalapa Y-14	100	XETC	1000		250	CMCD 925
Vera Cruz, Ver. Z-14	500	XETF	630		250	CMCF 890
	100	XEU	1007		30	CMCG 1395
YUCATAN					100	CMCH 1395
Merida, Yuc. X-19	10	XEFC	1050		250	CMCJ 630
	105	XEY	1000		15	CMCM 1395
WEST INDIES					250	CMCN 925
BAHAMA					250	CMCO 660
Nassau, U-26	500	VPN	610		1000	CMCQ 1140
CUBA					150	CMCR 1345
Caibarien W-25	250	CMHD	950		150	CMCU 1270
Camaguey W-26	75	CMJC	1382		150	CMCW 1270
	20	CMJE	856		500	CMCY 1355
	225	CMJF	930		40	CMDB 1395
	50	CMJG	1050		5000	CMK 730
	50	CMJL	960		250	CMQ 630
Cardenas W-24	30	CMGE	1375	Matanzas W-24	30	CMGB 1205
Ciego de Avila W-26	50	CMJH	1150		30	CMGC 820
	112	CMJI	1335		50	CMGF 987
					150	CMGH 1040
					20	CMAB 1249
					200	CMHI 1030
					150	CMKC 1034
					250	CMHC 790
				DOMINICAN REPUBLIC		
				Santo Domingo X-31	1000	HIX 630
				HAITI		
				Port au Prince X-30	1000	HHK 920

TIME CONVERSION TABLE

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

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.	CKCI 645	Quebec, Que., <i>EST</i> . 1-1:30 p.m.	CMCG 1395	Havana, Cuba.
CFBO 890	St. John, N. B.	CKCK 960	Regina, Sask., <i>MST</i> . 9-10 a.m.; 11 a.m.-noon; 1-3:30 p.m.	CMCH 1395	Havana, Cuba, <i>EST</i> . 5-9 p.m.
CFCA 1120	Toronto, Ont., <i>EST</i> . 7:15 a.m.-noon; 1 p.m.-mid.	CKCL 580	Toronto, Ont., <i>EST</i> . 8:30 a.m.-mid.	CMCJ 630	Havana, Cuba.
CFCF 1030	Montreal, Que., <i>EST</i> . 8 a.m.-mid.	CKCO 890	Ottawa, Ont.	CMCM 1395	Havana, Cuba.
CFCH 930	North Bay, Ont., <i>EST</i> . 8-8:30 a.m.; noon-1 p.m.; 5-8 p.m.	CKCR 645	Waterloo, Ont., <i>EST</i> . 10 a.m.-1:15 p.m.; 4-11 p.m.	CMCN 925	Havana, Cuba.
CFCL 580	Toronto, Ont.	CKCV 880	Quebec, Que., <i>EST</i> . Noon-2 p.m.; 6:30-11 p.m.	CMCO 660	Havana, Cuba.
CFCN 985	Calgary, Alta., <i>MST</i> . 7:30 a.m.-1:30 p.m.; 5-11 p.m.	CKFC 730	Vancouver, B. C. Silent.	CMCQ 1140	Havana, Cuba.
CFCO 1210	Chatham, Ont., <i>EST</i> . 7:15-8:30 p.m.	CKGW 840	Toronto, Ont., <i>EST</i> . 6:45 a.m.-mid.	CMCR 1345	Havana, Cuba.
CFCT 630	Victoria, B. C., <i>PST</i> . 8 a.m.-12:30 p.m.; 6-8 p.m.	CKIC 1010	Wolfville, N. S., <i>AST</i> . 7:30-8:30 a.m.; 12:15-1:15 p.m.; 6-7 p.m.; 8-10 p.m.	CMCS 1270	Havana, Cuba.
CFCY 580	Charlottetown, P. E. I., <i>AST</i> . 11:30 a.m.-noon; 4:30-8 p.m.	CKLC 840	Red Deer, Alta., <i>MST</i> . 8 a.m.-7:45 p.m.	CMCW 1270	Havana, Cuba.
CFJC 1120	Kamloops, B. C., <i>PST</i> . 7:30-9:30 a.m.; noon-2 p.m.; 5:30-7 p.m.	CKMC 1210	Cobalt, Ont.	CMCX 1355	Havana, Cuba, <i>EST</i> . 8:30-10:30 p.m.
CFLE 915	Prescott, Ont., <i>EST</i> . 8-10 a.m.; noon-2 p.m.; 5-7:30 p.m.	CKMO 730	Vancouver, B. C.	CMDB 1395	Havana, Cuba.
CFNB 1210	Fredericton, N. B.	CKNC 960	Toronto, Ont., <i>EST</i> . 8 a.m.-12:30 p.m.; 2:30-11:15 p.m.	CMDB 1205	Matanzas, Cuba.
CFQC 910	Saskatoon, Sask.	CKOC 635	Hamilton, Ont., <i>EST</i> . 8 a.m.-10:30 p.m.	CMGB 820	Matanzas, Cuba.
CFRB 690	Toronto, Ont., <i>EST</i> . 8 a.m.-mid.	CKOK 540	Windsor, Ont., <i>EST</i> . 7:30 a.m.-mid.	CMGE 1375	Cardenas, Cuba.
CFRC 930	Kingston, Ont.	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.	CMGF 987	Matanzas, Cuba.
CHCK 960	Charlottetown, P. E. I., <i>AST</i> . Noon-2 p.m.; 5-7:30 p.m.	CKPC 880	Preston, Ont., <i>EST</i> . 10 a.m.-2 p.m.	CMGI 1150	Colón, Cuba.
CHGS 1120	Summerside, P. E. I., <i>AST</i> . 10 a.m.-2 p.m.; 4-8 p.m.	CKPR 890	St. William, Ont., <i>EST</i> . 9 a.m.-2 p.m.; 5:30-11 p.m.	CMGJ 790	Tuinucu, Cuba.
CHLS 730	Vancouver, B. C., <i>PST</i> . 8:50-10:30 p.m.	CKTB 635	St. Catharines, Ont., <i>EST</i> . 1:30-5 p.m.; 6:30-8 p.m.	CMHD 950	Caibarien, Cuba.
CHMA 580	Edmonton, Alta.	CKUA 580	Edmonton, Alta., <i>MST</i> . 4-9 p.m.	CMHI 1030	Santa Clara, Cuba, <i>EST</i> . 11 a.m.-1 p.m.; 8-10 p.m.
CHML 880	Hamilton, Ont., <i>EST</i> . 3 p.m.-mid.	CKWX 730	Vancouver, B. C., <i>PST</i> . 8-8:30 a.m.; 10:30 a.m.-noon; 4:30-7:30 p.m.	CMHJ 1150	Cienfuegos, Cuba, <i>EST</i> . 11 a.m.-1 p.m.; 7-9 p.m.
CHNS 815	Halifax, N. S., <i>AST</i> . 8 a.m.-2 p.m.; 6 p.m.-mid.	CKX 930	Brandon, Man., <i>EST</i> . 8:30-9:30 a.m.	CMJ 1382	Camaguey, Cuba.
CHRC 645	Quebec, Que., <i>EST</i> . 9 a.m.-2 p.m.; 5 p.m.-mid.	CKY 780	Winnipeg, Man., <i>CST</i> . 8:30 a.m.-1:30 p.m.; 4-6 p.m.; 8:30-10:45 p.m.	CMJE 856	Camaguey, Cuba.
CHWC 960	Regina, Sask., <i>MST</i> . 7-9 a.m.; 10-11 a.m.; noon-1 p.m.; 3:30 p.m.-mid.	CMAB 1249	Pinar del Rio, Cuba.	CMJF 930	Camaguey, Cuba.
CHWK 665	Chilliwack, B. C., <i>PST</i> . Noon-8 p.m.	CMAF 680	Havana, Cuba.	CMJG 1050	Camaguey, Cuba.
CHYC 730	Montreal, Que.	CMBC 965	Havana, Cuba, <i>EST</i> . 4 p.m.-mid.	CMJH 1150	Ciego de Avila, Cuba, <i>EST</i> . 10 a.m.-2 p.m.; 5-10 p.m.
CJCA 745	Edmonton, Alta., <i>MST</i> . 7:45-9:15 a.m.; noon-1 p.m.; 3:30-4:30 p.m.; 5-6 p.m.; 6-7:30 p.m.	CMBD 965	Havana, Cuba.	CMJI 1335	Ciego de Avila, Cuba, <i>EST</i> . 10 a.m.-1:30 p.m.; 6-10 p.m.
CJCB 880	Sydney, N. S., <i>AST</i> . 10 a.m.-2 p.m.; 6-10 p.m.	CMBG 1070	Havana, Cuba.	CMJK 730	Havana, Cuba, <i>EST</i> . 10 a.m.-noon; 6 p.m.-mid.
CJCC 690	Calgary, Alta., <i>MST</i> . 9-11:30 a.m.; 1:45-3 p.m.; 6-7:30 p.m.	CMBI 1444	Havana, Cuba.	CMKC 1034	Santiago, Cuba.
CJCG 595	London, Ont., <i>EST</i> . 8:45 a.m.-1:15 p.m.; 5:30-10 p.m.	CMBL 1444	Havana, Cuba, <i>EST</i> . 7-9 p.m.	CMKJ 1300	Guantanamo, Cuba.
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.m.	CMBN 1444	Havana, Cuba. 2-3 p.m.; 9:15-11 p.m., <i>EST</i> .	CMKQ 630	Havana, Cuba.
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.	CMBO 1500	Havana, Cuba.	CMKW 1185	Havana, Cuba, <i>EST</i> . 7:30 a.m.-11:30 p.m.
CJOR 1210	Vancouver, B. C., <i>PST</i> . 7:30 a.m.-1 p.m.; 4:10-3:30 p.m.	CMBR 1500	Havana, Cuba.	CMX 890	Havana, Cuba, <i>EST</i> . 11 a.m.-2 p.m.; 7-11 p.m.
CJRM 665	Moose Jaw, Sask.	CMBS 790	Havana, Cuba.	CNRA 630	Moncton, N. B., <i>AST</i> . 12:30-2 p.m.; 6:15-7:15 p.m.
CJRW 665	Fleming, Sask.	CMBT 790	Havana, Cuba.	CNRH 815	Halifax, N. S.
CKAC 730	Montreal, Que., <i>EST</i> . 7:30 a.m.-mid.	CMBW 1140	Havana, Cuba.	CNRO 600	Ottawa, Ont., <i>EST</i> . Noon-1 p.m.; 6-11 p.m.
CKCD 730	Vancouver, B. C.	CMBY 1235	Havana, Cuba.	CNRV 1030	Vancouver, B. C., <i>PST</i> . 2-3:30 p.m.; 5:30-8:30 p.m.
		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.	CPRY 840	Toronto, Ont., <i>EST</i> . 1-1:30 p.m.; 10-10:30 p.m.
		CMC 840	Havana, Cuba.	HHK 920	Port au Prince, Haiti.
		CMCA 1235	Havana, Cuba.	HIX 630	Santo Domingo Silent.
		CMCB 1070	Havana, Cuba, <i>EST</i> . 11:30 a.m.-1 p.m.; 5-6 p.m.; 7:30-10 p.m.	KABC 1420	San Antonio, Tex., <i>CST</i> . 6:45 a.m.-1:30 p.m.; 4-11:30 p.m.
		CMCD 925	Havana, Cuba, <i>EST</i> . Noon-3 p.m.; 8 p.m.-mid.	KARK 890	Little Rock, Ark., <i>CST</i> . 7:30 a.m.-9 p.m.
		CMCF 890	Havana, Cuba, <i>EST</i> . 5-8 p.m.	KASA 1210	Elk City, Okla., <i>CST</i> . 7 a.m.-9 p.m.
				KBPS 1420	Portland, Ore., <i>PST</i> . 11 a.m.-12:30 p.m.; 3-5 p.m.
				KBTM 1200	Paragould, Ark., <i>CST</i> . 7:30 a.m.-1:30 p.m.; 3:15-6:15 p.m.
				KCMC 1420	Texarkana, Ark., <i>CST</i> . 6:45 a.m.-2 p.m.; 4-9 p.m.
				KCRC 1370	Enid, Okla., <i>CST</i> . 10 a.m.-2 p.m.; 3:45-7:45 p.m.
				KCRJ 1310	Jerome, Ariz., <i>MST</i> . 7:30-9:30 a.m.; noon-1 p.m.; 3:45-6 p.m.

KDB 1500 Santa Barbara, Calif., <i>PST.</i>	KFOR 1210 Lincoln, Nebr., <i>CST.</i>	KGDA 1370 Mitchell, S. D., <i>CST.</i>
8 a.m.-mid.	7 a.m.-10 p.m.	8 a.m.-4:30 p.m.; 5:30-9 p.m.
KDFN 1440 Casper, Wyo., <i>MST.</i>	KFOX 1250 Long Beach, Calif., <i>PST.</i>	KGDE 1200 Fergus Falls, Minn., <i>CST.</i>
9 a.m.-9 p.m.	6 a.m.-mid.	7 a.m.-9 p.m.
KDKA 980 Pittsburgh, Pa., <i>EST.</i>	KFPL 1310 Dublin, Texas, <i>CST.</i>	KGDM 1100 Stockton, Calif., <i>PST.</i>
7 a.m.-12:30 a.m. next day.	6 a.m.-10:30 p.m.	6 a.m.-sunset.
KDLR 1210 Devils Lake, N. D., <i>CST.</i>	KFPM 1310 Greenville, Texas, <i>CST.</i>	KGDY 1200 Huron, S. D.
7 a.m.-3 p.m.; 5:30-9:30 p.m.	7:45-9 a.m.; 1-2:45 p.m.; 6-9 p.m.	KGEK 1200 Yuma, Colo., <i>MST.</i>
KDYL 1290 Salt Lake City, Utah, <i>MST.</i>	KFPW 1210 Fort Smith, Ark., <i>CST.</i>	KGER 1360 Long Beach, Calif., <i>PST.</i>
6:30 a.m.-1 a.m. next day.	6:30 a.m.-2 p.m.; 5-10:30 p.m.	6 a.m.-mid.
KECA 1430 Los Angeles, Calif., <i>PST.</i>	KFPY 1340 Spokane, Wash., <i>PST.</i>	KGEW 1200 Ft. Morgan, Colo., <i>MST.</i>
9 a.m.-11 p.m.	7 a.m.-12:30 a.m. next day.	6:30-9:30 p.m.
KELW 780 Burbank, Calif., <i>PST.</i>	KFQD 1230 Anchorage, Alaska.	KGEZ 1310 Kalispell, Mont., <i>MST.</i>
10 a.m.-1 p.m.; 5-8 p.m.	6 p.m.-mid. (Zone 6)	8 a.m.-9 p.m.
KERN 1200 Bakersfield, Calif.	KFRC 610 San Francisco, Calif., <i>PST.</i>	KGFF 1420 Shawnee, Okla., <i>CST.</i>
KEX 1180 Portland, Ore., <i>PST.</i>	7 a.m.-1 a.m. next day.	7:30 a.m.-9 p.m.
7 a.m.-noon; 1 p.m.-mid.	KFRU 630 Columbia, Mo., <i>CST.</i>	KGFG 1370 Oklahoma City, Okla.
KFAB 770 Lincoln, Neb., <i>CST.</i>	6:30-9 a.m. 4-7:30 p.m.; 8 p.m.-mid.	KGFI 1500 Corpus Christi, Texas, <i>CST.</i>
6 a.m.-10:30 p.m.	KFSD 600 San Diego, Calif., <i>PST.</i>	7 a.m.-3 p.m.; 6-10 p.m.
KFAC 1300 Los Angeles, Calif., <i>PST.</i>	7:30 a.m.-mid.	KGFJ 1200 Los Angeles, Calif.
7 a.m.-mid.	KFSG 1120 Los Angeles, Calif., <i>PST.</i>	24 hours daily.
KFBB 1280 Great Falls, Mont., <i>MST.</i>	1:30-3 p.m.	KGFK 1500 Moorhead, Minn., <i>CST.</i>
8 a.m.-3 p.m.; 5-10 p.m.	KFUL 1290 Galveston, Texas, <i>CST.</i>	8 a.m.-9 p.m.
KFBI 1050 Abilene, Kans., <i>CST.</i>	8:30 a.m.; 11 a.m.-1 p.m.;	KGFL 1370 Santa Fe, N. M., <i>MST.</i>
5 a.m.-9 p.m.	2:30-4 p.m.; 5:30-8 p.m.;	9-10 a.m.; 11 a.m.-3 p.m.; 4-5:30 p.m.;
KFBK 1310 Sacramento, Calif.	10:15 p.m.-mid.	5-10 p.m.
KFBL 1370 Everett, Wash., <i>PST.</i>	KFUO 550 St. Louis, Mo., <i>CST.</i>	KGFW 1310 Kearney, Neb., <i>CST.</i>
8:30 a.m.-noon; 3-6 p.m.; 3-6 a.m.	6:30-7 a.m.; 12:15-12:40 p.m.;	7:30 a.m.-1:30 p.m.; 5-10:30 p.m.
KFDM 560 Beaumont, Texas, <i>CST.</i>	9:30-10:30 p.m.	KGFX 630 Pierre, S. D.
7 a.m.-2 p.m.; 4:30-10:30 p.m.	KFVD 1000 Los Angeles, Calif., <i>PST.</i>	KGGC 1420 San Francisco, Calif.
KFDY 550 Brookings, S. D., <i>CST.</i>	6 a.m.-6:45 p.m.; 10 p.m.-mid.	KGGD 1010 Coffeyville, Kans., <i>CST.</i>
12:30-2 p.m.	KFVS 1210 Cape Girardeau, Mo., <i>CST.</i>	7:30 a.m.-2 p.m.; 5-10:30 p.m.
KFEL 920 Denver, Colo., <i>MST.</i>	9 a.m.-noon; 4-8:30 p.m.	KGGM 1230 Albuquerque, N. M., <i>MST.</i>
7-8:30 a.m.; 10 a.m.-12:30 p.m.;	KFWB 950 Los Angeles, Calif., <i>PST.</i>	8 a.m.-2 p.m.; 4-10 p.m.
3-4:30 p.m.; 6-7:30 p.m.	7:30 a.m.-mid.	KGHF 1320 Pueblo, Colo., <i>MST.</i>
KFEQ 680 St. Joseph, Mo., <i>CST.</i>	KFWF 1200 St. Louis, Mo.	7 a.m.-1 p.m.; 4-10 p.m.
6 a.m.-7:45 p.m.	KFWI 930 San Francisco, Calif., <i>PST.</i>	KGHI 1200 Little Rock, Ark.
KFGQ 1310 Boone, Iowa.	7-8 a.m.; 9 a.m.-1 p.m.; 6-7:30 p.m.;	KGHL 950 Billings, Mont., <i>MST.</i>
KFH 1300 Wichita, Kans., <i>CST.</i>	8:30 p.m.-1 a.m.	7:30 a.m.-4 p.m.; 5:30-11 p.m.
7-8:30 a.m.; 9-11 a.m.; 11:30 a.m.-2 p.m.; 3-9 p.m.; 10-11 p.m.	KFXD 1200 Nampa, Idaho, <i>MST.</i>	KGIR 1360 Butte, Mont., <i>MST.</i>
KFI 640 Los Angeles, Calif., <i>PST.</i>	7 a.m.-9 p.m.	7 a.m.-mid.
6:30 a.m.-mid.	KFXF 920 Denver, Colo.	KGIW 1420 Trinidad, Colo.
KFIO 1120 Spokane, Wash., <i>PST.</i>	KFXJ 1310 Grand Jet, Colo., <i>MST.</i>	KGIX 1420 Las Vegas, Nev., <i>PST.</i>
6 a.m.-sunset.	8 a.m.-2 p.m.; 6-9 p.m.	7 a.m.-1 p.m.; 3-9 p.m.
KFIZ 1420 Fond du Lac, Wis., <i>CST.</i>	KFXM 1210 San Bernardino, Calif., <i>PST.</i>	KGIZ 1500 Grant City, Mo.
10 a.m.-1 p.m.; 4-10 p.m.	7 a.m.-mid.	KGKB 1500 Tyler, Texas, <i>CST.</i>
KFJB 1200 Marshalltown, Iowa.	KFXR 1310 Oklahoma City, Okla.	7 a.m.-2 p.m.; 4-10 p.m.
KFJI 1210 Klamath Falls, Ore., <i>PST.</i>	KFYO 1310 Lubbock, Texas.	KGKL 1370 San Angelo, Texas, <i>CST.</i>
7:30 a.m.-9 p.m.	KFYR 550 Bismarck, N. D., <i>CST.</i>	8 a.m.-9:30 p.m.
KFJM 1370 Grand Forks, N.D., <i>CST.</i>	6:30 a.m.-12:30 p.m.; 2-11 p.m.	KGKO 570 Wichita Falls, Texas.
7 a.m.-9 p.m.	KGGA 1470 Spokane, Wash., <i>PST.</i>	KGKX 1420 Lewiston, Idaho.
KFJR 1300 Portland, Ore., <i>PST.</i>	6 a.m.-mid.	KGKY 1500 Scottsbluff, Neb., <i>MST.</i>
10:30 a.m.-2:30 p.m.; 5-6 p.m.;	KGAR 1370 Tucson, Ariz., <i>MST.</i>	6:30 a.m.-2 p.m.; 4:30-9 p.m.
7-8 p.m.	7 a.m.-1:30 p.m.; 4-11 p.m.	KGMB 1320 Honolulu, Hawaii.
KFJZ 1370 Fort Worth, Texas, <i>CST.</i>	KG B 1330 San Diego, Calif., <i>PST.</i>	7-9 a.m.; 10:40 a.m.-11 p.m. (Zone 5)
7 a.m.-11 p.m.	7 a.m.-mid.	KGNF 1430 North Platte, Neb., <i>MST.</i>
KFKA 880 Greeley, Colo., <i>MST.</i>	KGBU 900 Ketchikan, Alaska.	7 a.m.-sunset.
6-7:30 a.m.; 9 a.m.-2:30 p.m.;	KG BX 1310 Springfield, Mo., <i>CST.</i>	KGNO 1210 Dodge City, Kans., <i>MST.</i>
6-7:30 p.m.; 9-11 p.m.	6:30-9:30 a.m.; 11 a.m.-2 p.m.;	7:30 a.m.-3:30 p.m.; 5-9 p.m.
KFKU 1220 Lawrence, Kans., <i>CST.</i>	4-10 p.m.	KG O 790 San Francisco, Calif., <i>PST.</i>
2:30-3 p.m.; 6-6:15 p.m.	KG BZ 930 York, Neb., <i>CST.</i>	7 a.m.-12:30 a.m. next day.
KFKX 1020 Chicago, Ill.	7:30-9:30 a.m.; 11 a.m.-12:30 p.m.;	KGRS 1410 Amarillo, Texas, <i>CST.</i>
KFLV 1410 Rockford, Ill., <i>CST.</i>	2-3:30 p.m.; 5-6:30 p.m.	6-8 a.m.; 10 a.m.-12:30 p.m.;
10 a.m.-12:30 p.m.; 3-5 p.m.;	KGCA 1270 Decorah, Iowa, <i>CST.</i>	3-4:30 p.m.; 6-7:30 p.m.; 9-10 p.m.
8-10 p.m.	8:30-9:45 a.m.; 10:45-11:30 a.m.;	KGU 750 Honolulu, Hawaii.
KFLX 1370 Galveston, Texas.	12:30-2:30 p.m.	6:15-10:30 a.m.; noon-1 p.m.;
KFMX 1250 Northfield, Minn. Silent.	KGCR 1210 Watertown, S. D., <i>CST.</i>	4:30-11 p.m. (Zone 5)
KFNF 890 Shenandoah, Ia., <i>CST.</i>	6:30 a.m.-3 p.m.; 5-9 p.m.	KGVO 1200 Missoula, Mont., <i>MST.</i>
5-8 a.m.; 9-10 a.m.; 12:15-5 p.m.;	KGCU 1240 Mandan, N. D., <i>CST.</i>	6 a.m.-mid.
6-8 p.m.; 9-10 p.m.	Non-5 p.m.; 6:45-9 p.m.	KGW 620 Portland, Ore., <i>PST.</i>
	KG CX 1310 Wolf Point, Mont., <i>MST.</i>	6:30 a.m.-mid.
	7:30-9 a.m.; noon-3 p.m.; 6-7:30 p.m.	

KGY 1210 Olympia, Wash., <i>PST</i> . 6 p.m.-mid.	KOMA 1480 Oklahoma City, Okla., <i>CST</i> .	KTAT 1240 Ft. Worth, Texas.
KHJ 900 Los Angeles, Calif., <i>PST</i> . 7 a.m.-1 a.m. next day.	KOMO 920 Seattle, Wash., <i>PST</i> . 6:55 a.m.-12:30 a.m. next day.	KTBR 1300 Portland, Ore.
KHQ 590 Spokane, Wash., <i>PST</i> . 7 a.m.-mid.	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 p.m.	KTBS 1450 Shreveport, La., <i>CST</i> . 6 a.m.-mid.
KICA 1370 Clovis, N. M.	KOOS 1370 Marshfield, Ore., <i>PST</i> . 9 a.m.-9 p.m.	KTFI 1240 Twin Falls, Idaho, <i>MST</i> . 6:30 a.m.-11 p.m.
KICK 1420 Red Oak, Iowa.	KORE 1420 Eugene, Ore., <i>PST</i> . 7:45 a.m.-8:30 p.m.	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.; 6:30-7 p.m.; 8:45-9:45 p.m.; 11 p.m.-mid.
KID 1320 Idaho Falls, Idaho, <i>MST</i> . 9 a.m.-mid.	KOY 1390 Phoenix, Ariz., <i>MST</i> . 7 a.m.-10 p.m.	KTM 780 Los Angeles, Calif., <i>PST</i> . 6-10 a.m.; 1-5 p.m.; 7:30 p.m.- 4 a.m. next day.
KIDO 1350 Boise, Idaho, <i>MST</i> . 7 a.m.-9:30 p.m.	KPCD 650 Seattle, Wash., <i>PST</i> . 5:30 a.m.-8 p.m.; 10 p.m.-4 a.m. next day.	KTRH 1120 Houston, Texas, <i>CST</i> . 6:30-11 a.m.; noon-11:30 p.m.
KIDW 1420 Lamar, Colo.	KPJM 1500 Prescott, Ariz.	KTSA 1290 San Antonio, Tex., <i>CST</i> . 6:30-8 a.m.; 9:30-11 a.m.; 1- 2:30 p.m.; 4-5:30 p.m.; 8- 10:15 p.m.
KIT 1310 Yakima, Wash., <i>PST</i> . 7 a.m.-11 p.m.	KPO 680 San Francisco, Calif., <i>PST</i> .	KTSM 1310 El Paso, Texas.
KJBS 1070 San Francisco, Calif., <i>PST</i> . Mid. to local sunset.	KPOF 7:30 a.m.-mid. 880 Denver, Colo., <i>MST</i> . 7:30-9 a.m.; 2:30-4:30 p.m.; 7:30-9 p.m.	KTW 1220 Seattle, Wash.
KJR 970 Seattle, Wash., <i>PST</i> . 7 a.m.-mid.	KPPC 1210 Pasadena, Calif. Silent.	KUJ 1370 Walla Walla, Wash., <i>PST</i> . 6 a.m.-sunset.
KLCN 1290 Blytheville, Ark.	KPQ 1500 Wenatchee, Wash., <i>PST</i> . 7 a.m.-10 p.m.	KUMA 1420 Yuma, Ariz., <i>MST</i> . 7-9 a.m.; noon-3 p.m.; 6-9 p.m.
KLO 1400 Ogden, Utah, <i>MST</i> . 8:30 a.m.-10:30 p.m.	KPRC 920 Houston, Texas, <i>CST</i> . 6:30 a.m.-mid.	KUOA 1390 Fayetteville, Ark., <i>CST</i> . 7-8 a.m.; 11 a.m.-1 p.m.; 5-6:30 p.m.
KLPM 1240 Minot, N. D., <i>CST</i> . 7 a.m.-1 p.m.; 6-7:45 p.m.; 10-11:30 p.m.	KQV 1380 Pittsburgh, Pa., <i>EST</i> . 8:30 a.m.-1 p.m.; 2-11 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.	KQW 1010 San Jose, Calif., <i>PST</i> . 7 a.m.-3 p.m.; 4:30-10 p.m.	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.	KRE 1370 Berkeley, Calif., <i>PST</i> . 6:30-9:30 a.m.; noon-3 p.m.; 6-9 p.m.	KVL 1370 Seattle, Wash.
KLX 880 Oakland, Calif., <i>PST</i> . 7 a.m.-11 p.m.	KREG 1500 Santa Ana, Calif., <i>PST</i> . 9 a.m.-11 p.m.	KVOA 1260 Tucson, Ariz.
KLZ 560 Denver, Colo., <i>MST</i> . 6:30 a.m.-11:30 p.m.	KRGV 1260 Harlingen, Texas, <i>CST</i> . 7-9:30 a.m.; 12:30-3:30 p.m.; 6:30-9:30 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 p.m.- mid.	KRKD 1120 Los Angeles, Calif., <i>PST</i> . 6 a.m.-1:30 p.m.; 3 p.m.-mid.	KVOR 1270 Colorado Springs, Colo., <i>MST</i> . 7 a.m.-10 p.m.
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.	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- 6:30 p.m.; 7-8:45 p.m.; 9:45- 11 p.m.	KVOS 1200 Bellingham, Wash.
KMBC 950 Kansas City, Mo., <i>CST</i> . 6:15 a.m.-mid.	KRMD 1310 Shreveport, La., <i>CST</i> . 7 a.m.-1 p.m.; 5-8 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.	KROW 930 Oakland, Calif., <i>PST</i> . 8-9 a.m.; 1-6 p.m.; 7:30-8:30 p.m.	KWEA 1210 Shreveport, La.
KMJ 580 Fresno, Calif., <i>PST</i> . 7 a.m.-mid.	KRSC 1120 Seattle, Wash., <i>PST</i> . Sunrise to local sunset.	KWG 1200 Stockton, Calif., <i>PST</i> . 7 a.m.-mid.
KMLB 1200 Monroe, La.	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.	KWJJ 1060 Portland, Ore.
KMMJ 740 Clay Center, Neb., <i>CST</i> . 5:45 a.m.-sunset.	KSCJ 1330 Sioux City, Iowa, <i>CST</i> . 6:30 a.m.-11 p.m.	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.	KSD 550 St. Louis, Mo., <i>CST</i> . 7 a.m.-12:15 p.m.; 12:40-9:30 p.m.; 10:30-11 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.	KSEI 890 Pocatello, Idaho, <i>MST</i> . 8 a.m.-11 p.m.	KWKH 850 Shreveport, La., <i>CST</i> . 8:30 p.m.-mid.
KMPK 710 Beverly Hills, Calif.	KSL 1130 Salt Lake City, Ut., <i>MST</i> . 7 a.m.-mid.	KWLC 1270 Decorah, Iowa, <i>CST</i> . 6:30-8:30 a.m.; 9:45-10:45 a.m.; 11:30 a.m.-12:30 p.m.
KMTR 570 Hollywood, Calif.	KSO 1380 Clarinda, Iowa.	KWSC 1220 Pullman, Wash., <i>PST</i> . 6:30-8 a.m.; 9:05 a.m.-noon; 3:30-5:30 p.m.; 6:30-8 p.m.
KNOW 1500 Austin, Texas, <i>CST</i> . 7:30 a.m.-1:30 p.m.; 4:30-10:30 p.m.	KSOO 1110 Sioux Falls, S. D., <i>CST</i> . 6 a.m.-8 p.m.	KWWG 1260 Brownsville, Texas.
KNX 1050 Hollywood, Calif., <i>PST</i> . 6:30 a.m.-1 a.m. next day.	KSTP 1460 St. Paul, Minn., <i>CST</i> . 6:30 a.m.-12:30 a.m. next day.	KXA 760 Seattle, Wash., <i>PST</i> . 7 a.m.-sundown; 9 p.m.-mid.
KOA 830 Denver, Colo., <i>MST</i> . 7 a.m.-mid.	KTAB 560 San Francisco, Calif., <i>PST</i> . 6:45 a.m.-1 a.m. next day.	KXL 1420 Portland, Ore., <i>PST</i> . 7 a.m.-mid.
KOAC 550 Corvallis, Ore., <i>PST</i> . 6:30 a.m.-4 p.m.; 6-8:30 p.m.	KTAR 620 Phoenix, Ariz., <i>MST</i> . 7 a.m.-11:15 p.m.	KXO 1500 El Centro, Calif.
KOB 1180 Albuquerque, N. M., <i>MST</i> . 7 a.m.-9 p.m.		KXRO 1310 Aberdeen, Wash., <i>PST</i> . 7:30 a.m.-10 p.m.
KOCW 1300 Chickasha, Okla.		KXYZ 1440 Houston, Texas, <i>CST</i> . 7-10 a.m.-11 a.m.-1:15 p.m.; 3:30-10:30 p.m.
KOH 1380 Reno, Nev., <i>PST</i> . 8 a.m.-9 p.m.		KYA 1230 San Francisco, Calif., <i>PST</i> . 7:30 a.m.-mid.
KOIL 1260 Council Bluffs, Ia., <i>CST</i> . 6 a.m.-mid.		KYW 1020 Chicago, Ill., <i>CST</i> . 7 a.m.-1 a.m. next day.
KOIN 940 Portland, Ore., <i>PST</i> . 6 a.m.-1 a.m. next day.		NAA 690 Arlington, Va.
KOL 1270 Seattle, Wash., <i>PST</i> . 6:45 a.m.-mid.		RUS 664 Salvador
		TGW 570 Guatemala.
		TICR 911 San Jose, C. R.

VAS 685	Glace Bay, N. S. 1-1:15 p.m., mid-12:15 a.m.	WBNX 1350	New York City, <i>EST.</i> 9 p.m.-mid.	WCOD 1200	Harrisburg, Pa. <i>EST.</i> 8-11 a.m.; 3-6 p.m.; 8-11 p.m.
VCX 690	Halifax, N. S.	WBOQ 860	New York City	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.
VOAS 810	St. Johns, N. F. 11 a.m.-12:30 p.m.; 4-5:30 p.m. (Zone 19)	WBOW 1310	Terre Haute, Ind., <i>CST.</i> 7 a.m.-2p.m., 4-10 p.m.	WCSC 1360	Charleston, S. C.
VOGT 893	Wabana, N. F. Silent.	WBRC 930	Birmingham, Ala., <i>CST.</i> 7 a.m.-11 p.m.	WCSE 940	Portland, Maine, <i>EST.</i> 7:45 a.m.-1:30 p.m.; 2-10:45 p.m.
VONA 950	St. Johns, N. F.	WBRE 1310	Wilkes Barre, Pa.	WDAA 1220	Tampa, Fla., <i>EST.</i> 8 a.m.-mid.
VOWR 750	St. Johns, N. F. Silent.	WBRO 920	Babson Park, Mass., <i>EST.</i> 7 a.m.-5 p.m.	WDAF 610	Kansas City, Mo., <i>CST.</i> 6:26 a.m.-mid.
VPN 610	Nassau, B. I.	WBT 1080	Charlotte, N. C., <i>EST.</i> 7 a.m.-mid.	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.
WAAB 1410	Boston, Mass., <i>EST.</i> 7:45 a.m.-mid.	WBTM 1370	Danville, Va.	WDAH 1310	El Paso, Texas.
WAAB 920	Chicago, Ill., <i>CST.</i> 6 a.m.-local sunset.	WBZ 990	Boston, Mass., <i>EST.</i> 7 a.m.-mid.	WDAS 1370	Philadelphia, Pa., <i>EST.</i> 9 a.m.-10:30 p.m.
WAAM 1250	Newark, N. J., <i>EST.</i> 7-9 a.m.; 10 a.m.-noon; 10 p.m.-mid.	WBZA 990	Springfield, Mass., <i>EST.</i> 7 a.m.-mid.	WDAY 940	Fargo, N. D., <i>CST.</i> 6 a.m.-11:45 p.m.
WAAT 940	Jersey City, N. J., <i>EST.</i> 6 a.m.-6 p.m.	WCAC 600	Storrs, Conn., <i>EST.</i> 12:30-1 p.m.; 7-8 p.m.	WDBJ 930	Roanoke, Va., <i>EST.</i> 8 a.m.-mid.
WAAB 660	Omaha, Neb.	WCAD 1220	Canton, N. Y., <i>EST.</i> 12:20-1:20 p.m.	WDBO 580	Orlando, Fla., <i>EST.</i> 7 a.m.-mid.
WABC 860	New York City, <i>EST.</i> 7:30 a.m.-2 a.m. next day.	WCAE 1220	Pittsburgh, Pa., <i>EST.</i> 6:45 a.m.-mid.	WDEL 1120	Wilmington, Del., <i>EST.</i> 9 a.m.-10 p.m.
WABI 1200	Bangor, Maine, <i>EST.</i> 6-9 a.m.; noon-3 p.m.; 6-9 p.m.	WCAH 1430	Columbus, Ohio, <i>EST.</i> 7:45 a.m.-mid.	WDEV 550	Waterbury, Vt., <i>EST.</i> 9:30-11 a.m.; noon-2 p.m.
WABZ 1200	New Orleans, La.	WCAJ 590	Lincoln, Neb., <i>CST.</i> 10-10:45 a.m.; 3:30-4 p.m.; 9-10 p.m.	WDGY 1180	Minneapolis, Minn., <i>CST.</i> 6:30 a.m.-8:15 p.m.
WACO 1240	Waco, Texas, <i>CST.</i> 7-8 a.m.; 10 a.m.-12:30 p.m.; 2-4 p.m.; 5-7:30 p.m.; 9-10:30 p.m.	WCAL 1250	Northfield, Minn., <i>CST.</i> 9:45-10:15 a.m.; 8-10 p.m.	WDDO 1280	Chattanooga, Tenn., <i>CST.</i> 7 a.m.-11 p.m.
WADC 1320	Akron, Ohio, <i>EST.</i> 8:30 a.m.-mid.	WCAM 1280	Camden, N. J., <i>EST.</i> 11 a.m.-noon; 2-5 p.m.; 8 p.m.-mid.	WDRC 1330	Hartford, Conn., <i>EST.</i> 8 a.m.-mid.
WAGM 1420	Presque Isle, Me., <i>EST.</i> 7 a.m.-1 p.m.; 3-9 p.m.	WCAO 600	Baltimore, Md., <i>EST.</i> 7 a.m.-mid.	WDSU 1250	New Orleans, La., <i>CST.</i> 7 a.m.-11:45 p.m.
WAIU 640	Columbus, Ohio, <i>EST.</i> 7 a.m.-sunset.	WCAP 1280	Asbury Park, N. J., <i>EST.</i> 9-11 a.m.; 5-8 p.m.	WDZ 1070	Tuscola, Ill., <i>CST.</i> 7 p.m.-4:30 p.m.
WALR 1210	Zanesville, Ohio, <i>EST.</i> 9 a.m.-10 p.m.	WCAT 1200	Rapid City, S. D., <i>CST.</i> 12:30 p.m.-1:30 p.m.	WEAF 660	New York City, <i>EST.</i> 6:45 a.m.-1 a.m. next day.
WAMC 1420	Anniston, Ala., <i>CST.</i> 7-10:30 a.m.; noon-9 p.m.	WCAU 1170	Philadelphia, Pa., <i>EST.</i> 8 a.m.-1 a.m. next day.	WEAI 1270	Ithaca, N. Y., Variable
WAPI 1140	Birmingham, Ala., <i>CST.</i> 6:30 a.m.-sunset; 9 p.m.-mid.	WCAX 1200	Burlington, Vt. Noon-1; 6-9 p.m., <i>EST.</i>	WEAN 780	Providence, R. I., <i>EST.</i> 7:30 a.m.-1 a.m. next day
WASH 1270	Gd. Rapids, Mich., <i>CST.</i> 7 a.m.-mid.	WCAZ 1070	Carthage, Ill., <i>CST.</i> 9:30 a.m.-3:30 p.m.	WEAO 570	Columbus, Ohio, <i>EST.</i> 9-11 a.m.; 1-3 p.m.; 8-10 p.m.
WAWZ 1350	Zarephath, N. J., <i>EST.</i> 6-9 a.m.; 7:30-9 p.m.	WCBA 1440	Allentown, Pa., <i>EST.</i> 7:30 a.m.-1 a.m. next day.	WEBC 1290	Superior, Wis., <i>CST.</i> 7 a.m.-11 p.m.
WBAA 1400	Lafayette, Ind., <i>CST.</i> 7-8 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.	WEBQ 1210	Harrisburg, Ill., <i>CST.</i> 6-9 a.m.; noon-4 p.m.; 8:30 p.m.-mid.
WBAK 1430	Harrisburg, Pa., <i>EST.</i> 10:30-11:30 a.m.; 1:30-2:30 p.m.; 4-4:30 p.m.; 8-9:45 p.m.	WCBM 1370	Baltimore, Md., <i>EST.</i> 7 a.m.-1:30 p.m.; 5-11 p.m.	WEBR 1310	Buffalo, N. Y., <i>EST.</i> 7 a.m.-2 a.m. next day
WBAL 1060	Baltimore, Md., <i>EST.</i> 7 a.m.-mid.	WCBS 1210	Springfield, Ill., <i>CST.</i> 11:30 a.m.-3 p.m.; 6:45-9 p.m.	WEDC 1210	Chicago, Ill.
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 p.m.-mid.	WCCO 810	Minneapolis, Minn., <i>CST.</i> 6:45 a.m.-mid.	WEEI 590	Boston, Mass., <i>EST.</i> 6:45 a.m.-mid.
WBAX 1210	Wilkes Barre, Pa., <i>EST.</i> 7:30 a.m.-noon.	WCDA 1350	New York City, <i>EST.</i> 9 a.m.-noon; 3-7:30 p.m.	WEEU 830	Reading, Pa., <i>EST.</i> 8 a.m.-8 p.m.
WBBC 1400	Brooklyn, N. Y.	WCFL 970	Chicago, Ill., <i>CST.</i> 6 a.m.-mid.	WEHC 1350	Emory, Va., <i>EST.</i> 6-8 a.m.; 11 a.m.-2 p.m.; 4-7 p.m.
WBBL 1210	Richmond, Va.	WCGU 1400	Brooklyn, N. Y., <i>EST.</i> 11:15 a.m.-1:30 p.m.; 6-7:30 p.m.	WEHS 1420	Cicero, Ill., <i>CST.</i> 4-6 p.m.
WBMM 770	Chicago, Ill., <i>CST.</i> 6:45 a.m.-10 p.m.; 11:30 p.m.-2 a.m.	WCKY 1490	Covington, Ky., <i>CST.</i> 7 a.m.-mid.	WELL 1420	Battle Creek, Mich.
WBBR 1300	Brooklyn, N. Y., <i>EST.</i> 10 a.m.-noon.	WCLO 1200	Janesville, Wis., <i>CST.</i> 7:30 a.m.-3:30 p.m.; 5-9 p.m.	WENC 1420	Americus, Ga., <i>EST.</i> 7 a.m.-2 p.m.; 4 p.m.-sunset.
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 p.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.
WBCM 1410	Bay City, Mich.	WCMA 1400	Culver, Ind., <i>CST.</i> 6-6:30 a.m.; 1:15-4:15 p.m.; 4:30-3 p.m.-mid.	WERE 1420	Erie, Pa., <i>EST.</i> 8 a.m.-1:30 p.m.; 3:45-10:45 p.m.
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.	WESG 1370	Glens Falls, N. Y.
WBEO 1310	Marquette, Mich.	WCOC 880	Meridian, Miss., <i>CST.</i> 7:30 a.m.-2 p.m.; 5-11 p.m.	WEVD 1300	New York City, <i>EST.</i> 8-9 a.m.; 3-6 p.m.
WBHS 1200	Huntsboro, Ala.				
WBIG 1440	Greensboro, N. C., <i>EST.</i> 8 a.m.-3 p.m.; 5-11 p.m.				
WBMS 1450	Hackensack, N. J., <i>EST.</i> 6-9 p.m.				

WEW	760 St. Louis, Mo., <i>CST.</i> 8 a.m.-5 p.m.	WHAT	1310 Philadelphia, Pa., <i>EST.</i> 9-11 a.m.; 1-2 p.m.; 5-6:30 p.m.	WIS	1010 Columbia, S. C., <i>EST.</i> 7 a.m.-1:30 p.m.; 5:30-11 p.m.
WEXL	1310 Royal Oak, Mich., <i>EST.</i> 8 a.m.-11 p.m.	WHAZ	1300 Troy, N. Y., <i>EST.</i> 6 p.m.-mid.	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.
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.	WHB	860 Kansas City, Mo., <i>CST.</i> 6 a.m.-5:45 p.m.	WJAC	1310 Johnstown, Pa., <i>EST.</i> 8:30-10:30 a.m.; 4:30 p.m.-mid.
WFAB	1300 New York City	WHBC	1200 Canton, Ohio, <i>EST.</i> 6-9 a.m.; noon-3 p.m.; 6-9 p.m.	WJAG	1060 Norfolk, Neb., <i>CST.</i> 6 a.m.-5:45 p.m.
WFAM	1200 South Bend, Ind.	WHBD	1370 Mt. Orab, Ohio, <i>EST.</i> 7-11 a.m.; noon-5 p.m.; 6-9 p.m.	WJAK	1310 Elkhart, Ind., <i>CST.</i> 7:30 a.m.-7:30 p.m.
WFAN	610 Philadelphia, Pa., <i>EST.</i> 9 a.m.-mid.	WHBF	1210 Rock Island, Ill., <i>CST.</i> 10 a.m.-3 p.m.; 5 p.m.-mid.	WJAR	890 Providence, R. I., <i>EST.</i> 8 a.m.-mid.
WFAS	1210 White Plains, N. Y., <i>EST.</i> 5-7 p.m.	WHBL	1410 Sheboygan, Wis., <i>CST.</i> 7-10 a.m.; 12:30-3 p.m.; 6-8 p.m.; 10 p.m.-mid.	WJAS	1290 Pittsburgh, Pa., <i>EST.</i> 7:30 a.m.-11:30 p.m.
WFBE	1200 Cincinnati, Ohio, <i>EST.</i> 7 a.m.-11 p.m.	WHBQ	1370 Memphis, Tenn., <i>CST.</i> 7:55 a.m.-10:30 p.m.	WJAX	900 Jacksonville, Fla., <i>EST.</i> 7 a.m.-11 p.m.
WFBC	1310 Altoona, Pa., Silent.	WHBU	1310 Anderson, Ind., <i>CST.</i> 7 a.m.-1 p.m.; 3-9:15 p.m.	WJAY	610 Cleveland, Ohio. 6 a.m.-6:45 p.m.; <i>EST.</i>
WFBL	1360 Syracuse, N. Y., <i>EST.</i> 7:30 a.m.-mid.	WHBY	1200 Green Bay, Wis., <i>CST.</i> 7 a.m.-10 p.m.	WJBC	1200 LaSalle, Ill., <i>CST.</i> 8-9 a.m.; 10 a.m.-12:30 p.m.; 6:30-10 p.m.
WFBM	1230 Indianapolis, Ind., <i>CST.</i> 7:30-10:15 a.m.; noon-3 p.m.; 5:30 p.m.-mid.	WHDF	1370 Calumet, Mich., <i>CST.</i> 9-9:45 a.m.; noon-1 p.m.; 4:40-7 p.m.	WJBI	1210 Red Bank, N. J., <i>EST.</i> 9 a.m.-noon.
WFBR	1270 Baltimore, Md., <i>EST.</i> 7 a.m.-mid.	WHDH	830 Boston, Mass.	WJBK	1370 Detroit, Mich., <i>EST.</i> 7 a.m.-11 p.m.
WFDF	1310 Flint, Mich., <i>CST.</i> 7 a.m.-11 p.m.	WHDL	1420 Tupper Lake, N. Y., <i>EST.</i> 7:45 a.m.-1 p.m.; 3-7:45 p.m.	WJBL	1200 Decatur, Ill., <i>CST.</i> 6:30-8 a.m.; 9-10 p.m.; 12:30-3 p.m.; 4:30-6:30 p.m.
WFDV	1500 Rome, Ga., <i>CST.</i> 6-9 a.m.; noon-3 p.m.; 6-9 p.m.	WHEB	740 Portsmouth, N. H., <i>EST.</i> 9 a.m.-2 p.m.; 5-7:45 p.m.	WJBO	1420 New Orleans, La.
WFEA	1430 Manchester, N. H., <i>EST.</i> 9 a.m.-11 p.m.	WHEC	1430 Rochester, N. Y., <i>EST.</i> 8 a.m.-mid.	WJBU	1210 Lewisburg, Pa., <i>EST.</i> Noon-2 p.m.; 4-10 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.; 6-7 p.m.	WHEF	1500 Kosciusko, Miss.	WJBW	1200 New Orleans, La., <i>CST.</i> 8 a.m.-noon; 4-8 p.m.
WFIW	940 Hopkinsville, Ky., <i>CST.</i> 6 a.m.-3 p.m.; 5 p.m.-mid.	WHET	1210 Troy, Ala., <i>CST.</i> 6-8 a.m.; 11 a.m.-5 p.m.	WJBY	1210 Gadsden, Ala.
WFLA	620 Clearwater, Fla., <i>EST.</i> 7:15 a.m.-mid.	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.	WJDX	1270 Jackson, Miss., <i>CST.</i> 6:15-10 a.m.; 11:30 a.m.-10 p.m.
WFOX	1400 Brooklyn, N. Y.	WHIS	1410 Bluefield, W. Va., <i>EST.</i> 8-9 a.m.; noon-2 p.m.; 6-8 p.m.	WJEF	1210 Hagerstown, Md.
WGal	1310 Lancaster, Pa., <i>EST.</i> 10 a.m.-noon; 1:30-6 p.m.; 8-11 p.m.	WHK	1390 Cleveland, Ohio, <i>EST.</i> 7 a.m.-mid.	WJEM	990 Tupelo, Miss.
WGAR	1450 Cleveland, Ohio, <i>EST.</i> 6 a.m.-1 a.m. next day.	WHN	1010 New York City.	WJEQ	1370 Williamsport, Pa.
WGBB	1210 Freeport, N. Y.	WHO	1000 Des Moines, Iowa.	WJJD	1130 Chicago, Ill., <i>CST.</i> 6 a.m.-8:30 p.m.
WGBF	630 Evansville, Ind., <i>CST.</i> 6:30 a.m.-3:30 p.m.; 4-8 p.m.	WHOM	1450 Jersey City, N. J., <i>EST.</i> 8 a.m.-3 p.m.; 9 p.m.-mid.	WJKS	1360 Gary, Ind., <i>CST.</i> 12:30-6:15 p.m.; 8:30 p.m.-mid.
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.	WHP	1430 Harrisburg, Pa., <i>EST.</i> 8:30-10:30 a.m.; 11:30 a.m.-1:30 p.m.; 2:30-4 p.m.; 4:30-8 p.m.; 9:45 p.m.-1 a.m.	WJMS	1420 Ironwood, Mich., <i>CST.</i> 7 a.m.-2:30 p.m.; 4:30 p.m.-sun- set.
WGCM	1210 Gulfport, Miss., <i>CST.</i> 8 a.m.-2 p.m.; 3-9 p.m.	WIAS	1310 Ottumwa, Iowa, <i>CST.</i> 7:30 a.m.-1:30 p.m.; 4-9 p.m.	WJRW	1460 Washington, D. C., <i>EST.</i> 7:30 a.m.-1 a.m. next day.
WGCP	1250 Newark, N. J., <i>EST.</i> 2-5 p.m.; 8-10 p.m.	WIBA	1280 Madison, Wis., <i>CST.</i> 6:30 a.m.-11:30 p.m.	WJTL	1370 Atlanta, Ga.
WGES	1360 Chicago, Ill., <i>CST.</i> 8 a.m.-12:30 p.m.; 6:15-8:30 p.m.	WIBG	930 Glenside, Pa., <i>EST.</i> Daybreak to sunset.	WJW	1210 Mansfield, Ohio, <i>EST.</i> 8 a.m.-10 p.m.
WGH	1310 Newport News, Va., <i>EST.</i> 7 a.m.-2 p.m.; 5-11 p.m.	WIBM	1370 Jackson Mich., <i>CST.</i> 7:30 a.m.-8:15 p.m.; 11 p.m.- mid.	WJZ	760 New York City, <i>EST.</i> 7:30 a.m.-1 a.m. next day.
WGL	1370 Fort Wayne, Ind., <i>CST.</i> 6:15 a.m.-9:30 p.m.	WIBO	560 Chicago, Ill., <i>CST.</i> 6:30 a.m.-mid.	WKAQ	1240 San Juan, P. R.
WGN	720 Chicago, Ill., <i>CST.</i> 7:30 a.m.-1:30 a.m. next day.	WIBU	1210 Poynette, Wis.	WKAR	1040 E. Lansing, Mich., <i>CST.</i> Noon-12:30 p.m.
WGR	550 Buffalo, N. Y., <i>EST.</i> 7:30 a.m.-mid.	WIBW	580 Topeka, Kans., <i>CST.</i> 6 a.m.-mid.	WKAV	1310 Laconia, N. H., <i>EST.</i> 9 a.m.-1 p.m.; 3-8 p.m.
WGST	890 Atlanta, Ga., <i>EST.</i> 7 a.m.-mid.	WIBX	1200 Utica, N. Y.	WKBB	1310 Joliet, Ill., <i>CST.</i> 8-11 a.m.; noon-3 p.m.; 8-10 p.m.
WGY	790 Schenectady, N. Y., <i>EST.</i> 6:45 a.m.-1 a.m. next day.	WICC	600 Bridgeport, Conn., <i>EST.</i> 7:30 a.m.-mid.	WKBC	1310 Birmingham, Ala.
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.	WKBF	1400 Indianapolis, Ind., <i>CST.</i> 6:30 a.m.-1:15 p.m.; 4:15-10:30 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.	WKBH	1380 LaCrosse, Wis., <i>CST.</i> 7:30 a.m.-10 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.	WKBI	1420 Cicero, Ill., <i>CST.</i> 1:30-4 p.m.; 9-11 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.	WKBN	570 Youngstown, Ohio, <i>EST.</i> 7-9 a.m.; 11 a.m.-1 p.m.; 3-8 p.m.; 10 p.m.-mid.
		WIOD	1300 Miami, Fla., <i>EST.</i> 7 a.m.-1 a.m. next day.	WKBS	1310 Galesburg, Ill.
		WIP	610 Philadelphia, Pa., <i>EST.</i> 9 a.m.-mid.	WKBV	1500 Connersville, Ind., <i>CST.</i> 10 a.m.-noon; 6-10 p.m.

WKBW 1480 Buffalo, N. Y., <i>EST.</i> 9:15 a.m.-1 a.m. next day.	WMMN 890 Fairmont, W. 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.
WKBZ 1500 Ludington, Mich., <i>CST.</i> 9 a.m.-9 p.m.	WMPC 1500 Lapeer, Mich., <i>EST.</i> 10 a.m.-2 p.m.; 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 p.m.; 4-10:30 p.m.
WKFI 1210 Greentown, Miss.	WMRJ 1210 Jamaica, N. Y., <i>EST.</i> Noon-5 p.m.; 7-9 p.m.	WPAP 1010 New York City.
WKJC 1200 Lancaster, Pa., <i>EST.</i> 11 a.m.-3 p.m.; 6-8 p.m.	WMSG 1350 New York City, <i>EST.</i> Noon-3 p.m.	WPAP 1010 Providence, R. I.
WKRC 550 Cincinnati, Ohio, <i>EST.</i> 6:45 a.m.-mid.	WMT 600 Waterloo, Iowa, <i>CST.</i> 7 a.m.-11 p.m.	WPCW 560 Chicago, Ill. Silent.
WKY 900 Oklahoma City, Okla., <i>CST.</i> 6:30 a.m.-11:30 p.m.	WNAC 1230 Boston, Mass., <i>EST.</i> 6:30 a.m.-1 a.m. next day.	WPCH 810 New York City, <i>EST.</i> 8 a.m.-6:30 p.m.
WKZO 590 Kalamazoo, Mich., <i>CST.</i> 6:30 a.m.-8:15 p.m.	WNAD 1010 Norman, Okla. Silent.	WPEN 1500 Philadelphia, Pa., <i>EST.</i> 7:30 a.m.-10:30 p.m.
WLAC 1470 Nashville, Tenn., <i>CST.</i> 7 a.m.-11 p.m.	WNAX 570 Yankton, S. D., <i>CST.</i> 6 a.m.-mid.	WPFB 1370 Hattiesburg, Miss., <i>CST.</i> 7 a.m.-2 p.m.; 4-9 p.m.
WLAP 1200 Louisville, Ky., <i>CST.</i> 6:30 a.m.-11 p.m.	WNBK 1500 Binghamton, N. Y., <i>EST.</i> 7 a.m.-10 p.m.	WPG 1100 Atlantic City, N. J., <i>EST.</i> 8:15 a.m.-6 p.m.; 8 p.m.-1 a.m. next day.
WLB 1250 Minneapolis, Minn., <i>CST.</i> 12:30-1 p.m.; 7-8 p.m.	WNBH 1310 New Bedford, Mass., <i>EST.</i> 8:30 a.m.-1:10 p.m.; 3-11 p.m.	WPHR 1200 Petersburg, Va., <i>EST.</i> 7-11 a.m.; noon-5 p.m.; 6-9 p.m.
WLBC 1310 Muncie, Ind., <i>CST.</i> 7 a.m.-11 p.m.	WNBO 1200 Washington, Pa., <i>EST.</i> 9 a.m.-noon; 3-6 p.m.; 9 p.m.-mid.	WPOR 780 Norfolk, Va.
WLBK 1420 Kansas City, Kans., <i>CST.</i> 7 a.m.-11 p.m.	WNBZ 1290 Saranac Lake, N. Y.	WPRO 1210 Providence, R. I.
WLBL 900 Stevens Point, Wis., <i>CST.</i> 8 a.m.-3 p.m.	WNBR 1430 Memphis, Tenn., <i>CST.</i> 7:30 a.m.-12:30 p.m.; 3-10:15 p.m.	WPSA 1230 State College, Pa., <i>EST.</i> 11:45 a.m.-12:15 p.m.; 4-5:30 p.m.
WLBW 1260 Erie, Pa., <i>EST.</i> 8 a.m.-1 a.m. next day.	WNBW 1200 Carbondale, Pa.	WPTF 680 Raleigh, N. C., <i>EST.</i> 6:45 a.m.-8:30 p.m.
WLBZ 620 Bangor, Maine	WNBX 1260 Springfield, Vt.	WQAM 560 Miami, Fla., <i>EST.</i> 7 a.m.-mid.
WLEY 1370 Lexington, Mass., <i>EST.</i> Noon-3 p.m.; 6-9 p.m.	WNBZ 1290 Saranac Lake, N. Y.	WQAN 880 Scranton, Pa., <i>EST.</i> 9 a.m.-9:30 a.m.; 12:30-1:30 p.m.; 4:30-5:30 p.m.
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 p.m.-1 a.m. next day.	WNJ 1450 Newark, N. J., <i>EST.</i> 6-8 p.m.	WQAO 1010 New York City.
WLOE 1500 Boston, Mass.	WNOX 560 Knoxville, Tenn., <i>CST.</i> 6:45 a.m.-11 p.m.	WQBC 1600 Vicksburg, Miss., <i>CST.</i> 7:30 a.m.-2:30 p.m.; 5-10 p.m.
WLS 870 Chicago, Ill., <i>CST.</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; 6-8:30 p.m.	WQDM 1370 St. Albans, Vt.
WLTH 1400 Brooklyn, N. Y., <i>EST.</i> 1:30-4 p.m.; 9-10:30 p.m.	WOAI 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.	WQDX 1210 Thomasville, Ga.
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.	WRAK 1370 Williamsport, Pa., <i>EST.</i> 8:30 a.m.-2:30 p.m.; 4:30-10:30 p.m.
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.	WRAM 1370 Wilmington, N. C., <i>EST.</i> 7:30 a.m.-3 p.m.; 6:30-11 p.m.
WLWL 1100 New York City	WOC 1000 Davenport, Iowa, <i>CST.</i> 7 a.m.-11 p.m.	WRAP 1310 Reading, Pa.
WMAC 570 Syracuse, N. Y.	WOCL 1210 Jamestown, N. Y., <i>EST.</i> Noon-mid.	WRAX 1020 Philadelphia, Pa., <i>EST.</i> 7 a.m.-sunset.
WMAL 630 Washington, D. C., <i>EST.</i> 8 a.m.-mid.	WODA 1250 Paterson, N. J.	WRBL 1200 Columbus, Ga., <i>CST.</i> 7 a.m.-9 p.m.
WMAQ 670 Chicago, Ill., <i>CST.</i> 7 a.m.-mid.	WODX 1410 Mobile, Ala., <i>CST.</i> 9 a.m.-4 p.m.; 5:30-9 p.m.	WRBX 1410 Roanoke, Va.
WMAS 1420 Springfield, Mass.	WOI 640 Ames, Iowa, <i>CST.</i> 6:30 a.m.-4:30 p.m.	WRD 950 Washington, D. C.
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.	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.
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.	WRDW 1500 Augusta, Ga., <i>EST.</i> 8 a.m.-2 p.m.; 5-11 p.m.
WMBD 1440 Peoria, Ill., <i>CST.</i> 6-9:30 a.m.; 1-2:30 p.m.; 8 p.m.- mid.	WOMT 1210 Manitowoc, Wis., <i>CST.</i> 7 a.m.-9 p.m.	WREC 600 Memphis, Tenn.
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> 7 a.m.-mid.	WREN 1220 Lawrence, Kans., <i>CST.</i> 7 a.m.-mid.
WMBH 1420 Joplin, Mo.	WOPI 1500 Bristol, Tenn., <i>EST.</i> 7 a.m.-2 p.m.; 4-9 p.m.	WRHM 1250 Minneapolis, Minn., <i>CST.</i> 6:15-9:45 a.m.; 10:35 a.m.-12:30 p.m.; 1-7 p.m.; 10 p.m.-1 a.m.
WMBI 1080 Chicago, Ill., <i>CST.</i> 7-7:30 a.m.; 10:30-11:30 a.m.; noon-1:30 p.m.; 3-4:30 p.m.; 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.; 9-10 p.m.; 11 p.m.-mid.	WRJN 1370 Racine, Wis., <i>CST.</i> 8 a.m.-10:30 p.m.
WMBO 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.	WRNY 1010 New York City.
WMBQ 1500 Brooklyn, N. Y.	WORC 1200 Worcester, Mass., <i>EST.</i> 8 a.m.-mid.	WROL 1310 Knoxville, Tenn., <i>CST.</i> 7 a.m.-10 p.m.
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.	WRR 1280 Dallas, Texas, <i>CST.</i> 6:30 a.m.-11 p.m.
WMC 780 Memphis, Tenn., <i>CST.</i> 7 a.m.-11 p.m.	WOS 630 Jefferson City, Mo.	WRUF 830 Gainesville, Fla., <i>EST.</i> 8 a.m.-7:15 p.m.
WMCA 570 New York City, <i>EST.</i> 8-11 p.m.; noon-6 p.m.; 8:30 p.m.-2 a.m. next day.	WOW 1130 New York City.	WRVA 1110 Richmond, Va., <i>EST.</i> 7 a.m.-mid.
WMIL 1500 Brooklyn, N. Y., <i>EST.</i> 2-6 p.m.; 8-10 p.m.	WOW 590 Omaha, Neb., <i>CST.</i> 6:15-10 a.m.; 10:45 a.m.-3:30 p.m.; 4-9 p.m.; 10 p.m.-mid.	WSAI 1330 Cincinnati, Ohio, <i>EST.</i> 8 a.m.-11 p.m.
		WSAJ 1310 Grove City, Pa. Silent.
		WSAN 1440 Allentown, Pa.
		WSAR 1450 Fall River, Mass., <i>EST.</i> 8 a.m.-3:30 p.m.; 5-10 p.m.

WSAZ 580	Huntington, W. Va., <i>EST.</i> 6-9 a.m.; noon-2 p.m.; 4-8:30 p.m.	WTFI 1450	Athens, Ga., <i>EST.</i> 8 a.m.-4 p.m.; 6-10 p.m.	XEL 1000	Saltillo, Mex., <i>CST.</i> 11 a.m.-1 p.m.; 6-9 p.m.
WSB 740	Atlanta, Ga., <i>EST.</i> 6:25 a.m.-11:30 p.m.	WTIC 1060	Hartford, Conn., <i>EST.</i> 4 p.m.-mid.	XEM 1300	Tampico, Mex.
WSBC 1210	Chicago, Ill.	WTJS 1310	Jackson, Tenn., <i>CST.</i> 7 a.m.-1 p.m.; 3-9 p.m.	XEN 711	Mexico City, Mex., <i>CST.</i> 10 a.m.-noon; 2-4 p.m.; 7-11 p.m.
WSBT 1230	South Bend, Ind.	WTMJ 620	Milwaukee, Wis., <i>CST.</i> 6:45 a.m.-mid.	XEO 940	Mexico City, Mex. 2-3 p.m.; 6:25-11 p.m., <i>CST.</i>
WSEN 1210	Columbus, Ohio, <i>EST.</i> 8 a.m.-11 p.m.	WTOC 1260	Savannah, Ga., <i>EST.</i> 7 a.m.-mid.	XEP 1400	Laredo, Mex.
WSFA 1410	Montgomery, Ala., <i>CST.</i> 6:30 a.m.-sunset, 9-11 p.m.	WTSL 1310	Laurel, Miss.	XEQ 750	Juarez, Mex., <i>MST.</i> 9 a.m.-2 p.m.; 5-11 p.m.
WSIX 1210	Springfield, Tenn.	WWAE 1200	Hammond, Ind.	XER 735	Villa Acuna, Mex. 24 hours daily.
WSJS 1310	Winston-Salem, N. C., <i>EST.</i> 8 a.m.-mid.	WWJ 920	Detroit, Mich., <i>EST.</i> 7:30 a.m.-mid.	XES 1055	Tampico, Mex., <i>CST.</i> 9-10:30 a.m.; noon-2 p.m.; 7:15-10 p.m.
WSM 650	Nashville, Tenn., <i>CST.</i> 6:30 a.m.-mid.	WWL 850	New Orleans, La., <i>CST.</i> 8 a.m.-8:30 p.m.	XET 690	Monterrey, Mex., <i>CST.</i> 9 a.m.-2 p.m.; 6-10 p.m.
WSMB 1320	New Orleans, La., <i>CST.</i> 7 a.m.-mid.	WWNC 570	Asheville, N. C., <i>CST.</i> 7 a.m.-mid.	XETA 1140	Mexico City, Mex.
WSMK 1380	Dayton, Ohio, <i>EST.</i> 7 a.m.-8 p.m.; 10 p.m.-mid.	WWRL 1500	Woodside, N. Y., <i>EST.</i> 8-9 a.m.; 11 a.m.-noon; 1-2 p.m.; 10 p.m.-mid.	XETB 1380	Torreon, Mex.
WSOC 1210	Gastonia, N. C., <i>EST.</i> 8 a.m.-10 p.m.	WWSW 1500	Pittsburgh, Pa., <i>EST.</i> 8 a.m.-1:30 p.m.; 3-11:30 p.m.	XETC 1000	Jalapa, Mex.
WSPA 1420	Spartanburg, S. C., <i>EST.</i> 7:30 a.m.-11 p.m.	WWVA 1160	Wheeling, W. Va., <i>EST.</i> 7:30 a.m.-9 p.m.	XETF 630	Veraeruz, Mex., <i>CST.</i> 7-8 a.m.; noon-2 p.m.; 7 p.m.-mid.
WSPD 1340	Toledo, Ohio, <i>EST.</i> 7:30 a.m.-mid.	WXYZ 1240	Detroit, Mich.	XETG 1000	Torreon, Mex.
WSUI 880	Iowa City, Iowa, <i>CST.</i> 9-10 a.m.; 11 a.m.-12:30 p.m.; 2-4 p.m.; 6-10 p.m.	XEA 1155	Guadalajara, Mex., <i>CST.</i> 11 a.m.-noon; 2-3 p.m.; 5-11 p.m.	XETQ 1230	Mexico City, Mex.
WSUN 620	St. Petersburg, Fla. Silent.	XEB 1030	Mexico City, Mex., <i>CST.</i> 8 a.m.-mid.	XETR 610	Mexico City, Mex.
WSVS 1370	Buffalo, N. Y.	XEC 1000	Toluca, Mex.	XEU 1007	Veraeruz, Mex., <i>CST.</i> 7-8 a.m.; 10-11 a.m.; noon-3 p.m.; 6:30-11 p.m.
WSYB 1500	Rutland, Vt., <i>EST.</i> 10 a.m.-1 p.m.; 5-10 p.m.	XED 965	Reynosa, Mex.	XEV 1000	Puebla, Mex.
WSYR 570	Syracuse, N. Y., <i>EST.</i> 7 a.m.-3 p.m.; 4-11 p.m.	XEE 1000	Oaxaco, Mex.	XEW 910	Mexico City, Mex.
WTAD 1440	Quincy, Ill., <i>CST.</i> 9:30 a.m.-1 p.m.; 2:30-8 p.m.	XEF 735	Villa Acuna, Mex. 24 hours daily.	XEX 1210	Mexico City, Mex.
WTAG 580	Worcester, Mass., <i>EST.</i> 8 a.m.-11:15 p.m.	XEFA 1250	Mexico City, Mex.	XEY 1000	Merida, Mex.
WTAM 1070	Cleveland, Ohio, <i>EST.</i> 6:30 a.m.-1 a.m. next day.	XEFB 1315	Monterrey, Mex., <i>CST.</i> 11 a.m.-2 p.m.; 6-10 p.m.	XEZ 780	Mexico City, Mex.
WTAQ 1330	Eau Claire, Wis., <i>CST.</i> 7 a.m.-8 p.m.	XEFC 1050	Merida, Mex.	XFC 810	Aguascalientes, Mex.
WTAR 780	Norfolk, Va., <i>EST.</i> 7 a.m.-mid.	XEFD 845	Tijuana, Mex.	XFF 875	Chihuahua, Mex.
WTAW 1120	College Station, Texas.	XEFE 1000	Laredo, Mex.	XFG 683.3	Mexico City, Mex.
WTAX 1210	Springfield, Ill.	XEFI 1000	Chihuahua, Mex.	XFX 867	Mexico City, Mex.
WTBO 1420	Cumberland, Md., <i>EST.</i> 7 a.m.-1:30 p.m.; 2:30-8 p.m.	XEFS 1000	Queretaro, Mex., <i>CST.</i> 7:30-10:30 p.m.	10-AB 1200	Moose Jaw, Sask., <i>MST.</i> 6-7 p.m.
WTEL 1310	Philadelphia, Pa., <i>EST.</i> 7-9 a.m.; noon-1 p.m.; 6:30-8 p.m.	XEFZ 1370	Coyoacan, Mex., <i>CST.</i> 8-11 p.m.	10-AK 1200	Stratford, Ont., <i>EST.</i> 6-8 p.m.
		XEG 1070	Mexico City, Mex.	10-AT 1155	Trail, B. C.
		XEH 1132	Monterrey, Mex., <i>CST.</i> 9 a.m.-1:30 p.m.; 6-10 p.m.	10-BI 1200	Prince Albert, Sask., <i>MST.</i> Noon-1 p.m.; 6-8 p.m.
		XEI 1310	Morelia, Mex., <i>CST.</i> 2-3:30 p.m.; 8:30-10 p.m.	10-BP 1199	Wingham, Ont. Silent.
		XEJ 1000	Juarez, Mex., <i>CST.</i> 11 a.m.-4 p.m.; 6-11 p.m.	10-BQ 1200	Bramford, Ont., <i>EST.</i> 8-10 p.m.
		XEK 990	Mexico City, Mex.	10-BU 1200	Canora, Sask.

For converting their time on the air to that of your own zone, the new RADEX Time Converter and Radio Map of the World will be found most convenient. See inside of back cover.

The time on the air for a different day of the week is given in each issue of RADEX. The Sunday time was in the September number of which a few copies are still available. The Tuesday time will appear next month.

The November issue will have a complete list of all the short wave stations in the United States and Canada, arranged by states and provinces.

The World Short Wave Stations

According to Frequencies in Megacycles (thousands of kilocycles) and Wave Lengths in Meters. For time on the air, see the list by countries in the September RADEX, No. 61. Next month the Short Wave Stations of North America will be given in geographical order.

Megs.	Meters	Call	City, State or Country	Megs.	Meters	Call	City, State or Country
1.558	192.43	KGPD	San Francisco, Calif.			WPDP	Philadelphia, Pa.
		WEY	Boston, Mass.			WPDT	Kokomo, Ind.
1.574	190.48	KGPY	Shreveport, La.			WPDZ	Fort Wayne, Ind.
		WMP	Framingham, Mass.			WPEC	Memphis, Tenn.
		WRDS	East Lansing, Mich.			WRDQ	Toledo, Ohio
1.596	187.85	WCF	New York City	2.502	119.83	KGPV	Des Moines, Iowa
		WKDT	Detroit, Mich.	2.735	109.62	VF9CI	London, Ont.
		WRDU	Brooklyn, N. Y.	2.750	109.00	VE9BK	Vancouver, B. C.
1.712	175.13	KGJX	Pasadena, Calif.	2.830	105.90	VE9AK	Red Deer, Alta.
		KGPC	St. Louis, Mo.	2.850	105.20	VE9AF	Montreal, Que.
		KGJ3	Beaumont, Texas			VE9AR	Saskatoon, Sask.
		KGPL	Los Angeles, Calif.	3.030	98.95	VE9AR	Saskatoon, Sask.
		KGPR	Fort Worth, Texas				Motala, Sweden
		KGZB	Houston, Texas	3.076	97.47	W9XL	Chicago, Ill.
		KVP	Dallas, Texas	3.100	96.72	KGPL	Kingman, Ariz.
		WKDU	Cincinnati, Ohio			KGTD	Wichita, Kans.
		WPDB	Chicago, Ill.			KG TJ	Las Vegas, Nev.
		WPDC	Chicago, Ill.			KGTR	St. Louis, Mo.
		WPDD	Chicago, Ill.			KSI	Los Angeles, Calif.
		WPDU	Pittsburgh, Pa.			KST	Kansas City, Mo.
		WPED	Arlington, Mass.			KSW	Amarillo, Texas
		WPEH	Somerville, Mass.			KSX	Albuquerque, N. M.
1.900	157.8	RW69	Odessa, U.S.S.R.			KSY	Tulsa, Okla.
2.004	149.61	VE9RM	Toronto, Ont.			WAEA	Indianapolis, Ind.
2.100	142.80	VE9OS	Montreal, Que.			WAEB	Columbus, Ohio
2.143	140.00		Surabaya, Java			WAFC	Pittsburgh, Pa.
2.414	124.20	KGPA	Seattle, Wash.			WAED	Harrisburg, Pa.
		KGPS	Bakersfield, Calif.			WAEI	Camden, N. J.
		WCK	Detroit, Mich.			WAEF	Newark, N. J.
		WMO	Highland Park, Mich.	3.124	95.97	WOO	Deal, N. J.
		WPDA	Tulare, Calif.	3.156	95.00	PK2AG	Samarang, Java
		WPDJ	Passaic, N. J.	3.170	94.58	KDD	Pasco, Wash.
		WPDN	Dayton, Ohio			KFO	Oakland, Calif.
		WPDK	Detroit, Mich.			KJE	Reno, Nev.
		WPDY	Atlanta, Ga.			KKO	Elko, Nev.
		WRDR	Grosse Pt. Village, Mich.			KMP	Omaha, Neb.
2.416	124.09	KGPB	Minneapolis, Minn.			KMR	No. Platte, Neb.
		KGZA	Fresno, Calif.			KQC	Rock Springs, Wyo.
		WPDS	St. Paul, Minn.			KQD	Salt Lake City, Utah
2.422	123.79	KGPE	Kansas City, Mo.			KQE	Cheyenne, Wyo.
		KGPG	Vallejo, Calif.			KQM	Des Moines, Iowa
		KGPP	Portland, Ore.			KQQ	Iowa City, Iowa
		KG PX	Denver, Colo.			KRA	Boise, Idaho
		KSW	Berkeley, Calif.			KRF	Lincoln, Neb.
		WMDZ	Indianapolis, Ind.			WQDU	Aurora, Ill.
		WMJ	Buffalo, N. Y.	3.178	94.34	KFM	Sacramento, Calif.
		WPDE	Louisville, Ky.			KGE	Medford, Ore.
		WPDH	Richmond, Ind.			KG T	Fresno, Calif.
		WPDW	Washington, D. C.			KVO	Portland, Ore.
2.430	123.45	WPDI	Columbus, Ohio			KZJ	Seattle, Wash.
2.442	122.77	WPDF	Flint, Mich.			KQX	Bakersfield, Calif.
		WPD L	Lansing, Mich.	3.189	94.01	KFU	Burbank, Calif.
		WPEB	Grand Rapids, Mich.	3.256	92.08	W9XL	Chicago, Ill.
2.450	122.40	KGPH	Okla. City, Okla.	3.488	85.96	HB9XD	Zurich, Switzerland
		KGPO	Tulsa, Okla.	3.490	85.91	KGUA	El Paso, Texas
		KG PQ	Honolulu, Hawaii			KGUC	Fort Worth, Texas
		KG PZ	Wichita, Kans.			KGUF	Dallas, Texas
		WPKD	Milwaukee, Wis.			KGUG	Big Springs, Texas
		WPEE	Brooklyn, N. Y.			KGUK	Shreveport, La.
		WPEF	Bronx, N. Y.			KGUL	Abilene, Texas
		WPEG	New York, N. Y.			WQDP	Atlanta, Ga.
		WRBH	Cleveland, Ohio			WSDB	Jackson, Miss.
2.458	121.97	WPDG	Youngstown, Ohio			WSDE	Tuscaloosa, Ala.
		WPDN	Auburn, N. Y.	3.560	84.22	OZ7R	Copenhagen, Denmark
		WPDO	Akron, Ohio			RW65	Peredvika, U.S.S.R.
		WPD R	Rochester, N. Y.	3.583	83.68	G2NM	Sonning-on-Thames, Eng.
		WPDV	Charlotte, N. C.	3.750	79.95	F8KR	Constantine, Tunis, Africa
		WPEA	Syracuse, N. Y.			FM8KR	Constantine, Algeria
2.470	121.40	KGOZ	Cedar Rapids, Iowa			I3RO	Rome, Italy
		KGPD	San Francisco, Calif.				Turin, Italy
		KGPI	Omaha, Neb.	3.998	75.00	PK1AA	Batavia, Java
		KGPK	Sioux City, Iowa	4.105	73.03	NAA	Arlington, Va.
		KGPM	San Jose, Calif.	4.116	72.87	WOO	Deal, N. J.
		KGPN	Davenport, Iowa	4.120	72.77		Constantine, Algeria
		KG PW	Salt Lake City, Utah	4.174	71.82	GDLJ	S.S. Homeric

Megs.	Meters	Call	City, State or Country	Megs.	Meters	Call	City, State or Country
		GFVW	S.S. Majestic			WSDC	Newark, N. J.
		GKFY	S.S. Minnetonka			WSDM	Albany, N. Y.
		GLSQ	S.S. Olympic			WSDO	Buffalo, N. Y.
		GMBJ	S.S. Empress of Britain			WSDQ	Cleveland, Ohio
		GMJQ	S.S. Belgenland	5.689	52.70	FIUI	Tananarive, Madagascar
		GTSD	S.S. Monarch of Bermuda	5.710	52.51	HCJB	Quito, Ecuador
		WSBN	S.S. Leviathan			VE9CL	Winnipeg, Man.
4.273	70.65	RW15	Khabarovsk, U.S.S.R.	5.766	52.00	XAM	Merida, Yucatan
		RW54	Moscow, U.S.S.R.	5.868	51.09	WNB	Lawrenceville, N. J.
4.280	70.05	OHK2	Vienna, Austria	5.875	51.03	CNSMC	Casablanca, Morocco
4.610	65.04	HTX	Santo Domingo, Dom. Rep.	5.879	51.00	HKB	Tunja, Colombia
4.700	63.79	W1XAB	Portland, Maine			XDA	Mexico City, Mex.
4.748	63.13	WOO	Ocean Gate, N. J.	5.925	50.60	HKO	Medellin, Colombia
4.760	62.99	LL	Paris, France	5.968	50.26	HVJ	Vatican City, Rome
4.770	62.86	ZL2XX	Wellington, N. Z.	5.996	50.00	HKD	Barranquilla, Colombia
4.782	62.70	CGA	Drummondville, Que.	6.000	49.97	EAJ25	Barcelona, Spain
4.792	62.56	VE9BY	London, Ont.			PK2AF	Djoejocarta, Java
4.795	62.53	W3XZ	Washington, D. C.			REN	Moscow, U.S.S.R.
		W9XAM	Elgin, Ill.			RFN	Moscow, U.S.S.R.
		W9XL	Chicago, Ill.			RW59	Moscow, U.S.S.R.
4.797	62.50	W2XV	Long Island City, N. Y.			YV2BC	Caracas, Venezuela
4.920	60.94	LL	Paris, France			ZL3ZC	Christchurch, N. Z.
4.975	60.27	W2XV	Long Island City, N. Y.				Bucharest, Roumania
		GBC	Rugby, England				Paris, France
5.000	59.96	RW71	Petropavlovsk, U.S.S.R.				Tananarive, Madagascar
		NCTE	Shanghai, China	6.005	49.93	VE9DN	Montreal, Que.
		VRT-ZFA	Hamilton, Bermuda			VE9DR	Drummondville, Que.
5.045	59.42	PMY	Bandoeng, Java	6.015	49.84	VE9CX	Wolfville, N. S.
5.143	58.30	DIQ	Nauen, Germany	6.020	49.80	W9XF	Chicago, Ill.
5.144	58.33	OK1MPI	Prague, Czechoslovakia			DJC	Konigs Wusterhausen, Ger.
5.169	58.00	PMB	Surabaya, Java			XEW	Mexico City, Mex.
5.170	57.99	XDA	Chapultepec, Mex.	6.040	49.64	PK3AN	Surabaya, Java
5.357	55.96	F8BP	Ruggles, France	6.045	49.60		Tanjong Priok, D.E.I.
5.450	55.01	W2XBH	Brooklyn, N. Y.	6.050	49.56	VE9CF	Halifax, N. S.
5.502	54.50	RW38	Moscow, U.S.S.R.			VE9HN	Halifax, N. S.
5.515	54.38	KGPL	Kingman, Ariz.	6.057	49.50	CMCI	Havana, Cuba
5.560	53.92	KGTD	Wichita, Kans.			OXO-ONZ	Copenhagen, Denmark
		KGTT	Las Vegas, Nev.			ZL2ZX	Wellington, N. Z.
		KGTR	St. Louis, Mo.	6.060	49.48	W8XAL	Cincinnati, Ohio
		KSI	Los Angeles, Calif.			VQ7LO	Nairobi, Kenya, Africa
		KST	Kansas City, Mo.	6.065	49.44	SAJ	Motala, Sweden
		KSW	Amarillo, Texas			SBG	Motala, Sweden
		KSX	Alluquerque, N. M.	6.070	49.39	VE9CS	Vancouver, B. C.
		KSY	Tulsa, Okla.	6.072	49.37	UOR2	Vienna, Austria
		WAEA	Indianapolis, Ind.			ZTJ	Johannesburg, So. Africa
		WAEB	Columbus, Ohio				Chicago, Ill.
		WAEC	Pittsburgh, Pa.	6.076	49.34	W9XAA	Charlottetown, P.E.I.
		WAED	Harrisburg, Pa.	6.080	49.31	VE9EH	Bangkok, Siam
		WAEE	Camden, N. J.			HS2PJ	Electra Cartago, Costa Rica
		WAEF	Newark, N. J.			TIRA	St. John, N. B.
5.600	53.54	KDD	Pasco, Wash.	6.090	49.23	VE9BJ	Bowmanville, Ont.
		KFO	Oakland, Calif.	6.092	49.22	VE9GW	Johannesburg, So. Africa
		KJE	Reno, Nev.	6.094	49.20	JB	Chicago, Ill.
		KKO	Elko, Nev.	6.095	49.19	W9XF	Boundbrook, N. J.
		KMP	Omaha, Neb.	6.096	49.18	W3XAL	Bombay, India
		KMR	No. Platte, Neb.	6.110	49.07	VVD	Richmond Hill, N. Y.
		KQC	Rock Springs, Wyo.	6.120	48.99	W2XE	Barcelona, Spain
		KQD	Salt Lake City, Utah			EAR25	Paris, France
		KQE	Cheyenne, Wyo.			FL	Rio de Janeiro, Brazil
		KQM	Des Moines, Iowa			PTH	Motala, Sweden
		KQQ	Iowa City, Iowa				Toulouse, France
		KRA	Boise, Idaho	6.125	48.95	YV1BMO	Maracaibo, Venezuela
		KRF	Lincoln, Neb.	6.130	48.91	VE9BA	Montreal, Que.
		WQDU	Aurora, Ill.	6.131	48.90	HKA	Barranquilla, Colombia
5.614	53.40	RW38	Moscow, U.S.S.R.	6.140	48.83	KZRM	Manila, Philippine Islands
5.630	53.25	KGUA	El Paso, Texas			W8XK	E. Pittsburgh, Pa.
		KGUC	Fort Worth, Texas	6.150	48.75	VE9CL	Winnipeg, Man.
		KGUF	Dallas, Texas	6.205	48.35	HKC	Bogota, Columbia
		KGUG	Big Springs, Texas	6.220	48.20	I2RO	Rome, Italy
		KGUK	Shreveport, La.	6.250	47.97	CNSMC	Casablanca, Morocco
		KGUL	Abilene, Texas	6.280	47.74		Sharabourge, France
		WQDP	Atlanta, Ga.	6.355	47.33	VE9AP	Drummondville, Que.
		WSDB	Jackson, Miss.	6.378	47.00	HKS	Cali, Columbia
		WSDE	Tuscaloosa, Ala.	6.380	46.99	CT2AG	Madeira Islands
5.657	53.00	KEU	Burbank, Calif.			HCIDR	Quito, Ecuador
		KFM	Sacramento, Calif.			XIF	Mexico City, Mex.
		KGIE	Medford, Ore.	6.386	46.96	W3XL	Boundbrook, N. J.
		KGT	Fresno, Calif.	6.420	46.70	RW62	Minsk, U.S.S.R.
		KQX	Bakersfield, Calif.	6.425	46.66	W9XL	Anoka, Minn.
		KVO	Portland, Ore.	6.426	46.64	VE9BY	London, Ont.
		KZJ	Seattle, Wash.				

Megs.	Meters	Call	City, State or Country	Megs.	Meters	Call	City, State or Country
6.430	46.63	PCM	The Hague, Holland	7.940	37.76	VK2ME	Sydney, Australia
		REN	Moscow, U.S.S.R.	8.100	37.01	EATH	Vienna, Austria
6.438	46.58	PBF5	The Hague, Holland			HS4PJ	Bangkok, Siam
6.480	46.27	TGW	Guatamala City, Guatamala			J1AA	Tokyo, Japan
6.515	46.02	WOO	Deal, N. J.	8.111	36.96	RW19	Toms, U.S.S.R.
6.560	45.70	RFN	Moscow, U.S.S.R.	8.120	36.92	PLW	Bandoeng, Java
6.610	45.36	RW72	Moskva, U.S.S.R.	8.180	36.65	PSK	Rio de Janeiro, Brazil
6.611	45.35	REN	Moscow, U.S.S.R.	8.328	36.00	DAN	Norden, Germany
6.618	45.31	PRADO	Riobamba, Ecuador	8.328	36.00	DDAC	S.S. Europa
6.625	45.25	HKM	Bogota, Columbia			DDAS	S.S. Bremen
6.648	45.09	IAC	Coltana, Italy			DDBR	S.S. Berlin
6.660	45.02	FM8KR	Constantine, Algeria			DDCB	S.S. Columbus
6.662	45.00	PK3CH	Surabaya, Java			DDCG	S.S. Resolute
6.667	44.98	IIAX	Rome, Italy			DDCP	S.S. Cap Polonio
		XFD	Mexico City, Mex.			DDDT	S.S. Deutschland
6.675	44.91	DGK	Nauen, Germany			DDDX	S.S. Hamburg
6.678	44.90	TGW	Guatamala City, Guatamala			DDEA	S.S. Cap Arcona
6.732	44.54	WEJ-				DDED	S.S. New York
		W2XBJ	Rocky Point, N. Y.			DDFF	S.S. Reliance
6.752	44.41	WOA	Lawrenceville, N. J.			DDFT	S.S. Oceana
		WOB	Lawrenceville, N. J.			DDNY	S.S. Albert Ballin
6.753	44.40	WND	Deal, N. J.	8.333	35.98	RW3KAA	Leningrad, U.S.S.R.
6.800	44.09	VO8Z	St. Johns, Nfld.	8.400	35.69	VBS	Glace Bay, N. S.
6.818	44.00	XDA	Mexico City, Mex.	8.450	35.48	PRAG	Porto Alegre, Brazil
6.840	43.83	CFA	Drummondville, Que.	8.562	35.02	WOO	Ocean Gate, N. J.
6.860	43.71	KEL	Bolinas, Calif.	8.570	34.98	G2AA	London, England
			Paris, France			HC2JM	Guayaquil, Ecuador
6.875	43.61	D4AFF	Colthen, Germany			KW15	Khabarovsk, U.S.S.R.
		F8MC	Casablanca, Morocco	8.630	34.74	WOO	Deal, N. J.
6.877	43.60		Rabat, Morocco			W2XDO	Ocean Gate, N. J.
6.888	43.54	KEQ	Kahuku, Hawaii	8.645	34.68	VE9BY	London, Ont.
6.900	43.45	IMA	Roma, Italy	8.650	34.66	W2XCU	Ampere, N. J.
6.976	43.00	EAR110	Madrid, Spain			W2XV	Long Island City, N. Y.
6.989	42.90	GBS	Rugby, England			W3XE	Baltimore, Md.
6.993	42.87	HKD	Barranquilla, Columbia			W3XX	Washington, D. C.
6.995	42.85	GBS	Rugby, England			W4XG	Miami, Fla.
7.005	42.80	F8KR	Constantine, Tunisia			W8XAG	Dayton, Ohio
7.020	42.71	EAR125	Madrid, Spain			W9XL	Chicago, Ill.
7.055	42.50	VS8AB	Johore Baru, Brit. Malaya	8.690	34.50	W2XAC	Schenectady, N. Y.
7.105	42.20	HKN	Medellin, Columbia			HKF	Bogota, Columbia
7.122	42.10	HKK	Cal. Columbia	8.820	33.99	VK3UZ	Melbourne, Australia
7.139	42.00	HKT	Manizales, Colombia	8.830	33.95	GD1J	S.S. Homerie
7.140	41.99	HKX	Bogota, Columbia			GFVW	S.S. Majestic
7.143	41.95	HKF	Bogota, Columbia			KKFY	S.S. Minnetonka
7.184	41.75	CM2MK	Havana, Cuba			GLSQ	S.S. Olympic
7.195	41.67	VK6AG	Perth, Australia			GMBJ	S.S. Empress of Britain
		VS1AB	Singapore, Straits Settlement			GMJQ	S.S. Belgenland
7.207	41.60	EAR58	Tenerife, Canary Islands			GTSD	S.S. Monarch of Bermuda
7.220	41.53	HB9D	Zurich, Switzerland			WSBN	S.S. Leviathan
			Budapest, Hungary	8.872	33.79	NAA	Arlington, Va.
			Cienfuegos, Cuba			NPO	Cavite, Manila, Ph. Is.
7.300	41.07	CM6DW	Matanzas, Cuba	8.897	33.70	ZLT	Wellington, N. Z.
7.312	41.00	CM5RY	Johannesburg, So. Africa	8.900	33.69	EATH	Posen, Poland
7.329	40.90	ZTJ		8.945	33.52	WEL-	
7.396	40.54	WEM-				W2XBJ	Rocky Point, N. Y.
		W2XBJ	Rocky Point, N. Y.	8.950	33.50	TGX	Guatamala City, Guatamala
7.400	40.52	ZTD	Durban, So. Africa	9.012	33.27	KEJ	Bolinas, Calif.
7.402	40.50	HKI	Bogota, Columbia	9.022	33.25	GBS	Rugby, England
7.410	40.46		Eberswalde, Germany	9.030	33.20	CFH	Halifax, N. S.
7.460	40.19	YR	Lyons, France	9.690	32.98	VK3ME	Melbourne, Australia
7.500	39.98		Radio Touraine, France			LL	Paris, France
7.518	39.89	KDK-		9.091	32.97	XFD	Mexico City, Mex.
		KKH	Kahuku, Hawaii	9.110	32.91	SUS	Cairo, Egypt
7.520	39.87	CGE	Calgary, Alta.	9.125	32.86	HAT	Szekesfehervar, Hungary
7.530	39.82		Riobamba, Ecuador	9.130	32.84	HB9OC	Berne, Switzerland
7.550	39.71	CGE	Calgary, Alta.	9.162	32.72	WNA	Lawrenceville, N. J.
		CKS	Calgary, Alta.	9.200	32.59	GBS	Rugby, England
7.562	39.65	KWY	Dixon, Calif.	9.230	32.48	FL	Paris, France
7.605	39.42	KWX	Dixon, Calif.			VK2BL	Sydney, Australia
7.610	39.40	HKF	Bogota, Columbia	9.250	32.41	GBK	Bodmin, England
7.660	39.14	FTL	St. Assise, France	9.290	32.27		Rabat, Morocco
7.715	38.86	KEE	Bolinas, Calif.	9.310	32.20	GBC	Rugby, England
7.758	38.65		Kootwijk, Holland	9.340	32.10	CGA	Drummondville, Que.
7.770	38.59	FTF	St. Assise, France	9.350	32.07	CN2MK	Havana, Cuba
		PKK	Kootwijk, Holland	9.369	32.01	VK3LO	Melbourne, Australia
7.775	38.57	F8BZ	Paris, France	9.370	32.00	CT3AQ	Funchel, Madeira
7.790	38.49	HBP	Geneva, Switzerland			TGGA	Guatamala City, Guatamala
7.830	38.29	PDV	Kootwijk, Holland	9.373	31.98		Hongkong, China
7.876	38.07	J1AA	Kenikawa-Cho, Japan	9.375	31.97	OZ7MK	Copenhagen, Denmark
7.890	38.00	J1AA	Tokyo, Japan			XDA	Mexico City, Mex
		PK2AG	Semarang, Java			VK3VZ	Melbourne, Australia
		VPD	Suva, Fiji Islands				

Megs.	Meters	Call	City, State or Country	Megs.	Meters	Call	City, State or Country
9.380	31.96	HB0XD	Zurich, Switzerland	10.520	28.50	VK2FC	Sydney, Australia
9.410	31.86	PLE	Bandoeng, Java			VK2ME	Sydney, Australia
		PLV	Bandoeng, Java	10.540	28.44	WLO	Lawrenceville, N. J.
9.448	31.74	WES-				WOK	Lawrenceville, N. J.
		W2XBJ	Rocky Point, N. Y.			VLK	Sydney, Australia
9.450	31.73	.....	Rio de Janeiro, Brazil	10.630	28.20	PLR	Bandoeng, Java
9.460	31.69	.....	Buenos Aires, Argentina	10.664	28.12	CEC	Santiago, Chile
9.480	34.63	PLW	Bandoeng, Java	10.700	28.02	VAS	Glace Bay, N. S.
9.488	31.60	WEF-		10.710	28.00	CT1BO	Lisbon, Portugal
		W2BJ	Rocky Point, N. Y.			P8MC	Casablanca, Morocco
		OXO-OXZ	Copenhagen, Denmark	10.800	27.76	EATH	Posen, Poland
9.492	31.58	PRBA	Rio de Janeiro, Brazil			GBX	Rugby, England
9.500	31.56	OZ7RL	Copenhagen, Denmark			PCP	Kootwijk, Holland
		.....	Hamilton, Bermuda			TGW	Guatemala City, Guatemala
		.....	Konigswusterhausen, Ger.	10.830	27.68	KWV	Dixon, Calif.
9.516	31.52	TGX	Guatemala City, Guatemala	10.962	27.35	OCI	Lima, Peru
9.520	31.49	OXY	Copenhagen, Denmark	10.980	27.30	ZLW	Wellington, N. Z.
9.530	31.46	W2XAF	Schenectady, N. Y.	11.100	27.01	.....	Vienna, Austria
9.548	31.40	VK3ME	Melbourne, Australia	11.111	26.98	XFD	Mexico City, Mex.
9.552	31.38	DJA	Zeesen, Germany			.....	Leningrad, U.S.S.R.
9.555	31.37	VE9DR	Drummondville, Que.	11.308	26.51	FYA	Paris, Pontoise, France
9.560	31.36	K1XR	Manila, Ph. Is.	11.302	26.50	.....	Radio Goldberg, Java
		DJA	Konigswusterhausen, Ger.	11.340	26.44	DAN	Nordeich, Germany
		ZL2XX	Wellington, N. Z.	11.435	26.21	DHC	Nauen, Germany
9.570	31.33	KZRM	Manila, Ph. Is.	11.440	26.20	K1XR	Manila, Ph. Is.
		W1XAZ	Springfield, Mass.	11.470	26.15	IBDK	S.S. Electra
		SRI	Poznan, Poland	11.490	26.10	GBK	Bodmin, England
9.580	31.30	VE0DN	Tandjong Priok, D.E.I.	11.530	26.00	XAM	Merida, Yucatan
		.....	Montreal, Que.	11.644	25.75	PPQ	Rjo de Janeiro, Brazil
9.585	31.28	W3XZU	Philadelphia, Pa.	11.680	25.67	FYA	Pontoise, France
		VK2ME	Sydney, Australia			YVQ	Maracay, Venezuela
9.590	31.26	PCJ	Eindhoven, Holland	11.690	25.65	KIO	Kahuku, Hawaii
		TIRA	Electra Caratgo, Costa Rica	11.700	25.62	VV4BV	Valencia, Venezuela
9.592	31.25	CT1AA	Lisbon, Portugal	11.705	25.63	VE9BA	Montreal, Que.
9.600	31.23	LGN	Bergen, Norway			.....	Paris, France
		LQA	Buenos Aires, Argentina	11.712	25.59	HKN	Medellin, Columbia
9.616	31.15	VQ7LO	Nairobi, Kenya	11.720	25.58	VE9JR	Winnipeg, Man.
9.670	31.00	T4NREI	Heredia, Costa Rica			PK6K	Makassar, Celebes, D.E.I
9.742	30.77	WOF	Lawrenceville, N. J.	11.750	25.51	G5SW	Pontoise, France
9.750	30.75	WNC	Deal, N. J.	11.760	25.50	DID	Chelmsford, England
		VK2ME-				SAS	Konigswusterhausen, Ger.
		VLK	Sydney, Australia			XDA	Kalsborg, Sweden
		.....	Agen, France	11.763	25.40	XDA	Mexico City, Mex.
9.772	30.68	EAM	Madrid, Spain	11.780	25.44	VE9DR	Chapultepec, Mex.
9.790	30.63	GBW	Rugby, England	11.790	25.42	W1XAL	Drummondville, Que.
9.798	30.60	GCW	Rugby, England			TITR	Boston, Mass.
9.810	30.56	LSOR	Buenos Aires, Argentina	11.800	25.40	I2RO	San Jose, Costa Rica
		LSRD	Buenos Aires, Argentina			UOR2	Rome, Italy
9.836	30.49	.....	Poznan, Poland	11.820	25.39	K1XR	Vienna, Austria
9.840	30.47	FTI	St. Assise, France	11.840	25.34	KZRM	Manila, Ph. Is.
9.862	30.40	WON	Lawrenceville, N. J.			W2XE	Manila, Ph. Is.
		EAQ	Madrid, Spain			W0NAA	Richmond Hill, N. Y.
9.890	30.32	LSA	Buenos Aires, Argentina	11.860	25.28	VE9CA	Chicago, Ill.
9.895	30.30	LSN	Buenos Aires, Argentina	11.870	25.27	VUC	Calgary, Alta.
9.928	30.20	HJY	Bogota, Columbia	11.872	25.25	W8XK	Calcutta, British India
9.940	30.16	VK2ME	Sydney, Australia	11.895	25.21	VE9DN	Pittsburgh, Pa.
9.942	30.15	GBU	Rugby, England	11.898	25.20	FYA	Montreal, Que.
9.993	30.00	LSL	Buenos Aires, Argentina	11.923	25.16	RW50	Pontoise, France
10.000	29.98	SUV	Belgrade, Yugo Slavia	11.945	25.10	KKQ	Moskva Imeni Popova, USSR
10.013	29.94	CM2LA	Havana, Cuba	11.969	25.05	KKQ	Bolinas, Calif.
10.051	29.83	SUV	Cairo, Egypt	11.993	25.00	PK6KZ	Bolinas, Calif.
10.054	29.82	DHI	....., Germany	12.000	24.99	FZG	Makassar, Celebes, D.E.I.
10.060	29.80	VRT-ZFB	Hamilton, Bermuda	12.004	24.99	AAA	Saigon, Indo-China
10.090	29.70	EAJ7	Madrid, Spain	12.045	24.89	NAA	Arlington, Va.
		OPM	....., Belgium Congo			NSS	Annapolis, Md.
10.150	29.58	DI7	Leopoldville, Belgian Congo	12.080	24.80	.....	Tokyo, Japan
10.160	29.51	D1C	Nauen, Germany	12.150	24.68	FQO-FQE	St. Assise, France
10.167	29.48	HS2PJ	Nauen, Germany	12.190	24.60	GBS	Rugby, England
10.212	29.35	PSH	Bangkok, Siam			GBX	Rugby, England
10.250	29.25	.....	Rio de Janeiro, Brazil	12.245	24.49	K1XR	Manila, Ph. Is.
10.300	29.00	LSX	Hongkong, China	12.250	24.46	K1XR	Manila, Ph. Is.
		LSX	Buenos Aires, Argentina			FTN	St. Assise, France
10.340	28.99	ORK	Buenos Aires, Argentina	12.290	24.40	GBU	Rugby, England
10.345	28.98	LSX	Brussels, Belgium			PLM	Rugby, England
10.390	28.85	GBX	Buenos Aires, Argentina			ZLW	Bandoeng, Java
10.410	28.80	KEZ	Rugby, England	12.470	24.00	CR3AQ	Wellington, N. Z.
		LSY	Bolinas, Calif.			DAN	Funchel, Madeira
		PKP	Buenos Aires, Argentina			FV4	Norden, Germany
		.....	Kootwijk, Holland	12.700	23.61	GBC	St. Assise, France
		.....	Medan, Sumatra	12.780	23.46	GBC	Rugby, England
10.510	28.53	.....	Leningrad, U.S.S.R.	12.785	23.45	IAC	Coltana, Italy

Megs.	Meters	Call	City, State or Country	Megs.	Meters	Call	City, State or Country
12.820	23.38		Rabat, Morocco	15.950	18.80	PLG	Bandoeng, Java
12.836	23.36	WOO	Ocean Gate, N. J.	16.024	18.71	KKP	Kabuku, Hawaii
12.850	23.33	W2XCU	Ampere, N. J.	16.060	18.66	NAA	Arlington, Va.
		W9XL	Anoka, Minn.	16.150	18.56	GBX	Rugby, England
13.010	23.04	FZG	Saigon, Indo-China	16.162	18.55	PSA	Rio de Janeiro, Brazil
13.040	23.00	DDAC	S.S. Europa	16.200	18.51	FZR	Saigon, Indo-China
		DDAS	S.S. Breman	16.260	18.44	WLK	Lawrenceville, N. J.
		DDBR	S.S. Berlin	16.300	18.39	WLO	Lawrenceville, N. J.
		DDCB	S.S. Columbus			PCL	Kootwijk, Holland
		DDCG	S.S. Resolute	16.320	18.37	VLK	Sydney, Australia
		DDCP	S.S. Cap Polonio			VK2ME	Sydney, Australia
		DDDT	S.S. Deutschland			G2GN	S.S. Olympic
		DDDX	S.S. Hamburg	16.601	18.06	DAN	Norden, Germany
		DDEA	S.S. Cap Arcoua	17.080	17.55	GBC	Rugby, England
		DDED	S.S. New York	17.110	17.52	W2XDO	Ocean Gate, N. J.
		DDFF	S.S. Reliance			WOO	Ocean Gate, N. J.
		DDFT	S.S. Oceana	17.300	17.33	W2XCU	Ampere, N. J.
		DDNY	S.S. Albert Ballin			W2XK	Schenectady, N. Y.
13.043	22.98	OBE	La Punta, Peru			W6XAJ	Oakland, Calif.
		TGCA	Guatemala City, Guatemala			W7XA	Portland, Ore.
13.074	22.93	J1AA	Komikawa-Cho, Japan			W7XC	Seattle, Wash.
13.220	22.68	GDLJ	S.S. Homeric			W8XL	Dayton, Ohio
		GFVV	S.S. Majestic	17.380	17.25	W9XL	Anoka, Minn.
		GKFY	S.S. Minnetonka	17.580	17.05	J1AA	Tokyo, Japan
		GLSQ	S.S. Olympic			GDLJ	S.S. Homeric
		GMBJ	S.S. Empress of Britain			GFVV	S.S. Majestic
		GMJQ	S.S. Belgenland			GKPY	S.S. Minnetonka
		GTSB	S.S. Monarch of Bermuda			GLSQ	S.S. Olympic
		WSBN	S.S. Leviathan			GMBJ	S.S. Empress of Britain
13.296	22.55	CGA	Drummondville, Que.			GMJQ	S.S. Belgenland
13.380	22.40	WMA	Lawrenceville, N. J.			GTSB	S.S. Monarch of Bermuda
13.400	22.37	WND	Deal, N. J.			WSBN	S.S. Leviathan
13.591	22.06	GBB	Rugby, England	17.640	16.99	PLF	Malabar, D.E.I.
		GBC	Rugby, England	17.750	16.89	HS1PJ	Kongswusterhausen, Ger.
13.628	22.00	F8BZ	Paris, France	17.760	16.88	DJE	Kongswusterhausen, Ger.
13.690	21.90	KKX	Bolinas, Calif.	17.772	16.87	W3XAL	Bound Brook, N. J.
13.776	21.77	KKW	Dixon, Calif.	17.775	16.87	PHI	Huizen, Holland
13.816	21.70	SUZ	Cairo, Egypt			PHO	Huizen, Holland
13.860	21.63	W1Y-		17.780	16.86	W8XK	Pittsburgh, Pa.
		W2XBJ	Rocky Point, N. Y.	17.830	16.82	PCV	Kootwijk, Holland
13.950	21.50	Y0I	Bucharest, Roumania	17.850	16.80	W2XAO	New Brunswick, N. J.
14.150	21.17	KKZ	Bolinas, Calif.			PLF	Bandoeng, Java
14.310	20.95	G2NM	Sonning-on-Thames, England	18.000	16.67	KQJ	Bolinas, Calif.
14.420	20.80	VPD	Suva, Fiji Islands	18.100	16.56	GBK	Bodmin, England
14.450	20.75	GBW	Rugby, England	18.105	16.56	W9XAA	Chicago, Ill.
14.464	20.73	WMF	Lawrenceville, N. J.	18.124	16.54	GBW	Rugby, England
14.480	20.70	WNC	Deal, N. J.	18.170	16.50	CGA	Drummondville, Que.
		W8XK	E. Pittsburgh, Pa.			PMC	Bandoeng, Java
		LSN	Buenos Aires, Argentina	18.240	16.44	FRO-FRE	St. Assise, France
14.530	20.65	LSA	Buenos Aires, Argentina			FTE	St. Assise, France
14.550	20.60	HBJ	Geneva, Switzerland	18.296	16.39	YVQ	Maracay, Venezuela
14.582	20.56	WMN	Lawrenceville, N. J.	18.310	16.38	FZS	Saigon, Indo-China
14.620	20.51	XDA	Mexico City, Mex.			GBS	Rugby, England
14.630	20.50	XDA	Chapultepec, Mex.	18.340	16.35	WLA	Lawrenceville, N. J.
14.682	20.42	PSS	Rio de Janeiro, Brazil			Z1W	Wellington, N. Z.
14.796	20.27	WKU-		18.350	16.35	WND	Deal, N. J.
		W2XBJ	Rocky Point, N. Y.	18.365	16.32	FZA	Saigon, Indo-China
14.850	20.19	HVJ	Vatican City, Italy	18.400	16.29	PKK	Kootwijk, Holland
15.000	19.99	LSJ	Monte Grande, Argentina	18.444	16.25	H1Y	Bogota, Columbia
		VK6AG	Perth, W. Australia	18.600	16.12	PDM	Kootwijk, Holland
15.066	19.90	T14NRH	Heredia, Costa Rica	18.620	16.10	GBJ	Bodmin, England
15.120	19.83	HVJ	Vatican City, Italy			GBU	Rugby, England
15.190	19.73	VE9BA	Montreal, Que.	18.670	16.06	OCI	Lima, Peru
		DJB	Zeesen, Germany	18.820	15.93	PLE	Bandoeng, Java
15.200	19.72	DJB	Kongswusterhausen, Ger.	18.958	15.82	LSR	Buenos Aires, Argentina
15.204	19.72	W8XK	Pittsburgh, Pa.	19.012	15.77	WKW-	
15.220	19.71	PCJ	Hilversum, Holland			W2XBJ	Rocky Point, N. Y.
15.234	19.68	FYA	Pontoise, France	19.194	15.62	ORG	Brussels, Belgium
15.280	19.62	W2XE	Richmond Hill, N. Y.	19.207	15.61	WKF	Lawrenceville, N. J.
15.300	19.53	OXO-OXZ	Copenhagen, Denmark	19.220	15.60	WNC	Deal, N. J.
		OX Y	Lynghby, Denmark	19.240	15.58	DFA	Nauen, Germany
			Kongswusterhausen, Ger.	19.270	15.57	PPU	Rio de Janeiro, Brazil
15.320	19.57	W2XAD	Schenectady, N. Y.	19.282	15.55	FTM	St. Assise, France
15.336	19.55		Tandjonk Priok, D.E.I.	19.350	15.50		Nancy, France
15.344	19.54	KWU	Dixon, Calif.	19.400	15.45	FRO-FRE	St. Assise, France
15.410	19.46	KWO	Dixon, Calif.			VK2ME	Sydney, Australia
15.456	19.40	F8BZ	Paris, France	19.460	15.40	FZU	Tamatore, Madagascar
15.570	19.03	F31CD	Saigon, Indo-China	19.678	15.24	CEC	Santiago, Chile
15.760	19.02	EAJ1	Barcelona, Spain	19.684	15.23	EAQ	Madrid, Spain
		J1AA	Tokyo, Japan	19.816	15.13	WKN	Lawrenceville, N. J.
15.860	18.90	FTK	St. Assise, France	19.830	15.12	FTD	St. Assise, France

Megs.	Meters	Call	City, State or Country	Megs.	Meters	Call	City, State or Country
19.850	15.10	WMI	Deal, N. J.	21.054	14.24	WKA	Lawrenceville, N. J.
19.895	15.07	LSG	Buenos Aires, Argentina	21,129	14.19	LSM	Buenos Aires, Argentina
19.950	15.03	DIH	Nauen, Germany	21.400	14.01	WLO	Lawrenceville, N. J.
20.028	14.97	DHO	Nauen, Germany	21.420	14.00	W2XDJ	Lawrenceville, N. J.
		OPL	Leopoldville, Belgian Congo	21.540	13.92	W8NK	Deal, N. J.
20.140	14.88	DWG	Nauen, Germany	24.000	12.48	W6XQ	Pittsburgh, Pa.
20.400	14.70	GBA	Rugby, England	24.380	12.30	VE9GW	San Mateo, Calif.
20.500	14.63	WQNF	Chicago, Ill.	25.960	11.55	G5SW	Bowmanville, Ont.
20.600	14.55	PMB	Bandoeng, Java	27.800	10.78	W6XD	Chelmsford, England
20.680	14.50	PSR	Paris-Sagon, Indo-China	31,000	9.67	W8XI	Palo Alto, Calif.
		LSN	Monte Grande, Argentina	34.600	8.67	W2XB	Pittsburgh, Pa.
		LXS	Buenos Aires, Argentina	42.530	7.05	W2XBC	New Brunswick, N. J.
20.710	14.47	LSY	Buenos Aires, Argentina	51.400	5.83	RW61	Berlin, Germany
21.000	14.28	OKI	Podebrady, Czechoslovakia	51.724	5.79	PK4PA	New Brunswick, N. J.
21.020	14.27	LSN	Buenos Aires, Argentina	59.964	5.00		Moskva Vei, U.S.S.R.
							Palembang, Sumatra

The Trans-Pacific Broadcasting Stations

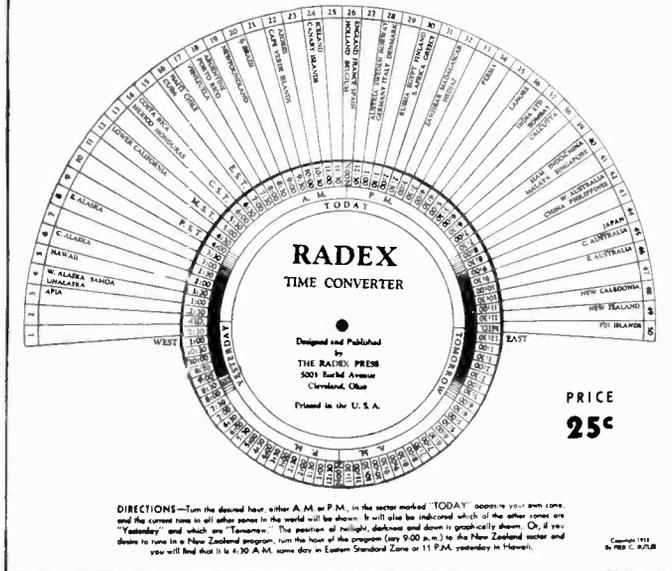
Note — In some cases the power is figured differently than is the rule in the United States, making it four or five times as much as American stations of the same wattage.

Kcs.	Call	Power	City and Country	Zone
790	JOGK	10000	Kumamoto, Japan	44
800	3LO	5000	Melbourne, Viet.	46
			National Broadcasting Station, 120A Russell St., 7-8:15 a.m.; 10:30 a.m.-12:30 p.m.; 1-1:30 p.m.; 2-11:30 p.m. Sun., 10 a.m.-12:30 p.m.; 3-10 p.m.	
810	JOCK	10000	Nagoya, Japan	44
820	3ZE	20	Greymouth, N. Z.	49
			Schaefer's Garage, Wed.-Sat., 8-10 p.m.	
	3ZR	100	Greymouth, N. Z.	49
830	JOJK	10000	Sapporo, Japan	44
	2ZP	25	Wairoa, N. Z.	49
850	JOFK	10000	Hiroshima, Japan	44
855	2BL	5000	Sydney, N. S. W.	46
			National Broadcasting Station, 96-98 Market St., 8-15-11 a.m.; noon-2 p.m.; 2:30-6 p.m.; 6:15-10:30 p.m. Sun., 11 a.m.-3 p.m.; 4:30-5 p.m.; 6:30-10 p.m.	
870	JOAK	10000	Tokyo, Japan	44
880	6PR	200	Perth, W. Aus.	42
			Nicholsons Ltd., Barrack St., 10:30-11:30 a.m.; 12:30-1:30 p.m.; 4:30-5:30 p.m.; 6:30-10:30 p.m.; Sun., 10-11 a.m.; 12:30-1:45 p.m.; 6-7:30 p.m.	
890	7HO	50	Hobart, Tas.	46
			Commercial Broadcasters, Ltd., 82 Elizabeth St., 12:30-2 p.m.; 6:30-10:30 p.m.	
900	1YA	5000	Auckland, N. Z.	29
			National Broadcasting Service.	
910	4RK	2000	Rockhampton, Queens.	46
			National Broadcasting Station, Relays 4QG.	
930	3UZ	500	Melbourne, Viet.	46
			Oliver J. Nilsen & Co., 45 Bourke St., 7:30-8:30 a.m.; 9 a.m.-12:30 p.m.; 1-4:30 p.m.; 5:30-11 p.m.	
950	2GB	3000	Sydney, N. S. W.	46
			Theosophical Broadcasting Station, 29 Bligh St., 7-11 p.m. Sun., 10 a.m.-9:45 p.m.	
960	5DN	500	Adelaide, S. Aus.	45
			Hume Broadcasters, Ltd., Franklin St., Parkside, 4-11:30 p.m.	
970	3BO	200	Bendigo, Viet.	46
			Amalgamated Wireless, Ltd., Kangaroo Flat, 8:00-10:30 p.m.	
980	3YA	5000	Christchurch, N. Z.	49
			National Broadcasting Service.	
1000	4GR	50	Toowoomba, Queens.	46
			Gold Radio Service, Ruthven St., 9-10 a.m.; 12:30-1:20 p.m.; 7:20-10 p.m. Sun., 1 a.m.-1 p.m.; 7:30-10:30 p.m.	
1010	3HA	200	Hamilton, Viet.	46
			Western Province Radio Co., 37 Gray St.	
1025	2UE	1000	Sydney, N. S. W.	46
			Radio House, 617 George St., 7:15-8:33 a.m.; 9:30 a.m.-noon; 6:15-11 p.m. Sun., 11 a.m.-noon; 6:10-15 p.m.	
1041	5PI	50	Port Pirie	44
			Midlands Broadcasting Service, Ellen St.	
770	JOHK	10000	Sendai, Japan	44
778	JOPK	500	Shizuoka, Japan	44
560	2CO	7500	Corowa, N.S.W.	46
			National Broadcasting Station, relaying 3LO and 3AR.	
580	7ZL	3000	Hobart, Tasmania	46
			National Broadcasting Station, Elizabeth St. 7:30-8:30 a.m.; 11 a.m.-2 p.m.; 3-4 p.m.; 6-11 p.m.; Sunday, 10:30 a.m.-noon; 3-4 p.m.; 8-10 p.m.	
590	JOAK	10000	Tokyo, Japan	44
600	27K	120	Wanganui, N. Z.	49
			Morrison & Son, Wed. and Sun., 7-10 p.m.	
610	3AR	5000	Melbourne, Victoria	46
			National Broadcasting Station, 120A Russell St., 8:15-11 a.m.; noon-5:45 p.m.; 6:15-11:30 p.m.; Sunday, 11 a.m.-10 p.m.	
625	JOQK	500	Niigata, Japan	44
630	1ZH	40	Hamilton, N. Z.	49
			G. S. Anchor, Tuesday, 7-10 p.m.	
635	JONK	500	Nagano, Japan	44
	5CK	7500	Crystal Brook, S. Aus.	45
			National Broadcasting Station, Relays 5CL.	
650	4YA	500	Dunedin, N. Z.	49
			National Broadcasting Service.	
665	2FC	5000	Sydney, N. S. W.	46
			National Broadcasting Station, 96-98 Market St., 7:00-8:15 a.m.; 10:30 a.m.-12:30 p.m., 1-4:30 p.m.; 5:45-8 p.m.; 8-11 p.m. Sunday, 11 a.m.-12:30 p.m.; 3-4:30 p.m.; 6-10:30 p.m.	
670	JFAK	10000	Tokyo, Japan	44
680	JOLK	500	Fukuoka, Japan	44
690	6WF	5000	Perth, W. Aus.	42
			National Broadcasting Station, Hay St., 7:30-8:30 a.m.; 11 a.m.-2 p.m.; 3-4:30 p.m.; 6-11 p.m.; Sunday, 10:30 a.m.-noon; 3-4 p.m.; 6-10:30 p.m.	
	JODK	1000	Keijo, Korea	44
	JOKK	500	Okayama, Japan	44
710	JOJK	300	Kanazawa, Japan	44
720	2YA	5000	Wellington, N. Z.	49
			National Broadcasting Service.	
730	5CL	5000	Adelaide, S. Aus.	45
			National Broadcasting Station, Hindmarsh Sq., 7:30-8:30 a.m.; 11 a.m.-2 p.m.; 3-4:30 p.m.; 5:30-11 p.m. Sun., 10:30 a.m.-12:30 p.m.; 3-10 p.m.	
741	JOSK	1000	Kokura, Japan	44
750	JOBK	10000	Osaka, Japan	44
760	JQAK	1000	Dairen, Manchuria	44
	4OG	5000	Brisbane, Queens.	46
			National Broadcasting Station, State Ins. Bldg., 7:30-8:30 a.m.; 11 a.m.-2 p.m.; 3-4:30 p.m.; 6-11 p.m. Sun., 10:30 a.m.-12:15 p.m.; 3-4:30 p.m.; 6-11 p.m.	

Kcs.	Call	Power	City and Country	Zone	Kcs.	Call	Power	City and Country	Zone
1050	2ZF	150	Palmerston, N. Z.	49		2ZE	35	Eketahuna, N. Z.	49
	Manowatu Radio Club, Wed. 6:15-9 p.m.; Fri., 7-9 p.m. Sun., 7-9 p.m.					G. R. S. Allen, Sun. 4:30-6:30 p.m.			
	2CA	50	Canberra, N. S. W.	46	1220	2MV	50	Manurewa, N. Z.	49
	A. J. Ryan, Kingston.					Moss Vale, N. S. W.			46
1060	2ZO	50	Palmerston, N. Z.	49		Moss Vale Broadcasting Service, North St., Noon-1 p.m.; 7-10 p.m.			
1070	2KY	1500	Sydney, N. S. W.	46		6KG	100	Kalgoorlie, W. Aus.	42
	Trades & Labor Council, Goulburn St., 10 a.m.-noon; 6-10 p.m. Sun., 6-10 p.m.					Goldfields Broadcasters, Ltd., Bourke St.			49
1080	3SH	50	Swan Hill, Vict.	46		47L	250	Dunedin, N. Z.	49
	Swan Hill Broadcasting Co., 7:30-10 p.m. Sun., 12:15-2:15 p.m.; 4:15-6 p.m.; 7:30-10 p.m.					Radio Service, Ltd.			
	4ZW	300	Dunedin, N. Z.	49	1230	2YB	120	New Plymouth, N. Z.	49
	Radio Sales & Exchange, Ltd., Sat., 7:30 p.m.-mid-4:20					Sun., Mon., 8-10 p.m. Wed., Sat., 6:30-10 p.m.			
	4ZO	35	Dunedin, N. Z.	49	1245	2NC	2000	Newcastle, N. S. W.	46
	Barnett's Radio Supplies, Mon., 7-11 p.m. Fri., 7-Mid.					National Broadcasting Station, relays 2FC-2BL			
	4ZM	45	Dunedin, N. Z.	49	1260	3WR	50	Wangaratta, Vict.	46
	Thos. Begg & Co., Ltd., Tues., 8-11 p.m. Sun. 7-10 p.m.					Wangaratta Broadcasting Pty., Ltd., Reid St., 7:45-10 p.m.			
	4ZF	5	Dunedin, N. Z.	49		2ZH	120	Napier, N. Z.	49
	4ZB	20	Dunedin, N. Z.	49		C. B. Hausen & Co., Wed., 6:30-10:30 p.m. Sun., 7-9:30 p.m.			
1090	1ZR	200	Auckland, N. Z.	49	1270	2SM	1000	Sydney, N. S. W.	46
	Lewis Eady, Ltd., Tues., Thurs., Fri., 5:45-10 p.m. Sat., 5:45-11:45 p.m.					Catholic Broadcasting Co., Australia House.			
	1ZB	32	Auckland, N. Z.	49	1280	3TR	50	Trafalgar, Vict.	46
	LaGloria Gramophone Co., Ltd., Mon., 7:30-10 p.m. Wed., 8-10 p.m.					Gippsland Broadcasting Service, P.O. Box 89, Noon-1 p.m.; 7-10 p.m. Sun., 7-9 p.m.			
1100	7LA	200	Launceston, Tas.	46	1290	4BK	200	Brisbane, Queens.	46
	Findlay & Wills, 67 Brisbane St., 3-4:30 p.m.; 6-10 p.m.					Brisbane Broadcasting Co., King House, Queen St., 12:30-1:30 p.m.; 4:30-10 p.m. Sun., 7-9 p.m.			
1110	2HD	200	Newcastle, N. S. W.	46	1300	3BA	50	Ballarat, Vict.	46
	Airsales Broadcasting Co., Civic Centre, 8:15-10:15 a.m.; 12:30-1:30 p.m.; 6-10 p.m. Sun. 10-11 a.m.; 7-9 p.m.					Ballarat Broadcasters Pty., Armstrong St., 11 a.m.-noon; 7-10:30 p.m. Sun., 1-3 p.m.; 6:30-10 p.m.			
1120	2ZW	400	Wellington, N. Z.	49		2ZB	8	Napier, N. Z.	49
	Nimmo & Sons					5AD	1000	Adelaide, S. Aus.	45
1125	2UW	1500	Sydney, N. S. W.	46	1310	5AD	1000	Adelaide, S. Aus.	45
	Radio Broadcasting, Ltd., Paling's Bldg., Ash St., 7:30-9 a.m.; 10:30 a.m.-2 p.m.; 2:30-5 p.m.; 5:15-10:30 p.m. Sun., 10:30 a.m.-1 p.m.; 3-10:30 p.m.					Advertiser Newspaper, Ltd., Weymouth St., 2-3:15 p.m.; 6-11 p.m. Sun., 5:30-10 p.m.			
1135	6ML	300	Perth, W. Aus.	42	1320	1ZJ	25	Auckland, N. Z.	49
	Musgroves, Ltd., Lyric House, 11 a.m.-noon; 12:30-2 p.m.; 3-4 p.m.; 5:45-10 p.m. Sun., 7-10 p.m.					Johns, Ltd., Wed., 7:30-9:30 p.m.			
1145	4BC	600	Brisbane, Queens.	46	1330	2MO	50	Gunnedah, N. S. W.	46
	J. B. Chandler & Co., 43 Adelaide St., 10:30 a.m.-noon; 2-3 p.m.; 5:45-10 p.m. Sun., 6-10:30 p.m.					M. J. Oliver, P.O. Box 78, 7:45-8:30 a.m.; 1-2 p.m.; 6-9 p.m. Sun., 8-10 p.m.			
	3YB	25	Melbourne, Vict.	46		2ZI	15	Hastings, N. Z.	49
	Mobile Broadcasting Service, 430 Little Collins St.					2ZL	20	Hastings, N. Z.	49
1150	2ZM	110	Gisborne, N. Z.	49	1340	2XN	50	Lismore, N. S. W.	46
	Atwater Kent Radio Service, Thurs., 8-11 p.m. Sun., 7-10 p.m.					G. W. Exton, P.O. Box 138B, 7-8 a.m.; noon-2 p.m.; 6-10 p.m.			
	2ZJ	20	Gisborne, N. Z.	49	1350	3KZ	200	Melbourne, Vict.	46
1160	4ZP	300	Invercargill, N. Z.	49		3KZ	Broadcasting Station, 40 Victoria St., 8:30 a.m.-1:15 p.m.; 6-11 p.m. Sun., 2:30-4:30 p.m.; 6-10 p.m.		
	Parson's Radio Supplies, Mon., Tues., Thurs., 8-10 p.m.; Fri., 8-11 p.m.				1360	2ZR	50	Nelson, N. Z.	49
1170	4ZI	10	Invercargill, N. Z.	49		4ZR	25	Balclutha, N. Z.	49
	4TO	100	Townsville, Queens.	46	1365	2XL	50	Broken Hill, N. S. W.	46
	Amalgamated Wireless, Ltd., 6:30-7 p.m.; 8-10:15 p.m.					Barrier Broadcasting Co., Ltd., Argent St., 7-8 a.m.; noon-2 p.m.; 6-10 p.m. Sun. 7-9:30 p.m.			
	1ZB	25	Auckland, N. Z.	49	1380	4BH	600	Brisbane, Queens.	46
1180	3DB	500	Melbourne, Vict.	46		Broadcasters Ltd., 90-92 Queen St.			
	3DB Broadcasting Station, Pty., 36 Flinders St., 7-9 a.m.; 10:45 a.m.-12:30 p.m.; 2-10:45 p.m. Sun., 6-9:45 p.m.				1390	2GN	50	Goulburn	
	2ZD	5	Masterton, N. Z.	49		Goulburn Broadcasting Co., Auburn St.			
1190	4MK	100	Mackay, Queens.	46	1400	3GL	50	Geelong, Vict.	46
	Williams' Agencies, Ltd., P.O. Box 165, 7:40-9:30 p.m.					Geelong Broadcasting Pty., Ltd., National Mutual Bldgs., 9:30-11 a.m.; 2:30-3 p.m. Thurs., 7-10:30 p.m. Sun., 7-10 p.m.			
	1ZQ	15	Auckland, N. Z.	49	1415	2KO	200	Newcastle, N. S. W.	46
1200	5KA	300	Adelaide, S. Aus.	45		Newcastle Broadcasting Co., 57 Hunter St., 6:30-10 a.m. Sun., 9-10 a.m.; 7-9 p.m.			
	Sport Radio Broadcasting Co., Ltd., 81 Flinders St., 6:30-8 a.m.; 2:45-4 p.m.; 5:45-10:15 p.m. Sun., 10-11 a.m.; 3-4 p.m.; 7-9:30 p.m.				1420	1ZS	15	Auckland, N. Z.	49
	3ZC	250	Christchurch, N. Z.	49	1425	3AW	300	Melbourne, Vict.	46
	3ZC Broadcasting Service, Ltd., Tues., 5:45-10:15 p.m. Wed., 7:30-11 p.m. Sun., 7-8 p.m.; 9-10 p.m.					Vogue Broadcasting Co., Ltd., His Majesty's Theatre.			
1210	2CH	1000	Sydney, N. S. W.	46	1435	2WL	50	Wollongong, N. S. W.	46
	Council of Churches, 77 York St.					Wollongong Broadcasting Co., 149 Crown St., 6:30-10 p.m. Sun., 7-9 p.m.			
					1480	2AY	50	Albury, N. S. W.	46
						Charles Rice, 610 Dean St., 7-10 p.m. Sun., 7:30-8:45 p.m.			
					1500	3AK	200	Melbourne, Vict.	46
						Akron Broadcasting Service, Ltd., 490 Elizabeth St.			

RADEX RADIO MAP of the WORLD

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Cleveland, Ohio, U. S. A.



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, Tele-

vision and Talking Movies are other fields their training covers. And to think, until the day I wrote for that book, I'd been waiting, "I have never had a chance—I 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 bad 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. 2KO, Washington, D. C.

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Dear Mr. Smith: Send me your free book, "Rich 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.....