

MIDSUMMER EDITION 1933

RADIO INDEX

A COMPLETE RADIO LOG OF THE WORLD



25^c

Sweeping Changes in Canada
How to Build a Simple Short Wave
Converter

The Most Interesting Station in
the World

No. 70

JUNE 1, 1933



RADIO IN DEX

Reg. U. S. Patent Office

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NINTH YEAR

CONTENTS

NUMBER 70

Frontispiece—Mary Eastman

Coloratura Soprano of the Columbia System

The DX Calendar of Special Programs for June.....	1
Building a Short-Wave Converter, <i>by B. Francis Dasbiell</i>	2
Remarkable Reception in the B. C. Band.....	5
Fading, Broad Tuning and Other Troubles, <i>by the Technical Editor</i>	7
The World's Most Friendly Station, <i>by Amando Cespedes M.</i>	11
Trials and Troubles of the Editor.....	12
Short Stories of Your Favorites, <i>by "Betty"</i>	16
This Summer on the Short Waves, <i>by Page Taylor</i>	19
Final DX Reports on the Closing Season.....	25
Fan Chat from the Pacific Coast, <i>by Chas. C. Norton</i>	31
He Tried to Prove DX Claims Impossible, <i>by John De Myer</i>	32
Verifying Under Difficulties, <i>by Irving Van Zandt, Jr.</i>	33
The Monthly DX Round Table.....	34
"What's on the Air Tonight," the Monthly Programs.....	35
Classified Index to the Chain Features.....	44
The Month's Changes in Station Data.....	45
A Complete Index to the World's Broadcasting Stations.....	46
Broadcasters of the World by Countries, States and Cities.....	57
The One Hundred Best S. W. Stations by Frequencies.....	68
Call Letter Index to the 100 Best S. W. Stations.....	70
Quick Index to Station Data in Past Issues.....	80

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ADDRESS ALL CORRESPONDENCE TO CLEVELAND OFFICE

JUNE DX CALENDAR

Special Programs for Distant Listeners

A. M. time is given as the night before. Thus early Monday morning programs are listed under Sunday night. Time is given in Eastern Standard so that programs may be listed in proper sequence.

SUNDAY NIGHT

June 4th

12:00-2:00—CMCH, 1405, Havana, Cuba.

June 4th, 11th, 18th, 25th

12:15-1:00—KSOO, 1110, Sioux Falls, S. D.

1:00-3:00—WGES, 1360, Chicago, Ill.

MONDAY NIGHT

June 5th

4:30-5:15—WEAO, 570, Columbus, Ohio.

June 19th

2:30-5:00—10-BI, 1200, Prince Albert, Sask.

June 12th, 26th

5:00-6:00—WAWZ, 1350, Zarephath, N. J.

June 5th, 12th, 19th, 26th

12:00-2:30—WMIL, 1500, Brooklyn, N. Y.

1:00-5:00—WSUI, 880, Iowa City, Iowa.

5:00-5:15—WCAH, 1430, Columbus, Ohio.

5:15-5:30—WHP, 1430, Harrisburg, Pa.

TUESDAY NIGHT

May 30th, June 27th

2:30-3:30—WCLO, 1200, Janesville, Wis.

June 20th

2:00-3:00—WJMS, 1420, Ironwood, Mich.

5:30-7:00—WRAK, 1370, Williamsport, Pa.

June 6th, 13th, 20th, 27th

12:00-1:00—KFUO, 550, St. Louis, Mo.

2:00-4:00—CFJC, 1120, Kamloops, B. C.

5:00-6:00—KFGQ, 1310, Boone, Iowa.

WEDNESDAY NIGHT

May 31st

2:30-4:00—CHWK, 780, Chilliwack, B. C.

June 7th

2:00-2:30—WHBF, 1210, Rock Island, Ill.

June 7th, 14th

12:00-1:00—WHBL, 1410, Sheboygan, Wis.

June 14th

4:00-6:00—KFBI, 1050, Abilene, Kans.

June 7th, 14th, 21st, 28th

2:00-3:00—KFXX, 1200, Grand Junction, Colo.

2:30-4:30—CKWX, 1500, Vancouver, B. C.

THURSDAY NIGHT

June 1st

9:00-11:00—OFH, 1031, Viipuri, Finland.

4:00-5:00—KASA, 1210, Elk City, Okla.

June 1st, 8th, 15th, 22nd, 29th

11:00-12:30—WHOM, 1450, Jersey City, N. J.

12:00-1:00—KFUO, 550, St. Louis, Mo.

12:00-2:30—WMIL, 1500, Brooklyn, N. Y.

1:00-2:00—WBBX, 1200, New Orleans, La.

1:00-2:00—WENC, 1420, Americus, Ga.

FRIDAY NIGHT

June 2nd

4:15-4:45—WNBZ, 1290, Saranac Lake, N. Y.

June 30th

2:30-4:00—CHWK, 780, Chilliwack, B. C.

June 2nd; 9th, 16th, 23rd, 30th

12:30-1:30—WCAJ, 590, Lincoln, Neb.

1:00-1:30—CFCN, 1030, Calgary, Alta.

1:30-3:30—KGEK, 1200, Yuma, Colo.

4:30-5:00—CMJH, 1150, Ciego de Avila, Cuba.

SATURDAY NIGHT

June 3rd

12:00-4:00—WRBX, 1410, Roanoke, Va.

June 24th

3:00-4:00—KDLR, 1210, Devils Lake, N. D.

June 3rd, 10th, 17th, 24th

9:00-2:00—WWRLL, 1500, Woodside, N. Y.

12:00-1:00—WGBI, 880, Scranton, Pa.

12:00-1:00—WJBK, 1370, Detroit, Mich.

12:00-1:30—WVVA, 1160, Wheeling, W. Va.

12:00-3:00—CMCD, 1140, Havana, Cuba.

12:00-4:00—WNAC, 1230, Boston, Mass.

1:00-1:30—WKY, 900, Oklahoma City, Okla.

1:00-2:00—KQV, 1380, Pittsburgh, Pa.

1:00-2:00—KTFI, 1240, Twin Falls, Idaho.

1:00-2:00—WGBF, 630, Evansville, Ind.

1:00-3:00—WGES, 1360, Chicago, Ill.

1:00-3:00—WWAE, 1200, Hammond, Ind.

1:00-4:00—KGU, 750, Honolulu, Hawaii.

1:30-3:00—KMAC, 1370, San Antonio, Tex.

2:00-3:00—CMGE, 1375, Cardenas, Cuba.

2:00-3:00—CMQ, 630, Havana, Cuba.

2:00-5:00—KFEL, 920, Denver, Colo.

2:00-7:00—KGBU, 900, Ketchikan, Alaska.

2:30-4:30—CKWX, 1010, Vancouver, B. C.

3:00-4:00—KXL, 1420, Portland, Ore.

3:00-5:00—CFCT, 1430, Victoria, B. C.

4:00-6:00—KVOA, 1260, Tucson, Ariz.

4:00-6:00—XFB, 1290, Jalapa, Ver., Mex.

THE MONTH'S CHANGES

FREQUENCY

570	WPCH	New York, N. Y., from 810
580	CJOC	Lethbridge, Alta., from 1120
580	CRCA	Moncton, N. B., from 630
600	CFCF	Montreal, Que., from 1030
630	CFCY	Charlottetown, P. E. I., from 580
630	HIX	Santo Domingo, D. R., from 570
690	HJN	Bogota, Colombia, from 685
730	CJCA	Edmonton, Alta., from 745
780	CHWK	Chilliwack, B. C., from 665
780	CKPR	Fort William, Ont., from 890
810	WNYC	New York, N. Y., from 570
880	CJRM	Moose Jaw, Sask., from 665
880	CJRW	Fleming, Sask., from 665
880	CRCO	Ottawa, Ont., from 600
890	CFQC	Saskatoon, Sask., from 910
890	CHML	Hamilton, Ont., from 880
910	CKY	Winnipeg, Man., from 780
915	CFRC	Kingston, Ont., from 930
930	CFCH	North Bay, Ont., from 910
930	CFLC	Prescott, Ont., from 915
1010	CHWC	Regina, Sask., from 960
1010	CKCD	Vancouver, B. C., from 780
1010	CKCK	Regina, Sask., from 960
1010	CKCO	Ottawa, Ont., from 890
1010	CKOC	Hamilton, Ont., from 635
1010	CKWX	Vancouver, B. C., from 780
1030	CFBO	St. John, N. B., from 890
1030	CFCN	Calgary, Alta., from 985
1030	CKNC	Toronto, Ont., from 960
1050	CHNS	Halifax, N. S., from 815

(Continued on page 45)

BUILDING a Short-Wave CONVERTER

• • • By B. FRANCIS DASHIELL

LAST month a list of parts necessary for our short-wave converter was published, and if they now have been gathered together we are ready to proceed with actual construction. RADEX herewith presents exclusively for its readers a special converter circuit designed for this magazine. It is shown in Figure 1. Its originator, Mr. Henry K. Bradford, member I. R. E., is a well-known short-wave expert and technical official of the National Radio Institute, of Washington, D. C.

The converter employs a 58 type r.f. pentode tube as detector, and a type 56 for oscillator. The latter is a Hartley modification with its cathode coupled to the detector. The antenna control grid circuit of the detector is tuned with a short-wave variable condenser, while a similar condenser is used to control oscillations. These two condensers may be ganged on a single shaft, but it is not recommended for sets that are home constructed. It is practically impossible to build coils and circuits that will balance to perfection over the entire wave band.

Converts S. W. to Long

The circuits have been designed to provide a "beat" frequency of between 1,000 and 1,500 kilocycles, to which the broadcast set must be tuned permanently while the short wave converter is used. The two frequencies—that of the incoming signal wave, and that created by the oscillator of the converter—are mixed together and create a "beat" note or frequency that in turn is fed to the antenna terminal of the broadcast receiver. In other words, the short waves are increased in wave length so as to fall within the tuning limits of the broadcast receiver.

For instance, if a short-wave sig-

nal is being broadcast on a frequency of 8,734 kilocycles, and the broadcast receiver is tuned to a silent spot that happens to fall upon 1,360 kilocycles, it will be necessary automatically to create a frequency of 7,374 kilocycles by tuning the oscillator condenser so that a beat frequency of 1,360 kilocycles will be sent into the broadcast set. Beat frequency equals the difference between the received frequency and the oscillator frequency. The antenna condenser tunes the detector to the incoming short wave and the oscillator creates a different frequency, so it can be seen how difficult it is to align the condensers on a single shaft.

Making the Coils

There are two coils in use at one time when the converter is working. These coils represent the only difficult work in making this converter, and it is important that these instructions be carefully followed if satisfactory results are to be obtained. One coil is the antenna or detector coil, indicated by L_1 and L_2 , and the other is the oscillator coil, L_3 . However, because each coil responds only to a limited portion of the short-wave band, it is necessary to wind a number of sets or pairs of coils. A total of eight will be needed, two to a set, or four pairs in all. Blank forms (16 to 23) for the coils are about $1\frac{1}{2}$ inches in diameter, and are fitted with four prongs or pins to fit standard 4-contact sockets (11 and 12). They can be procured from any radio supply house, and many have bakelite handles to facilitate removal from sockets when changing to different wave-lengths.

All coils are wound with number 26 double-cotton-covered copper magnet wire. All must be wound in the same direction. Take four blanks for the detector coils, and four for the oscil-

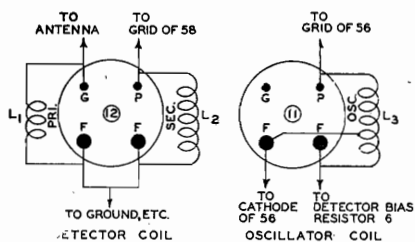


FIGURE TWO

ber panel, a metal panel and base are advised. And, in fact, it will be well if the entire converter is built within a metal container. The metal panel, base, shields, partitions, variable condenser frames, and other parts, must be well grounded to the converter ground connection. A wire must connect this ground terminal to the ground connection or negative B supply of the broadcast receiver with which the converter is used.

Securing Filament Current

The two tubes of the converter obtain their filament current from one of the tubes in the broadcast receiver. The additional load of 2 amperes on the filament winding of the broadcast set will not ordinarily affect the average a.c. set. A wafer adapter, with either four or five holes, to fit beneath some tube that takes 2.5 volts, is used for this purpose. The filament contacts of the 56 and 58 sockets (13 and 14) are connected in parallel with twisted cord to the wafer adapter. A switch to turn the converter on and off is inserted in one of the leads.

The plates of the two tubes require 180 volts. This is taken off also from the broadcast set at some point such as a common plate supply lead, voltage divider, speaker field coil, or in the filter system. Or 180 volts of B batteries can be used, and operation will be smoother and more quiet. Another wafer adapter can be utilized to connect to the plate of some tube that takes approximately 180 volts within the set.

After the radio-frequency choke

coil (15), resistors (6, 7 and 8), and fixed condensers (1, 2, 3, 4 and 5) are arranged in the proper circuit positions, the converter is ready to test. Terminal post marked "A" is connected to the antenna terminal of the broadcast set. The filament adapter is placed directly on top of a conveniently selected socket in the set and the tube replaced. Switch S_1 of the converter is closed. When the converter is not in use it need not be disconnected. The switch is placed at S_2 , which then connects the antenna directly to the broadcast set.

Operating the Converter

Select some point on the dial of the receiver between 1,000 and 1,500 kilocycles where no signal or interference can be heard. Set the volume control at its maximum but without undue noise. With the antenna tuning condenser (9) remaining in one position, the oscillation condenser (10) is rotated until the characteristic "rushing" noise or sound is heard. This means that oscillation is taking place, and the beat frequency will be produced at the proper frequency to which the broadcast receiver is tuned. The two condensers are then simultaneously rotated, very, very slowly, until a short-wave signal is picked up. Further adjustment of these condensers, and perhaps a final micrometer adjustment of the dial of the broadcast set together with its volume control, should bring short-wave stations in at their maximum strength.

CANADIAN CHANGES

Official data from the Canadian Radio Commission enables us to make the necessary revision in all of our lists. A number of stations do not appear in the official list. The presumption is that these will be deleted. They are marked with an asterisk in the list by calls. CJGC, London, and CKOK, Windsor, are combined with the call CKLW. This station will use 540 kcs. at least for a time.

REMARKABLE RECEPTION

in B. C. Band

THOSE of us who give three cheers when we tune in Cuba can only stand aghast when we consider the reception recently reported by C. R. Caraven, 1840 East Georgia St., Vancouver, British Columbia. We have on our desk half a dozen really remarkable verifications of stations in the broadcast band.

The first is from Ostmarken Rundfunk, Konigsberg in East Prussia, on the Baltic Sea east of Poland. It says in part: "After your communication, there can be no doubt that you have heard our sender. Your two noticeable tones, which were repeated three times, stand between pauses. The sender of Konigsberg worked on 1382 kcs. with a strong wave of 600 watts."

The second is from Radio Journal Praha XII, at Praha (The Prague) in Czechoslovakia and from it we quote: "There can be no doubt about your picking up our station although we are emitting on 614 kcs. and not at 616 (!) as you assumed. We are working with a power of 120 k. w. and 488.6 meters wavelength. This is the first time that we have been received in Canada and it would be very interesting for us to have a report from time to time." The exclamation point is our own. How could Mr. Caraven make such a big mistake as two kilocycles when reporting his reception?

The next is from Radio Bucuresti in Bucarest, Roumania: "The reception heard by you has been from station Bucarest. Herewith we acknowledge the reception by you of our program in the day of January 1st."

From CX-26, Montevideo, Uruguay, comes this: "At the same time as we thank you for your valuable data we have the pleasure to confirm to you that reception as that night we

made in fact a transmission dedicated to the hams at a great distance. Before becoming broadcasters we had been enthusiastic amateurs and it is in memory of our reception of DX then that we at times give those emissions dedicated to the radio amateurs. The detailed information that you gave us is for us of inestimable value for the care of the observations and for the considerable distance that separates us. We are pleased to inform you that you are the record-holder for reception from CX-26, Radio Uruguay, at a distance."

For good measure we have this verification from 7ZL, Hobart, Tasmania: "The information you give is correct and corresponds with our station log."

And somewhat in the short waves,



Lots of people who thought they were listening to Greta Garbo on the air, were hearing Alice Hill. She now has the part of Thelma Jasper, Jack Arnold's secretary, in "Myrt and Marge," daily except Saturday and Sunday on the See-Bee-Ess at 7:00 p. m. EDST.

about 1713 kcs. to be exact, Mr. Caraven finds this one although he does not say whether he received it on his regular broadcast receiver or on a short wave set: From The Western India Wireless Association, Poona, India: "We have the greatest pleasure confirming your report of reception from our experimental transmitter VU2BY. This transmitter operates on 175 meters *with ten watts* input, but this last few days we have increased the output to 50 watts and now work on 42 meters between 8:00 and 9:00 p. m. I. S. T. We work Thursdays and Saturdays. Yours is the first real long-distance report we have had and I think, with the power employed, *it must constitute a record for telephony anywhere.*"

"I have been DXing for many years," writes Mr. Caraven, "beginning at a time when foreign reception was considered impossible. It is my firm belief that DXers are today pioneering the field for that future when foreign reception will be an everyday matter. To those desiring

distant reception, it should hardly be necessary to emphasize the necessity of having a perfect aerial and ground, good tubes and soldered connections. Such factors are of vital importance for, without these, foreign reception can not be expected. I have found it essential to have up-to-date lists of transmitting stations, to know times in foreign countries and to have a systematic manner of logging. Through the years RADEX has fulfilled these requirements in every respect and without this assistance, I should not have been able to accomplish such reception."

Mr. Caraven has a Remler 10-tube Superheterodyne receiver, a single-wire inverted L antenna and an Ollie Ross ground. He is a member of the International DXers Alliance.

A Phone Receptor

The Amplivox "Phone Receptor" enables the owner of any radio set to listen with phones to distant radio signals. The outstanding feature of the unit is its ability automatically to cut out the speaker at will, but without unbalancing the receiver. The Receptor should fill a long-felt want where listeners wish to DX during the static season or at late hours when the loudspeaker is undesirable.

The device is made for any type of 4, 5, 6 and 7-prong power tubes. One or two socket-prong adapters are connected with a five-foot cable to a metal headphone-jack box. In the case of push-pull power circuits the tubes are removed from the output stages of the set. The two adapters are then inserted into the sockets. The tubes are replaced in the top sockets of the adapters. When the phones are desired the plug is inserted in the jack box and the loudspeaker is automatically silenced without its circuit being opened. The jack merely connects the phones in series with the grid contacts of the power socket or sockets, and in turn grounds the grids of the power tube

(Continued on page 33)



A microphone view of the broadcast of the Best Foods Musical Grocery Store. Herbert Polesie, Jeannie Lang and Tom Howard and his derby. NBC-WEAF net, Fridays at 9:00 p. m. EDST and again at 12:30 a. m.

FADING, Broad Tuning and OTHER TROUBLES

• • • *By the* TECHNICAL EDITOR

DURING evenings and early mornings the radio programs come in good for a while, then the reception becomes blurred and distorted for a minute or so. Then it clears up but only to do the same things again. The service man checked my Philco 112 and found nothing wrong. It seems to do this on all stations. Is it a disadvantage of the automatic volume control?

Fading accompanied by blurring distortion is characteristic of distant reception, and is attributed to wave-interference. This is made more pronounced by automatic volume control, which brings the fading signal in strong at its lowest field strength at the time when wave-interference occurs. When signal fading is absent, the automatic volume control naturally is working at its minimum volume and the interfering station is drowned out and reception is clear. Then as fading comes on and the a.v.c. comes into action the interfering station becomes louder and you have distortion and blurring. When fewer stations are on the air there is less likelihood of so much station interference.

Broad Tuning

I have an Acme 6-tube receiver and it seems to tune very broadly on nights when reception is good. This prevents stations from coming in clearly at all times.

The trouble you are experiencing is due to the fact that so many stations are now on the air. The more power a broadcasting station has, and the louder its signals are received, the more dial space it covers on a receiving set. When reception at nights is very good, signals come in

louder and more stations are heard. Thus, reception is spread out over a wider portion of the dial in a ratio proportional to the selectivity of the set, and more interference is noted.

Frequently selectivity in an old receiver becomes poor because of the accumulation of dust within the set. A radio set should be cleaned carefully twice a year. The plates of the variable condensers must be polished carefully and cotton pipe cleaners are best for this purpose. All parts should be brushed and dusted off. If tubes are old, they should be tested, and replaced if weak.

Phones on AK 55

I wish to attach headphones to my Atwater Kent model 55 set, but wish advice for this particular receiver.

Your receiver has two power tubes in push-pull amplification. We suggest that you use the hook-up that is shown in Figure 4 of the article in the February issue of RADEX, as this corresponds to the circuit in your set. Use the wafer adapter shown in "A" of Figure 2 for the -45 tube, or the one at "B" for the -47 tube. Place an adapter beneath each tube in the same position shown in Figure 2. Insert the tube in its socket and press down on the wafer and fit snugly in place. Flexible wires, which have been soldered to the proper lug, as shown in Fig. 2, then run to the phones through the condensers and resistor. Two wires run from the output of the audio transformer which is fed by the two power tubes, either -45s or -47s. They terminate at the socket into which the speaker cable is plugged. The silencing switch can be placed in either one of these two wires which are colored yellow with

a black trace through them.

Locating Tubes

Can you tell me the location of the various tubes and the value of the volume control in my Silver Marshall 9-tube receiver?

We assume that your receiver is model 36A. The model 724 is identical, except that it has only three variable condensers in the gang instead of four as in the 36A.

Looking down upon the receiver, standing at the rear, the tubes are as follows: Left to right in a row beginning in the rear of the four-gang variable condensers—the first -24 is the radio-frequency tube; second -24, the first detector; third -27 is the oscillator; fourth -24, the first intermediate frequency tube; fifth -24, the second intermediate frequency; and sixth -24, the second detector. In the rear will be found the -80 rectifier, and two -45s, connected in push-pull audio power output.

The value of the volume control is 3,000 ohms. It is a simple potentiometer with the arm and one end connected together to one end of a resistor of 375 ohms which in turn is grounded. The other end of the control connects into the circuit. In the 724 model receiver this control is similar except that the additional 375 ohm resistor is not used between the control and the ground.

New R.F. Amplifier

What about the "Amplitenna" device, and will it increase the sensitivity of my receiver?

The "Amplitenna" scheme, which has been published in another radio magazine, has not been tested by RADEX. However, it is said to increase antenna signals before they pass into the radio set. It is a sort of pre-stage signal amplifier. The drawback, which has always hindered these radio-frequency untuned amplifiers from being in wider use with radio sets, is that all static and other noises are so amplified as to prevent even fair reception on the set. A high noise level is handed the set right at

the start and cannot be eliminated. Such r.f. amplification schemes, when reception is clear and perfect, will tend to increase the range and sensitivity of smaller sets, those of few tubes and little or no radio amplification.

Two-Volt Tubes

I wish to use 2-volt tubes in my Radiola 20 battery set that now utilizes the -99 tubes. Please explain what to do.

The -30 series of tubes can be used in your set in all positions except the power tube (now a -20), for which a -31 should be substituted. If you use a 6-volt A battery or an eliminator it will be necessary to insert a suitable resistance in the filament lead in order to cut down the voltage to the 2-volts needed for the new tubes. We recommend the use of a 2-volt storage cell or the new Aircell battery. The present volume rheostat will be turned all the way on, and slightly less if the Aircell is used. The resistance, if 6-volts are used, should be of 12 ohms and is inserted in series in the yellow A plus wire next to the rheostat. The same B battery for the -30s and the -31 power tube will be suitable, and the same holds good for the C battery now on the -20 tube.

Short Wave Harmonics

My short wave receiver brings in local stations and some others that are not on short waves. Also I use this set and keep it near my Radiola 3 battery receiver, using the same aerial and ground. What seems to be wrong here?

All short-wave sets bring in harmonics of local or other strong broadcasting stations if their harmonics fall within the range of the particular short wave coil being used. These harmonics are always multiples of the original frequency and are two, three, four, five, etc., times the broadcast frequency. For instance, if a station broadcasts on 1,000 kcs., it will emit harmonics on 2,000, 3,000, 4,000, 5,000, etc., kilocycles—all of which

will be within the short wave range.

A short-wave set should never be placed in close proximity to another tuned circuit, such as a broadcast receiver. The latter may have serious effects on short-wave reception unless the latter set is very well shielded. A separate aerial must be used, and never run the two sets at the same time if fairly close together.

Phones on Zenith 430

My new Zenith, model 430 receiver, is a new one using dual-speakers and some new type tubes. How can I attach headphones to this circuit which is not fully covered in your February issue?

You can connect phones to the two 59 power tubes, but you cannot obtain adapters for these 7-contact sockets. It will be necessary to make the connections to plate contacts of the power tube sockets. These may be located by looking down upon the sockets: The two large holes at the bottom are the filament or heater terminals; next on the right is the plate; two grids, numbers 1 and 3, are tied to the plate. Thus they all have the same potential. Any of these and the plate may be used to attach the phones as shown in Figure 4 of the February, 1933, article.

Or the phones may be connected as shown in the upper left-hand corner of Figure 3, by attaching to the 59 driver tube in the right rear corner of your Zenith chassis. Connection is made to the plate of this tube. You can also attach the phones to the 56 first audio tube with a 5-hole wafer adapter. The dual speakers are connected together, and the wires leading from the output transformer may be considered as feeding just a single speaker. The silencing switch may be put in either of the leads from the transformer output.

A Separate A.V.C.

Can I procure a separate automatic volume control device to attach to my receiver which is not so equipped?

We do not know of any separate automatic volume control that can be



No wonder Raymond Knight goes "Cuckoo" listening to a perfectly charming singer like Mary McCoy flitting her notes in burlesque. For she can sing. She had leading roles in two Broadway operetta hits after studying under Mme. Schumann-Heink. At 10:30 p. m., Saturdays, EDST, on the NBC Blue chain.

attached to a radio set. Because the automatic volume control is a complicated affair, requiring changes in wiring and the circuit of the receiver, we doubt whether the idea is practicable. When a.v.c. is designed for a set having only manual control it must be built within, and attached to, the parts and circuit of the broadcast receiver.

RCA 50 With New Tubes

Can new tubes be used in my RCA-Victor model 50 receiver?

The first r.f. tube in your set, a -35, may be replaced with a new 58, provided a suitable adapter to convert the present 5-contact socket to a 6-hole socket is used. We believe a small improvement will be noted, and there will be a saving of current consumed. We do not recommend changing the first and second detectors or

intermediate frequencies. The -47s in power amplification cannot be improved upon in this set.

Converter With AK 85

Can my Atwater Kent model 85 receiver be used with some kind of short-wave converter?

Your receiver can be used with any short-wave converter on the market. See the March, 1932, and May, 1933, issues of RADEX for articles on these converters. The instrument is simply attached to your receiver and all short-wave tuning done by a single control on the converter instead of the broadcast set. They are very satisfactory, and perhaps you have read of some of the remarkable results our readers are obtaining with this kind of radio reception.

Dial Reads 0 to 100

The dial of my Stewart-Warner short-wave converter reads 0-100. How can I tell where different frequencies can be located?

Since your dial on the converter is divided into 0 to 100 spaces it is difficult to state where certain kilocycles will be found without experimentation. The preparation of a curve from a few known stations is the most satisfactory plan. This converter has two switch positions and the dial readings change when the switch is moved. Thus, if a straight-line variable condenser is used, the 0 reading should be for either 15 or 65 meters, and the 100 for 65 or 200 meters, provided the entire coil and condenser is used when tuning. This is purely problematical. At 50 on the dial with the low and high wave switches, you should get either 40 or 135 meters, respectively. Various other wave lengths or frequencies should be heard at intermediate points, and these can be calculated. But since these are theoretical readings, actual wave lengths may be found some spaces to either side of the estimated number on the dial.

60 vs. 30 Cycles

Will my Majestic "B" eliminator,

which works on 110 volts at 60 cycles, operate the same on house current of 30 cycles in another locality?

No alternating current device designed to operate on 60 cycles will operate satisfactorily on 30 or 25 cycles. If you use your eliminator on 30 cycles it will not deliver its full output and there will also be much hum. The primary coil of the transformer will tend to heat up and use considerable current. The resistance of a coil of wire at 60 cycles is higher than at 30 cycles, and therefore the coil becomes a carrier of more current which it cannot absorb—it is a partial short-circuit across the 110-volt line to which it is attached. There is nothing that you can do except replace the transformer and parallel condensers in the filter system, which latter should be twice the size of the originals, in order to reduce the hum that would otherwise arise.

Short Wave Circuits

Which is the best for a 2-volt and 3-tube short-wave circuit: One r.f. tube, one detector tube, one audio frequency tube; one detector, two audios; or two r.f. tubes, and one detector tube?

We believe you will obtain better gain if you use a -32 tube as a radio-frequency amplifier and a -30 as a detector, with a -31 tube as an audio amplifier. Two stages of r.f. followed by a detector will give greater gain, but the volume will be low because there is no audio amplifier tube. Of three tubes, therefore, a r.f. amplifier, a detector, and an audio amplifier, will give the best all-around service and satisfaction.

140 Zenith Tubes

Can I change the tubes in my Zenith model 140 receiver to still newer types and get better satisfaction?

Your receiver now employs 56, 57, 58 and 59 tubes. We cannot advise any change from these tubes. This set is the latest, except in a few re-

(Continued on page 79)

THE WORLD'S *Most Friendly* STATION

● ● ● *By* AMANDO CESPEDES MARIN

Editor's Note: We are pleased to present this message to our readers from the builder and operator of what is undoubtedly the most unique station in all the world, TI-4-NRH. We are giving it in the author's own words that our readers may enjoy the pleasant sincerity of the writer. In no other way could they catch the extreme friendliness which the author so evidently feels for the radio listeners of all the world.

FIVE years ago, by this time, the waves from a little tiny broadcaster were sprouting from 3800 feet shack, in the ever green mountains of near-by the city of Heredia, in the Benjamin Republic of the Americas, the girdle of the Continent, known as Costa Rica.

And since then all the readers of RADEX have known more or less of the marvellous success of the old NRH, a pure amateur station, built for fun and maintained through out by the help of amateur fans in the world, all admiring the so many events occurred in the "junk" amidst friendship, flowers and coffee trees.

It is the only known case in the world, that with tiny $7\frac{1}{2}$ watts power, the whole continents were conquered with mere broadcasting efforts to please, in three years. Then, for two more years the power was increased

to 15 watts, and with them the NRH obtained long DX records from India, Russia and Japan, Denmark, Holland, and South Africa, not obstant that North and South America became obsolete to the waves, for some skip effects.

It has been all very queer, and today, when the NRH files have 16,800 letters from 46 countries on earth, you can not but repeat the phrase of Mr. Ragle in Massillon, Ohio, which reads: "—and I certainly hope we all hear you daily from now on, as you seem to be the only friendly station there is anymore."

Broadcasting Is Fun

It is all love down here and fun, therefore we all make merryment, and when Miss Cespedes speaks, we laugh and when my boy plays the piano we applause and when the music is pretty I whistle, no matter if 52 years is upon me. I am just beginning to live. And radio is my plaything. The voice of the youngest announcer is that one of Alvarito, 4 years old, and the only announcer in the world, which has been heard ever since 45 days old.

The NRH has been a friend and it ever will be, because she does not carry paid up advertising of any nature, but that of his owner announcing his gospel of Friendship, or the headquarters of the Union Radio Americana, a big Club started for and by the listeners and radio followers in the American Continental countries, under the Spanish language domain.

The station works every evening from 4:30 to 5:30 p. m. central standard time, and is using two bottles DeForest type 503A in push pull, which nominally most give at least 200 watts. The modulation is done with two 845 type jugs, but one of them is under silence, and thus, some

(Continued on page 79)



Here's one reason why visitors try to witness the broadcast of Pond's Program each Friday night at 9:30 EDST in the Red studios of the NBC. Her name is Lee Wiley.

TRIALS *and* TROUBLES

of the EDITOR

THE May issue of this compendium of radio information was all ready for the press when the first reports of the kilocycle earthquake in Canada first reached us. Time and Tide and RADEX can wait for no man. Much as we disliked to do so, we had to let the May issue go forward without the latest Canadian data.

Press reports from the Dominion are apprehensive that this reallocation is merely prophetic of others yet to come and that the new Radio Commission in Ottawa is going to follow the modern education principle of "learning by doing." Many complaints of conditions following the recent shift are coming from Canada, some intimating that it is all a part of a vast conspiracy on the part of the new Commission to keep U. S. vibrations out of Canada or at least out of Canadian sets.

Our sympathy goes both to Canadian listeners and to the new Radio Commission. It's some problem. We hope that we shall be able to give a complete picture in the proper departments of this issue of the Canadian broadcasting situation "as is." Some of the reports that have reached us are contradictory and we are awaiting official word from the Ottawa authorities.

Radio in A B C

Our Technical Editor has under consideration a series of Simple Lessons in Radio to start with the September issue. These would be written in as nearly non-technical language as may be used to present a highly technical subject. The plan is to begin with the simplest phase of radio and lead the reader, through a series of ten monthly lessons, into an understanding of the real principles underlying radio. These articles would

constitute a home-study course in radio. How many of our readers want Mr. Dashiell to prepare such a course? Let us hear from you. As the ads say, "Write now—today."

For years we have wanted a really good world globe large enough to be of real, practical value. We have found it at last and one of them now ornaments your Editor's desk where it is used daily. It is surprising what a different aspect the countries of the world take on when presented in globe form and how many things are made clear that cannot be grasped from a series of maps on different pages. Heretofore a good large globe cost from \$15.00 to \$20.00 but at last we have found one at a very reasonable price and we are passing the advantage on to our readers. With one of these globes and a RADEX Time Converter, the radio listener can say "OK, Australia."

Building Sets

There is still a widespread interest in building a set of one's own, particularly the smaller sets of one, two and three tubes. No music seems quite so sweet as that which comes from a set which one has himself created. As a child is to its mother, so a radio set is to the one who constructs it.

"Now that we have heard so much about two-tube records, why not have a one-tube set competition and see who can build the best set ('bloopless' by all means), and the most efficient hookup using one of the new tubes," suggests Douglas Wauchope, 501 S. Candler St., Decatur, Ga. "Those who 'bloop' should be disqualified and also dismembered! Do you think there is anything in the theory that double-wire aerials are less efficient than single? I have been told that each wire has a tendency to neutralize the other, thus lowering the

signal strength. At the present time, my aerial consists of a double copper ribbon system replacing a seven-strand one. Now I notice more difference on my crystal set than my tube receiver. Stations come in much louder on the former receiver than before, while there is some, though not as much difference on the latter. Perhaps the ribbon gives greater pick-up than the wire, but has anybody really settled this question of multiple-wire aerials?

"Incidentally, some of your readers might be interested in my crystal set, which is the most selective that I have ever been able to build. Living only two miles from WSB's transmitter and six from WGST, the first can be practically eliminated while the latter comes in fine even with only one-twentieth the power. All this on my double-wire aerial about 175 feet long. With this arrangement. I have listened to WENR, WSM, KDKA, WLW, WGST, WSB and one other Chicago station. No battery is used to bias the crystal. Anyone desiring this hook-up may have it by sending me a stamped, addressed envelope. Do you know anything about the 'Tunicoil' tuner manufactured by the Radio Products Co., of Kansas City, Mo.?"

"Here is another entry for your 'baby' department, which seems to be ever growing," remarks Bill McPherson, 134 Murray St., Peterborough, Ont. "I have my home-made one-peanut tube set, on which I have received 202 stations in a little over two months. I have received all the 50 k.w. stations in the U. S., 4 stations in Mexico, CMJK and CMAF, Cuba. Some of my best catches in Canada are CKY, CKCR, CFCO and CHGS. I would like to know when to tune in KOB."

We hesitate to give records made on regenerative sets for fear we will encourage readers to build such sets which are nearly always unpardonable squealers and may easily cause annoyance to other listeners for blocks around. Richard Hanau, 308



A favorite of many thousands of children, Madge Tucker plays "The Lady Next Door" Mondays, Tuesdays, Thursdays and Fridays at 4:45 p. m. EDST and Saturday at 5:00.

West 11th Street, New York City, writes us of two one-tube sets he has built, the first one using a screen-grid tube and the second a 230. He logged a total of 301 stations with the two sets.

The 24 Hour Pest

"I wish to refer," writes H. F. Strain, 15031 Vose St., Van Nuys, Calif., "to the article on page 19 of the April number by Mr. Alfred H. Bacon, New Westminster, B. C. I think his article is swell in regard to the 'wave hogs' and I most heartily agree with him, and especially in regard to our local KGFJ. I have been DXing since 1925 and I have been knocked out of getting nearly every station on the 1200 channel simply due to KGFJ. The only ones that I have on that channel are stations that I got at some time before they went on that frequency. I think it is an outrage and a shame. I know that

there are many more DXers who agree with me. It does seem as though if enough pressure was brought to bear and enough protests sent in that we could get the F. R. C. to do a little something about it. I would suggest that we all pull together and try to get KGFJ to sign off for at least one hour a night, say from one to two, or two to three, during the DX season each year, say from the first of October until the first of May. I don't think that would be asking too much and it would give us DXers here on the coast at least an even break. It would then show that KGFJ was at least human anyway."

And the Unlicensed Station

"Here is some more dope on out-laws," complains R. B. Rolfe, 1741 Burnett Ave., Waco, Texas. "The Rosebud station, 720 kcys., has apparently gone off the air, as I can't raise him any more. But there is BLTX on 1000 kcys., in Belton, Texas. They use the slogan 'The Playground of Central Texas' and there is also a station in Taylor, Texas, on 980 kcys. They don't have any special time on the air, as I get them at odd times. The Belton station also comes in at odd times. The Taylor station has never given any call other than 'This is the Cotton Belt station in Taylor.' There is also a station in Temple, Texas, with studios in the Doring (?) Hotel. Their call is also a slogan, 'The Voice of Bell County,' which is all I have ever heard them announce. What has become of XEPN? I can't get him any more. He used to be good 24 hours a day, on 585 kcys., but now I can never get him at all. My radio is a Philco Model 90 9-tube Baby Grand, and 1500 kcys. is as low as the dial reads. The Home Benefit Life Insurance Assn. station in Marlin comes in about as far as 30 kcys. would be below 1500. Are they a shortwave station? My pals say they are. I don't see how they could be."

Arthur Johnson, Secretary Newfoundland Boxing Commission, Box

E5103, St. John's, Newfoundland, sends us this interesting information: "Re: Wrestling Match Enquiry, page 27, April RADEX. While I cannot verify the source of the program, this may throw light on the subject. Wrestling by 10-minute rounds is common in many parts of the British Empire—England, South Africa, New Zealand, Australia (and we have also had some of it here). The short periods and rests give faster and more varied action when the wrestlers are used to the system. Therefore it is safe to assume that it was an Empire station, and from the time of reception, to select New Zealand (or perhaps Australia) but wrestling is more popular in the former."

Some Station Affinities

"Alfred H. Bacon, New Westminster, B. C., writes for help about stations who almost absolutely block various kilocycles," writes Miss C. A. Brinkerhoff, 317 Clinton Ave., Oak Park, Ill. "Now I have never been able to tune in KGFJ on 1200 kcys., though I do get KERN and KWG. It seems to me that various radios have super-sensitiveness, for if I bring in a station once that special one is almost always in evidence. On 570 kcys. WEAO and WNOX are always there in full force, and only in specially good DX weather can other stations cut in. On 580 I can sometimes cut through WIBW. On 600 WMT, Waterloo, Iowa, day and night is never silent it seems to me. 620 gives WTMJ; 660 WEAJ; 880 WSUI; 910 XEW; 960 XEAW; 1200 WWAE; 1210 WSBC or WEDC; 1300 KFH; 1310 WCLS or WKBC spoils all DX usually until after 11:00 p. m. KFJZ is ever evident on 1370; WHFC drowns out everything on 1420 until early morning. These are a few stations which bother me for early DX. Perhaps after 1 or 2 a. m. it would be better and locals would be off also, but it is marvelous how a fine selective radio can act so strangely at times."

Our good friend, Raoul Karman of

CMCF, Havana, Cuba, helps us materially in bringing our Cuban data up to the moment. He thinks there will be three or four new stations in that country soon. Senor Karman adds: "I must congratulate you on your campaign for better reports which has already given splendid results. The percentage of doubtful reports in two late programs I gave this season, was almost Zero—only two or three 'stamp-collectors' in 140 reports."

"May I make a suggestion?" inquires Earl R. Roberts, 105 Gomber Ave., Cambridge, Ohio. "In your list by frequencies, instead of listing the Mex's as being in Juarez, Mexico; Morelia, Mexico; N. Laredo, Mex., etc., why not list them by their states? We know that since their calls begin with 'X' they are in Mexico, but in order to find the state, have to look in the list by states. Would it be possible to list them as Juarez, Chih.; Morelia, Mich.; N. Laredo, Tams.; Mexico City, D. F., etc.?"

This suggestion is well made and there is no reason at all why it should not be put into effect.

Converter Brought Zealand

W. T. R. Morris, Jr., 3219 Garland Ave., Richmond, Va., reports that he has just brought in his first really distant broadcast station. Says he: "Received my RADEX Map and Time Converter a few days ago and have certainly put it to use. I surely do urge those other DXers who have not as yet sent for theirs, to do so immediately. It has enabled me to bring in ten new stations on the short waves and is responsible for my first New Zealand long-waver."

"Early on the morning of April 23rd, I received a station on 1170 keys. with the call letters of WJKY, Sandusky, Ohio," reports George R. Schneider, 3148 Yorkshire Road, Cleveland Heights, Ohio, who wants to know what this station was doing on the broadcast band. Who knows WJKY?

Sufficient data for a DX Club Di-



Presenting the "Men About Town" who provide the vocal harmonies for B. A. Rolfe and his Terraplane Orchestra on the Saturday Night Dancing Party over the NBC Red network at 10:00 p. m. EST. Will Donaldson and Frank Luther (top) and Phil Dewey and Jack Parker (bottom).

rectory will not reach us in time for this issue. We hope secretaries of the clubs will send us the information requested in the May issue, so that we may have a complete roster of the leading DX Clubs of North America in our September issue.

"May I draw your attention to the fact that station WKAV, Laconia, N. H., mentioned in the April RADEX, has been off the air for at least two months?" complains B. B. Bosworth, 50 Clymer St., Burlington, Vt.

"I listened to a DX program over XEFV, Juarez, Mexico, on March 26," writes Charles Meyer, Jr., 411 Blake St., St. Joseph, Mo.," and I distinctly heard them say that XEFV was the greatest little 50-watt station in the world, while in the April RADEX you list them at 100 watts."

SHORT STORIES *of your* FAVORITES

• • • By "Betty"

A RUNAWAY boy from New York, hungry and broke, leaped at the chance to make fifty cents by appearing in an amateur night show at the Bowdoin Square theatre in Boston.

Years later that boy became the first \$5,000 a week headliner and master-of-ceremonies in the great picture-and-vaudeville houses of America.

Now the boy, Phil Baker, is starring on the Armour program, heard every Friday night over a coast-to-coast NBC (Blue) network at 9:30 p.m. EDST.

The story of Phil's stage career, from that amateur night in Boston, covers well over twenty years.

Returning to his New York home after the runaway to Boston, he eventually became secretary to Carl Laemmle in the old IMP Film Company. Mary and Lottie Pickford and King Baggot were the company's stars. Bored by a secretary's chores, young Phil spent all his leisure moments at a movie house around the corner from his home. He almost lived there, he says, sitting down front and watching with envy the nimble fingers of the girl pianist. One hot night the girl was taken ill and had to leave. The picture was continuing without music when Phil, without invitation, slipped down to the piano and began to play. He could only play three tunes, among them "Hearts and Flowers," but the manager gave him a job, and he was really started on his career.

And Then to Vaudeville

Phil's first real stage venture was in vaudeville, accompanying a violinist on the piano. Later he formed the team of Bernie and Baker with Ben

Bernie, the "Old Maestro" of today. By that time Phil had deserted the piano in favor of his accordion. When the team split, each became a star in his own right. When America entered the World War, Phil joined the Navy. "That did wonders for me," he declares. "I never had the nerve to speak a line on the stage until I put on that uniform. And now, well, even Beetle can't keep me quiet."

A flash at Phil's career since the war years brings in the names of some of the most successful musical comedies and revues the American stage has seen. He was starred in



With Myrtle Vail out of "Myrt and Marge" by reason of an automobile accident, Bobby Brown, director of the series, is a busy man. In addition to directing, he now writes the script, a task formerly performed by Myrt. Here's Brown conferring with Marge on the new plot which, by reason of necessity, revolves about the question, "Where is Myrt?"

"Greenwich Village Follies," and in the "Passing Show." He was a leading factor in the two-year run of "Artists and Models." He was the star in the "Music Box Revue." His comedy and his accordion helped a "Night in Spain" to its successful run of two years.

Only a little more than a year ago, Phil, teamed with Fanny Brice and Ted Healey in "Crazy Quilt," astounded the theatrical world by carrying that production to every key city and every likely one-night-stand in the country.

Outstanding in Phil's record is a run of twelve consecutive weeks in the Palace Theatre in New York. That was the achievement that made him the first \$5,000 a week headliner in history. Phil acted as master-of-ceremonies in addition to producing his own act.

Strange as it may sound, Phil doesn't relish the idea of being called a comedian. Every time he begins rehearsal for a new show, he extracts a promise from the management that he be given one classical solo on his accordion, and he has carried that idea into his radio programs.

The Rise of "Myrt"

Once upon a time there was a beautiful chorus girl who fell in love with the tenor lead. The girl was Myrtle Vail, known to several millions of radio listeners as "Myrt." The tenor lead is George Damerel, famous as the "Prince" during the long run of "The Merry Widow."

Myrtle stepped into the theatrical picture at the age of fifteen, in the back row of the chorus in the then-current show, "The Umpire." From her isolated position she took one long look at the rising star, Damerel, and fell in love. Damerel was so busy with the make-believe love-making on the stage that more than a year passed before he realized the real thing was going on back stage. Then came a prompt marriage and one of those story-book types of stage partnerships.



Phil Baker and his Accordion

They have two children—the daughter, christened Donna, is now better known as "Marge," her mother's partner in the "Myrt and Marge" show. The son, George, Jr., is now 14 years old, a student in a California military academy.

Two years after their marriage the Damerels were playing opposite one another in "The Merry Widow." When Franz Lehár wrote the first condensed version for vaudeville presentation this couple grabbed the rights and toured the big-time circuits with the piece, as "Damerel and Vail." In eight years they crossed the continent eleven times in the two-a-day. Then young Donna was placed in a private girls' school in Chicago, with instructions that anything pertaining to the stage be omitted from her curriculum. Myrt went into temporary retirement, and George, Jr., appeared on the scene.

A year later she was back with her husband in vaudeville. This time she was writing the acts.

When Donna was fifteen, she served notice on the family that she was joining their act, or some other act—this in spite of the private school influence. The show became Damerel, Vail & Company," Donna being the "& Company." For two years she toured with mother and dad. Then they bought a chicken farm, and took up real-estate as a sideline, and a sub-division was soon flourishing.

When the stock market took its famous nose-dive, dragging real estate values along with it, Myrt remembered those vaudeville skits she once wrote. She remembered all of the real-life tragedies and comedies behind the scenes, often far more vividly than those before the foot-lights—and "Myrt and Marge" was born. Of course, there were a few difficulties in getting those first sample scripts before P. K. Wrigley, but a girl who'd spent some sixteen years fighting for success could hardly be stopped by a half-dozen secretaries. And in radio Myrtle Vail has attained a success greater than that afforded by musical comedy, vaudeville, chicken-farming, or real estate.

The Official Weeper

Most young ladies can get along with their weeping with the aid of a small hankie, but earning a living by crying requires more equipment. And any time you hear a baby crying on NBC programs, you can be pretty sure it is Sally Belle Cox, aged twenty-five.

The beginning of Miss Cox's unusual professional career was described in a recent issue of the New Yorker magazine. "Miss Cox seemed destined for a tearless life when, five years ago, she got a job at an orphan asylum in Cleveland," the New Yorker said, and told how she amused the children by imitating a wailing child. "It brought down the house, and the squawler shut up and let somebody squawl that could squawl. One day she read in the paper that the one sound the radio people had had no



Sally Belle Cox

success in imitating was the wailing of a baby. Miss Cox put on her hat and went right up to the National Broadcasting Company. She cried for several officials, and was solemnly hired."

She uses the pillow to help her cry in various ages, from an hour to fourteen years old. She laughs and coos, too, and her varied imitations are heard on many NBC programs, including the Maxwell House Show Boat, on Thursdays at 9:00 p.m. EDST, over an NBC (Red) network, on which she has the important role of Henry Maxwell.

* * *

You can't tell these radio artists by their names—particularly after the numerologist has been working on them. Latest to fall under the spell of the "number lady" are the Neil Sisters, that trio of blonde blues singers. In the home town of Indianapolis, Lucille, Ann and Gwyneth are known as the Neal girls. But they were told that luck, fame and fortune awaited them if they put an "i" in their name.

THIS SUMMER *on the* SHORT WAVES

• • • By PAGE TAYLOR

MANY of our readers who are constructing the converter described in Mr. Dashiell's department are probably wondering just what they will be able to hear on it before "good DX commences again in the winter." These persons who have tuned exclusively in the broadcast band may be surprised to learn that the greatest distances are more easily accomplished on short waves during sultry summer weather than during the winter months. Many stations are very difficult to tune during the winter while they are heard with tremendous volume in the summer. This is particularly true of the Australian stations.

On completing the converter the builder should confine a few days to becoming familiar with it, following the procedure outlined in the article "Breaking into the Short Waves" in the May number of *RADEX*. After the required fundamentals have been acquired, if the tuner will confine his efforts to the ten best stations mentioned this month he will avoid many pitfalls usually encountered by the beginner. Perhaps of greatest interest among the stations listed are the two Australian stations.

The Friendly Australians

These friendly stations are among the oldest short wave stations in the world, VK2ME having broadcast the first British Empire Program on September 5, 1927, on a wavelength of 28.5 meters. Since that time Amalgamated Wireless has pioneered in many radio activities, adding immeasurably to our store of radio knowledge. Their efforts to please by transmitting interesting and instructive programs are earning for them the reputation once held by PCJ, that of being the station with the largest audience in the world.

The present series of World Wide

Broadcasts was inaugurated on July 5, 1931, and continues to hold the interest of thousands of fans. These programs are transmitted every Sunday morning and may easily be heard by anyone with the most simple kind of receiver. The schedule of 2ME is changed slightly each month so as to obtain optimum results in each zone to which the various parts of the program are addressed. The schedule for the next three months will be as follows, time in EST.

June: 12 to 2 a. m.; 5 to 9 a. m.; 11:30 a. m. to 1:30 p. m.

July: 12 to 2 a. m.; 4:30 to 8:30 a. m.; 11:30 a. m. to 1:30 p. m.

August: 12 to 2 a. m.; 4:30 to 8:30 a. m.; 10:30 a. m. to 12:30 p. m.

VK3ME is heard on Wednesday mornings from 5 to 6:30 and on Saturdays from 5 to 7 a. m., EST. De-



Permit us to present the distinguished Lieutenant Commander Rudy Vallee in his pretty new uniform. Rudy enters the navy via the staff of the Governor of Maine. The Lieutenant Commander still directs the Fleischmann Hour on the NBC-WEAF net each Thursday night at 8:00 EDST.

spite the fact that 3ME uses only 4000 watts as compared with 2ME's 12,000 watts, the volume and quality of the two stations is about equal.

Amalgamated Wireless is very anxious to receive reports of reception and always acknowledges them. They may be addressed as follows:

VK2ME: Amalgamated Wireless (A/sia), Ltd., 47 York St., Sydney, Australia.

VK3ME: Amalgamated Wireless (A/sia), Ltd., Box No. 1272L, Elizabeth St. P. O., Melbourne, Australia.

Ten For Practice

Following are the ten stations most often reported to us by readers. These are recommended especially to beginners as the most dependable and most easily tuned of the stations broadcasting musical programs regularly.

- 6,050 49.56, GSA, Daventry, England.
- 6.119 49.00, YV1BC, Caracas, Venezuela.
- 6.618 45.31, PRADO, Riobamba, Ecuador.
- 9.503 31.55, VK3ME, Melbourne, Australia.
- 9.510 31.53, GSB, Daventry, England.
- 9.585 31.28, VK2ME, Sydney, Australia.
- 9.862 30.40, EAQ, Madrid, Spain.
- 11.711 25.60, Pontoise, France.
- 11.753 25.51 DJD, Zeesen, Germany.
- 11.800 25.40, I2RO, Rome, Italy.

The T-P Phones

We have been advised that the stations owned by Transpacific Communications, Ltd., located at Dixon, California (KWO, KWU, KWV and KWX) have been licensed to add Manila as a point of communication, while KEE at Bolinas is now authorized to communicate with Shanghai, Manila and Honolulu. These circuits are not yet in operation, but the trans-Pacifics will be as follows:

The stations of the Radio Corpora-

tion of the Philippines, Plaza Moraga, Manila: KAX, 19.980; KAY, 14.980; KAZ, 9.990; KBI, 21.140; KBJ, 13.240; KBK, 6.680; KTO, 16.240; KTP, 8.120; KTR, 10.910; KUS, 18.220; KUV, 12.280; KUW, 9.110. The frequencies are given in megacycles. Of these, KAY and KAZ have been heard testing by readers.

Whether new stations will be built at Shanghai is not known, but it is believed that the stations of the Chinese Government Radio Administration will be brought into use. These stations are, XGK, 18.692; XGL, 7.963; XGN, 16.383, and XGO, 7.575 megacycles. They may be addressed at Sassoon House, Jinkee Road, Shanghai, China.

Mr. E. N. Luken, a RADEXER in Crooks, S. Dak., reports station WXH at Ketchikan, Alaska, on 45 meters or 6.662 megs., testing with WBD or WVD, Seattle, Wash., on 45.3 meters or 6.618 megs. It appears that the long awaited Alaskan radiotelephone circuit is now in operation.

Airways and Police

Of particular interest are the new Canadian Airways stations. CJU, Winnipeg, Manitoba, operates on 86.9 and 97.7 meters (3.450 and 3.068 megs.). The other stations are UYO, Echo Bay, Northwest Territories; CGK, Ft. Chipewyan, Alberta; UYN, Ft. McMurray, Alta., and UYM, Fort Rae, N. W. T. These four stations transmit on 2.481 megs. (120.8 meters); 3.450 (86.9); 4.751 (63.1); 8.353 (35.89), and 12.951 (23.15).

Several new police stations have recently been licensed, the first of these not yet having call letters assigned. It is located at Asheville, N. C., and uses the 2458 kcs. frequency with 100 watts. Others are: WPEL — W. Bridgewater, Mass., 1574 kcs., 500 watts. WPFI—Columbus, Ga., 2414 kcs., 50 watts. WPOF—Knoxville, Tenn., 2470 kcs., 100 watts.

Station WPEY at Chattanooga, Tenn., has been deleted.

Hialeah, Florida, station WNC, has been heard working with several South American countries in addition to the formerly chronicled Pan-Americans. All the stations which have so far been heard talking with WNC are listed here: Argentina, LSR; Bahamas, VPN; Chile, CEC; Colombia, HJB and HJP; Costa Rica, TIR; Guatemala, TGA; Nicaragua, YNA; Panama, RXF; Peru, OCI, and Venezuela, YVQ. CEC, OCI and LSR are usually heard near 3-4 p. m., EST. and TGA and YNA near 5-6 p. m. The others are on the air at various times during the day from 10 a. m. to 6 p. m.

From the Other Side

One of our overseas correspondents reports some stations that may interest readers who like to fish for those hard-to-get ones. Mr. H. N. Walker of Brisbane, Australia, reports that VK6AG at Perth, Western Australia, has returned to the air on 40 meters, transmitting at a time that is hardly favorable for general reception in the United States. Readers on the Pacific Coast may be able to hear it near 6 a. m. on Sundays, Pacific Time. The station of the Kuala Lumpur Radio Society located at Kuala Lumpur, Federated Malay States, broadcasts several mornings each week on 49.1 meters with the call sign ZGE. It has been heard a few times in the U. S. A. near 7 a. m., EST. A station that should be received here is VWZ at Kirkee, Poona, India, working duplex telephony with London. VWZ is on 17.3 meters. From 6 to 8 a. m., EST. should be the most favorable time for reception. Quoting from Mr. Walker's letter, "On Thursday between 2:30 and 3 a. m., EST., I heard KOR calling GMBJ, the Empress of Britain, on 40-41 meters and on Friday heard KOO, 38-39 meters working the same boat. KOO and KOR are at Dixon, Calif. KAY, Manila, has been on a lot lately, gen-



Dolores Gillen, attractive young NBC dramatic actress, plays the part of Alice Dudley, daughter of the newspaper editor in "Northwestern Chronicle" on the Blue net Sundays at 2:30 p. m. EDST.

erally between 5 and 8 a. m., EST., on 14,980 kcs., working with Berlin. VK2ME has been testing with VJDY, the S. S. Katoomba, which plys between Sydney and Perth. A few nights ago on about 32 meters, heard Mukden, Manchuria. The call here seems to be accepted as ZILY."

S.W. DX Chat

We are printing this month a short article on station TI-4-NRH of Costa Rica, which was written especially for RADEX by Sr. Amando Cespedes M., the operator of the station. This will be found on another page and we are sure readers will find it highly interesting, being written by the man who has done more than any other person to spread the fame of that little Central American Republic.

"All you short-wavers who want to get a really elaborate verification from a pretty hard-to-get station, try for TI-4-NRH on 31 meters, suggests W. T. R. Morris, Jr., 3219 Gar-

land Ave., Richmond, Va. He continues, "They sent me one and it's surely the best looking veri I've ever received. NRH takes pride in the fact that it is the only amateur station in the world providing programs for the short wave listener."

Doyle E. Carpenter, Emmetsburg, Iowa, comments on his reception of PHI, Huizen, Holland, at noon, announcing in English. He writes: "I have also heard PCK this week. They were working with Bangkok near 2 p. m., EST. DIQ was on Wednesday p. m., at about 8 o'clock with music, and also heard DJC the same night. Have been getting Radio Coloniale well on all three freqs. Its address is 103 Rue de Grenelle, Paris. I get their new broadcast in English best near 8:45 a. m., on 15,234 kcs."

"GSF has become my best 19-meter station," writes Geo. K. Glass, 1320 Cadillac Blvd., Detroit, Mich. "I received a card from VK2ME verifying my log just 9 weeks after the reception. I also got quite a booklet from YV1BC replete with photos and even a Lucky Strike ad." Mr. Glass lists 19 new stations received in the past month . . . says he is able to hear YV1BC with W2XE on top of it . . . and expresses his satisfaction with the promptness and courtesy with which the BBC verifies the Daventry station reports.

J. F. Maney, Spring Lane, Stoneham, Mass., says he "can't understand how those fellows with 11-tube sets fail to get foreigners. Have a National SW5AC and aside from Java, Japan and Russia have heard everywhere else. PHI came in with terrific volume last Saturday." Mr. Maney would like to hear from owners of the National FB7.

A reader who wishes his name withheld reports a Colombian station near 42 meters at 9 p. m., announcing their location as an island possession of that country.

The schedule of VE9GW as given in the lists this month was contributed by Alf Raymond, Avon, Ill. He also reports fine reception from EAQ



Carveth Wells, traveler, explorer and naturalist, who makes the truth sound like a terrible whopper. He turns natural history into a "believe-it-or-not." On a split NBC Red network from Chicago at 10:30 p. m., Wednesdays, EDST.

and GSA on his Philco converter.

With a good log of stations in Australia, Europe, Africa and Asia, Bartlett Bemister, 522 Clifton St., Winnipeg, Man., is unable to hear anything in South America, Guatemala City, station TGX being the closest he has gotten. He is 16 and would be pleased to hear from other 16 year old readers.

"Patience probably plays about 50 per cent of a good DX record," advises Clarence Sargent, Dansville, N. Y. "I was tuning in the 20 meter band for about 2 hours and was about to give up when OA1B, Negritos, Peru, came in. Tuned in EAR262, a Spanish amateur, after listening an hour to all those 41 meter codes."

"I have been an ardent short wave DX'er for the past two months," advises Henry King, Jr., 743 Simpson St., Atlanta, Ga. "I have such foreigners as DJD in Germany, which signs off daily near 4 o'clock, I2RO in Rome, EAQ, Madrid, like a local, YV1BC, Caracas, which I can hear

in spite of W2XE, Daventry, on three wavelengths, VK2ME early Sunday mornings with their laughing Kookaburra, and the travel talks about Australia, and, best of all, NRH in Costa Rica. As I work nights my listening during the week is confined to the day time. I would like to hear from anyone else who gets good daylight reception."

Richard Zorn of Tucson, Ariz., tells us that he logged EAQ on the loudspeaker every day for a month. He has heard stations on every continent, not to mention numerous ocean liners, airplanes and police stations.

"Although I have no television set, I enjoy the television sound stations," advises Frank W. Pollitt, 1427 Reisterstown Road, Pikesville, Md. "I think W2XAR, Long Island, on 1550 kcs. and W1XAU, Boston, on 1550 present very good sound programs."

"I haven't seen many reports in RADEX regarding reception of ship to shore transmissions, so here's some dope that may be of value to the fans," contributes K. P. Williamson, of Montreal. "For the last few months I have been listening quite

frequently between 6 and 9 p. m., EST., on and around 4 megacycles, to ships talking to WOO on 4.75 megs. I have heard DDAS, DDNY, IBLI, VTSX, VPTG, WSBN, GLRZ and GMBJ and can be sure of one of the Bermuda ships almost any night. My best catch is the 'Empress of Britain', 1800 miles off New York. The 'Monarch' and 'Queen of Bermuda' can also be heard talking to VRT-ZFA in the early evening, the Bermuda phone having a very strong signal.

"Regarding the Empire's stations GSA, GSB, etc.," adds Mr. Williamson, "it may be of interest to readers to know that they merely acknowledge reports with a printed card which says: 'We regret that we do not issue specific verifications of reception.'"

His First Results

"Although several others here have had this same converter and could get no satisfaction with it, I am very much pleased with the Philco s. w. converter which I purchased a week or so ago," reports Eugene L. Beebe, 210 Franklin St., West, Jackson, Mich. "I am using it in connection with a

Authors of "Somebody Loves You" and other song hits, May Singhi Breen and Peter de Rose (otherwise Mr. and Mrs.) are heard in piano and ukulele melodies each morning at 10:00 EDST excepting Tuesdays, Thursdays and Sundays.



Sparton 7-tube super. I am on the second floor of a three-story building, four blocks from downtown district, and have only a picture-moulding antenna and a ground to a steam pipe and consequently have much man-made static to contend with.

"The first night or two I received nothing but U. S. and Canadian stations including some 35 police, a few airport and airplane stations, and, of course, quite a number of amateurs. However, on the third day, which was Sunday, I received GSE and GSF with good loud speaker volume. A few evenings after that I received a station announcing as HJ-4-ABB at Manzanales, Colombia. Later I received HJB at Bogota, Colombia, with quite a long broadcast which I held for sometime or until man-made static stopped my activities. All my listening is necessarily done before 10:30 p. m. as I have not yet adapted a set of headphones to my set.

"Whether fate was kind to me or whether I was more careful in tuning for foreign stations than the average new s. w. fan, I do not know. I feel that if I had a real good antenna, a

good location away from local interference and a good ground, I could pile them up quite fast for a time at least.

"As a result of my last letter in RADEX I have acquired several new friends in different parts of the country and I would be glad to hear from others particularly those who are using Sparton sets or Philco converters."

From Benigno Contreras, Box 74, Marina Station, Mataguez, Porto Rico, comes this report: "Although static has been more bothersome than ever this season and I am disappointed in my b. c. band reception, on the short waves I have had better luck. I have added Hawaii, Holland, Jave, Portugal, Costa Rica and Switzerland to my list of countries heard which now totals twenty-five."

"My log shows 543 stations, both long and short wave," advises C. C. Barga, Box 224, Mountain Lake, Minn. "On the short waves, I have GSA, GSC, GSD, DGT, YV11BMO, YVQ, I2RO, PLV, VK2ME, VK3ME, FYA, HKC, and VE9GW, the latter in daytime as clear as W8XK."

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FINAL Reports on Closing Season

• • • *From the Radexers*

EITHER radio is permanently improving due to the activities of the engineers, or the season of 1932-1933 has been an unusually favorable one and the pendulum may swing backward another year. There is no doubt that more and farther stations have been reported this season than in any that have preceded it. Scores of our readers who have fished in vain for those elusive T-P's in the past, have this year brought them in. And more of them have been reported from the Middle West and even from the Atlantic Seaboard than ever before. No longer are they confined to reports from the Pacific Coast division of the fraternity.

Has Ten T-P's

"I operate a 1932 Lucerne 7-tube TRF Northern Electric set," declares William Ansell, 168 Wascana St., North Regina, Sask., "and on November 15, 1932, my log stood at 137 stations, and then I commenced DXing, and to date my log has reached 369 stations, an increase of 232 this winter. I have logged 43 states and in addition the District of Columbia, KGBU, WKAQ, and KGU; 7 provinces in Canada; 5 Cuban and 19 Mexican. My trans-Pacific log to date is 2CO, 3AR, 5CK, 2YA, 4QG, 3LO, 2BL, 4RK, 3HA and 4BC. Have also heard one Chinese and several Jap stations, but have been unable to log them. My log consists in part of 110 stations operating on 250 watts power and under, including 81 100-watters, but, with the exception of trans-Pacific stations, I consider my greatest catches to be CKIC, Wolfville, N. S., and CHGS, Summerside, P. E. I., 50 and 100-watters respectively. I can use from 90 to 400 feet of antenna including lead-ins as conditions require, and have often used the maximum in order to

log some of the Australians first, having found through experiments that directional aerials give me greater reception in the direction I am searching.

"Following is a quotation from my verification from 4BC: 'Your two most interesting letters of the 17th and 19th December, '32, reporting reception of 4BC programmes to hand with thanks, and we wish to congratulate you on your very excellent reception. The programme accurately reported in your letter of the 17th December was a relay from 200 miles away in the Australian bush of a real Aboriginal Corroboree, which was relayed to every Australian state and from station 3ME, Melbourne, on short waves for European reception. Your letter of the 19th December is practically a



Introducing H. V. Kaltenborn, expert commentator on world affairs, whose program, "Current Events" is heard each Sunday at 7:00 p. m. EDST and Thursdays at 8:00 p. m. EDST, over WABC and the Columbia network.

word by word report of our programme and the session featuring the Kelly family is a serial comedy drama presented one episode per week, entitled 'On Enterprise Farm,' and is a feature presented on behalf of United Metal Industries of Brisbane, Queensland."

Spokane Gets News via Japan

"Had a rather interesting experience this morning while listening to the Japanese," writes S. S., R. No. 4, Spokane, Wash. "This morning DX seemed to be in the doldrums so decided to listen to the Japs awhile, and at 2:45 tuned in JOIK and heard a fellow say in English, 'So she said to Walter,' followed by a minute's talk in Jap, when this sentence was repeated, some more Jap, then, 'And he made her queen of the Broadlands.' This was also repeated after a little more Jap explanations, then more English sentences, followed by more Jap. After about

ten minutes of this the whole story was read in English, sentence after sentence. Very evidently this was a lesson in English, with a fairy tale as the practice theme. At 2:55 a man with an English accent took the air and read news cables of world interest. The first news was of the Jap situation in Manchuria. Then a cable from Washington regarding prohibition here, followed by a report that Mayor Cermak was dangerously wounded by the assassin. Then a few New York stock exchange quotations. Then a cable from Ottawa and one from London. This news was broadcast from 2:55 to 3:00 a. m. PST, over the entire Japanese network of 10kw stations, as were the English lessons. While this is the first time I have heard this, it is probably a regular nightly feature. This was the first time I have listened to a Jap for any length of time. The Japs have been coming in here very well this winter, and it was no more difficult to hear every word in their English program than in a news report from nearby domestic stations. As a coincidence with the news report, we have been snowed in here all this month (February) and our last mail delivery came a week ago. I live ten miles from the city. But here I am getting the latest news from Japan."



Meet the "Greek Grocer" with Fred Waring and his Pennsylvanians on the Old Gold program, Wednesdays at 10:00 p. m. EDST. Take our tip and listen to him murder the good King's English. In humdrum, every-day life he is George Givot, of the Omaha Givots.

Europe From Santa Barbara

"Having become interested in the DX game only a short time ago," writes E. B. Martin, Deane School, Santa Barbara, Calif., "I cannot boast of long use of RADEX, but the two issues I have used have afforded me every possible advantage in getting distance. I have been DXing for three weeks with my new Scott All-Wave and am very pleased with its performance. Please find for me, either through your readers or through Washington, the address of EAJ1, in Barcelona, on 860 kcys. I have a very nice program received from them last Tuesday and have been trying frantically to find their

address, because I wish to verify this, my best catch. Europe from Santa Barbara! I failed to understand their Spanish, but have the music, time, etc. I am buying a phonograph hook-up to take records of my more distant stations. Now for the statistics. In those three weeks, by rather concentrated effort, I have logged 308 long-wave stations and 120 short-wave, making a total of 428 stations. Among the long wave are the following: 32 in Australia, 17 in Japan, 4 New Zealand, 2 Tasmania, 4 Cuba, 2 Hawaii, 2 Alaska, 1 Formosa, EAJ1, and of course XGOA, and 18 in Canada and 14 in Mexico. This makes 97 foreign stations or 57 trans-Pacific, and 211 U. S. stations. The latter record is rather poor because I spent most of my short time on the foreign ones. On short wave I have the usual Europeans and 7 in South America. Lots of police and airport stations bring the total to 428. Your magazine has been the deciding factor in bringing out what I believe is a good record from a superb radio."

Take Your Choice

"In your April issue, I notice some of your readers have received verifications from 4RK in Rockhampton on reports about the recent cricket matches played in Australia," remarks Clyde W. Ham, 1002 S. Lafayette St., Shelby, N. C. "I would like to say that the following Australian stations broadcast the matches: 5CL, 5CK, 2FC, 2BL, 3LO, 3AR, 4QG, 4RK, 2CO, 7ZL, 6WF, 2GB, 5KA, 2UW, 5DN, 3UZ, 4BH. All of the class A stations gave the scores at the fall of each wicket. Talks were given from other stations by the following: Don Bradman, W. Woodfull, and Stan McCabe. I am of the belief that your readers who received veris from Rockhampton did not really hear 4RK, but did hear Poste Parisien. Some of your readers will want to know what I mean by this. Well 4RK was broadcasting the matches as explained, as was the French station, both at practical-

ly the same time, so naturally if a report was sent to 4RK he would verify it because he was really broadcasting the matches, but still they could have been coming from Parisien, and again it was really too early for reliable trans-Pacific reception. This is the reason I think it was not 4RK, but Poste Parisien."

His Year's Report

"Well the DX season is all over the shouting, so I will do mine now," exclaims Lee F. Blodgett, 917½ W. Montgomery St., Creston, Iowa. "I have never had an article about my DXing in print except for the local paper news items. As I live in a small town I have a lot of my good verification news published in the local newspaper. I now have 545 stations in my log from 11 countries of the world. I have 10 countries verified to date. My best foreign stations are: 2YA, 2BL, 4QG, 4BC, 5CK and KGU. Of this list 4BC, 2YA and KGU verified, as well as JOIK and JOCK of course. I also have WKAQ and YV1BC verified. I now have 331 verified in 44 states of the U. S. A., 6 provinces of Canada verified, but I have heard 7. I have 7 states in Mexico heard and 7 verified. My set is an Earl Model 21-22, using none of the screen-grid tubes. The antenna, which I intend to junk for a cage type next season, runs N-W by S-W on the first 100 feet and S-W by N-E on the last 50 feet, with a lead-in directional on Australia. I would appreciate receiving any information on a cage antenna that anyone who has tried one can give me."

Verifies 100 Per Cent

"After reading of the numerous DX catches by many readers," comments C. Hesterman, 506 Fourth Ave. N., Saskatoon, Sask., "I, with many misgivings, submit my own list. I have verifications from some of the stations and the others should come within the next two weeks. Not one



Pearl Pickens is registering something or other as she listens to Carson Robison in the Friday night series "Triple Bar X Days and Nights" on the CBS at 8:30 p. m. EDST.

of the stations has failed to send verification to date. Therefore I am very optimistic regarding those yet to come. I make it a set rule never to ask for verification until I have heard at least two station identifications and thirty minutes of the program. Class me with the 'Baron' or 'Ripley' if you will. Nevertheless I have sent to most of the Australians and New Zealanders a log of reception that encompasses from two to three and a half hours of their programs, with very few blank spaces due to fade-outs, static, etc. Now follows a list of my star catches. Don't forget all these stations were heard for more than an hour and a half at least: 2CO, 7ZL, JOAK, 3AR, 5CK, 4YA, 2YA, 5CL, 4QG, 3LO, 1YA, JOIK, 2BL, JOBK, 4RK, 2GB, 5DN, 3YA, 2UE, 4BC, WKAQ, KGU, YV1BC, CMX, CMBY, CMCD and CM CJ. I must thank RADEX for them all, as it showed me just where to go for them."

"Concerning the publicity on those remarkable catches of five and ten-

watters half way around the globe, while I don't question their authenticity, my sympathies are all with the anonymous agnostic," complains Arthur L. Robb, Topeka, Kans. "My claim to recognition lies in the fact that I have never heard Japan, Hawaii, New Zealand, Australia, or cricket matches. The only station I have heard off of the North American continent was HJN on the morning of February 26th. While countless other listeners had 'enormous volume' and 'heard call and location 15 times' I had a hard time holding a faint signal long enough to hear one station identification. Here are some questions: Does XER use the call XEF any more? I haven't heard it now for about a year. Also, has anyone heard XEPN since it left 885 for 585?"

Logs Italy On B. C. Band

"I just want to tell you what I have been doing with my 2-tube battery receiver," writes Charles H. Peterson, W2CFW, 168 Beacon Ave., Jersey City, N. J. "Have had the set about a month and have heard 37 states and 5 countries. My best catch is IMI in Milan, Italy. I heard them on the morning of March 25th and was listening to them from 2:30 to 4:00 a. m. EST., on 905 kcys. They were coming in fairly well, but managed to get enough of their broadcast to send for a verification. Perhaps some of your readers heard this station also. I think that the morning of March 27th was about the best morning I ever heard. All the west coast stations were coming in as loud as Chicago. Some of the stations I heard were KPO, KGO, KHJ, KFI, KGER, KSL, KDYL, KECA, KEX, KNX, KGB, KFPY and finally finished the evening with KERN, the little 100-watter in Bakersfield. I built the receiver, using the old Ambassador coil to kill time while I'm not using my amateur transmitter. I operate an amateur station and operate on the 20 meter band, but DX has been so poor down there

lately that I built this little outfit."

"Have a DX log of 533 stations, all verified by either card or letter and am a member of the Buffalo News DX Club," advises Joseph B. Reilly, 5 Forest Park, Jamestown, N. Y. "Am a make-up man on our morning newspaper here and get home about 2:30 a. m. just in time to DX. All my verifications but ten are verified from stations heard after 2:30 a. m. and are all real verifications. Have all our states verified, all the provinces of Canada (never have had Newfoundland), have a dozen from Cuba, the same number from Mexico, WKAQ in Porto Rico, YV1BC in Venezuela, HIX in Santo Domingo, and expect one from HJN in Bogota soon. In the summer of 1931 I received \$5.00 in gold from the Buffalo News DX Club for logging the longest distance, smallest powered station during June, which, as you know, is about the noisiest month of the year for DX, and the station was KFPM in Greenville, Texas, using 15 watts, and have a verified letter of ten consecutive records, verified by the owner himself, which I think is the most valuable verification in my collection."

Revises Log Monthly

"In the six months since October 1st, I have logged 365 stations on the b.c. band, including 329 in the U. S., 22 in Canada, 7 in Mexico, one in Porto Rico, and one in South America," reports Alf Raymond, Avon, Ill. "I have logged stations on all of the 97 channels, and 44 states. My log is on the same plan as that of A. L. Long, Oklahoma City, in that I never log a station unless I hear the call letters and I am DXing for my own pleasure. I revise my log every month with the latest copy of RADEX, and the stations logged, as numbered above, are all active stations and are listed in the new copy of RADEX. Here are some stations to illustrate my plan. I did not add another station to my log when the call XED was changed to XEAW, or when

WTSL was changed to WAML. Neither did I again count XEPN when they changed their wave from 885 to 585 keys."

"Although I have been a Radexer since November, 1931, this is my first letter to you," greets Wilkins B. Green, 63 Thyra Ave., Toronto, Ont. "I have a Kolster CK66 model, which I have had since last May, and since then I have managed to log 494 stations, of which 84 are 100 watts, 8 fifties, 4 twenty-fives, 2 fifteen, and one lone ten. I have logged 84 over 2000 miles away. Some of my best catches are 2YA, KGU, YV1BC, HJN, KXO, KPCB, CKMO, KFPM and several others. In regard to the records claimed by some of your listeners, I would like to say that in radio reception almost anything is possible. Take the incident of my reception of KFPM, a 15-watt station over 1500 miles away. At the time of the reception it came in a great deal louder than WEBR, a 100-watt station on the same band, but only 40 miles, and it was as loud as



And this is the one-man radio show—Smiling Ed McConnell—who is heard each Sunday at 2:00 p. m. EDST from Cincinnati over the Columbia net.

WBBM, Chicago, was that night. So why not anything!"

Best In Four Years

Guy B. Welch, 114 Brown Street, Reynoldsville, Pa., thinks "there is no doubt that this year has been the best for reception in the four years past. This is indicated by the fact that I can pick up Australian and New Zealand stations which I have tried to hear in other years ever since I started and this in spite of the fact that my old 8-tube Philco is now in its last stages. I'm sure that with a new set similar to mine I could have logged at least 20 foreigners." Guy reports the following "outlaws" now rampant in his state and wonders what the FRC is doing: WJAE, 1030 kcs., in Brookville, Pa., on daily; XYZ, 1010 kcs., Dubois Pa., daily; WRT, 800 kcs., Indiana, Pa., daily; have other readers logged these?

"After reading other readers' reports in DXing, I thought I would tell you about mine, since I am rather proud of it," comments C. Albin Johnson, 561 Trenton Ave., Wilkesburg, Pa. "I have only been DXing since last October and to date I have received 222 stations. I have only recently started writing for verifications. Included are stations from Mexico, Canada, Cuba and Porto Rico. I have not had such good luck with the far western states. I have logged quite a number in California, but that is the only state in the far west where I have logged more than one. The best I have received are KABC, KDB and WKAQ, Porto Rico. Am using an American Bosch Model 200. Am not using any aerial as it works better when I attach the aerial connection to my ground."

"RADEX started me DXing," blames J. Dickenson, 2109 Winnipeg St., Regina, Sask. "Being a policeman I can tune in when I get home in the morning at 4:00 a. m. My log stands at present at 171 stations, all of which are listed in RADEX and are operating at present. I am using a Philco Model 20 Baby Grand TRF.

On the morning of April 9th I received the surprise of my life when I tuned in 2CO, 2YA, 4QG, 3LO, 4BC, and on April 11th and 12th I again tuned in 4QG. I noticed something which I have not seen in print in your magazine and that is the wave band is very narrow. In other words, it requires finer tuning for Australia. Those who have been trying for Australia better take note. No one would believe me when I told them what I received on a Baby Grand, so I am getting them verified, if I can. I received KGU also on March 25th."

Regarding CMQ

"I have just received my verification from CMQ," announces Francis E. Andrew, 96 22nd St., Warwood, Wheeling, W. Va. "They write in English and have changed power to 500 watts. They inform me that they are on the air every Sunday from 2 to 3 a. m. with special programs dedicated to radiofans in foreign countries, which we hope you will enjoy. I have been logging stations since March 17 and have 151 to date. Have sent to about 70 for verification and have received 29 to date. I know that most of these are commonplace, but I really am proud of WLBC. My radio is four years old and has very little selectivity. I am about 250 feet from a street car line. There is also a leaky transformer across the street which, despite numerous protests, is still interfering."

"I never did any DXing until three months ago," confesses Theo. Emmons, 88 River St., Niles, Mich., "and since then have logged several 100, 250 and 500-watt stations on the west coast and Canada. Some of them are KXA, KGDM, KFVD, KMPC, KFWI, CHGS and 10-BP, a 25-watter. My two best catches are HJN and 2YA. I logged an hour of HJN's DX program on Sunday morning, February 26. This program was announced in English, the call letters being given after every musical selection. I received them on 685

(Continued on page 75)

FAN CHAT *from the* Pacific Coast

●●● By CHARLES C. NORTON, *Vice-President Transcontinental Radio DX Club*

TOM WALLACE was born in Bisbee, Arizona, about 32 years ago; is 5 feet 10 inches tall, weighs 170 pounds, has blue eyes, light brown hair, athletic shoulders and clear-cut features. At high and college he excelled in sports: football, baseball, basketball, track. Also, he sang in the University of Arizona Glee Club, played in the campus band, went in for dramatics, held various offices, was president of his fraternity, Kappa Sigma, during his senior year, and upon graduation in 1922 operated a tire business in Oklahoma for about a year. From that he went into real estate in Long Beach, California, and then came an opportunity to act as instructor in physical education and athletic coach for the Long Beach High School. Radio opened new avenues; he sang over KFI for 3 years, switched to KNX and has been more than active announcing sports, appearing in dramas and writing ever since. There is an attractive Mrs. Thomas Jay Wallace, and three children, two boys and a little girl, complete the happy family.

* * *

Rob Roberts, after an absence of a year, has returned as the General Manager of KTAB. He resigned from that job last year to enter his own radio advertising business which he still maintains. Roberts was largely responsible for building up KTAB to the top of the medium class stations in the San Francisco Bay area at that time. He has many new plans for the growth of the station and is busy formulating them. KTAB is now located in the Kohler-Chase Building in San Francisco, to which it recently moved from Oakland.

* * *

The Mauna Keans (KQW), specializing in native Hawaiian music, were originally the Mauna Kea Trio.

Three American girls (Lei Lani, Lei Aloha and Lei Nani) started out with a "big idea." Seeing great possibilities in these girls, Kimo Haulani joined them, forming the troupe of Mauna Keans. Kimo is native Hawaiian. He has played in all the larger radio stations on the Pacific Coast. The Mauna Keans are one of the most popular groups playing over the air on the Pacific Coast. Their fan mail has reached tremendous proportions.

* * *

Eddie Holden, the inimitable Japanese house boy of "Frank Watanabe and the Honorable Archie" (KNX), was born in San Francisco and still readily admits it. He spent most of his boyhood playing with Japanese youngsters on the sand lots of the Bay district, absorbing the colloquialisms of the language that are so much a part of his radio dialect. Holden now numbers his friends among the Japanese by the hundreds.

* * *

Monroe Upton was born in Bandon, Oregon, in 1898, finished school in Marshfield, went to seas as a ship's radio operator, spent a year with a radio station in Shanghai, saw more travel, landed in San Francisco and began broadcasting 6 years ago. Although he is best known as a comedian—(his "Lord Bilgewater" on Associated Spotlight has them in stitches)—he is a successful writer and has turned out several books. Six feet tall, blonde, blue eyes, married.

* * *

Joe Wright, whose orchestra has been heard over KYA until a recent fire destroyed the cafe from which they played, is mourning the loss of a Stradivarius violin destroyed by the fire. He says that during the entire time that the valuable instrument was in his possession this was the only oc-

casation upon which he left it anywhere overnight. He is now heard with his orchestra over KFWI broadcasting from the New Lido Cafe.

* * *

Claude Sweeten is now musical director of KFRC. He directed the orchestra at the RKO-Golden Gate Theatre in San Francisco for 10 years and previous to that was concert master of the Salt Lake Symphony orchestra. Sweeten succeeds Walter Kelsey.

* * *

The Emporium, one of San Francisco's larger department stores, is sponsoring a program over KYA from 8 to 9 a. m., daily except Sunday. Barbara Lee conducts the program which consists of chats on styles, beauty, household hints, coupled with a good round of music.

* * *

Jack Hall's "Keep Smiling Revue" on KTAB is featuring a thirty-piece accordion orchestra every Wednesday afternoon, under the direction of Danti Barsi, one of the "Chile Peppers."

* * *

After a lay-off of several months KOL's Mid-Week Jubilee has returned to the air. Wen Niles is the new master of ceremonies.

* * *

The "Goldbergs" are now heard only over KPO on the Pacific Coast.

He Tried to Prove DX Claims Impossible

By JOHN DE MYER*

AWAY back about 1922, in the days of the one-tube "Blooper" receiver, I was a DXer. In those days our stations were few and of low power, and it was a real thrill to tune in a station out on the Pacific Coast. In fact, it was an event to proudly tell all your friends about. As time marched on, our station list increased, also power was increased to many thousands of watts, and most of our

broadcast stations were taken over, or at least the programs were sponsored, by commercial advertisers. Their sole aim seemed to be dedicated to the task of impressing us with our possible social handicap if we did not use a certain brand of tooth paste or cold cure, etc. It was about this time that I lost my enthusiasm for DXing.

Last fall, as I was looking over some radio magazines on the news stand, I ran on to RADEX. The station listing in RADEX looked very impressive, also the DXers' comments. I purchased a copy and in it I read several "preposterous claims" of trans-Pacific reception on the broadcast band. After giving this trans-Pacific business some careful consideration, I decided to try it myself. I designed and installed the most efficient aerial and ground system that I could think of and had room for, and in this installation I decided to spare no expense.

Well, sir, the installation was soon made to my satisfaction and I selected a good clear night in December, set the alarm for 3:30 a.m. and was all set for my initial test to definitely prove to myself that 10,000-mile broadcast reception was impossible. I tuned in first on 750 kcys. for KGU, and of all things impossible, I heard him, very clearly. Then I tuned in on 720 kcys. and heard a man announcing the next portion of his program. His accent was very distinctly English. Could this possibly be Zealand? It was—ZL2YA.

Following I shall list a few foreign stations that I have since heard on the broadcast band: ZL1YA, KGMB, RUS, HIX, HHK, TICR, WKAQ, KGBU, VOWR, YV1BC, HJN, VK5CK, VK6WF, VK5CL, VK4QG, VK3LO, VK2BL, VK4RK, VK4BC, VK4TO, JOBK, JOHK, JOGK, JOCK, JOIK, JOFK, JOAK and XGOA. In addition to this list I have heard many Canadian, Mexican and Cuban stations. Incidentally, I do some short-wave DXing. My shortwave log consists of over 100 foreign phone stations, located in 35 countries in every

continent on earth.

My receivers are a Model No. 111 A. C. Philco (11 tubes) and a Model No. 4 Philco converter (3 tubes). My aerial is a 2" copper tube mounted vertically on a weather-proof insulator on top of the house. Also I have an 8" copper ball on this tube and it looks very much like a tall flag pole. My ground is made of 40 feet of one-half inch copper tube wound into a six-foot coil and sunk into the ground. I filled in, with the earth around it, about fifty pounds of rock salt. Well, with this outfit, again I am a DXer, and you and your magazine are to blame for it.

*545 Baker Street, Lansing, Mich.

Verifying Under Difficulties

By IRVING VAN ZANDT, JR.*

ONLY in one case out of over two dozen, have I succeeded in getting my report to the mail within 48 hours after reception, and never within the 24-hour limit that many stations are adopting. I live 18 miles from town on a road that, from Christmas until Easter, only a horse can get through. The nearest telephone is five miles away and it rarely works in winter. There is no mail delivery up this way and we venture to town but once every five weeks or so in winter. Mail delivery and collection is made by neighbors, and this service varies from once a week to once every three or four weeks. I have destroyed numerous reports that have been in the mail bag for over a week. A few stations have been generous enough to accept my explanation, but the vast majority, I fear, merely raise one eyebrow. The 24-hour deadline is a good idea, but it drives me crazy. I should greatly appreciate any suggestions from you or from readers of RADEX.

I have been DXing since last November with a Philco 35, after having been out of the DX game since 1923. Due to a remarkable location, results

have been most satisfactory. When my log began to include a few real good catches, I started to seek verifications, writing only to 3000-milers, and 2000-milers if less than 1000 watts. I have been most careful, writing only after having logged definitely at least 15 consecutive minutes of reception, and I never even log a station whose call I have not unquestionably heard.

I heartily endorse any fight that you may make towards the rapid and complete extinction of "channel hogs." I wish to add KXL to this list. They seem to be on the air indefinitely every Saturday morning, playing records for Gertie and Joe and for the Broadway Cab Co., and announcing most infrequently. Once I listened to them for an hour and twenty minutes without their giving the slightest indication of who or where they were. Perhaps the F.R.C., if it functions at all, could work out a ratio between time on the air and power. Or perhaps the ax is the sole solution.

*Forsythe Range, Bozeman, Montana.

A Phone Receptor

(Continued from page 6)

or tubes. The bias thus thrown on the tubes renders them inoperative although the filaments remain lighted. The box with jack may be placed in any convenient location.

Any signal that can be heard with the speaker can be heard on the phones. The volume of sound is pleasing, and stations that cannot be identified on the speaker due to the high noise level, can be heard with the phone receptor.

The "Phone Receptor" is manufactured and sold by the Amplivox Laboratories, 82 East 95th Street, Brooklyn, N. Y.

*Would you like a fine world-globe?
See back cover.*

STATIONS CAUGHT *and*

Those That GOT AWAY

THERE would be very little fun in DX or in any other hobby, for that matter, if we couldn't brag a bit to others about our progress and talk over our triumphs and disappointments. So here we are at the regular monthly meeting of the greatest radio club on earth—the RADEX family. Our first speaker is a new member of the tribe.

"I have just discovered RADEX and like it very much," comments Maxwell Hall, 806 Fifth St., Marietta, Ohio. "It seems to me that your idea of having certain minimum requirements for counting DX reception is an excellent one. When we report receiving a certain number of stations it should be generally understood just what we mean. This is more important that verification. At our house we have been interested in seeing how large a portion of the stations licensed by the F.R.C. we can get. Counting only stations listed in the F.R.C. bulletin of January 1, 1933, we have listed since December 1, 1931, 507 out of 608 stations, and including all stations listed in 12 states, Puerto Rico and D. of C., all but one in 17 states, and at least half the stations in all other states. We have also identified 23 stations in Canada, 16 in Cuba, 14 in Mexico, and one in Colombia. The above includes one or more stations on every standard frequency in the regular broadcast band between 540 and 1500 kcs."

Added 151 New Ones

"For lack of space and other reasons I am unable to erect a really efficient aerial, an aerial suited to real distant reception," writes Rudolph Kuré, 3633 Vine St., Clifton, Cincinnati, Ohio. "In spite of this handicap and the bad location I am dwelling in, with my rejuvenated

RCA 60—although the number of stations logged then was pretty high and the higher the number the harder it is to add new ones—I managed to log 151 new stations from October 1, 1932 to March 13, 1933. And good stations, too, such as KPJM, Prescott, Ariz., 100 watts; CKOV, Kelowna, B. C., 100 watts; KFXM, San Bernardino, Calif.; 10-BQ, 10-AB, CKIC, WAGM, CHGS, CHRC, KREG, KFIO, YV1BC and HJN, giving me a total of 836 stations."

"I have now received 550 stations, 218 veris," comments George E. Lowrey, David St., Brampton, Ont. "All the states and provinces logged, but not Newfoundland. One in France, YV1BC and HJN in South America; 2BL and 4QG in Australia, and 2YA in New Zealand; KGU logged and verified. 15 100-watters on the west coast; 31 stations in California logged. Connecticut, D. of C., New Hampshire, North Carolina, Porto Rico, Tennessee, Utah, West Virginia, Wyoming and Manitoba completed. KCIC, a 50-watter, was logged and verified at 7:00 p. m., also CHNS of Nova Scotia, after 6:00 p. m. My best is KFPM rating 75.3 with 10-BI, 10-AB and CMJH coming close. WHBC is my lowest powered station, having 10 watts, logged with lots of volume on April 1st."

Can't Get Over Seas

"I have been much interested in letters from other DXers published in your magazine," comments F. Herbert Peters, Woodbury, N. J., "but so far have hesitated to write to you because my record must seem rather small beside some of those published. However, if you are interested, here goes: I have logged 279 stations since October on a Philco 9-tube baby

(Continued on page 71)

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: ED Eastern Daylight; E Eastern; C Central; M Mountain.
For Pacific Time subtract one hour from Mountain.

RADEX is the only publication listing stations in alphabetical order for your convenience.
While these programs are correct at the time of going to press changes are made from time to time.

MONDAY

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

ED-6:00 p.m., E-5:00, C-4:00, M-3:00
R — Waldorf-Astoria Orchestra
 CKGW KFYZ KGO KOA KPRC
 KSD KTBS WBEN WCAE WCKY
 WCHS WDAF WFAE WENR WFBZ
 WFI WHO WIBA WIOD WJAR
 WKY WMC WOAI WOC WRC WSB
 WSMB WTAG WWNC

C — Reis and Dunn
 CFRB CKOK KFAB KFH KLZ
 KMBC KSCJ KSL KTRH KVOR
 WAAB WADC WBCM WBIG WBRC
 WBT WCAO WDAE WDBO WDOD
 WDSU WEAN WFAW WGR WHEC
 WIP WISN WJAS WJVS WKBH
 WLWB WLWZ WNAW WOKO WORC
 WQAM WSBT WSCA WSJS WSPD
 WTAG WTAR WTOC

ED-6:30 p.m., E-5:30, C-4:30, M-3:30
R — Richard Himber's Ensemble
 KFYZ KGO KGW KHQ KOA KOMO
 KPRC KSD KTBS KTHS KV00
 WDAF WFAE WFBZ WIBA WIS
 WMAQ WMC WOAI WSB WSMB
C — Happy Wonder Bakers
 WAAB WABC WHEC WKBW WMAS
 WORC
B — Tastyest Jesters
 KDKA WBAL WBZ WBZA WGAR
 WHAM WJR WJZ

ED-6:45 p.m., E-5:45, C-4:45, M-3:45
R — Countess Olga Albani
 KFSD KGO KGW KOMO WBEN
 WCAE WFAE WFBZ WHO WIS
 WJAR WJAX WMAQ WMC WOC
 WOV WRC WSAI WSB WSM WTAG
 WWNC

C — Just Plain Bill
 CKOK WAAB WABC WCAO WCAU
 WHK WJVS WKBW
B — Lowell Thomas
 CKGW KDKA WBAL WBZ WBZA
 WGAR WHAM WJR WJZ WLW
B — Little Orphan Annie
 KFYZ KOIL KPRC KSO KSTP
 KTBS KWCR KWK WBAF WDAY
 WBEZ WENR WGY WOAI WREN

ED-7:00 p.m., E-6:00, C-5:00, M-4:00
B — Amos 'n' Andy
 CKGW KDKA WBAL WBZ WBZA
 WCKY WFLA WGAR WIOD WJAX
 WJZ WLW WMAL WPTF WRVA
C — Theo. Karie, Tenor

CFRB KFH KLZ KMBC KSL KVOR
 WABC WACO WBBM WBIG WBRC
 WCAH WCAO WCAU WDAE WDBJ
 WDBO WDOD WDRC WDSU WEAN
 WFBL WFEA WGR WGST WWBK
 WHP WISN WLAC WLWB WMBG
 WMT WNAC WODX WOKO WORC
 WQAM WSFA WSJS WSPD WTAQ

R — Southernaires Male Quartet
 KDYL KOA KOMO KSTP KTBS
 WBEN WCAE WCHS WDAF WFAE
 WFBZ WGY WHO WIBA WMAQ
 WOC WOW WRC WSAI WTAM

ED-7:15 p.m., E-6, 15 C-5:15, M-4:15
C — Buck Rogers—Year 2433
 CKOK KMOX WABC WBBM WCAU
 WCCO WGR WHAS WHK
B — Everett Marshall, Baritone
 KDKA WBAL WBZ WBZA WCKY
 WJR WJZ WMAL WSYR

R — Century of Progress
 CFCF CKGW KFSD KFYZ KGO
 KOMO KPRC KSD KTHS WBEN
 WCAE WCHS WDAF WFAE WEEI
 WFBZ WGY WHO WIBA WIOD WIS
 WJAR WKY WLIT WMAQ WMC
 WOAI WOC WOW WRC WRVA
 WSAI WSB WSM WSMB WTAG
 WTAM WTIC WWJ WWNC

ED-7:30 p.m., E-6:30, C-5:30, M-4:30
B — Five Star Theatre
 KDKA KTBS WBAL WBZ WBZA
 WHAM WIS WJZ WMAL WMC
 WPTF WRVA WSAZ WSMB WWNC

C — Dolph Martin's Orchestra
 WABC WCAO WCAU WDRC WEAN
 WFBL WFEA WGR WHEC WHP
 WJAS WJVS WLWZ WNAC WOKO
 WORC

R — Elvia Aliman
 WCKY WCHS WDAF WFAE WEEI
 WENR WFBZ WGY WJAR WSAI
 WTAG

ED-7:45 p.m., E-6:45, C-5:45, M-4:45
R — The Goldbergs
 KFYZ KPRC WBEN WCAE WCHS
 WDAF WFAE WEEI WENR WFAA
 WFBZ WGY WJAR WKY WLIT
 WOAI WOW WRC WSAI WTAG
 WTAM WTMJ WWJ

C — Boake Carter, News Flashes
 CKOK KMBC KMOX WABC WBBM
 WBT WCAO WCAU WCCO WGR
 WHAS WHK WJVS WNAC

ED-8:00 p.m., E-7:00, C-6:00, M-5:00
C — Singin' Sam
 CKOK KMBC KMOX WABC WADC
 WCAO WCAU WDRC WEAN WFBL
 WPMW WGN WGR WHK WJAS

WJVS WKRC WNAC WOKO WSPD
R — Soonlyand Sketches
 WBEN WCHS WEAF WEEI WGY
 WJAR WTAG WTIC
B — Cliquot Club Eskimos
 KDKA KOIL KSO KWCR KWK
 WBAL WBZ WBZA WCKY WGAR
 WHAM WJZ WLS WREN

ED-8:15 p.m., E-7:15 C-6:15, M-5:15
C — Carson Robison and Buckaroos
 CFRB KFH KLRA KMBC KTRH
 KVOR WABC WBIG WCAH WCAO
 WCCO WDAE WDBJ WDBO WDOD
 WDRC WDSU WEAN WFBL WFBM
 WFEA WGR WGST WHEC WHK
 WHP WISN WJAS WLAC WLWB
 WMBG WNAC WODX WOKO WORC
 WQAM WSFA WSJS WSPD WTAQ
 WWVA

ED-8:30 p.m., E-7:30, C-6:30, M-5:30
R — Sizzlers Trio
 CFCF CKGW KSD WBEN WCAE
 WCKY WCHS WFAE WEEI WFBZ
 WGY WHO WJAR WLIT WMAQ
 WOC WOW WRC WSAI WTAG
 WTAM WTIC WWJ

ED-8:45 p.m., E-7:45, C-6:45, M-5:45
R — Famous Brands—Ranny Weeks
 WBEN WCAE WCHS WDAF WFAE
 WEEI WGY WJAR WLIT WLW
 WMAQ WRC WTAG WTAM WTIC
 WWJ
B — Phil Cook-Andy Sanella
 KDKA KOIL KSO KWCR KWK
 WBAL WBZ WBZA WCKY WGAR
 WJAX WJR WJZ WLS WMAL WREN
 WSYR

ED-9:00 p.m., E-8:00, C-7:00, M-6:00
R — A. & P. Gypsies
 KSD WBEN WCAE WCHS WDAF
 WFAE WEEI WGY WHO WJAR
 WLIT WMAQ WOC WOW WRC
 WSAI WTAG WTAM WTIC WWJ
B — Sinclair Minstrels
 KDKA KFYZ KOIL KPRC KSO
 KSTP KTBS KTHS KV00 KWCR
 KWK WAPI WBAL WBZ WBZA
 WDAY WECB WFAA WFLA WGAR
 WHAM WIBA WIOD WIS WJAX
 WJDX WJR WJZ WKY WLW WMC
 WOAI WREN WRVA WSB WSM
 WSMB WTMJ WWNC

C — Eton Boys, Do Re Mi Girls
 CFRB KLRA KLZ KMBC KRLLD
 KTRH KVOR WABC WBIG WCAH
 WCAO WCAU WCCO WDAE WDBJ
 WDBO WDOD WDRC WDSU WEAN
 WFBL WFBM WFEA WGST WHEC
 WHK WHP WLWB WICC WISN

MONDAY—(Continued)

WJAS WKBW WLAC WLBW WMBG
WOKO WORC WQAM WSFA WSJS
WSPD WTAQ WWVA

ED-9:15 p.m., E-8:15, C-7:15, M-6:15
C — Street Singer

CFRB KFH KLRA KMBC KTRH
KTSa KFOR WABC WBIG WCAH
WCAO WVAO WCCO WDAE WDBJ
WDBo WDOD WDRC WDSU WEAN
WFBL WFBM WFEA WGST WHEC
WHK WHP WICC WISN WJAS
WKBW WLAC WLBW WLBZ WMBG
WMT WNAC WOKO WORC WQAM
WSFA WSJS WSPD WTAQ WWVA

ED-9:30 p.m., E-8:30, C-7:30, M-6:30
C — Evening in Paris

CFOK KLZ KMBC KMOX KOMA
KSL WABC WCAO WCAU WCCO
WDSU WEAN WGN WGST WHK
WJAS WJSV WNAC

B — Jack Frost's Melody Moments
KDKA WBAL WENR WGAR WHAM
WJR WJZ WLW

ED-10:00 p.m., E-9:00, C-8:00, M-7:00
C — Golden Country Club

WAAB WABC WCAO WCAU WDRC
WFBL WHEC WHP WICC WJAS
WJSV WKBW WLBW WOKO WPG

R — Contented Program
CFCF CKGW KFJR KPRC KSD
KSTP WBEN WCAE WDAF WEA
WECB WENR WFAA WFLA WGY
WHO WIOD WJAX WKY WMC
WOAI WOC WRVA WSAI WSB
WSM WTAM WTMJ WWJ

ED-10:30 p.m., E-9:30, C-8:30, M-7:30
C — Edwin C. Hill

CFRB CKOK KLRA KLZ KMBC
KMOX KSCJ KTRH KTSa KFOR
WAAB WABC WADC WBCM WBIG
WBRC WBT WCAH WCAO WCCO
WDAE WDBJ WDOB WDRC WDSU
WFAN WFBL WFBM WFEA WGST
WHA5 WHEC WHP WIP WISN
WJAS WJSV WKBW WKBW WLBW
WLBW WLBZ WMBD WNAX WNOX
WODX WOKO WORC WQAM WREC
WSJS WSPD WTOC

R — Neighbors, Drama
CFCF CKGW KDYL KFI KFSD
KFYR KGH1 KGR KGO KGW
KHQ KOA KOMO KPRC KSD KSTP
KTAR KTHS WBEN WCAE WKY
WCHS WDAF WDAY WFAE WECB
WEEI WFAA WFBR WFLA WJY
WHO WIBA WIOD WJAR WXJ
WJDX WKY WLIT WMAQ WMC
WOC WOV WRC WSAI WSB WSM
WSMB WTAG WTAM WTIC WWJ
WWNC

ED-10:45 p.m., E-9:45, C-8:45, M-7:45
C — Howard Barlow's Symphony

CFRB CKOK KFAB KFH KLZ
KMBC KSCJ KSL KTRH KFOR
WAAB WABC WADC WBCM WBRC
WBT WCAO WDOD WDRC WDSU
WEAN WFAN WFBM WHK WIBW
WICC WIP WISN WJAS WJSD
WKBW WKBW WLBW WLBZ WMBD
WNAX WODX WOKO WORC WQAM
WSBT WSJS WSPD WTAQ WWVA

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

KDYL KFI KFSD KGO KGW KHQ
KOA KOIL KOMO KPRC KSTP

KTHS KWK WBAP WDAF WENR
WHAM WJDX WJR WKY WMAQ
WMC WOAI WREN WSB WSM
WSMB WTMJ

B — Ann Butler, Comedienne
WBAL WFLA WHAM WIOD WIS
WJZ WWNC

ED-11:15 p.m., E-10:15, C-9:15, M-8:15
B — Everett Marshall, Baritone

KDYL KFI KFJR KGO KGW KHQ
KOA KOIL KOMO KPRC KSO KSTP
KTHS KWCJR KWK KYW WDAY
WECB WFAA WIBA WJDX WKY
WMC WOAI WREN WSB WSMB
WTMJ

C — William O'Neal Tenor
CFRB CKOK WAAB WABC WADC
WCAU WDRC WEAN WFBL WFEA
WHEC WHK WICC WJAS WJSV
WKBW WKBW WLBW WLBZ WOKO
WORC WPG WSPD

ED-11:30 p.m., E-10:30 C-9:30, M-8:30
C — Ted Lewis and Orchestra

CFRB CKOK KFAB KFH KLRA KLZ
KMBC KMOX KSCJ KSL KTRH
KFOR WAAB WABC WACO WADC
WCAH WCAO WCAU WCCO WDAE
WDBJ WDBo WDOD WDRC WDSU
WEAN WFBL WFBM WGST WHEC
WHP WIBW WICC WJSV WKBW
WKBW WLAC WLBW WLBZ WMBD
WMT WNAX WNOX WOKO WORC
WPG WQAM WREC WSBT WSJS
WSPD WTOC

B — Phantom Gypsy
CFCF KFJR KPRC KSO KSTP
KTHS KTHS KWCJR KWK WBAL
WBAP WKY WDAY WECB WENR
WGAR WHAM WIBA WJZ WKY
WMAL WMC WOAI WREN WSB
WSMB WSYR

ED-12:00 p.m. E-11:00, C-10:00, M-9:00
C — Leon Belasco and Orchestra

CFOK KFAB KLRA KLZ KMBC
KRLD KSCJ KTRH KFOR WABC
WACO WCAH WCAO WCAU WCCO
WDOD WDSU WEAN WFBL WGST
WHP WIBW WICC WISN WJAS
WJSV WKBW WLAC WLBW WMBD
WMT WNAC WNAX WNOX WOKO
WREC WSBT WSPD WTOC

TUESDAY

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

ED-6:00 p.m., E-5:00, C-4:00, M-3:00
C — Reis and Dunn See Monday

R — Waldorf-Astoria, See Monday

ED-6:15 p.m., E-5:15, C-4:15, M-3:15
C — Ozzie Nelson and Orchestra

CFRB KFH KLRA KLZ KTRH
KFOR WAAB WABC WACO WBIG
WBRC WCAH WDAE WDBJ WDBo
WDOD WDRC WDSU WFEA WGR
WGST WHK WHP WIBW WIP WISN
WJAS WLBZ WLBW WMBG WMT
WODX WOKO WORC WQAM WSBT
WSFA WSJS WSPD WTAQ WWVA

ED-6:30 p.m., E-5:30, C-4:30, M-3:30
B — Three X Sisters

KSO KWCR KWK WKY WJZ
WLW WMAL WREN WSYR

R — Mid-Week Hymn Sing
KFYR KGO KOA KOMO KTHS
KTHS KVOO WBEN WDAF WEA
WFBR WFI WIS WMAQ WMC
WOAI WPTe WSB WSMB WTAG
WWNC

ED-6:45 p.m., E-5:45, C-4:45, M-3:45
R — James Melton, Tenor

KOA WEA WFBR WFI WHO WIS
WJAR WMAQ WOC WOW WRC
WSAI WSM WTAG

B — Lowell Thomas, See Monday

C — Orphan Annie, See Monday

C — Just Plain Bill, See Monday

ED-7:00 p.m., E-6:00, C-5:00, M-4:00
B — Amos 'n' Andy, See Monday

R — Three Keys
WEAF WEEI WFBR WFI WJAR
WRC WTAG

ED-7:15 p.m., E-6:15, C-5:15, M-4:15
C — Buck Rogers, See Monday

B — Radio in Education
KDKA KDYL KECA KEX KFSD
KFYR KGA KGR KJR KOA KOIL
KPO KTHS KVOO KWCR WBZ
WBZA WENR WFLA WIBA WIS
WJDX WJZ WMC WOAI WPTe
WREN WSB WSM WSMB WWNC

R — Century of Progress, See Monday

ED-7:30 p.m., E-6:30, C-5:30, M-4:30
C — Jack Dempsey's Gymnasium

CFRB WABC WCAO WCAU WHK
WKBW WKRC

ED-7:45 p.m., E-6:45, C-5:45, M-4:45
B — Irene Bordoni

CFCF CKGW KDKA KFJR KOIL
KPRC KSO KWCR KWK KYW
WBAL WBZ WBAZ WKY WDAY
WECB WGAR WHAM WIBA WIOD
WIS WJR WJZ WKY WMAL WMC
WOAI WREN WRVA WSB WSM
WSMB WSYR

C — Boake Carter, See Monday

R — The Goldbergs, See Monday

ED-8:00 p.m., E-7:00, C-6:00, M-5:00
R — Blackstone, Sanderson-Crumit

KSD KSTP KYW WBEN WCAE
WCHS WDAF WFAE WECB WEEI
WFI WGY WHO WJAR WOC WOW
WRC WSAI WTAG WTAM WWJ

B — Eno Crime Club
KDKA KOIL KSO KWCR KWK
WBAL WBZ WBAZ WGAR WHAM
WJZ WLW WMAQ WREN

C — Mary Eastman, Soprano

CFRB KFH KLZ KMBC KRLD KSL
KTRH KFOR WABC WBBM WBIG
WBRC WCAH WCAU WDAE WDBJ
WDBo WDOD WDRC WDSU WEAN
WFBL WFEA WGR WGST WHEC
WHK WHP WISN WJAS WLAC
WLBW WMBG WMT WNAC WODX
WOKO WORC WPG WQAM WSFA
WSJS WSPD WTAQ WWVA

ED-8:15 p.m., E-7:15, C-6:15, M-5:15
C — Magic Voice

CFOK KMBC KMOX WABC WADC
WCAO WCAU WDRC WEAN WFBL
WFBM WGN WGR WHAS WHK
WJAS WJSV WKRC WNAC WOKO
WSPD

TUESDAY—(Continued)

ED-8:30 p.m., E-7:30, C-6:30, M-5:30
C — Kate Smith
COKO KMBC KMOX WABC WADC
WBCO WCAH WCAO WCAU WCCO
WFBL WFBM WGN WGR WHAS
WHK WJAS WJVS WKRC WNC
WOKO WSPD
R — Wayne King and Orchestra
KSD KSTP WBEW WCAE WCKY
WCBS WEAF WEBC WEEI WFBR
WFI WGY WHO WJAX WJZR
WMAQ WOC WOV WRC WSAI
WTAG WTAM WTMJ WWJ
B — Horlick-Health Talks
KDKA KOIL KWCR KWK WBAL
WBZ WBZA WGAR WHAM WJZ
WLS WLW WREN

ED-8:45 p.m., E-7:45, C-6:45, M-5:45
C — Abe Lyman and Orchestra
COKO KMBC KMOX WABC WADC
WCAO WCAU WDRB WEAN WFBL
WFBM WGN WGR WHAS WHK
WJAS WJVS WKRC WNC WOKO
WOWO WSPD
B — Herman Hupfeld, Songs
KDKA KDYL KFSD KOA KOIL
KPO KPRC KSO KTAR KTBS KWCR
KWK KYW WBAL WBAP WCKY
WFLA WGAR WHAM WIOD WIS
WJR WJZ WKY WMAI WMC WQAI
WREN WSB WSM WSMB WSYR
WWNC

ED-9:00 p.m., E-8:00, C-7:00, M-6:00
C — Easy Aces
COKO KMBC KMOX WABC WADC
WCAO WCAU WCCO WDRB WEAN
WFBL WFBM WGN WGR WHAS
WHK WJAS WJVS WKRC WNC
WOKO WSPD
R — Ben Bernie and Orchestra
KFYR KOA KPRC KSTP WBAP
WBEW WCAE WCKY WCBS WDAF
WDAY WFAE WEEI WFBR WFI
WGY WHO WJAX WKY WLS WMC
WQAI WOC WOV WRC WRVA
WSAI WSB WSM WSMB WTAG
WTAM WWJ
B — Willard Robison and Orchestra
CFBC CKGW KDKA KOIL KSO
KWCR KWK WBAL WBZA WGAR
WJR WJZ WMAQ WREN WSYR

ED-9:15 p.m., E-8:15, C-7:15, M-6:15
C — Threads of Happiness
COKO KDB KERN KFBK KFH
KFPY KFRB KGB KHJ KLRA KLZ
KMBC KMR KMOX KOIN KOMA
KRLD KSL KTRH KTSa KVI KWG
WABC WADC WBRB WBT WCAO
WCAU WCCO WDAE WDBO WDOD
WDRB WDSU WEAN WFBL WFBM
WGN WGST WHAS WHBC WHK
WJAS WJVS WKBW WKRC WLAC
WNC WOKO WOWO WQAM WREC
WSPD WTAR WTOC

ED-9:30 p.m., E-8:30, C-7:30, M-6:30
R — Ed Wynn-Don Voorhees
CFBC KDYL KFI KFSD KFYR
KGHL KGIR KGO KGW KHQ KOA
KOMO KPRC KSD KSTP KTAR
KTBS KTBS KYOD WBAP WBEW
WCAE WCBS WDAF WDAY WFAE
WFCB WEEI WFBM WFI WFLA
WGY WHO WJAX WIOD WIS WJZR
WJAZ WJZ WKY WLW WMAQ
WMAC WQAI WOC WOV WRC
WRVA WSB WSM WSMB WTAG
WTAM WTMJ WWJ WWNC

C — Nino Martini, Tenor
CFRB KFH KLRA KLZ KMBC
KRLD KTRH KVOR WABC WBBM
WBIG WBRB WCAH WCAO WCCO
WDAE WDBJ WDBO WDOD WDRB
WDSU WEAN WFBL WFBM WFEA
WGST WHEC WHK WHP WIBW
WICC WIP WISN WJAS WKBW
WLAC WLWB WMBG WMT WNC
WOKO WORC WQAM WSFA WSJS
WSPD WTAQ
B — Sigmund Spaeth, Tune Detective
CFBC KDKA KOIL KSO KWCR
KWK WBAL WCKY WGAR WHAM
WJR WJZ WMAQ WREN WSYR

ED-10:00 p.m., E-9:00, C-8:00, M-7:00
C — Five Star Theatre
KLRA WABC WBIG WBT WCAO
WCAU WDBJ WDOD WDRB WDSU
WEAN WFBL WFEA WHP WICC
WJAS WJVS WKBW WLAC WMBG
WNC WNOX WOBW WOKO WORC
WRC WJSJ WTAR

R — Lives at Stake, Drama
KDYL KFI KGO KGW KHQ KOA
KOMO KPRC KSD KSTP KTBS
KTHS KVOD WAFI WBAP WBEW
WCAE WCBS WDAF WFAE WFCB
WEEI WENR WFBR WFI WGY
WHO WJAX WJDX WKY WLW
WMC WQAI WOC WRC WRVA WSB
WSMB WTAG WTAM WTMJ WWJ
B — Household Musical Memories
KDKA KSO KWK WBAL WBZ
WBZA WHAM WJR WJZ WMAQ
WREN WSYR

ED-10:30 p.m., E-9:30, C-8:30, M-7:30
C — Edwin C. Hill, See Monday
B — Miss Lilla, Southern Drama
KDKA KSO KWCR WBAL WCKY
WHAM WJR WJZ WMAQ WREN
WSYR

ED-10:45 p.m., E-9:45, C-8:45, M-7:45
C — Howard Barlow, See Monday

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

ED-11:30 p.m., E-10:30, C-9:30, M-8:30
C — Abe Lyman and Orchestra
CFRB COKO KFAB KFH KLRA
KLZ KMBC KSCJ KSL KTRH
KVOR WAAB WABC WACO WADC
WCAH WCAO WCAU WCCO WDAE
WDBJ WDBO WDOD WDRB WDSU
WEAN WFBL WFBM WGST WHK
WHP WIBW WICC WISN WJVS
WKBW WKBW WLAC WLWB WLWB
WMBD WMT WNAK WNOX WOKO
WORC WPG WQAM WREC WSBT
WSJS WSPD WTOC WWVA

R — Talkie Picture Time, Drama
KPRC KSD KTBS KTHS WBEW
WCAE WCBS WDAF WFAE WEEI
WFAA WFBR WFI WHO WJAX
WKY WMAQ WQAI WOC WOV
WRC WSAI WTAG WTAM WWJ
B — Phantom Gypsy, See Monday

ED-12:00 p.m., E-11:00, C-10:00, M-9:00
C — Glen Gray and Orchestra
KFH KLRA KLZ KMBC KSL KTRH
KVOR WABC WACO WBRB WCAH
WCAO WCAU WCCO WDAE WDBJ
WDBO WDOD WDSU WEAN WFBL
WFBM WGST WHEC WHP WIBW
WICC WISN WJAS WKBW WLAC
WLWB WMBD WMBG WMT WNC
WODX WOKO WQAM WSBT WSJS
WSPD WWVA

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

WEDNESDAY

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

ED-6:00 p.m., E-5:00, C-4:00, M-3:00
R — Waldorf-Astoria, See Monday
C — Art Coogan and Orchestra
CFRB KFH KLRA KLZ KMBC KSL
KTRH KTBS KVOR WAAB WABC
WACO WBBM WDBJ WBRB WCAH
WCAO WCAU WDAE WDBJ WDBO
WDOD WDRB WDSU WFBL WFEA
WGST WHAS WHK WHP WIBW
WIP WISN WJAS WKBW WLAC
WLWB WLWB WMBG WMT WODX
WOKO WORC WQAM WSBT WSFA
WSJS WSPD WTAQ WWVA

ED-6:30 p.m., E-5:30, C-4:30, M-3:30
C — Happy Wonder Bakers, See Monday
B — Three X Sisters, See Tuesday
R — Back of the News—Wm. Hard
KECA KEA KFVR KGA KJR KOA
KPO KSD KTBS KTHS WBEW
WCKY WDAF WFAE WFBR WJAX
WIOD WIS WJAX WMAQ WMG
WQAI WSB WTAG WWNC

ED-6:45 p.m., E-5:45, C-4:45, M-3:45
R — John Pierce, Tenor
KFSD KPO WBEW WCAE WFAE
WFBR WHO WIS WJAX WMAQ
WMC WOC WOW WSAI WTAG
C — Just Plain Bill, See Monday
B — Lowell Thomas, See Monday
B — Orphan Annie, See Monday

ED-7:00 p.m., E-6:00, C-5:00, M-4:00
B — Amos 'n' Andy, See Monday
C — Mildred Bailey, Songs
CFRB KFH KLZ KMBC KSL KTSa
KVOR WABC WACO WDBJ WBRB
WCAH WCAO WCAU WDAE WDBJ
WDBO WDOD WDRB WDSU WEAN
WFBL WFEA WGR WGST WHAS
WHK WHP WISN WJAS WJVS
WKBW WLAC WLWB WLWB WMBG
WMT WNC WODX WORC WQAM
WSFA WSJS WSPD WTAQ

ED-7:15 p.m., E-6:15, C-5:15, M-4:15
R — Century of Progress, See Monday
B — Everett Marshall, See Monday
C — Buck Rogers, See Monday

ED-7:30 p.m., E-6:30, C-5:30, M-4:30
B — String Symphony
KDKA KOIL KWCR WBAL WCKY
WIOD WIS WJDX WJZ WMAI
WMC WREN WSMB WSYR WWNC
R — Elvia Allman, See Monday
C — Jack Dempsey, See Tuesday

ED-7:45 p.m., E-6:45, C-5:45, M-4:45
C — Boake Carter, See Monday
R — The Goldbergs, See Monday

ED-8:00 p.m., E-7:00, C-6:00, M-5:00
C — Voice of Experience
KMBC KMOX WABC WCAO WCAU
WDRB WEAN WGR WHAS WHK
WJAS WJVS WKRC WNC
B — Eno Crime Club, See Tuesday
R — George Olsen-Fanny Brice
KSD WBEW WCAE WCBS WDAF
WFAE WEEI WFBR WGY WHO
WJAX WJZ WLS WOC WOV WRC
WSAI WTAG WTAM WTIC WWJ

WEDNESDAY—(Cont'd)

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

C — Boswell Sisters
CFRB KMBC KRLD KTRH KTSa
KVOR WABC WBiG WCAH WDBJ
WDBo WDOD WDSU WEAN WFBL
WFEA WGR WGSt WHEC WHK
WHP WISN WJAS WJSV WLaC
WLBW WLBZ WMBG WNAC WOKO
WORC WQAM WSFA WSJS WSPD
WTAQ WWVA

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

R — Woodbury—Donald Novis
KSD KTBS KTHS KVOO WAPI
WBEN WCAE WcSH WDAF WEAf
WEEI WFAA WFBZ WGY WHO
WJAR WJDX WKY WLiT WMAQ
WMC WOAi WOC WOV WRc WSB
WSM WSMB WTAg WTAM WTIC
WTVJ

B — Tastyeast Jesters

KDKA WBAL WBZ WBZA WCKY
WHAM WJZ

C — Kate Smith, See Tuesday

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

B — Phil Cook, See Monday

C — Abe Lyman, See Tuesday

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

C — Irvin S. Cobb

CFRB COK KFH KLRA KLZ
KMBC KRLD KScJ KTRH KTSa
KVOR WABC WADc WBiG WCAH
WCAO WCAU WCCO WDAE WDBJ
WDBo WDOD WDRc WDSU WEAN
WFBL WFBM WFEA WGSt WHEC
WHK WHP WIBW WICc WISN
WJAS WJSV WKBW WLaC WLBW
WLBZ WMBD WMT WNAC WNAX
WNOX WOKO WORC WPG WQAM
WREc WSBt WSJS WSPD WTOc

R — Famous Brands—Ranny Weeks

KSD WBEN WCAE WcSH WDAF
WEAF WEEI WGY WJAR WLiT
WMAQ WRc WTAg WTAM WTIC
WTVJ

B — Sherlock Holmes

CFcF CkGw KDKA KOIL KWOR
KWK WBAL WBZ WBZA WGAR
WHAM WJR WJZ WLS WLW WREN

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

C — Street Singer, See Monday

R — Vic Erwin and Band

KDYL KFI KFSd KFYR KGO KGW
KHQ KOA KOMO KPRc KSD KSTP
KTBS KVOO WBEN WCAE WCKY
WcSH WDAF WDAy WEAf WEBC
WEEI WFBZ WFLA WGY WHO
WIBa WIOD WIS WJAR WJAX
WJDX WKY WLiT WMAQ WOAl
WOC WOV WRc WRVA WSAI WSB
WSM WTAM WTIC WTVJ WNNC

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

C — Guy Lombardo—Burns and Allen

COK KMBc KMOX KOMA KRLD
KTRH KTSa WABC WADc WCAO
WCAU WCCO WDRc WEAN WFBL
WFBM WGN WHK WJAS WJSV
WKBW WKRC WNAC WOKO WOV
WSPD

R — Mischa Levitzki, Pianist

CFcF CkGw KDYL KFI KGO KGW
KHQ KOA KOMO KSD WBEN
WCAE WCKY WcSH WDAF WEAf
WEEI WFBZ WFLA WHO WIOD
WIS WJAR WJAX WLiT WMAQ
WOC WOV WRc WRVA WSAI
WTAg WTAM WTIC WTVJ WNNC

B — Conrad Thibault, Baritone

KDKA KOIL KPRc KSO KSTP
KTBS KTHS KVOO KWCR KWK
WBAL WBZ WBZA WENR WFAA
WGAR WHAM WJDX WJZ WKY
WLW WMC WOAI WREN WSB
WSM WSMB

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

C — Old Gold—Fred Waring

COK KDB KERN KFBK KFPY
KFRc KGB KHJ KLRA KLZ KMBC
KMJ KMOX KOIN KOL KOMO
KSL KTAf KTRH KTSa KVI KWG
WAAB WABC WADc WBRc WBT
WACH WCAO WCAU WCCO WDAE
WDBO WDOD WDRc WDSU WFBL
WFBM WGN WGSt WHAS WHEC
WHK WIBW WJAS WJSV WKBW
WKRC WODX WOKO WOV WQAM
WREc WRR WRc WSLD

R — Corn Cob Pipe Club

KDYL KFI KGHL KGIR KGO KGW
KHQ KOA KOMO KSD WBEN
WCAE WcSH WDAF WEAf WEEI
WENR WFBZ WGY WHO WJAR
WLiT WLW WOC WOV WRc WRVA
WTAg WTAM WTIC WTVJ

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

B — Irene Franklin, Songs

KSO KTBS KWCR KWK KYW WAPI
WBAL WCKY WFAA WFLA WGAR
WIOD WIS WJAX WJR WJZ WKY
WMAL WMC WOAI WREN WSMB
WSYR WNNC

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

B — Century of Progress

CKGw KOIL KSO KWCR KWK
KYW WAPI WBAL WFLA WGAR
WHAM WIOD WIS WJAX WJR
WJZ WMAL WMC WREN WSB
WSMB WSYR WNNC

C — Edwin C. Hill, See Monday

R — Dance Hits of Yesteryear

WAPI WBEN WCAE WCKY WcSH
WEAF WEEI WGY WJAR WMC
WSB WSMB WTAg WTAM WTVJ

R — Carveth Wells

KDYL KFYR KGHL KGIR KOA
KPRc KSD KSTP KTBS KTHS
WDAF WDAy WEBC WFAA WFBZ
WHO WIBa WKY WMAQ WOAI
WOC WOV WRVA WTAMJ

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

C — Light Opera Gems

CFRB COK KFH KLZ KMBC
KRLD KScJ KSL KTSa KVOR
WABC WADc WBCM WBiG WCAH
WCAO WCAU WDAE WDBJ WDBo
WDOD WDRc WDSU WEAN WFBL
WFBM WFEA WGR WGSt WHEC
WHK WHP WIBW WISN WJAS
WLaC WLBW WLBZ WNAC WNAX
WNOX WOKO WORc WQAM WREc
WSFA WSJS WSPD WTAQ WTOc
WWVA

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

B — Amos 'n' Andy, See Monday

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

B — Everett Marshall, See Monday

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

C — Freddie Martin and Orchestra

CFRB KLRA KLZ KMBC KSL KTRH
KTSa KVOR WABC WBiG WCBZ
WCAH WCAU WCCO WDAE WDBJ
WDBO WDOD WDRc WDSU WEAN

WFBL WFBM WGSt WHAS WHEC
WHK WHP WIBW WICc WISN
WJAS WJSV WKW WLaC WLBW
WLBZ WMBD WMBG WMT WNAC
WODX WOKO WORc WPG WQAM
WSBT WSJS WSPD

B — Sixteen Male Voices

KSO KWCR KWK WBAL WBZ
WBZA WCKY WENR WGAR WHAM
WJZ WREN

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

C — Eddie Duchin and Orchestra

COK KFAb KLZ KMBC KScJ
KTRH KVOR WABC WBRc WBT
WCAH WCAU WCCO WDAE WDOD
WDSU WEAN WFBL WGSt WHAS
WHK WHP WICc WISN WJAS
WJSV WKBW WLBW WMBD WMT
WNAC WNAX WNOX WOKO WORc
WPG WREc WSBt WSPD WTOc

ED-12:15 a.m., E-11:15, C-10:15, M-9:15

B — Sherlock Holmes

KDYL KFI KFSd KGHL KGIR
KGO KGW KHQ KOA KOMO KTAf

THURSDAY

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

B — Orphan Annie, See Monday

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

R — Waldorf-Astoria, See Monday

C — H. V. Kattenborn

CFRB COK KFAb KFH KLZ
KScJ KVOR WAAB WABC WAcO
WBiG WBRc WCAO WDAE WDBJ
WDBO WDOD WDRc WDSU WEAN WFEA
WGSt WHEC WHP WLW WLBZ
WIP WISN WKHB WKBN WLWV
WLBZ WMT WNAX WNOX WODX
WOKO WORc WQAM WREc WSBt
WSFA WSJS WSPD WTAQ WTAR
WTOc

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

C — Ozzie Nelson and Orchestra

CFRB COK WAAB WABC WAcO
WBiG WBRc WCAO WDAE WDBJ
WDBO WDOD WDRc WDSU WFEA
WGSt WHEC WHP WLW WLBZ
WNOX WODX WOKO WORc WQAM
WREc WSBt WSFA WSJS WSPD
WTAR WTOc

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

R — Three Keys

KECA KEX KFSd KFYR KGA
KJR KOA KPO KSD KTBS KTHS
WAPI WDAF WDAy WEAf WFBZ
WFL WFLA WIS WJAR WMAQ
WMC WOAi WSAI WSB WSMB
WTAg WWJ WNNC

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

R — Olga Albani, See Monday

C — Just Plain Bill, See Monday

B — Lowell Thomas, See Monday

B — Orphan Annie, See Monday

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

B — Amos 'n' Andy, See Monday

C — Charles Carlie, Tenor

CFRB CKLW KFH KLZ KMBC KSL
KTSa KVOR WABC WAcO WBiG
WBRc WCAO WCAU WDAE WDBJ
WDBO WDOD WDRc WDSU WEAN
WFBL WFAA WGR WGSt WHAS
WHK WHP WISN WJAS WJSV
WKBW WLaC WLBW WLBZ WMBG
WMT WNAC WODX WOKO WORc
WQAM WREc WSFA WSJS WSPD
WTAQ WTAR

THURSDAY—(Continued)

ED-7:15 p.m., E-6:15, C-5:15, M-4:15
C — Buck Rogers, See Monday
R — Century of Progress, See Monday

ED-7:30 p.m., E-6:30, C-5:30, M-4:30
C — Jack Dempsey, See Tuesday

ED-7:45 p.m., E-6:45, C-5:45, M-4:45
B — Merle Thorpe, Talks
KDKA KBCA KFSD KGA KGIR
KGV KJR KOA KOIL KSO KWCR
KWK KYW WAPI WBAL WGAR
WEAM WIOD WIS WJDX WJZ
WMAL WMC WREN WSB WSM
WSYR WWNC
C — Boake Carter, See Monday
R — The Goldbergs, See Monday

ED-8:00 p.m., E-7:00, C-6:00, M-5:00
C — Evan Evans—Do Re Mi
CFRB CKOK KFH KLRA KMBC
KSCJ KTRH KTSa KVOA WABC
WADC WCAH WCAO WDAE WDBJ
WDBO WDOD WDRG WDSU WEAN
WFBL WFBM WFEA WGR WGST
WHAS WHEC WHK WHP WIBW
WIP WISN WJAS WJSV WKBH
WLAC WLWB WLWB WMBG WNAC
WNOX WOKO WPG WQAM WREC
WSFA WSJS WSPD WTAQ WTAR
WTOC WVVVA

R — Rudy Vallee and Orchestra
CFRC CKGW KDYL KFI KFJR
KGO KGW KHQ KOA KOMO KPRC
KSD KSTP KTAR WAPI WBAP
WBEN WCAE WCKY WCSH WDAF
WDAY WEAF WEBC WEEI WFBR
WFI WFLA WGY WHO WIOD WJAR
WJAX WJDX WKY WMAQ WMC
WQAL WOC WOW WRC WRVA
WSAI WSB WSM WSMB WTAG
WTAM WTMJ WWJ

ED-8:30 p.m., E-7:30, C-6:30, M-5:30
C — Kate Smith, See Tuesday
B — Rin Tin Tin Trailers
KDKA KOIL KWK WBZ WBZA
WGAR WHAM WJZ WLS WLW
WREN

ED-8:45 p.m., E-7:45, C-6:45, M-5:45
C — Abe Lyman, See Tuesday

ED-9:00 p.m., E-8:00, C-7:00, M-6:00
R — Maxwell House Show Boat
KPRC KSD KSTP KTBS WAPI
WBAP WBEN WCAE WCKY WCSH
WDAF WEAF WEEI WFBR WFI
WFLA WGY WHO WIOD WJAR
WJAX WJDX WKY WMAQ WMC
WQAL WOC WOW WRC WRVA
WSAI WSB WSM WSMB WTAG
WTAM WTMJ WWJ WWNC
C — Easy Aces, See Tuesday
B — Death Valley Days
KDKA KOIL KWK WBAL WBZ
WBZA WGAR WHAM WJR WJZ
WLS WLW WREN

ED-9:15 p.m., E-8:15, C-7:15, M-6:15
C — Fray and Braggiotti
CFRB CKOK KFH KLRA KLZ
KMBC KSCJ KTRH KTSa KVOA
WABC WADC WBIG WCAH WCAO
WCAU WDAE WDBJ WDBO WDOD
WDRG WDSU WEAN WFBL WFEA
WGST WHEC WHP WIBW WICC
WISN WJAS WKBN WKBW WLAC
WLWB WLWB WMBD WMBG WMT
WNOX WOKO WORC WPG WQAM
WREC WSBT WSJS WSPD WTCO

ED-9:30 p.m., E-8:30, C-7:30, M-6:30
C — Col. Stoopnagle and Budd
CKOK KDB KERN KFBK KFH
KFPY KFRC KGB KHJ KLRA KLZ
KMBC KMJ KMOX KOIN KOL
KOMA KSCJ KSL KTRH KTAT
KTSa KVI KWG WABC WADC
WBRC WBT WCAH WCAO WCAU
WCCO WDAE WDBO WDRG WDSU
WEAN WFBL WFBM WGN WGST
WHAS WHEC WHK WJAS WJSV
WKBW WKRC WLAC WNAC WOKO
WOWO WQAM WREC WRRR WSPD
WTAR
B — Wayne King and Orchestra
KDKA KOIL KSO KWCR KWK
WBAL WBZ WBZA WENR WJZ
WREN

ED-10:00 p.m., E-9:00, C-8:00, M-7:00
R — Lucky Strike—Jack Pearl
KDYL KFI KFSD KFJR KGO KGW
KHQ KOA KOMO KPRC KSD KSTP
KTAR KTBS KTHS KVVO WBAP
WBEN WCAE WCSH WDAF WDAY
WEAF WEBC WEEI WENR WFBR
WFI WFLA WGY WHO WIOD WIS
WJAR WJAX WJDX WKY
WLW WSB WQAL WOC WOV WRC
WRVA WSB WSM WSMB WTAG
WTAM WTMJ WWJ WWNC

C — John Henry—River Giant
CFRB CKLW KFH KLRA KLZ
KMBC KSL KTRH KTSa KVOA
WAAB WABC WBBM WBIG WBRG
WCAH WCAO WCAU WCCO WDAE
WDBJ WDBO WDOD WDRG WDSU
WEAN WFBL WFEA WGST WHAS
WHK WHP WIBW WIC WISN
WJAS WJSV WKBN WKBW WLAC
WLWB WLWB WMBD WMBG WMT
WODX WOKO WORC WPG WQAM
WREC WSBT WSJS WSPD

ED-10:15 p.m., E-9:15, C-8:15, M-7:15
C — California Melodies
CFRB CKLW KFH KLRA KLZ
KMBC KSL KTRH KTSa KVOA
WAAB WABC WBBM WBIG WBRG
WCAH WCAO WCAU WCCO WDAE
WDBJ WDBO WDOD WDRG WDSU
WEAN WFBL WFEA WGST WHAS
WHK WHP WIBW WIC WISN
WJAS WJSV WKBN WKBW WLAC
WLWB WLWB WMBD WMBG WMT
WODX WOKO WORC WPG WQAM
WREC WSBT WSJS WSPD WTAR

ED-10:45 p.m., E-9:45, C-8:45, M-7:45
C — Howard Barlow, See Monday

ED-11:00 p.m., E-10:00, C-9:00, M-8:00
B — Sizzlers Trio
WBAL WFLA WGAR WHAM WIS
WJAX WJZ WMAL WRVA WSYR
WWNC
R — James Melton, Tenor
KSD WCAE WCKY WEAF WFBR
WRC WSAI WTAG WWJ
B — Amos 'n' Andy, See Monday

ED-11:30 p.m., E-10:30, C-9:30, M-8:30
C — Ted Lewis, See Monday

ED-1:00 a.m., E-12:00, C-11:00, M-10:00
R — Maxwell House Show Boat
KDYL KFI KFSD KGO KGW KHQ
KOA KOMO KTAR

FRIDAY

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

ED-6:00 p.m., E-5:00, C-4:00, M-3:00
R — Waldorf-Astoria, See Monday

ED-6:30 p.m., E-5:30, C-4:30, M-3:30
R — Betty Boop—Mae Questel
KFSD KFJR KOA KPO KSD KTBS
KTBS WBEN WDAF WEAF WFBR
WGY WIBA WIS WJDX WOAI
WSB WSMB WWNC
B — Tastyest Jesters, See Monday
C — Happy Wonder Bakers, See Monday

ED-6:45 p.m., E-5:45, C-4:45, M-3:45
C — Just Plain Bill, See Monday
B — Lowell Thomas, See Monday
B — Orphan Annie, See Monday

ED-7:00 p.m., E-6:00, C-5:00, M-4:00
B — Amos 'n' Andy, See Monday
C — Mildred Bailey, See Wednesday
R — Borrah Minevitch, Harmonica
WAPI WEAF WFBM WJAR WMC
WRC WSAI WSB WSM WWJ

ED-7:15 p.m., E-6:15, C-5:15, M-4:15
R — Century of Progress, See Monday
C — Buck Rogers, See Monday

ED-7:30 p.m., E-6:30, C-5:30, M-4:30
B — Five Star Theatre, See Monday

ED-7:45 p.m., E-6:45, C-5:45, M-4:45
C — Boake Carter, See Monday
R — The Goldbergs, See Monday

ED-8:00 p.m., E-7:00, C-6:00, M-5:00
R — Cities Service Concert
CKGW KDYL KOA KPRC KSD
KSTP KTBS KYW WBEN WCAE
WCSH WDAF WEAF WEBC WEEI
WFAA WFBR WGY WHO WJAR
WKY WLIT WOAI WOC WOW WRC
WSAI WTAG WTAM WTMJ WTMJ
WWJ

B — Nestle's Program
KDKA KOIL KWK WBAL WBZ
WBZA WGAR WHAM WJR WJZ
WLS WREN

C — Nino Martini, Tenor
CFRB CKLW KMBC KTRH KTSa
KVOA WABC WBIG WBRG WCAH
WCAO WCAU WCCO WDBJ WDBO
WDOC WDRG WDSU WEAN WFBL
WFEA WGR WGST WHEC WHK
WHP WISN WJAS WJSV WLAC
WLWB WLWB WMBG WMT WODX
WOKO WORC WQAM WREC WSBT
WSFA WSJS WSPD WTAQ WTAR

ED-8:30 p.m., E-7:30, C-6:30, M-5:30
C — Foreign Legion

CFRB CKLW KLRA KMBC KSL
KTRH KTSa KVOA WABC WBIG
WCAH WCAO WCAU WCCO WDAE
WDBJ WDBO WDOD WDRG WDSU
WFBL WFEA WGR WGST WHAS
WHEC WHK WHP WISN WJAS
WJSV WLAC WLWB WLWB WMBG
WMT WOKO WORC WQAM WREC
WSBT WSFA WSJS WSPD WTAQ
WTAR

B — Horlick Program, See Tuesday

ED-8:45 p.m., E-7:45, C-6:45, M-5:45
B — Phil Cook, See Monday

ED-9:00 p.m., E-8:00, C-7:00, M-6:00
B — Archer Gibson, Organist
KDYL KFSD KFJR KGO KGW
KHQ KOA KOMO KSO KTBS KWCR
KWK KYW WBAL WDAY WFAA
WFLA WIBA WIS WJR WJZ WKY
WOAI WREN WRVA WSB WSMB
WSYR WWNC

FRIDAY—(Continued)

C — Irvin S. Cobb, See Wednesday

R — Musical Grocery Store

KSD WBEN WCAE WCHS WDAF WFAE
WEEI WFBW WGR WJAR WLIT
WMAQ WRC WTAG WTAM WVIC

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

C — Street Singer, See Monday

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

R — Pond's Program

KSD WBEN WCAE WCHS WDAF WFAE
WEAF WENR WFBW WGR WHO
WJAR WLIT WOC WOW WRC WSAI
WTAG WTAM WJJ

C — Edwin C. Hill, Inside Story

CKOK KFH KTRA KMBC KMOX
KOMA KRLD KTRH KTSB WABC
WADC WBCM WCAH WCAO WCAU
WCCO WDRC WEAN WFBL WFBM
WGN WHAD WHAS WHK WHP
WIBW WJAS WJWS WKBB WKBW
WKRC WLWB WLWB WMBD WNAC
WOKO WORC WOWO WREC WSPD

B — Armour Program—Phil Baker

KDKA KDYL KFI KGO KGW KHQ
KOA KOIL KOMO KPRC KSO KSTP
KWK WAPI WBAL WBZ WBZA
WEBC WFAA WGAR WHAM WIOD
WJAX WJR WJZ WKY WMAQ
WMC WOAI WREN WRVA WSB
WSM WSMB WTMJ WWNC

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

R — Chevrolet—Jack Benny

KDYL KFI KFSB KFYR KGHL
KGIR KGO KGW KHQ KOA KOMO
KPRC KSD KSTP KTAR KTBS
KTHS KVOO WBEN WCAE WCHS
WDAF WDAY WFAE WFCB WEEI
WENR WFAA WFBW WFLA WGY
WHO WIBA WIOD WIS WJAR
WJAX WKY WLIT WLW WMC
WOAI WOC WOW WRC WRVA WSB
WSM WSMB WTAG WTAM WVIC
WTMJ WJJ WWNC

C — Chesterfield—Lou Holtz

CKLW KDB KERN KFBK KFPY
KPRC KGB KEJ KLRA KLZ KMBC
KMJ KMOX KOH KOIN KOL KOMA
KRLD KSL KTRH KTSB KVI KGW
WABC WADC WBRB WBT WCAH
WCAO WCAU WCCO WDAE WDBJ
WDBO WDRC WDSU WEAN WFBL
WFBM WGN WGST WHAS WHEC
WHK WISN WJAS WJWS WKBW
WKRC WLAC WLWB WMBG WMT
WNAC WOKO WORC WOWO WPG
WQAM WREC WSPD WTAR WVIC

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

B — Irene Franklin, See Wednesday

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

R — Richfield Country Club

WBEN WCAE WFAE WEEI WFBW
WGY WJAR WLIT WRC WVIC

C — Little Jack Little

CFRB CKLW KFH KLRA KLZ
KMBC KRLD KSL KTSB KFOR
WAAB WABC WBBM WBIG WBRB
WCAH WCAO WCAU WDAE WDBJ
WDBO WDOD WDRB WDSU WEAN
WFBL WFBM WFEA WGST WHAS
WHEC WHK WHP WIBW WJAS
WJWS WKBW WLAC WLWB WLWB
WMBD WMBG WMT WODX WOKO
WORC WPG WQAM WREC WSBT
WSJS WSPD WTAR

B — First Nighter, Drama

KDKA KDYL KFI KFSB KGO KGW
KHQ KOA KOIL KOMO KPRC

KSTP KTAR KWK WAPI WBAL
WBZ WBZA WCKY WEBC WGAR
WHAM WJR WJZ WKY WLS WOAI
WREN WSB WSM WSMB WTMJ

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

B — Amos 'n' Andy, See Monday

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

C — Do Re Mi Girls

CFRB CKLW KLRA KLZ KMBC
KSL KTSB KFOR WABC WBIG
WBRB WCAH WCAO WCCO WDAE
WDBJ WDBO WDOD WDRB WDSU
WEAN WFBL WFBM WFEA WGST
WHAS WHEC WHP WIBW WIP
WJAS WJWS WKBW WLAC WLWB
WLWB WMBD WMBG WMT WNAC
WODX WOKO WORC WPG WQAM
WSBT WSJS WSPD WTAR WWVA
B — Dorothy Fields—Jimmy McHugh
KSO KWCR KWK WBAL WENR
WGAR WHAM WJR WJZ WMAL
WREN

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

R — Musical Grocery Store

KDYL KFI KFSB KGO KGW KHQ
KOA KOMO KTAR WDAF

C — Abe Lyman, See Tuesday

B — Phantom Gypsy, See Monday

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

C — George Hall and Orchestra

CKOK KFAB KLZ KMBC KRLD
KSCJ KSL KTRH KFOR WABC
WBRB WBT WCAU WCCO WDAE
WDOD WDSU WICC WISN WJWS
WLWB WMBD WNAC WNA3 WOKO
WPG WSBT WSPD WTOC

SATURDAY

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

B — Orphan Annie, See Monday

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

B — Don Bestor and Orchestra

KDKA KOIL KSO KWCR KWK
WBAL WENR WHAM WJR WJZ
WMAL WREN WSYR

C — America's Grub Street

CFRB CKOK KFAB KFH KSCJ KSL
KTRH KFOR WAAB WABC WADC
WBBM WBCM WBIG WBRB WBT
WCAO WCAU WCCO WDAE WDBO
WDOD WDRB WDSU WEAN WFEA
WHEC WICC WISN WJWS WKBB
WLWB WLWB WMBG WMT WODX
WOKO WORC WQAM WREC WSPA
WTAQ WTAR WTOC WWVA

R — Waldorf-Astoria, See Monday

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

C — Art Coogan and Orchestra

CFRB CKLW KFH KLRA KLZ
KMBC KSL KTRH KTSB KFOR
WAAB WABC WACO WBIG WBRB
WCAH WDAE WDBJ WDBO WDOD
WDRB WDSU WFBL WFEA WGR
WGST WHAS WHK WHP WIBW
WICC WIP WISN WJAS WJWS WLAC
WLWB WLWB WMBG WMT WODX
WOKO WORC WQAM WSBT WSPA
WSJS WSPD WTAQ WTAR WWVA

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

C — Billy Burton and Orchestra

CFRB CKOK KTRH WAAB WABC
WACO WADC WBIG WCAO WCAU
WDAE WDBJ WDBO WDOD WDRB
WDSU WEAN WFEA WGR WGST
WHEC WHP WICC WJWS WLAC
WLWB WLWB WNOX WODX WOKO

WORC WQAM WREC WSBT WSFA
WSJS WSPD WTOC

B — Laws That Safeguard

KDYL KEK KFSB KFYR KGA KGIR
KJR KOA KOIL KPO KPRC KSO
KSTP KTAR KTBS KTHS KWCR
KWK WBAL WBZ WBZA WCKY
WEBC WFLA WIBA WIOD WIS
WJAX WJR WJZ WKY WMAQ
WMC WOAI WREN WRVA WSB
WSMB WWNC

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

R — Orphan Annie, See Monday

B — Pickens Sisters

CKGW KDYL WBEN WCAE WFAE
WFBW WGY WHO WIOD WIS WJAR
WJAX WMC WOC WOW WSAI
WTAG WWNC

B — Vincent Lopez and Orchestra

WBAL WGAR WHAM WJR WJZ
WSYR

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

R — Bert Lown and Orchestra

CFCF WBEN WDAF WFAE WFBW
WFI WGY WJAR WMAQ WSAI
WTAG WTAM

B — American Taxpayers' League

KDKA KDYL KFSB KGA KJR KOA
KPO KSO KTBS KWCR WBAL
WEBC WFLA WHAM WIBA WJR
WJZ WMAL WMC WBSW WSMB
WSYR WWNC

C — Frederic William Wile

KMBC KRLD KTRH WABC WADC
WBBM WBCM WBIG WBRB WBT
WCAO WCAU WDAE WDBO WDOD
WDRB WDSU WEAN WFBM WFEA
WGR WHEC WHK WICC WJAS
WJWS WLWB WLWB WNAC WOKO
WQAM WSFA WSPD WTAR WWVA

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

C — Gypsy Nina

CFRB CKLW KFH KLZ KMBC
KTRH KTSB KFOR WABC WACO
WBBM WBIG WBRB WCAH WCAO
WCAU WCCO WDAE WDBJ WDBO
WDOD WDRB WDSU WEAN WFEA
WGR WGST WHK WHP WIBW
WISN WJAS WJWS WLAC WLWB
WLWB WMBG WMT WNAC WODX
WOKO WORC WQAM WREC WSPA
WSJS WSPD WTAQ WTAR

R — Century of Progress, See Monday

B — Everett Marshall, See Monday

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

C — Glen Gray and Orchestra

CFRB CKLW KFH KLZ KMBC
KTRH KTSB KFOR WABC WACO
WBIG WBRB WCAH WCAO WCAU
WCCO WDAE WDBJ WDBO WDOD
WDRB WDSU WFBM WFEA WGR
WGST WHEC WHP WICC WISN
WJAS WJWS WLAC WLWB WLWB
WMBG WMT WNAC WODX WOKO
WORC WQAM WREC WSPA WSJS
WSPD WTAQ WTAR

R — Elvia Allman, See Monday

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

R — The World Today

KFYR KTBS WBEN WDAF WFAE
WENR WFBW WFLA WGY WHO
WIBA WIS WJAR WJAX WKY
WOAI WOC WOW WPTF WRC
WSAI WTAG WTAM WJJ WWNC
B — Irene Bordini, See Tuesday

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

R — Ortiz Tirado, Mexican Tenor

CKGW KFYR KOA KPO KPRC KSD

SATURDAY—(Continued)

KSTP KTBS WBEN WCKY WCSH WDAF WDAY WEAF WEBC WEEI WFT WGY WHO WIBA WIOD WIS WJAR WMAQ WMC WOAI WOC WRC WSAI WSBM WTAG WTAM WWJ WWNC

ED-8:15 p.m., E-7:15, C-6:15, M-5:15
C — Magic Voice, See Tuesday

ED-8:30 p.m., E-7:30, C-6:30, M-5:30
C — Leon Belasco and Orchestra
CFRB CKOK KFH KLRA KLZ KMBC KSCJ KSL KTRH K TSA KVRB WABC WADC WBIG WCAH WCAO WCAU WCCO WDAE WDBJ WDBO WDOD WDRS WDSU WEAN WFBL WFBM WFEA WGR WGST WHEC WHK WHP WIBW WICC WISN WJAS WJSV WLAC WLWB WLWB WMT WNAC WNAX WNOX WODX WOKO WORC WQAM WREC WSBT WSPA WSPD WTAA WTOC

R — Economic World Today
KDYL KFSD KFYR KGA KFHL KGRJ KJR KOA KPO KPRC KSD KSTP WAPI WBAF WBEN WCSH WDAF WDAY WEAF WEBC WEEI WFBF WFL WFLA WGY WHO WIBA WIOD WIS WJAR WJDX WKY WMAQ WMC WOAI WOC WOV WRC WSAI WSBM WTAG WTAM WWJ WWNC

ED-9:00 p.m., E-8:00, C-7:00, M-6:00
C — Easy Aces, See Tuesday
R — Ranny Weeks, See Wednesday

ED-9:15 p.m., E-8:15, C-7:15, M-6:15
C — Boswell Sisters
CFRB CKOK KFH KLRA KLZ KMBC KMOX KRLD KSCJ KSL KTRH K TSA KVRB WAAB WABC WACO WADC WBBM WBCM WBIG WBRC WBT WCAH WCAO WCCO WDAE WDBJ WDBO WDOD WDRS WEAN WFBL WFBM WFEA WGR WGST WHAS WHEC WIBW WICC WIP WISN WJAS WJSV WKBH WKWB WLWB WLWB WMT WNAX WNOX WODX WOKO WORC WOV WQAM WREC WSPD WTAR WTOC

ED-9:30 p.m., E-8:30, C-7:30, M-6:30
R — K-7, Drama
KSD WBEN WCAE WCSH WDAF WEAF WEEI WFBF WFL WGY WHO WJAR WMAQ WOC WOV WRC WSAI WTAG WTAM WWJ

ED-9:45 p.m., E-8:45, C-7:45, M-6:45
C — Saturday Frivolities
CFRB CKOK KFH KLRA KLZ KMBC KMOX KSCJ KSL KTRH K TSA KVRB WAAB WABC WDAE WDBJ WDBO WDOD WDRS WEAN WFBL WFBM WFEA WGR WGST WHP WIBW WICC WJAS WJSV WKWB WLAC WLWB WLWB WMBD WMT WNAC WNAX WNOX WODX WOKO WORC WPG WQAM WREC WSBT WSJS WSPD WTOC

ED-10:00 p.m., E-9:00, C-8:00, M-7:00
B — Gilbert and Sullivan Gems
KDKA KOIL KSO KWCR KWK WBAL WBZ WBZA WCKY WFLA WGAR WHAM WIS WJAX WJR WJZ WMAL WREN WRVA WSYR WWNC

R — B. A. Rolfe and Orchestra
CFCF CKGW KDYL KFI KGO KOA KSD KSTP WBAF WBEN WCAE WCSH WDAF WEAF WEEI WFBF WFL WGY WHO WJAR WLW WMAQ WOC WOV WRC WSB WSBM WTAG WTAM WWJ

ED-10:15 p.m., E-9:15, C-8:15, M-7:15
C — Public Affairs Institute
KFH KLZ KSCJ KTRH K TSA KVRB WAAB WABC WADC WBBM WBCM WBIG WBRC WBT WCAO WCAU WCCO WDAE WDBO WDOD WDRS WDSU WEAN WFBM WFEA WHEC WICC WJAS WJSV WKBH WLWB WMBD WNAX WOKO WORC WPG WQAM WSBT WSJS WSPD WTAR WTOC WVVVA

ED-10:30 p.m., E-9:30, C-8:30, M-7:30
B — Cuckoo Program
CKGW KDKA KOIL KSO KWCR KWK KYW WBAF WCKY WGAR WHAM WJZ WREN WSYR

ED-10:45 p.m., E-9:45, C-8:45, M-7:45
C — Gertrude Niesen
CFRB CKOK KFH KLRA KLZ KMBC KSCJ KTRH K TSA KVRB WAAB WABC WBIG WCAO WDAE WDBJ WDBO WDOD WDRS WDSU WEAN WFEA WGR WHAS WHEC WHK WHP WICC WIP WISN WJAS WJSV WKWB WLAC WLWB WLWB WMBD WMT WNAX WNOX WODX WOKO WORC WPG WQAM WREC WSBT WSJS WSPD WTAR WTOC WVVVA

ED-11:00 p.m., E-10:00, C-9:00, M-8:00
B — The Buccaneers Vocal Trio
KDKA KDYL KFSD KFYR KGHLL KOA KOIL KPO KPRC KSO KSTP KTBS KWCR KWK WBAF WBZ WBZA WEBC WFAA WFLA WGAR WHAM WIBA WIOD WIS WJDX WJR WJZ WKY WLW WMAQ WMC WREN WSB WSBM WSYR WWNC

C — Freddie Martin and Orchestra
CFRB CKOK KFAB KLRA KLZ KMBC KSCJ KSL KTRH KVRB WAAB WABC WACO WADC WCAH WCAO WCAU WCCO WDAE WDBJ WDBO WDOD WDSU WEAN WFBM WGR WGST WHEC WHK WHP WIBW WICC WISN WJAS WJSV WLAC WLWB WMBD WMT WNAX WNOX WODX WOKO WORC WSBT WSJS WSPD WTOC WVVVA

ED-11:15 p.m., E-10:15, C-9:15, M-8:15
B — Everett Marshall, See Monday

ED-11:30 p.m., E-10:30, C-9:30, M-8:30
C — Ben Pollack and Orchestra
CFRB CKLW KFH KLRA KLZ KMBC KTRH K TSA KVRB WABC WBIG WBRC WCAH WCAO WCCO WDAE WDBJ WDBO WDOD WDRS WDSU WEAN WFBL WFBM WFEA WGR WHAS WHEC WHK WHP WIBW WICC WIP WISN WJAS WKWB WLAC WLWB WLWB WMBD WMBG WNAC WODX WOKO WORC WQAM WREC WSBT WSPD WTAR WVVVA

B — The Witching Hour
KDKA KDYL KEX KFSD KFYR KGA KGHLL KJR KOIL KPO KPRC KSO KSTP KTBS KWCR KWK WBAF WBZ WBZA WDAY WNBC

WFLA WGAR WIBA WIOD WIS WJR WJZ WKY WLW WMAL WMC WREN WRVA WSB WSBM WSYR WWNC

R — Harold Stern and Orchestra
KSD WBEN WCAE WCKY WCSH WDAF WEAF WEEI WFBF WFL WGY WHO WJAR WMAQ WOC WRC WSAI WTAG WTAM WWJ

ED-12:00 m., E-11:00, C-10:00, M-9:00
R — Johnny Johnson and Orchestra
KSD WCAE WCKY WDAF WEAF WFBF WFL WGY WHO WJAR WMAQ WOC WRC WTAG WTAM
B — Mark Fisher's Orchestra
KOIL KSO KWCR KWK KYW WGAR WJZ WLW WRC WREN

SUNDAY

ED-11:15 a.m., E-10:15, C-9:15, M-8:15
R — Major Bows' Family
KDYL KEX KFSD KFYR KGA KJR KOA KPO KPRC KVOO WBAF WDAF WDAY WEAF WFBF WFLA WGY WHO WIOD WJAR WJAX WKY WMC WOC WRC WSM WSBM WTAG WTAM WTMJ WWJ WWNC

ED-11:30 a.m., E-10:30, C-9:30, M-8:30
C — Salt Lake Tabernacle Choir
CFRB CKOK KFAB KLZ KSCJ KSL KTRH K TSA KVRB WABC WADC WBCM WBIG WBT WCAO WCAU WCCO WDAE WDBO WDOD WDRS WDSU WEAN WFEA WGR WHEC WHK WIBW WISN WJAS WJSV WKBH WKBN WLWB WLWB WMBD WNAC WNAX WODX WOKO WORC WPG WQAM WSBT WSJS WSPD WTAR WVVVA

ED-12:15 p.m., E-11:15, C-10:15, M-9:15
B — Radio City Concert
CFCF CKGW KDKA KDYL KECA KEX KFSD KFYR KGA KJR KOA KOIL KPO KPRC KSTP KTR KVOO KWK WAPI WBAF WBZ WBZA WDAY WEBC WFAA WFLA WGAR WHAM WIBA WIOD WIS WJAX WJR WJZ WKY WLW WMAQ WOAI WRC WREN WRVA WSB WSM WSBM WSYR WWNC

ED-12:30 p.m., E-11:30, C-10:30, M-9:30
R — Walter Logan Pop Concert
CFCF CKGW KDYL KFYR KOA KPRC KSTP KTBS KVOO WAPI WBEN WCAE WCKY WCSH WDAF WDAY WEAF WEBC WEEI WFAA WFBF WFL WGY WHO WIBA WIOD WIS WJAR WKY WOAI WOC WRVA WSAI WSB WSM WSBM WTAG WTAM WWJ WWNC

ED-12:45 p.m., E-11:45, C-10:45, M-9:45
C — Street Singer
CFRB CKOK KFAB KLZ KMBC KSCJ KSL KTRH K TSA KVRB WABC WADC WBCM WBIG WBT WCAO WCCO WDAE WDBO WDOD WDSU WGR WHEC WHK WIBW WISN WJAS WJSV WKBH WKBN WLWB WLWB WMBD WNAX WODX WOKO WPG WQAM WSAI WSB WSPD WTAR WTOC WVVVA

ED-1:00 p.m., E-12:00, C-11:00, M-10:00
C — Columbia Church of the Air
CFRB CKOK KLZ KSCJ KSL KTRH K TSA KVRB WAAB WABC WADC WBCM WBIG WCAO WCCO WDAE

SUNDAY—(Continued)

WDBO WDOD WDRC WDSU WGR
WHEC WIBW WJAS WJSV WKBH
WLBW WLBZ WNAX WODX WOKO
WPG WQAM WSBT WJSJ WSPD
WTAQ WTAR WTOC WVVV

ED-1:15 p.m., E-12:15, C-11:15, M-10:15
B — Cook Travelogues
KDKA WBAL WBZ WBZA WCKY
WGAR WHAM WJR WJZ WMAL
WMAQ WWSYR

ED-1:30 p.m., E-12:30, C-11:30, M-10:30
C — Lazy Dan, Minstrel Man
CKOK KMBC KMOX WAAB WABC
WBMM WCAH WCAO WCAU WCCO
WHAS WJAS WJSV WKRC WMBG
R — Folks from Dixie
CFCC CKGW KFI KFSD KFYR KGO
KGW KHQ KOA KOMO KPRC KSD
KSTP KTBS KVOO WAPI WBEN
WCAE WCKY WDAF WDAY WFAF
WBEBC WEBC WFAA WFBZ WFI
WGY WHO WIBA WIOD WIS WJAR
WJAX WKY WMAQ WOAI WOC
WOW WRC WRVA WSAI WSB WSM
WSMB WTAG WTAM WJJ WNNC

ED-2:00 p.m., E-1:00, C-12:00, M-11:00
C — Smiling Ed McConnell
CKOK KERN KFBK KFPY KFRC
KGB KHL KLZ KMBC KMOX KOIN
KOL KSL KVI KWG WABC WBMM
WBT WCCO WDSU WGR WGST
WHAS WHEC WJAS WJSV WKRC
WLAC WNAC WOVO WQAM WRR
B — Monarch Mystery Tenor
KDKA KDYL KFI KFVR KGO KOA
KOIL KSO KSTP KWCR KWK WBZ
WBZA WCKY WDAY WEEC WGAR
WHAM WIBA WJAZ WJAX WJR
WJZ WMAQ WREN WTMJ WNNC
R — Pilgrims Mixed Chorus
CFCC KSD KTBS KTHS KYW WAPI
WBEN WCAE WCKY WCSH WFAF
WEEI WFAA WGY WJAR WJDX
WMC WOAI WOV WSAI WSM
WSMB WTAG WTAM WJJ

ED-2:15 p.m., E-1:15, C-12:15, M-11:15
B — International Radio Forum
KDKA KOIL KSO KWCR KWK
WBAL WJZ WMAL WMAQ WREN
WSYR

C — Albert Bartlett Tango King
CKOK KMBC KMOX WABC WBMM
WCAO WCAU WGR WHEC WHK
WJAS WJSV WKRC WNAC WOKO
WOWO

ED-2:30 p.m., E-1:30, C-12:30, M-11:30
R — Joe Green's Marimba Band
CFCC CKGW WBEN WCAE WCKY
WDAF WFAF WFBZ WGY WJAR
WMAQ WOV WRC WTAG WTAM
B — Northwestern Chronicle, Drama
KDKA KDYL KFI KFSD KFYR
KGHL KGR KGO KGW KHQ KOA
KOIL KOMO KPRC KSO KSTP
KTAR KTHS KVOO KWCR KWK
KYW WAPI WBAL WBZ WBZA
WDAY WBEBC WFAA WFLA WGAR
WHAM WIBA WIOD WIS WJAX
WJDX WJR WJZ WKY WLW WMAL
WMC WOAI WPTF WRN WRVA
WSB WSM WSMB WTAM WJJ WNNC
C — Victor Arden and Orchestra
CKOK KMBC KMOX WABC WBMM
WCAO WCAU WGR WHEC WHK
WJAS WJSV WKRC WNAC WOKO
WOWO

ED-2:45 p.m., E-1:45, C-12:45, M-11:45
C — Armida, Songstress
CKLV KMBC KMOX WABC WBMM
WCAO WCAU WGR WHEC WHK
WJAS WJSV WKRC WNAC WOKO
WOWO

ED-3:00 p.m., E-2:00, C-1:00, M-12:00
B — National Opera Concert
CFCC KDKA KOIL KSO KWCR
KWK WBAL WBZ WBZA WCKY
WHAM WJZ WMAL WMAQ WREN
WSYR

R — Wayne King and Orchestra
KDYL KFI KGO KGW KHQ KOA
KOMO KPRC KSD KSTP KTBS
KTHS KVOO KYW WBEN WCAE
WCKY WCSH WDAF WFAF WEEC
WEEI WFAA WFBZ WGY WHO
WIBA WJAR WKY WLIT WOAI
WOC WOW WRC WSAI WTAG
WTAM WTMJ WJJ

ED-3:15 p.m., E-2:15, C-1:15, M-12:15
C — Howard Barlow, Symphony
CFRB KFH KLRA KLZ KMBC
KTRH KVOR WABC WACO WBIG
WCAH WCAO WCCO WDAE WDBJ
WDBO WDOD WDRC WDSU WEAN
WFBM WFEA WGR WGST WHEC
WHK WHP WIBW WICC WISN
WJAS WLAC WLBW WMBD WMBG
WMT WNAC WODX WOKO WORC
WQAM WSBT WSFA WJSJ WSPD
WTAQ

ED-3:30 p.m., E-2:30, C-1:30, M-12:30
R — Radio Pulpit
KDYL KFI KFSD KFYR KGHL
KGR KGO KGW KHQ KOA KOMO
KPRC KSD KTHS KVOO WBEN
WCAE WCSH WDAF WFAF WEEC
WEEI WFBZ WFLA WGY WHO
WIBA WIOD WIS WJAR WJAX
WJDX WKY WLIT WMC WOAI
WOC WOW WPTF WRC WRVA
WSAI WSB WSM WSMB WTAG
WTAM WJJ WNNC

ED-4:00 p.m., E-3:00, C-2:00, M-1:00
R — Fiddlers Three
CFCC CKGW KDYL KFI KFSD
KFYR KGO KGW KHQ KOA KOMO
KPRC KTAR KTBS KTHS KVOO
WAPI WBAP WBEN WCAE WDAF
WFAF WEEC WEEI WFBZ WFLA
WGY WIOD WIS WJAR WJAX
WJDX WKY WLIT WMAQ WMC
WOAI WOV WRC WRVA WSAI WSB
WSM WSMB WTAG WTAM WNNC
C — Cathedral Hour
CFRB CKOK KFH KLZ KMBC
KRLD KSCJ KSL KVOR WAAB
WABC WADC WBMM WBCM WBIG
WBRC WBT WCAO WCAU WCCO
WDAE WDBO WDOD WDRC WDSU
WFBM WFEA WHEC WIBW WICC
WISN WJAS WJSV WKBH WKBN
WQKB WLBW WLBZ WNAX WOKO
WORC WQAM WSBT WSFA WJSJ
WSPD WTAR WTOC WVVV

ED-4:15 p.m., E-3:15, C-2:15, M-1:15
B — Symphonette
CFCC CKGW KDKA KOIL KPRC
KSO KTBS KWCR KWK WBAL
WBAP WCKY WFLA WHAM WIOD
WJAX WJZ WMAL WMC WOAI
WREN WRVA WSB WSM WSMB
WSYR WNNC
R — Wildroot—Vee Lawnhurst
KDYL KFI KGO KGW KHQ KOA
KOMO WBEN WCAE WCSH WDAF

WEAF WEEI WFBZ WGY WJAR
WLIT WMAQ WOW WRC WSAI
WTAG WTAM WJJ

ED-4:30 p.m., E-3:30, C-2:30, M-1:30
R — Temple of Song
WBEN WCAE WCSH WDAF WFAF
WEEI WFBZ WFI WGY WJAR
WMAQ WOW WRC WSAI WTAG
WTAM WJJ

ED-5:00 p.m., E-4:00, C-3:00, M-2:00
R — Impressions of Italy
WBEN WCAE WCSH WDAF WFAF
WEEI WFBZ WFI WGY WJAR
WMAQ WOW WRC WSAI WTAG
WTAM WJJ

B — World of Religion
KDYL KFSD KFYR KGHL KGR
KGO KGW KHQ KOA KOIL KOMO
KSTP KTAR KTBS KVOO KWCR
KWK WBAL WBAP WBZ WBZA
WCFL WCKY WEEC WFLA WGAR
WHAM WIBA WIOD WIS WJAX
WJDX WJZ WKY WMAL WMC
WOAI WPTF WRN WRVA WSB
WSM WSMB WTMJ WNNC

ED-5:30 p.m., E-4:30, C-3:30, M-2:30
C — Sanderson and Crumit
CKLV KFAB KFH KMBC KMOX
KOMA WAAB WABC WADC WCAH
WCAO WCAU WDRC WDSU WEAN
WFBL WFBM WGR WHAS WHEC
WHK WICC WJSV WOKO WORC
WSPD WTAR WVVV

R — Clyde Doerr's Saxophone Octet
KSD WBEN WCAE WCSH WDAF
WFAF WEEI WENR WFBZ WFI
WFLA WGY WHO WIOD WIS WJAR
WMC WOC WOW WRC WSAI WSB
WSM WSMB WTAG WTAM WJJ
WNNC

B — Pages of Romance, Drama
KDKA KOIL KSO KWCR KWK
KYB WBAL WBZ WBZA WGAR
WJR WJZ WLW WREN

ED-6:00 p.m., E-5:00, C-4:00, M-3:00
B — L'Heure Exquise
KDKA KOIL KSO KWCR KWK
WBAL WBZ WBZA WCKY WGAR
WHAM WJR WJZ WMAQ WREN
WSYR

R — Catholic Hour
KDYL KFAB KFYR KGHL KGR
KJR KOA KPRC KSD KTAR KTBS
KVOO WAPI WBAP WBEN WCAE
WCKY WCSH WDAF WDAY WFAF
WEEC WEEI WENR WFBZ WFLA
WGY WHO WIBA WIOD WIS WJAR
WJAX WJDX WKY WLIT WMC
WOAI WOC WOW WRC WRVA
WSAI WSB WSM WSMB WTAG
WTAM WJJ WNNC

C — The Lawyer and Public
CFRB KFH KFH KLZ KRLD
KSCJ KSL KVOR WAAB WABC
WACO WBCM WBIG WBRC WCAO
WCCO WDAE WDBJ WDBO WDOD
WDRC WDSU WEAN WFEA WGST
WHAS WHP WIBW WICC WISN
WKBH WLBW WLBZ WNAX WNOX
WODX WOKO WOV WRC WPG WQAM
WREC WSFA WJSJ WSPD WTAG
WTAR WTOC WVVV

ED-6:30 p.m., E-5:30, C-4:30, M-3:30
C — Roses and Drums
CKOK KMBC KMOX KRLD WAAB
WABC WADC WCAO WCCO WDSU
WGN WGR WHAS WHK WJAS
WJSV WKRC

SUNDAY—(Continued)

R — Our American Schools

KDYL KBA KKA KEX KFSO KFYR
KGA KOA KPCO KPRC KSD KSTP
KTBS KVOO WBAP WBEN WCAE
WCSE WDAY WEAF WEBC WEEI
WENR WFBR WFLA WGY WIBA
WIOD WJAR WKY WLIT WMC
WOAI WOV WPTF WRC WRVA
WSAI WSM WSMB WTAG WWJ
WWNC

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

B — Dick Daring, Children's Sketch
KDKA KOIL KSO KWCR WBAL
WBZ WBZA WCKY WENR WGAR
WHAM WJZ WMAL WREN WSYR

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

B — Borrah Minevitch, Harmonica
KDYL KFYR KOA KOIL KPRC KSO
KTBS KVOO KWK WBAL WCKY
WDAY WEBC WFLA WIBA WIOD
WIS WJZ WKY WLS WOAI WREN
WRVA WSMB WWNC

R — James Melton, Tenor

KDYL KFYR KOA KPRC KSD
KSTP KTBS KVOO WBEN WDAF
WDAY WEAF WEBC WEEI WFBR
WFLA WGY WIBA WIOD WIS
WJAR WMAQ WOAI WRVA WSAI
WSMB WTAG WWJ WWNC

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

R — Joe Moss and Orchestra
WCSE WEAF WJAR WTAG WTIC

B — Great Moments in History

KDKA KDYL KFI KFSO KFYR
KGO KGW KHQ KOA KOIL KOMO
KPRC KSTP KTAR KVOO KWCR
KWK WBAL WBZ WBZA WDAY
WEBC WFAA WFLA WGAR WHAM
WIBA WIOD WJAX WJDX WJR
WJZ WKY WLS WLW WMC WOAI
WPTF WREN WRVA WSB WSM
WSMB WTMJ WWNC

C — Fray and Braggiotti

CKOK KFAB KFH KLZ KMBC
KSCJ KSL KTRH KFOR WABC
WACO WADC WBRW WCAH WCAO
WDAE WDBJ WDOR WDOE WDR
WDSU WEAN WFBL WFBM WFEA
WGST WHAS WHEC WHP WIBW
WISN WJAS WJSV WLW WLWZ
WQMT WNAC WNOX WOKO WORC
WQAM WSFA WSJS WSPD WTAR
WTOC WWVA

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

C — Angelo Patri, Your Child
CKOK KMBC KMOX WABC WCAO
WCAU WCCO WFBL WGN WGR
WHAS WHK WJAS WJSV WKRC
WNAC

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

R — Chase and Sanborn
CPFC CKGW KDYL KFI KFSO
KFYR KGO KGW KHQ KOA KOMO
KPRC KSD KSTP KATR KVOO
WBEN WCAE WCSE WDAF WDAY
WEAF WEBC WFAA WFBR WFLA
WGY WHO WIOD WIS WJAR WJDX
WKY WLIT WLW WMAQ WMC
WOAI WOC WOV WRC WSB WSM
WSMB WTAG WTAM WTIC WTMJ
WWJ WWNC

C — The Gauchos

CKOK KFAB KFH KLZ KSCJ KTRH
KFOR WAAB WABC WADC WBCM
WBRW WBT WCAO WDAE WDBO
WDOE WDRW WDSU WEAN WFBM
WGR WHEC WIBW WICC

WIP WISN WJAS WJSV WKBN
WLWB WLWZ WMBD WNAX WODX
WOKO WPG WQAM WSJS WSPD
WTAR WTOC

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

C — Chicago Variety Program
KPH KLRA KLZ KMBC KSL KTRH
KFOR WABC WACO WBBM WBIG
WBRW WCAH WCAO WCCO WDAE
WDBJ WDBO WDOE WDRW WDSU
WEAN WFBL WFBM WFEA WGR
WGST WHEC WHP WICC WISN
WJAS WLWB WMT WNAC WODX
WOKO WORC WQAM WSFA WSJS
WSPD WTAQ WWVA

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

C — Columbia Dramatic Guild
CFRB KLRA KLZ KMBC KSL KTRH
KFOR WABC WACO WBRW WCAH
WCAO WCAU WCCO WDAE WDBJ
WDBO WDOE WDRW WDSU WEAN
WFBL WFBM WFEA WGR WGST
WHEC WHK WHP WIBW WICC
WISN WJAS WLAC WLWB WNAC
WOKO WORC WQAM WSFA WSJS
WSPD WTAQ WWVA

B — Will Rogers

KPRC KTBS KTHS WAPI WBAL
WBZ WBZA WFAA WFLA WGAR
WHAM WIS WJAX WJDX WJR
WJZ WLW WMAL WMC WOAI
WPTF WRVA WSB WSM WSMB
WSYR WWNC

R — Manhattan Merry-Go-Round

KSD WDAF WEAF WENR WFBR
WFI WGY WHO WJAR WOC WOV
WRC WSAI WTIC WWJ

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

R — Album of Family Music
KDYL KFI KGO KGW KHQ KOA
KOMO KPRC KSD KSTP KTHS
WAPI WBEN WCAE WCKY WCSE
WEAF WENR WFAA WFBR WFI
WFLA WGY WHO WIOD WJAR
WJZ WJX WKY WMC WOAI
WOC WOV WRC WRVA WSAI WSB
WSM WSMB WTAG WTAM WTMJ
WWJ

B — Walter Winchell

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

C — Andre Kostelanetz Presents

CKOK KLZ KMBC KMOX KRLD
KSCJ KSL KTRH KTA KFOR
WABC WADC WBBM WBCM WBRW
WBT WCAO WCAU WCCO WDAE
WDBO WDOE WDRW WDSU WEAN
WFBM WFEA WGR WHEC WHK
WIBW WISN WJAS WJSV WKHB
WLWB WLWZ WNAC WNAX WOKO
WORC WBSI WSFA WSJS WSPD
WTAR WTOC WWVA

ED-9:45 p.m., E-8:45, C-7:45, M-6:45

B — Pickens Sisters
CPFC CKGW KDKA KOIL KSO
KWCR KWK KYW WBAL WHAM
WJR WJZ WREN WSYR

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

R — David Lawrence
KDYL KFI KFSO KFYR KGO KGW
KHQ KOA KOMO KPRC KSTP
KTBS WBEN WCAE WCKY WCSE
WDAF WDAY WEAF WEBC WEEI
WFBR WFI WFLA WGY WHO WIBA
WIOD WIS WJAR WJAX WKY WMC
WOAI WOC WRC WSAI WSM WSMB
WTAG WTAM WTIC WWJ WWNC
B — Phil Dewey, Fireside Songs
KDKA KOIL KSO KWCR KWK

WBAL WBZ WBZA WCKY WGAR
WHAM WJR WJZ WMAQ WREN
WSYR

C — John Henry—River Giant

CKOK KLRA KLZ KMBC KRLD
KSCJ KSL KTRH KTA KFOR
WABC WACO WADC WBBM WBCM
WBRW WBT WCAH WCAO WCAU
WDAE WDBJ WDOE WDRW WDSU
WFBL WFBM WFEA WGR WGST
WHEC WHK WHP WISN WJAS
WKHB WLWB WLWZ WNAX WNOX
WOKO WORC WREC WSFA WSJS
WSPD WWVA

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

C — Columbia Revue

CFRB KLRA KLZ KMBC KRLD
KSL KTRH KFOR WAAB WABC
WBIG WBRW WCAH WCAO WCAU
WCCO WDAE WDBJ WDBO WDOE
WDRW WDSU WFBL WFBM WFEA
WGR WGST WHEC WHP WIBW
WICC WISN WJAS WKBW WLAC
WLWB WMBD WMT WODX WOKO
WORC WPG WQAM WSBT WSJS
WSPD WTAQ

R — Highlights and Shadows

CKGW KYW WBEN WCAE WCKY
WCSE WDAF WEAF WEEI WFBR
WFLA WGY WIOD WIS WJAR WOV
WRC WSAI WTAG WTAM WWJ
WWNC

B — Vincent Lopez; Pratt-Sherman

KDKA KDYL KFI KGO KGW KHQ
KOA KOIL KOMO KPRC KSTP
KTHS KWK WBAL WBAP WBZ
WBZA WGAR WIBA WJDX WJR
WJZ WKY WLW WMAQ WOAI
WREN WSB WSM WSMB WTMJ

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

R — Sunday at Seth Parker's

CPFC CKGW KDYL KFSO KFYR
KGHL KGIR KGO KGW KHQ KOA
KPRC KSTP KTAR KTHS KTHS
KYW WAPI WBAP WBEN WCAE
WCKY WCSE WDAF WDAY WEAF
WEBC WEEI WFBR WFI WFLA
WGY WHO WIBA WIOD WIS WJAR
WJAX WJDX WMC WOAI WOC
WOW WRC WRVA WSAI WSB WSM
WSMB WTAG WTAM WTMJ WWJ
WWNC

B — Orange Lantern, Mystery Drama

KDKA KSO KWCR KWK WBAL
WGAR WHAM WJZ WREN

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

C — Eddie Duchin and Orchestra

CKOK KFAB KFH KLRA KLZ
KMOX KSCJ KTRH KFOR WAAB
WABC WBCM WBRW WCAO WCAU
WCCO WDAE WDBJ WDOE WDR
WDRW WDSU WEAN WGST WHK
WHP WIBW WICC WISN WKBN
WLWB WLWZ WMBD WMT WNAC
WNAX WNOX WOKO WPG WQAM
WREC WBSI WSJS WSPD WTAR
WTOC

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

R — Don Hall Trio

KFYR KSTP WCAE WCKY WCSE
WDAF WDAY WEAF WEBC WENR
WFBR WFI WGY WHO WIBA WOC
WRC WSAI WTAG WTIC

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

C — Abe Lyman, See Tuesday

B — Minneapolis Symphony Orchestra
KDKA KSO KWCR KWK KYW
WBAL WBZ WBZA WGAR WHAM
WJR WJZ WMAL WREN WSYR

CLASSIFIED INDEX TO CHAIN PROGRAMS

Time in Eastern Daylight Saving

CONCERTS

Howard Barlow, 3:15 p.m., Sun.; 10:45 p.m., Mon., Tues., Thurs., C.
Gauchos, 8:00 p.m., Sunday, C.
Gilbert and Sullivan Gems, 10 p.m., Saturday, B.
Impressions of Italy, 5:00 p.m., Sunday, R.
L'Heure Exquise, 6:00 p.m., Sunday, B.
Walter Logan, 12:30 p.m., Sunday, R.
Minneapolis Symphony, 11:30 p.m., Sunday, B.
National Opera, 3:00 p.m., Sunday, B.
Orchestral Gems, 11:30 p.m., Sunday, R.
Radio City Symphony, 12:15 p.m., Sunday, B.
Riesensfeld's Viennese, 8:00 p.m., Sunday, B.
String Symphony, 7:30 p.m., Wednesday, B.
Symphonette, 4:15 p.m., Sunday, B.
Waldorf-Astoria, 6:00 p.m., daily, ex. Sunday, R.

DANCE BANDS

Victor Arden, 2:30 p.m., Sunday, C.
Albert Bartlett, 2:15 p.m., Sunday, C.
Ben Bernie, 9:00 p.m. and 12:30 a.m., Tuesday, R.
Don Bestor, 6:00 p.m., Saturday, B.
Frank Black, 10:00 p.m., Friday, R.
Art Coogan, 6:00 p.m., Wed.; 8:15 p.m., Sat., C.
Clyde Doerr, 5:30 p.m., Sunday, R.
Eddie Duchin, 11:00 p.m., Sun.; 12 mid., Wed., C.
Vic Erwin, 9:15 p.m., Wednesday, R.
Glen Gray, 12 mid., Tuesday; 7:30 p.m., Sat., C.
Richard Himber, 6:30 p.m., Monday, R.
Johnny Johnson, 12 mid., Saturday, R.
Wayne King, 3:00 p.m., Sun.; 8:30 p.m., Tues., R.; 9:30 p.m., Thurs., B.
Ted Lewis, 11:30 p.m., Mon. and Thurs., C.
Guy Lombardo, 9:30 p.m., Wednesday, C.
Vincent Lopez, 10:15 p.m., Sun.; 6:45 p.m., Sat., B.
Bert Lown, 7:00 p.m., Saturday, R.
Abe Lyman, 11:30 p.m., Sun., Tues., Fri.; 8:45 p.m., Tues., Wed., Thurs., C.
Dolph Martin, 7:30 p.m., Monday, C.
Freddie Martin, 11:30 p.m., Wed.; 11:00 p.m., Sat., C.
Joe Moss, 7:30 p.m., Sunday, R.
Ozzie Nelson, 6:15 p.m., Tuesday, C.
George Olsen, 8:00 p.m., Wednesday, R.
Ben Pollack, 12 mid., Sun.; 11:30 p.m., Sat., C.
Willard Robison, 9:00 p.m., Tuesday, B.
B. A. Rolfe, 10:00 p.m., Saturday, R.
Harold Stern, 11:30 p.m., Saturday, R.
Rudy Vallee, 8:00 p.m., Thursday, R.
Fred Waring, 10:00 p.m., Wednesday, C.

DIALOG

Amos 'n' Andy, 7 and 11 p.m., daily, ex. Sat. and Sun., B.
Phil Baker, 9:30 p.m., Friday, B.
Jack Benny, 10:00 p.m., Friday, R.
Burns and Allen, 9:30 p.m., Wednesday, C.
Ann Butler, 11:00 p.m., Monday, B.
Phil Cook, 8:45 p.m., Mon., Wed., Fri., B.
Cuckoo, 10:30 p.m., Saturday, B.
Easy Aces, 9:00 p.m., Tues., Thurs., Sat., C.
Lou Holtz, 10:00 p.m., Friday, C.
Tom Howard, 9:00 p.m. and 11:30 p.m., Friday, R.
Marx Bros., 7:30 p.m., Monday, B.
Baron Munchausen, 10:00 p.m., Thursday, R.
Jack Osterman, 2:30 p.m., Sunday, C.
Reis and Dunn, 6:00 p.m., Mon. and Tues., C.
Stoopnagle and Budd, 9:30 p.m., Thursday, C.

DRAMA

Columbia Dramatic Guild, 9:00 p.m., Sunday, C.
Dick Daring, 6:45 p.m., Sunday, B.
Death Valley Days, 9:00 p.m., Thursday, B.
Eno Crime Clues, 8:00 p.m., Tues. and Wed., B.
First Nighter, 10:30 p.m., Friday, B.
Folks from Dixie, 1:30 p.m., Sunday, R.
Foreign Legion, 8:30 p.m., Friday, C.
Goldbergs, 7:45 p.m., daily, ex. Sat. and Sun., R.
John Henry, 10:00 p.m., Sun. and Thurs., C.
Sherlock Holmes, 9:00 p.m. and 12:15 a.m., Wednesday, B.

K-7, 9:30 p.m., Saturday, R.
Miss Lilla, 10:30 p.m., Tuesday, B.
Lives at Stake, 10:00 p.m., Tuesday, R.
Magic Voice, 8:15 p.m., Tuesday and Saturday, C.
Neighbors, 10:30 p.m., Monday, R.
Northwestern Chronicle, 2:30 p.m., Sunday, B.
Pages of Romance, 5:30 p.m., Sunday, B.
Rin Tin Tin, 8:30 p.m., Thursday, B.
Buck Rogers, 7:15 p.m., daily, ex. Sat. and Sun., C.
Roses and Drums, 6:30 p.m., Sunday, C.
Soconyland Sketches, 8:00 p.m., Monday, R.

PIANO AND ORGAN

Fray and Braggiotti, 7:30 p.m., Sun.; 9:15 p.m., Thurs., C.
Archer Gibson, 9:00 p.m., Friday, B.
Vee Lawnhurst, 4:15 p.m., Sunday, R.
Mischa Lebitzki, 9:30 p.m., Wednesday, R.
Ohman and Arden, 2:30 p.m., Sun., C.; 9:30 p.m., Sun., R.

POPULAR PROGRAMS

A. & P. Gypsies, 9:00 p.m., Monday, R.
Album of Familiar Music, 9:30 p.m., Sunday, R.
Armour Program, 9:30 p.m., Friday, B.
Major Bowses' Family, 11:15 a.m., Sunday, R.
California Melodies, 10:15 p.m., Thursday, C.
Chase and Sanborn, 8:00 p.m., Sunday, R.
Chesterfield, 10:00 p.m., Friday, C.
Chevrolet Program, 10:00 p.m., Friday, R.
Chicago Variety, 8:30 p.m., Sunday, C.
Cities Service, 8:00 p.m., Friday, R.
Cliquot Club, 8:00 p.m., Monday, B.
Columbia Revue, 10:15 p.m., Sunday, C.
Contented Program, 10:00 p.m., Monday, R.
Corn Cob Pipe Club, 10:00 p.m., Wednesday, R.
Evening in Paris, 9:30 p.m., Monday, C.
Fiddlers Three, 4:00 p.m., Sunday, R.
Five Star Theatre, 10:00 p.m., Tues., C.; 7:30 p.m., Mon. and Fri., B.
Jack Frost's Melody, 9:30 p.m., Monday, B.
Golden Country Club, 10:00 p.m., Monday, C.
Happy Wonder Bakers, 6:30 p.m., Mon., Wed., Fri., C.
Household Musical Memories, 10:00 p.m., Tuesday, B.
Inside Story, 9:30 p.m., Friday, C.
Lucky Strike, 10:00 p.m., Thursday, R.
Manhattan Merry-Go-Round, 9:00 p.m., Sunday, R.
Maxwell House, 9:00 p.m. and 1:00 a.m., Thursday, R.
Borah Minevitch, 7:00 p.m., Sun., B.; 7:00 p.m., Fri., R.
Nestle's Program, 8:00 p.m., Friday, B.
Old Gold, 10:00 p.m., Wednesday, C.
Pond's Program, 9:30 p.m., Friday, R.
Richfield Country Club, 10:30 p.m., Friday, R.
Royal Vagabonds, 8:00 p.m., Wednesday, R.
Saturday Fervidities, 9:45 p.m., Saturday, C.
Sinclair Minstrels, 9:00 p.m., Monday, B.
Wildroot Institute, 4:15 p.m., Sunday, R.
Woodbury Program, 8:30 p.m., Wednesday, R.
Ed Wynn, 9:30 p.m., Tuesday, R.

RELIGIOUS

Cathedral Hour, 4:00 p.m., Sunday, C.
Catholic Hour, 6:00 p.m., Sunday, R.
Church of the Air, 1:00 p.m., Sunday, C.
Mid-Week Hymn Sing, 6:30 p.m., Tuesday, R.
Seth Parker's, 10:45 p.m., Sunday, R.
Pilgrims, 2:00 p.m., Sunday, R.
Salt Lake Choir, 11:30 a.m., Sunday, C.
World of Religion, 5:00 p.m., Sunday, B.

SINGERS

Countess Olga Albani, 6:45 p.m., Mon. and Thurs., R.
Frances Alda, 6:00 p.m., Tuesday, R.
Elvia Allman, 7:30 p.m., Mon., Wed. and Sat., R.
Armda, 2:45 p.m., Sunday, C.
Mildred Bailey, 7:00 p.m., Wed. and Fri., C.
Betty Barthell, 10:30 p.m., Friday, R.
Irene Bordoni, 7:45 p.m., Tuesday and Saturday, B.
Boswell Sisters, 8:15 p.m., Wed.; 9:15 p.m., Sat., C.
Fanny Brice, 8:00 p.m., Wednesday, R.

Buccaneers, 11:00 p.m., Saturday, B.
 Charles Carlile, 7:00 p.m., Thursday, C.
 Phil Dewey, 10:00 p.m., Sunday, B.
 Do Re Mi, 9:00 p.m., Mon.; 8:00 p.m., Thurs.; 11:15 p.m., Fri., C.
 Jessica Dragonette, 8:00 p.m., Friday, R.
 Mary Dragman, 9:30 p.m., Sunday; 8:00 p.m., Tuesday; C.
 Eton Boys, 9:00 p.m., Monday, C.
 Evan Evans, 9:30 p.m., Sun.; 8:00 p.m., Thurs., C.
 Fields and McHugh, 11:15 p.m., Friday, B.
 Irene Franklin, 10:15 p.m., Wed. and Fri., B.
 Gypsy Nina, 7:15 p.m., Saturday, C.
 Don Hall Trio, 11:15 p.m., Sunday, R.
 Herman Hupfeld, 8:45 p.m., Tuesday, B.
 Theo Karle, 7:00 p.m., Monday, C.
 Irving Kaufman, 8:45 p.m., Tues., Wed., Thurs., C.
 Jeannie Lang, 9:30 p.m., Thurs., C.; 9:00 and 11:30 p.m., Friday, R.
 Lazy Dan, 1:30 p.m., Sunday, C.
 Little Jack Little, 11:15 p.m., Wed.; 10:30 p.m., Fri., C.
 Everett Marshall, 7:15 and 11:15 p.m., Mon., Wed., Sat., B.
 Nino Martini, 9:30 p.m., Tues.; 8:00 p.m., Fri., C.
 Smiling Ed McConnell, 2:00 p.m., Sunday, C.
 Tommy McLaughlin, 9:15 p.m., Tuesday, C.
 James Melton, 7:00 p.m., Sun.; 6:45 p.m., Tues.; 11:00 p.m., Thurs., 10:00 p.m., Fri., R.
 Monarch Mystery Tenor, 2:00 p.m., Sunday, B.
 Frank Munn, 9:30 p.m., Sunday, R.
 Gertrude Niesen, 10:45 p.m., Saturday, C.
 Donald Novis, 8:30 p.m., Wednesday, R.
 William O'Neal, 11:15 p.m., Monday, C.
 Pickens Sisters, 9:45 p.m., Sunday, B.; 6:45 p.m., Sat., R.
 Mae Questel, 6:30 p.m., Friday, R.
 Carson Robison, 8:15 p.m., Monday, C.
 Lanny Ross, 9:00 p.m., Thursday, R.
 Sanderson-Crumit, 5:30 p.m., Sunday, C.; 8:00 p.m., Tues., R.
 Singin' Sam, 8:00 p.m., Monday, C.
 Sixteen Male Voices, 11:30 p.m., Wednesday, B.
 Sizzlers Trio, 8:30 p.m., Mon.; 11:00 p.m., Thurs., B.

Kate Smith, 8:30 p.m., Tues., Wed., Thurs., C.
 Southernaires Male Quartet, 7:00 p.m., Monday, R.
 Street Singer, 12:45 p.m., Sun.; 9:15 p.m., Mon., Wed., Fri., C.
 Tastyest Jesters, 6:30 p.m., Mon., Fri.; 8:30 p.m., Wed., B.
 Conrad Thibault, 9:30 p.m., Wednesday, B.
 Three Keys, 7:00 p.m., Tues.; 6:30 p.m., Thurs., R.
 Three X Sisters, 6:30 p.m., Tues. and Wed., B.
 Ortiz Tirado, 8:30 p.m., Mon.; 8:00 p.m., Sat., R.
 Ranny Weeks, 8:45 p.m., Mon.; 9:00 p.m., Wed. and Sat., R.
 Witching Hour, 11:30 p.m., Saturday, B.

TALKS

America's Grub Street, 6:00 p.m., Saturday, C.
 American Taxpayers' League, 7:00 p.m., Saturday, B.
 Boake Carter, 7:45 p.m., daily, ex. Sat. and Sun., C.
 Century of Progress, 7:15 p.m., daily, ex. Sun., R.; 10:30 p.m., Wed., B.
 Irvin Cobb, 9:00 p.m., Wed. and Fri., C.
 Cook Travelogues, 1:15 p.m., Sunday, B.
 Jack Dempsey, 7:30 p.m., Tues., Wed., Thurs., C.
 William Hard, 6:30 p.m., Wednesday, R.
 Edwin C. Hill, 10:30 p.m., Mon., Tues., Wed.; 9:30 p.m., Fri., C.
 Horlick's Health, 8:30 p.m., Tues. and Fri., B.
 David Lawrence, 10:00 p.m., Sunday, R.
 Laws that Safeguard, 6:30 p.m., Saturday, B.
 Lawyer and Public, 6:00 p.m., Sunday, C.
 Alex Morrison on Golf, 10:00 p.m., Mon., C.; 10:30 p.m., Fri., R.
 Angelo Patri, 7:45 and 11:15 p.m., Sunday, C.
 Radio Pulpit, 3:30 p.m., Sunday, R.
 Will Rogers, 9:00 p.m., Sunday, B.
 Sigmund Spaeth, 9:30 p.m., Tuesday, B.
 Lowell Thomas, 6:45 p.m., daily, ex. Sat. and Sun., B.
 Merle Thorpe, 7:45 p.m., Thursday, B.
 Voice of Experience, 8:00 p.m., Wednesday, C.
 Carveth Wells, 10:30 p.m., Wednesday, R.
 Frederic William Wile, 7:00 p.m., Saturday, C.
 Walter Winchell, 9:30 and 11:15 p.m., Sunday, B.

THE MONTH'S CHANGES

(Continued from page 1)

1100 CRCV Vancouver, B. C., from 1030
 1210 CFCO Chatham, Ont., from 1010
 1260 KUOA Fayetteville, Ark., from 1390
 1310 CHCK Charlottetown, P. E. I., from 960
 1310 CKCV Quebec, Que., from 880
 1340 KGNU Dodge City, Kans., from 1210
 1410 CKFC Vancouver, B. C., from 730
 1410 CKMO Vancouver, B. C., from 730
 1430 CFCT Victoria, B. C., from 630

POWER

580 CKCL Toronto, Ont., 500 to 100
 580 CRCA Moncton, N. B., 700 to 500
 630 CMQ Havana, Cuba, 250 to 500
 680 KFO San Francisco, Calif., 5000 to 50000
 690 HJN Bogota, Colombia, 2000 to 1000
 880 CJRW Fleming, Sask., 1000 to 500
 940 WAAT Jersey City, N. J., 300 to 500
 1000 WHO Des Moines, Iowa, 5000 to 50000
 1000 WOC Davenport, Iowa, 5000 to 50000
 1010 CKOC Hamilton, Ont., 1000 to 100
 1030 CKNC Toronto, Ont., 500 to 100
 1120 CFCA Toronto, Ont., 500 to 100
 1210 CFCO Chatham, Ont., 250 to 100
 1310 WTRC Elkhart, Ind., 50 to 100
 1340 KGNU Dodge City, Kans., 100 to 250

OWNERS

580 CRCA Moncton, N. B., to Canadian Radio Broadcasting Commission
 680 WPTF Raleigh, N. C., to WPTF Radio Co.
 880 CRCO Ottawa, Ont., to Canadian Radio Broadcasting Commission
 1100 CRCV Vancouver, B. C., to Canadian Radio Broadcasting Commission
 1290 KFUL Galveston, Texas, to Southwest Broadcast Co.
 1310 WFDF Flint, Mich., to Flint Broadcasting Co.
 1390 KUOA Fayetteville, Ark., to KUOA, Inc.
 1440 WSAN Allentown, Pa., to WSAN, Inc.

CALLS

540 CKLW Windsor, Ont., formerly CKOK
 580 CRCA Moncton, N. B., formerly CNRA
 880 CRCO Ottawa, Ont., formerly CNRO
 1100 CRCV Vancouver, B. C., formerly CNRV
 1400 WARD. Brooklyn, N. Y., formerly WCRGU

DELETED

595 CJGC London, Ont.
 1200 KGEW Fort Morgan, Colo.
 1420 WERE Erie, Pa.

INDEX BY FREQUENCIES AND DIAL NUMBERS

520 kcs. 576.6 m.

.....	250	....	Freiburg, Germany
.....	700	522	Hamar, Norway
.....	7000	522	Ljubljana, Yugo.

530 kcs. 565.7 m.

LKH	700	536	Hamar, Norway
OPE	1000	536	Tampere, Finland
RW24	2600	531	Smolensk, USSR
.....	250	536	Augsburg, Germany
.....	2000	....	Grenoble, France
.....	250	....	Hanover, Germany
.....	1500	536	Kaiserslautern, Germany
.....	16000	533	Wilno, Poland

540 kcs. 555.2 m.

CKLW	5900	....	Windsor, Ont.
HAL-2	20000	545	Budapest, Hungary
.....	700	....	Tammersfors, Finland
XEY	105	546	Merida, Yucatan

550 kcs. 545.1 m.

IPA	3000	558	Palermo, Italy
KFDY	1000	....	Brookings, S. Dak.
KFUO	1000	....	St. Louis, Mo.
KFYR	1000	....	Bismarck, N. Dak.
KOAC	1000	....	Corvallis, Ore.
KSD	500	....	St. Louis, Mo.
RW48	1200	554	Romsk, USSR
SBD	10000	554	Sundsvall, Sweden
WDEV	500	....	Waterbury, Vt.
WGR	1000	....	Buffalo, N. Y.
WKRC	1000	....	Cincinnati, Ohio

560 kcs. 535.4 m.

KFDM	500	....	Beaumont, Texas
KLZ	1000	....	Denver, Colo.
KTAB	1000	....	San Francisco, Calif.
RW41	1200	563	Syktvykar, USSR
WFI	500	....	Philadelphia, Pa.
WIBO	1000	....	Chicago, Ill.
WLIT	500	....	Philadelphia, Pa.
WNOX	1000	....	Knoxville, Tenn.
WPCC	500	....	Chicago, Ill.
WQAM	1000	....	Miami, Fla.
XEAO	7.5	....	Mexicali, B. C.
2CO	7500	....	Corowa, Australia
.....	120000	563	Makhatch, USSR
.....	60000	563	Munich, Germany

570 kcs. 526.0 m.

FQN	250	....	St. Pierre, Miquelon
KGKO	250	....	Wichita Falls, Texas
KMPR	500	....	Hollywood, Calif.
KVI	500	....	Tacoma, Wash.
WEAO	1000	....	Columbus, Ohio
WKBN	500	....	Youngstown, Ohio
WMCA	500	....	New York, N. Y.
WNAX	1000	....	Yankton, S. Dak.
WPCB	500	....	New York, N. Y.
WSYR	250	....	Syracuse, N. Y.
WWNC	1000	....	Asheville, N. Car.
YLZ	15000	571	Riga, Latvia
.....	10000	571	Nagnitogorsk, USSR

580 kcs. 516.9 m.

CHMA	250	....	Edmonton, Alta.
CJOC	100	....	Lethbridge, Alta.
CKCL	100	....	Toronto, Ont.
CKUA	500	....	Edmonton, Alta.
CRCA	500	....	Moncton, N. B.
KMJ	500	....	Fresno, Calif.
KSAC	500	....	Manhattan, Kans.
ON4RB	3600	589	Brussels, Belgium
RW35	10000	589	Astrakhan, USSR

RW38	1200	....	Alexandrovsk, USSR
WDBO	250	....	Orlando, Fla.
WIBW	1000	....	Topeka, Kans.
WOBW	250	....	Charleston, W. Va.
WTAG	250	....	Worcester, Mass.
XEPN	100000	585	Pedras Negras, Coah.
ZTB	750	588	Bloemfontaine, S. Africa
ZL.....	15000	581	Vienna, Austria
Z7L	3000	....	Hobart, Australia

590 kcs. 508.2 m.

IFI	20000	598	Firenze, Italy
JOAK-2	10000	....	Tokyo, Japan
KHQ	1000	....	Spokane, Wash.
LP6	1500	....	Buenos Aires, Argentina
RW42	10000	598	Gorki, USSR
WCAJ	500	....	Lincoln, Neb.
WEEI	1000	....	Boston, Mass.
WKZO	1000	....	Kalamazoo, Mich.
WOW	1000	....	Omaha, Neb.
No. 1	15000	....	Brussels, Belgium
.....	10000	598	Nijmi-Novgorod, USSR

600 kcs. 499.7 m.

CFCF	500	....	Montreal, Que.
CMW	1400	....	Havana, Cuba
KFSD	1000	....	San Diego, Calif.
LKT	1200	608	Trondelag, Norway
TISO	50	....	San Jose, Costa Rica
WCAC	250	....	Storrs, Conn.
WCAO	250	....	Baltimore, Md.
WICG	250	....	Bridgeport, Conn.
WMT	500	....	Waterloo, Iowa
WREC	500	....	Memphis, Tenn.
ZZK	120	....	Wanganui, N. Z.
.....	1750	....	Colombo, Ceylon
.....	1200	605	Trondheim, Norway

610 kcs. 491.5 m.

JODK-1	1000	....	Keijo, Korea
KFRK	1000	....	San Francisco, Calif.
KZRM	50000	618.5	Manila, P. I.
OKP	120000	614	Praha, Czech.
RW22	10000	617	Oufa, USSR
TIXA	7.5	614	San Jose, C. R.
WDAF	1000	....	Kansas City, Mo.
WIP	500	....	Philadelphia, Pa.
WJAY	500	....	Cleveland, Ohio
XETR	1000	....	Mexico City, D. F.
3AR	5000	....	Melbourne, Australia

620 kcs. 483.6 m.

CEB2	1000	625	Santiago, Chile
JOTK	500	625	Matsuye, Japan
KGW	1000	....	Portland, Ore.
KTAR	500	....	Phoenix, Ariz.
LV3	350	....	Cordova, Arg.
NR	50000	625	Manchester, G. B.
OFD	500	622	Pori, Finland
RW31	10000	625	Ivanovo, USSR
RW40	1000	621	Gomel, USSR
WFLA	1000	....	Clearwater, Fla.
WLBZ	500	....	Bangor, Maine
WSUN	1000	....	St. Petersburg, Fla.
WTMJ	1000	....	Milwaukee, Wis.
XOTN	500	624	Tientsin, China

630 kcs. 475.9 m.

CFCY	500	....	Charlottetown, P. E. I.
CJGX	500	....	Yorkton, Sash.
CKTB	1900	635	St. Catharines, Ont.
CMCU	150	....	Havana, Cuba
CMQ	500	....	Havana, Cuba
HLX	1000	....	Santo Domingo, D. R.
JODG	500	635	Hamamatsu, Japan
KFRU	500	....	Columbia, Mo.
KGFX	200	....	Pierre, S. Dak.
LU3	4500	....	Buenos Aires, Arg.

INDEX BY FREQUENCIES AND DIAL NUMBERS

RW28	700	635	Vladivostok, USSR
RW52	4000	.....	Siniferopol, USSR
WGBF	500	.....	Evansville, Ind.
WMAL	250	.....	Washington, D. C.
WOS	500	.....	Jefferson City, Mo.
XETF	500	.....	Vera Cruz, Ver.
XFG	2000	638.3	Mexico City, D. F.
1ZH	45	.....	Hamilton, N. Z.
5CK	7500	635	Crystal Brook, Australia
.....	60000	635	Langenberg, Germany

640 kcs. 468.5 m. □ □ □

CHRC	100	645	Quebec, Que.
CKCI	100	645	Quebec, Que.
CKCR	100	645	Waterloo, Ont.
JOUK	300	645	Akita, Japan
JQAK	500	645	Dairen, Manchuria
KFI	50000	.....	Los Angeles, Calif.
RW17	10000	644	Kazan, USSR
RW56	1200	.....	Penza, USSR
WAIU	500	.....	Columbus, Ohio
WOI	5000	.....	Ames, Iowa
YN	3000	644	Lyons, France
.....	500	644	Tartu, Estonia

650 kcs. 461.3 m. □ □ □

JOCG	300	655	Asahikawa, Japan
KPCB	100	.....	Seattle, Wash.
RW33	1000	.....	Krasnodar, USSR
RW46	10000	653	Karaganda, USSR
WSM	50000	.....	Nashville, Tenn.
4YA	500	.....	Dunedin, N. Z.
.....	60000	653	Beromunster, Switz.

660 kcs. 454.3 m. □ □ □

EAJ8	600	662	San Sebastian, Spain
EAJ22	1000	662	Salamanca, Spain
LKD	500	662	Bodo, Norway
LKM	110	662	Tromsø, Norway
LKP	700	662	Porsgrund, Norway
RUS	500	664	San Salvador, Salvador
RW13	10000	662	Odessa, USSR
SCT	1500	662	Upsala, Sweden
TIGP	75	666	San Jose, C. R.
WAAW	500	.....	Omaha, Neb.
WEAF	50000	.....	New York, N. Y.
XEM	500000	.....	Matamoros, Tams.
2FC	5000	665	Sydney, Australia
ZTJ	15000	667	Johannesburg, S. Africa
.....	500	662	Bjorneborg, Finland
.....	500	662	Bodo, Norway
.....	500	662	Danzig, Danzig
.....	500	662	Klagenfurt, Austria
.....	15000	667	Madonna, Latvia
.....	700	662	Porsgrund, Norway
.....	500	662	Radio-Agen, France
.....	100	662	Tromsø, Norway

670 kcs. 447.5 m. □ □ □

FPTT	1000	671	Paris, France
JFAK	10000	.....	Taihoku, Formosa
LKA	350	671	Aalesund, Norway
LKN	50	671	Notodden, Norway
LKR	180	671	Rjukan, Norway
LP4	1000	.....	Buenos Aires, Arg.
RW23	1200	676	Groznyi, USSR
WMAQ	5000	.....	Chicago, Ill.

680 kcs. 440.9 m. □ □ □

CMAF	500	.....	Havana, Cuba
CMB	1000	681	Canton, China
HRO	50000	.....	Rome, Italy
JOLK	500	.....	Fukuoka, Japan
JOVK	500	.....	Hakodate, Japan
KFEQ	2500	.....	St. Joseph, Mo.
KPO	50000	.....	San Francisco, Calif.
RW27	1200	689	Makhatch, USSR

RW46	1200	686	Karaganda, USSR
RW74	1200	.....	Toheokarsy, USSR
SBA	75000	689	Stockholm, Sweden
SCN	250	689	Malmberget, Sweden
VAS	2000	685	Glace Bay, N. S.
WPTF	1000	.....	Raleigh, N. Car.
XGOA	15000	681	Nanking, China

690 kcs. 434.5 m. □ □ □

CFAC	500	.....	Calgary, Alta.
CFRB	10000	.....	Toronto, Ont.
CJ CJ	500	.....	Calgary, Alta.
HJN	1000	.....	Bogota, Colombia
JODK	1000	.....	Keijo, Korea
NAA	1000	.....	Arlington, Va.
XET	500	.....	Monterrey, N. L.
6WF	5000	.....	Perth, Australia
.....	2800	697	Belgrade, Yugo.
.....	1500	696	Paredes, Portugal

700 kcs. 428.3 m. □ □ □

CE70	1000	705	Santiago, Chile
EAJ2	750	708	Madrid, Spain
EAJ7	2000	707	Madrid, Spain
JOKK	500	.....	Okayama, Japan
PRAG	3000	706	Porto Alegre, Brazil
RW39	100000	707	Moskva-Stalina, USSR
WLW	50000	.....	Cincinnati, Ohio

710 kcs. 422.3 m. □ □ □

JOJK	3000	.....	Kanazawa, Japan
KMPC	500	.....	Beverly Hills, Calif.
LSI	5000	.....	Buenos Aires, Arg.
TIFB	30	714	San Jose, C. R.
WOR	5000	.....	Newark, N. J.
XEN	1000	711	Mexico City, D. F.
.....	1500	715	Berlin, Germany
.....	500	.....	Cairo, Egypt

720 kcs. 416.4 m. □ □ □

JFBK	1000	.....	Tainan, Japan
JORK	500	.....	Kochi, Japan
RW28	10000	725	Vladivostok, USSR
RW52	10000	725	Siniferopol, USSR
WGN	25000	.....	Chicago, Ill.
2RN	1500	725	Dublin, Ireland
2YA	5000	.....	Wellington, N. Z.
.....	60000	725	Athlone, Ireland
.....	6000	721	Rabat, Morocco

730 kcs. 410.7 m. □ □ □

CHLS	100	.....	Vancouver, B. C.
CHYC	5000	.....	Montreal, Que.
CJCA	500	.....	Edmonton, Alta.
CKAC	5000	.....	Montreal, Que.
CMK	3150	.....	Havana, Cuba
CX10	1000	.....	Montivideo, Uruguay
JOSK	1000	735	Kokura, Japan
LVI	1500	.....	San Juan, Arg.
XEF	75000	735	Villa Acuna, Coah.
ZTD	1000	731	Durban, S. Africa
5CL	5000	.....	Adelaide, Australia
.....	16000	734	Katowice, Poland
.....	2200	735	Tartu, Estonia

740 kcs. 405.2 m. □ □ □

CE74	1000	745	Santiago, Chile
KMMJ	1000	.....	Clay Center, Neb.
RW51	1200	748	Naltchik, USSR
SBF	600	747	Ostersund, Sweden
WHIEB	250	.....	Portsmouth, N. H.
WSB	5000	.....	Atlanta, Ga.
.....	10000	743	Mourmansk, USSR.
.....	25000	743	Sottens, Switz.

INDEX BY FREQUENCIES AND DIAL NUMBERS

750 kcs. 399.8 m.

JOBK-1	10000	....	Osaka, Japan.
KGU	2500	....	Honolulu, Hawaii
LR7	1000	....	Buenos Aires, Arg.
MR-	25000	752	Davenport, G. B.
PRAA	2000	....	Rio de Janeiro, Brazil.
RW64	10000	752	Vladikavkaz, USSR.
VOWR	500	....	St. John's, Nfld.
VQ7LO	1000	....	Nairobi, Kenya.
WJR	10000	....	Detroit, Mich.
XEAN	5000	....	Juarez, Chih.
.....	250	....	Mont-de-Marsan, France.

760 kcs. 394.5 m.

JQAK	1000	....	Dairen, Manchuria.
KXA	250	....	Seattle, Wash.
LT4	170	....	Mendoza, Arg.
WBAL	10000	....	Baltimore, Md.
WEW	1000	....	St. Louis, Mo.
WJZ	50000	....	New York, N. Y.
4QG	5000	....	Brisbane, Australia.
.....	12000	761	Bucharest, Rumania.

770 kcs. 389.4 m.

CX12	500	....	Montivideo, Uruguay.
JOHK	10000	....	Sendai, Japan.
KFAB	5000	....	Lincoln, Neb.
RW26	10000	779	Stalino, USSR.
VUM	200	....	Madras, India.
WBBM	25000	....	Chicago, Ill.
.....	120000	....	Leipsig, Germany.
.....	500	777	Rheims, France.
.....	8000	779	Toulouse, France.

780 kcs. 384.4 m.

CE78	1000	785	Santiago, Chile.
CHWK	100	....	Chilliwick, B. C.
CKPR	100	....	Fort William, Ont.
CMBS	150	....	Havana, Cuba.
CMCQ	10000	....	Havana, Cuba.
JOPK	500	....	Shizuoka, Japan.
KELW	500	....	Burbank, Calif.
KTM	500	....	Los Angeles, Calif.
LT1	4500	....	Rosario, Arg.
PRAJ	200	789	Juiz de Fora, Brazil.
PRAN	8	789	Curityba, Brazil.
PRAY	50	789	Mogy das Cruzes, Brazil.
WEAN	500	....	Providence, R. I.
WMC	500	....	Memphis, Tenn.
WPOR	500	....	Portsmouth, Va.
WTAR	500	....	Norfolk, Va.
XEP	1000	....	Mexico City, D. F.
.....	200	....	Alexandria, Egypt.
.....	300	....	Cairo, Egypt.
.....	16000	788	Lwow, Poland.
.....	50	785	Valparaiso, Chile.
.....	.....	.....	Vienna, Austria.

790 kcs. 379.5 m.

CMHC	250	....	Tuinucu, Cuba.
CMJK	300	....	Camaguey, Cuba.
JOGK	10000	....	Kumamoto, Japan.
KGO	7500	....	San Francisco, Calif.
LR1	500	....	Buenos Aires, Arg.
OAX	5000	....	Lima, Peru.
RW37	1000	792	Moskva, USSR.
SR	50000	797	Falkirk, G. B.
WGY	50000	....	Schenectady, N. Y.

800 kcs. 374.8 m.

LU2	500	....	Bahia Blanca, Arg.
WBAP	50000	....	Fort Worth, Texas.
WFAA	50000	....	Dallas, Texas.
3LO	500	....	Melbourne, Australia.
.....	1500	806	Hamburg, Germany.

810 kcs. 370.2 m.

CNRH	500	815	Halifax, N. S.
CX14	1000	....	Montivideo, Uruguay.
EAJ5	1500	815	Seville, Spain.
IBZ	1000	815	Bolzano, Italy.
JOCK-1	10000	....	Nagoya, Japan.
LKF	700	815	Fredrikstad, Norway.
LL	1200	....	Paris, France.
OFA	10000	815	Helsinki, Finland.
RW20	10000	815	Kharkov, USSR.
VOAS	75	....	St. John's, Nfld.
VUC	3000	....	Calcutta, India.
WCCO	50000	....	Minneapolis, Minn.
WNYC	500	....	New York, N. Y.
XFC	350	....	Aguascalientes, Ags.
XFI	1000	818	Mexico City, D. F.
ZTC	1000	....	Capetown, S. Africa.

820 kcs. 365.6 m.

CE82	1000	825	Santiago, Chile.
CMGC	30	....	Matanzas, Cuba..
F8GC	1500	825	Paris, France.
LKB	1000	824	Bergen, Norway.
LV7	200	....	Tucuman, Arg.
RW68	1500	824	Tobehlabinsk, USSR.
RW69	4000	825	Ijevsk, USSR.
WHAS	25000	....	Louisville, Ky.
1YA	500	....	Auekland, N. Z.
.....	13000	824	Algiers, Algeria.
.....	700	....	Fredrikstad, Norway.

830 kcs. 361.2 m.

CMGA	100	834	Colon, Cuba.
JOIK	10000	....	Sapporo, Japan.
KOA	12500	....	Denver, Colo.
LR5	1600	....	Buenos Aires, Arg.
RW57	4000	838	Tiraspol, USSR.
TIEA	7.5	833	San Jose, C. R.
WEEU	1000	....	Reading, Pa.
WHDH	1000	....	Boston, Mass.
WRUF	5000	....	Gainesville, Fla.
XETW	500	....	Mexico City, D. F.
.....	60000	832	Stuttgart, Germany.

840 kcs. 356.9 m.

CHNC	5000	....	Toronto, Ont.
CKGW	5000	....	Toronto, Ont.
CKLC	1000	....	Red Deer, Alta.
CMC	500	....	Havana, Cuba.
CPRY	5000	....	Toronto, Ont.
F31CD	12000	....	Saigon, Indo China.
LR	50000	843	London, England.
LT8	350	....	Rosario, Arg.
VUB	3000	....	Bombay, India.
XETH	100	....	Puebla, Pue.
XETM	150000	845	Matamoros, Tams.
ZBW	12000	845	Hong Kong, China.

850 kcs. 352.7 m.

CX6	1000	....	Montivideo, Uruguay.
CX16	.....	....	Montivideo, Uruguay.
HSPI	2500	857	Bangkok, Siam.
JOFK	10000	....	Hiroshima, Japan.
KIEV	100	....	Glendale, Calif.
KWKH	10000	....	Shreveport, La.
PRAC	500	857	Rio de Janeiro, Brazil.
PRAI	10	857	Ribeirao Preto, Brazil.
WWL	10000	....	New Orleans, La.
XEFD	2500	855	Tijuana, B. C.
2BL	5000	855	Sydney, Australia.
2HZ	350	857	Rangoon, India.
.....	7000	852	Graz, Austria.

INDEX BY FREQUENCIES AND DIAL NUMBERS

860 kcs. 348.6 m.

CE86	1000	865	Santiago, Chile.
EAJ1	8000	.....	Barcelona, Spain.
LV10	350	.....	Las Heras, Arg.
RW30	3000	869	Dnepropetrovsk, USSR.
RW70	10000	.....	Leningrad, USSR.
SP1T	6000	867	Strasbourg, France.
TIVL	30	.....	San Jose, C. R.
WABC	50000	.....	New York, N. Y.
WHB	500	.....	Kansas City, Mo.
XFX	500	.....	Mexico City, D. F.

870 kcs. 344.6 m.

JOAK-1	10000	.....	Tokyo, Japan.
LR6	2100	.....	Buenos Aires, Arg.
OKB	36000	878	Brno, Czech.
WENR	50000	.....	Chicago, Ill.
WLS	50000	.....	Chicago, Ill.
XEAD	250	875	Mexico City, D. F.

880 kcs. 340.7 m.

CE88	100	.....	Valparaiso, Chile.
CJCB	100	.....	Sydney, N. S.
CJRM	500	.....	Moose Jaw, Sask.
CJRW	500	.....	Fleming, Sask.
CRCO	500	.....	Ottawa, Ont.
CT1GL	150	885	Lisbon, Portugal.
HJ3ABD	20	881	Bogota, Colombia.
KFKA	500	.....	Greeley, Colo.
KLX	1000	.....	Oakland, Calif.
KPOF	500	.....	Denver, Colo.
TIC	15	882	San Jose, C. R.
VUL	100	882	Lahore, India.
WCOC	500	.....	Meridian, Miss.
WGBI	250	.....	Scranton, Pa.
WQAN	250	.....	Scranton, Pa.
WSUI	500	.....	Iowa City, Iowa.
YV2BC	100	882	Caracas, Venezuela.
6PR	200	.....	Perth, Australia.
No. 2	15000	887	Brussels, Belgium.

890 kcs. 336.9 m.

CFQC	500	.....	Saskatoon, Sask.
CHML	50	.....	Hamilton, Ont.
CMCF	250	.....	Havana, Cuba.
CMX	750	.....	Havana, Cuba.
CX18	250	.....	Montivideo, Uruguay.
KARK	250	.....	Little Rock, Ark.
KFNF	500	.....	Shenandoah, Iowa.
KSEI	250	.....	Pocatello, Idaho.
KUSD	500	.....	Pemillion, S. Dak.
VOGY	100	.....	St. John's, Nfld.
WGST	250	.....	Atlanta, Ga.
WILL	250	.....	Urbana, Ill.
WJAR	500	.....	Providence, R. I.
WMMN	250	.....	Fairmont, W. Va.
XETU	100	.....	Pachuca, Hdo.
7EO	50	.....	Hobart, Australia.
.....	5500	896	Cadiz, Spain.
.....	1900	896	Poznan, Poland.

900 kcs. 333.1 m.

CE90	1000	905	Santiago, Chile.
IMI	50000	905	Milan, Italy.
JODK-2	10000	.....	Keijo, Korea.
KGBU	500	.....	Ketchikan, Alaska.
KHJ	1000	.....	Los Angeles, Calif.
LV9	500	.....	Rosario, Arg.
WBEN	1000	.....	Buffalo, N. Y.
WJAX	1000	.....	Jacksonville, Fla.
WKY	1000	.....	Oklahoma City, Okla.
WLBL	2500	.....	Stevens Point, Wis.
ZILY	1500	.....	Hoten, Manchuria
ZZP	105	.....	Wairoa, N. Z.

910 kcs. 329.6 m.

CFRC	50	915	Kingston, Ont.
CKY	5000	.....	Winnipeg, Man.
LB2	5500	.....	Buenos Aires, Arg.
PP	50000	914	Paris, France
TIGR	50	911	San Jose, C. R.
XEW	5000	.....	Mexico City, D. F.
XFF	500	915	Chihuahua, Chih.
4RK	2000	.....	Rockhampton, Australia.

920 kcs. 325.9 m.

CMBW	150	925	Havana, Cuba.
CMCN	250	925	Havana, Cuba.
HHK	1000	.....	Port-au-Prince, Haiti.
JOJK	500	.....	Niigata, Japan.
KEEL	500	.....	Denver, Colo.
KFXF	500	.....	Denver, Colo.
KOMO	1000	.....	Seattle, Wash.
KPRC	1000	.....	Houston, Texas.
LV2	500	.....	Cordoba, Arg.
PRAD	50	.....	Felotas, Brazil.
FRAE	1000	921	Sao Paulo, Brazil.
WAAF	500	.....	Chicago, Ill.
WBSS	500	.....	Babson Park, Mass.
WWJ	1000	.....	Detroit, Mich.
.....	60000	923	Breslau, Germany.

930 kcs. 322.4 m.

CFCH	100	.....	North Bay, Ont.
CFLC	100	.....	Prescott, Ont.
CKPC	100	.....	Preston, Ont.
CKX	500	.....	Boston, Man.
CKX	500	.....	Camaguey, Cuba.
CMJF	200	.....	Lisbon, Portugal.
CT1BO	150	936	Montivideo, Uruguay.
CX20	2000	.....	Nagasaki, Japan.
JOAG	500	.....	San Francisco, Calif.
KFWI	500	.....	York, Neb.
KGBZ	500	.....	Shenandoah, Iowa.
KMA	500	.....	Oakland, Calif.
KROW	500	.....	937 Rio de Janeiro, Brazil.
PRAB	500	.....	932 Goteborg, Sweden.
SBB	10000	.....	Birmingham, Ala.
WBRC	500	.....	Roanoke, Va.
WDBJ	250	.....	Glenaside, Pa.
WIBG	25	.....	Melbourne, Australia.
3UZ	500	.....

940 kcs. 319.0 m.

CE94	1000	945	Santiago, Chile.
INA	1500	941	Naples, Italy.
JONK	500	.....	Nagano, Japan.
KOIN	1000	.....	Portland, Ore.
WAAT	500	.....	Jersey City, N. J.
WCSE	100	.....	Portland, Maine.
WDAY	1000	.....	Fargo, N. Dak.
WFIW	1000	.....	Hopkinsville, Ky.
WHA	1000	.....	Madison, Wis.
XEFO	5000	.....	Mexico City, D. F.
.....	2500	941	Dresden, Germany.
.....	1000	941	Sofia, Bulgaria.

950 kcs. 315.6 m.

CMHD	250	.....	Caibarien, Cuba.
CT1DH	10	952	Lisbon, Portugal.
IGE	10000	959	Genoa, Italy.
KFWB	1000	.....	Los Angeles, Calif.
KGHL	1000	.....	Billings, Mont.
KMBC	1000	.....	Kansas City, Mo.
LR3	7500	.....	Buenos Aires, Arg.
RW55	1000	959	Engels, USSR.
WRC	500	.....	Washington, D. C.
XOPP	100	952	Peiping, China.
ZGB	3000	.....	Sydney, Australia.
.....	250	.....	Bremen, Germany.
.....	1500	959	Cracow, Poland.
.....	2500	.....	Marseilles, France.

INDEX BY FREQUENCIES AND DIAL NUMBERS

960 kcs. 312.3 m.

CMBD	150	965	Havana, Cuba.
CMCW	150	965	Havana, Cuba.
CMJL	50	....	Camaguey, Cuba.
JOCK	300	....	Kyoto, Japan.
OFC	2500	....	Jacobstad, Finland
PRAP	300	967	Pernambuco, Brazil.
RW75	10000	968	Vinnitsa, USSR.
XEAW	10000	965	Reynosa, Tams.
YV1BC	5000	....	Caracas, Venezuela.
5DN	1000	....	Adelaide, Australia.
.....	1000	968	Cardiff, G. B.

PFBI	20000	1013	Hilversum, Holland.
PH9	6400	1013	Amsterdam, Holland.
TIGA	30	1014	Cartago, C. R.
WHN	250	....	New York, N. Y.
WIS	500	....	Columbia, S. Car.
WNAD	500	....	Norman, Okla.
WPAP	250	....	New York, N. Y.
WQAO	250	....	New York, N. Y.
WRNY	250	....	New York, N. Y.
XEJ	500	1015	Juarez, Chih.
XEU	100	....	Veracruz, Ver.
3HA	200	....	Hamilton, Australia.

970 kcs. 309.1 m.

CX22	250	....	Montivideo, Uruguay.
JOBG	500	....	Maebashi, Japan.
KJR	5000	....	Seattle, Wash.
SCC	500	977	Falun, Sweden.
WCFL	1500	....	Chicago, Ill.
XGOD	1000	973	Hangchow, China.
3BO	200	....	Bendigo, Australia.
.....	750	977	Zagreb, Yugo.

1020 kcs. 293.9 m.

CE102	100	1025	Santiago, Chile.
KYW	10000	....	Chicago, Ill.
OKK	2600	1022	Kostice, Czech.
WRAX	250	....	Philadelphia, Pa.
XEFC	10	....	Merida, Yuc.
2UE	1000	1025	Sydney, Australia.
.....	700	1022	Limoges, France

980 kcs. 303.9 m.

CE98	1000	....	Santiago, Chile.
CMGF	100	987	Matanzas, Cuba.
CNO	25	983	Casablanca, Morocco.
JOXK	500	....	Tokushima, Japan.
KDKA	50000	....	Pittsburgh, Pa.
3YA	500	....	Christchurch, N. Z.
.....	13000	986	Bordeaux, France.
.....	250	985	Santiago, Chile.

1030 kcs. 291.1 m.

CFBO	500	....	St. John, N. B.
CFCN	10000	....	Calgary, Alta.
CKNC	100	....	Toronto, Ont.
CMHI	30	....	Santa Clara, Cuba.
CMEK	150	1034	Santiago, Cuba.
LR9	5000	....	Buenos Aires, Arg.
OFH	13200	1031	Viborg, Finland.
XEB	10000	....	Mexico City, D. F.
YR	500	....	Lyons, France.

990 kcs. 302.8 m.

JOFG	300	....	Fukui, Japan.
LR4	20000	....	Buenos Aires, Arg.
NN	50000	995	Manchester, England.
TITV	7.5	999	San Jose, C. R.
WBZ	25000	....	Boston, Mass.
WBZA	1000	....	Springfield, Mass.
XEK	100	....	Mexico City, D. F.

1040 kcs. 288.3 m.

CMGH	15	....	Matanzas, Cuba.
KRLD	10000	....	Dallas, Texas.
KTHS	10000	....	Hot Springs, Ark.
SN	50000	....	Falkirk, G. B.
WESG	1000	....	Elmira, N. Y.
WKAR	1000	....	East Lansing, Mich.
5PI	50	1041	Port Pirie, Australia.
.....	1000	....	Bournemouth, G. B.
.....	800	1049	Montpellier, France.
.....	20	1045	Valparaiso, Chile.

1000 kcs. 299.8 m.

KFVD	250	....	Los Angeles, Calif.
PRAR	500	1006	Sao Paulo, Brazil.
WHO	50000	....	Des Moines, Iowa.
WOC	50000	....	Davenport, Iowa.
WORK	1000	....	York, Pa.
XEA	100	....	Guadalajara, Jal.
XEB	50	....	Toluca, D. F.
XEFC	100	....	Nuevo Laredo, Tams.
XEPI	100	....	Chihuahua, Chih.
XEJF	100	....	Monterrey, N. L.
XEFS	40	....	Queretaro, Gro.
XEL	10	....	Saltillo, Coah.
ZP8	300	....	Asuncion, Paraguay.
ZTP	50	....	Pretoria, S. Africa.
4GR	50	....	Toowoomba, Australia.
.....	350	....	Hague, Holland.
.....	11000	1004	Tallin, Estonia.

1050 kcs. 285.5 m.

CHNS	500	....	Halifax, N. S.
CMJG	50	....	Camaguey, Cuba.
CTIAA	2000	1056	Lisbon, Portugal.
CTIAN	10	1056	Lisbon, Portugal.
CTIBM	50	1056	Lisbon, Portugal.
CTIDS	10	1058	Lisbon, Portugal.
CTIEB	50	1056	Lisbon, Portugal.
CX26	2000	....	Montivideo, Uruguay.
KFBI	5000	....	Abilene, Kans.
KNX	25000	....	Hollywood, Calif.
XES	250	1055	Tampico, Tams.
2CA	50	....	Camberra, Australia.
2ZF	150	....	Palmerston N., N. Z.
2ZO	200	....	Palmerston N., N. Z.
.....	500	1058	Berlin, Germany.
.....	500	1058	Innsbruck, Austria.
.....	500	1058	Magdeburg, Germany.
.....	500	1058	Stettin, Germany.

1010 kcs. 296.9 m.

CHWC	500	....	Regina, Sask.
CKDC	100	....	Vancouver, B. C.
CKCK	500	....	Regina, Sask.
CKCO	100	....	Ottawa, Ont.
CKIC	50	....	Wolfville, N. S.
CKOC	100	....	Hamilton, Ont.
CKWX	100	....	Vancouver, B. C.
CMBZ	150	....	Havana, Cuba.
CX24	1000	....	Montivideo, Uruguay.
KGGF	500	....	Coffeyville, Kans.
KQW	500	....	San Jose, Calif.

1060 kcs. 282.8 m.

CT1GK	50	1062	Lisbon, Portugal.
KWJJ	500	....	Portland, Ore.
LT9	100	....	Rosario, Arg.
WBAL	10000	....	Baltimore, Md.
WJAG	1000	....	Norfolk, Neb.
WTIC	50000	....	Hartford, Conn.
4MB	50	....	Maryborough, Australia.
.....	750	1067	Copenhagen, Denmark.

INDEX BY FREQUENCIES AND DIAL NUMBERS

1070 kcs. 280.2 m.

CMBG	225	....	Havana, Cuba.
CMCB	150	....	Havana, Cuba.
KJBS	100	....	San Francisco, Calif.
OKR	14000	1075	Bratislava, Czech.
WCAZ	50	....	Carthage, Ill.
WDZ	100	....	Tuscola, Ill.
WTAM	50000	....	Cleveland, Ohio
XEG	500	1075	Mexico City, D. F.
2KY	1500	....	Sydney, Australia.

1080 kcs. 277.6 m.

JOBK-2	10000	1085	Osaka, Japan.
LKO	60000	1083	Oslo, Norway.
LT3	250	....	Rosario, Arg.
WBT	25000	....	Charlotte, N. Car.
WCB D	5000	....	Zion, Ill.
WMBI	5000	....	Chicago, Ill.
3SH	50	....	Swan Hill, Australia.
4ZB	20	....	Dunedin, N. Z.
4ZF	10	....	Dunedin, N. Z.
4ZM	45	....	Dunedin, N. Z.
4ZO	40	....	Dunedin, N. Z.
4ZW	50	....	Dunedin, N. Z.
.....	500	....	Alexandria, Egypt.
.....	200	....	Caen, France.
.....	60000	1085	Heilsberg, Germany.
.....	500	1085	Konigsberg, Germany.
.....	500	....	Port Said, Egypt.

1090 kcs. 275.1 m.

IITO	7000	1096	Turin, Italy.
KMOX	50000	....	St. Louis, Mo.
XEAI	100	....	Mexico City, D. F.
XGOB	250	....	Loyang, China.
1ZR	80	....	Auckland, N. Z.
.....	250	1091	Angers, France.
.....	1500	1098	Poznan, Poland.

1100 kcs. 272.6 m.

CRCV	500	....	Vancouver, B. C.
KGDM	250	....	Stockton, Calif.
WLWL	5000	....	New York, N. Y.
WPG	5000	....	Atlantic City, N. J.
7LA	300	....	Launceston, Australia.
.....	1300	1103	Rennes, France.
.....	.....	1105	Santiago, Chile.

1110 kcs. 270.1 m.

CMJO	50	....	Ciego de Avila, Cuba.
IIBA	20000	1112	Bari, Italy.
KSOO	1000	....	Sioux Falls, S. Dak.
LS 5	5000	....	Buenos Aires, Arg.
PAZ	50	....	Franca, Brazil.
WRVA	5000	....	Richmond, Va.
XENT	150000	1115	Nuevo Laredo, Tams.
2HD	200	....	Newcastle, Australia.
.....	250	1112	Bremen, Germany.
.....	1500	1112	Kaiserslautern, Germany.
.....	.....	.....	Thesalonik, Greece.

1120 kcs. 267.7 m.

CFCA	100	....	Toronto, Ont.
CFJC	100	....	Kamloops, B. C.
CHGS	100	....	Summerside, P. E. I.
CHLP	100	....	Montreal, Que.
CMHJ	40	1125	Cienfuegos, Cuba.
EAJ3	1500	1121	Valencia, Spain.
EAJ19	700	1121	Ovideo, Spain.
KFIO	100	....	Spokane, Wash.
KFSG	500	....	Los Angeles, Calif.
KRKD	500	....	Los Angeles, Calif.
KRSC	100	....	Seattle, Wash.
KTRH	500	....	Houston, Texas.
LV5	500	....	San Juan, Arg.

WDEL	250	....	Wilmington, Del.
WHAD	250	....	Milwaukee, Wis.
WISN	250	....	Milwaukee, Wis.
WTAW	500	....	College Station, Texas.
2UW	1500	1125	Sydney, Australia.
2ZW	400	....	Wellington, N. Z.

1130 kcs. 265.3 m.

CX30	250	....	Montivideo, Uruguay.
KSL	50000	....	Salt Lake City, Utah.
WJJD	20000	....	Chicago, Ill.
WOV	1000	....	New York, N. Y.
XEH	250	1132	Monterrey, N. L.
ZPI	1000	1135	Asuncion, Paraguay.
6ML	300	1135	Perth, Australia.
.....	1300	....	Lille, France.
.....	11000	1137	Moravska, Czech.

1140 kcs. 263.0 m.

CMBJ	150	....	Havana, Cuba.
CMCD	250	....	Havana, Cuba.
CW30	.....	....	Tucumero, Uruguay.
KVOO	5000	....	Tulsa, Okla.
LN	50000	1147	London, G. B.
WAPI	5000	....	Birmingham, Ala.
XETA	250	....	Mexico City, D. F.
3YB	25	....	Melbourne, Australia.
4BC	600	1145	Brisbane, Australia.
.....	100	1145	Santiago, Chile.

1150 kcs. 260.7 m.

CMJH	30	....	Ciego de Avila, Cuba.
LR8	3000	....	Buenos Aires, Arg.
PRAK	500	1153	Rio de Janeiro, Brazil.
WHAM	25000	....	Rochester, N. Y.
XED	500	1155	Guadalajara, Jal.
2WG	50	1155	Wagga, Australia.
2ZJ	75	....	Gisborne, N. Z.
2ZM	110	....	Gisborne, N. Z.
10-AT	25	1155	Trail, B. C.
.....	17000	1157	Frankfurt-am-Main, Germany.
.....	7500	1153	Kalundborg, Denmark.
.....	2000	1157	Trier, Germany.
.....	20	1153	Valparaiso, Chile.

1160 kcs. 258.5 m.

SBH	10000	1166	Horby, Sweden.
WOWO	10000	....	Fort Wayne, Ind.
WWVA	5000	....	Wheeling, W. Va.
4ZI	8	....	Invercargill, N. Z.
4ZP	125	....	Invercargill, N. Z.

1170 kcs. 256.3 m.

CMJE	50	1175	Camaguey, Cuba.
CX32	200	....	Montivideo, Uruguay.
JOCK-2	10000	1175	Nagoya, Japan.
MRD	1500	1175	Toulouse, France.
WCAU	50000	....	Philadelphia, Pa.
4TO	100	....	Townsville, Australia.

1180 kcs. 254.1 m.

CMBN	150	1185	Havana, Cuba.
CMCJ	250	1185	Havana, Cuba.
CEB2	30	....	Salto, Uruguay.
HLJK	15000	....	Santo Domingo, D. R.
KEX	5000	....	Portland, Ore.
KOB	20000	....	Albuquerque, N. Mex.
TICR	30	....	San Jose, C. R.
WDGY	1000	....	Minneapolis, Minn.
WINS	500	....	New York, N. Y.
WMAZ	500	....	Macon, Ga.
3DB	500	....	Melbourne, Australia.
.....	14000	1184	Gleitwitz, Germany.
.....	100	1185	Santiago, Chile.

INDEX BY FREQUENCIES AND DIAL NUMBERS

1190 kcs. 252.0 m.

EAJ15	1000	1193	Barcelona, Spain.
EAJ18	1000	1193	Almeria, Spain.
LS2	5500	.....	Buenos Aires, Arg.
VONF	100	1195	St. John's, Nfld.
WOAI	50000	.....	San Antonio, Texas.
WSAZ	500	.....	Huntington, W. Va.
1ZQ	25	.....	Auckland, N. Z.
4MK	100	.....	Mackay, Australia.
.....	250	1193	Trollhattan, Sweden.

1200 kcs. 249.9 m.

CHCH	100	.....	Montreal, Que.
CKOV	100	.....	Kelowna, B. C.
CMGB	30	1205	Matanzas, Cuba.
KBTM	100	.....	Paragould, Ark.
KERN	100	.....	Bakersfield, Calif.
KFJB	100	.....	Marshalltown, Iowa.
KFWF	100	.....	St. Louis, Mo.
KFXD	100	.....	Nampa, Idaho.
KFXJ	100	.....	Grand Junction, Colo.
KGDE	100	.....	Fergus Falls, Minn.
KGEK	100	.....	Yuma, Colo.
KGFJ	100	.....	Los Angeles, Calif.
KGHI	100	.....	Little Rock, Ark.
KGVO	100	.....	Missoula, Mont.
KMLB	100	.....	Monroe, La.
KVOS	100	.....	Bellingham, Wash.
KWG	100	.....	Stockton, Calif.
SCI	200	1202	Kalmar, Sweden.
TFA	1200	.....	Reykjavik, Iceland.
WABI	100	.....	Bangor, Maine.
WBBX	100	.....	New Orleans, La.
WBBZ	100	.....	Ponca City, Okla.
WBHS	100	.....	Huntsville, Ala.
WCAT	100	.....	Rapid City, S. Dak.
WCAX	100	.....	Burlington, Vt.
WCLO	100	.....	Janesville, Wis.
WCOD	100	.....	Harrisburg, Pa.
WFAM	100	.....	South Bend, Ind.
WFBC	100	.....	Greenville, S. Car.
WFBE	100	.....	Cincinnati, Ohio.
WBHC	10	.....	Canton, Ohio.
WBHY	100	.....	Green Bay, Wis.
WIBX	100	.....	Utica, N. Y.
WIL	100	.....	St. Louis, Mo.
WJBC	100	.....	LaSalle, Ill.
WJBL	100	.....	Decatur, Ill.
WJBW	100	.....	New Orleans, La.
WKJC	100	.....	Lancaster, Pa.
WLAP	100	.....	Louisville, Ky.
WNBO	100	.....	Washington, Pa.
WNBW	10	.....	Carbondale, Pa.
WORC	100	.....	Worcester, Mass.
WPHR	100	.....	Petersburg, Va.
WRBL	100	.....	Columbus, Ga.
WWAE	100	.....	Hammond, Ind.
YV3BC	50	.....	Caracas, Venezuela.
3ZC	250	.....	Christchurch, N. Z.
5KA	300	.....	Adelaide, Australia.
10-AB	25	.....	Moose Jaw, Sask.
10-AK	15	.....	Stratford, Ont.
10-BI	25	.....	Prince Albert, Sask.
10-BP	25	1199	Wingham, Ont.
10-BQ	15	.....	Brantford, Ont.
10-BU	15	.....	Canora, Sask.
.....	800	1205	Nice, France.
.....	500	.....	Toulon, France.

1210 kcs. 247.8 m.

CFCO	100	.....	Chatham, Ont.
CFNB	100	.....	Fredericton, N. B.
CJOR	500	.....	Vancouver, B. C.
6KMC	100	.....	Cobalt, Ont.
CX34	500	.....	Montivideo, Uruguay.
HTR	10000	11	Trieste, Italy.
KASA	100	.....	Elk City, Okla.
KDLR	100	.....	Devils Lake, N. D.
KFJI	100	.....	Klamath Falls, Ore.

KFOR	100	.....	Lincoln, Neb.
KFPW	100	.....	Fort Smith, Ark.
KFVS	100	.....	Cape Girardeau, Mo.
KFXM	100	.....	San Bernardino, Calif.
KGCR	100	.....	Watertown, S. Dak.
KGY	100	.....	Olympia, Wash.
KIEM	100	.....	Eureka, Calif.
KPPC	50	.....	Pasadena, Calif.
KWEA	100	.....	Shreveport, La.
ON4FO	100	1219	Brussels, Belgium
ON4RG	400	1219	Ghent, Belgium.
ON4RW	200	1219	Liege, Belgium.
WALR	100	.....	Zanesville, Ohio.
WBAX	100	.....	Wilkes-Barre, Pa.
WBBL	100	.....	Richmond, Va.
WCBS	100	.....	Springfield, Ill.
WCRW	100	.....	Chicago, Ill.
WEBQ	100	.....	Harrisburg, Ill.
WEBC	100	.....	Chicago, Ill.
WFAS	100	.....	White Plains, N. Y.
WGBB	100	.....	Freeport, N. Y.
WGCM	100	.....	Gulfport, Miss.
WGNV	50	.....	Chester, N. Y.
WHBF	100	.....	Rock Island, Ill.
WHBU	100	.....	Anderson, Ind.
WHET	100	.....	Troy, Ala.
WIBU	100	.....	Poynette, Wis.
WJBI	100	.....	Red Bank, N. J.
WJBU	100	.....	Lewisburg, Pa.
WJBY	100	.....	Gadsden, Ala.
WJEJ	100	.....	Hagerstown, Md.
WJW	100	.....	Akron, Ohio.
WKFI	100	.....	Greenville, Miss.
WMBG	100	.....	Richmond, Va.
WOCL	50	.....	Jamestown, N. Y.
WOMT	100	.....	Manitowoc, Wis.
WPAW	100	.....	Providence, R. I.
WQDX	100	.....	Thomasville, Ga.
WSBC	100	.....	Chicago, Ill.
WSEN	100	.....	Columbus, Ohio.
WSIX	100	.....	Springfield, Tenn.
WSOC	100	.....	Gastonia, N. C.
WTAX	100	.....	Springfield, Ill.
XEX	500	.....	Mexico City, D. F.
2CH	1000	.....	Sydney, Australia.
2ZE	10	.....	Eketahuna, N. Z.
.....	100	.....	Hull, Que.

1220 kcs. 245.8 m.

CMHK	15	1225	Cruces, Cuba.
CW34	50	.....	Salto, Uruguay.
KFKU	500	.....	Lawrence, Kans.
KTW	1000	.....	Seattle, Wash.
KWSC	1000	.....	Pullman, Wash.
OFG	600	.....	Abo, Finland.
SCB	200	.....	Eskilstuna, Sweden.
SCL	200	.....	Kiruna, Sweden.
SCP	400	.....	Saffle, Sweden.
SCU	300	.....	Varberg, Sweden.
WACD	500	.....	Canton, N. Y.
WCAE	1000	.....	Pittsburgh, Pa.
WDAE	1000	.....	Tampa, Fla.
WREN	1000	.....	Lawrence, Kans.
4ZL	100	.....	Dunedin, N. Z.
6KG	100	.....	Kalgoorlie, Australia.
.....	500	1229	Basle, Switz.
.....	500	.....	Berne, Switz.
.....	400	.....	Bloemendaal, Holland.
.....	250	.....	Cartagena, Spain.
.....	500	.....	Cassel, Germany.
.....	100	1225	Linz, Austria.
.....	120	.....	Santiago, Chile.
.....	120	.....	Swansea, G. B.

1230 kcs. 243.8 m.

CMBY	250	.....	Havana, Cuba.
CMCA	150	.....	Havana, Cuba.
KFQD	250	.....	Anchorage, Alaska.
KGGM	250	.....	Albuquerque, N. Mex.

INDEX BY FREQUENCIES AND DIAL NUMBERS

KYA	1000	.....	San Francisco, Calif.
LSB	2000	.....	Buenos Aires, Arg.
WFBBM	1000	.....	Indianapolis, Ind.
WNAC	1000	.....	Boston, Mass.
WSBT	500	.....	South Bend, Ind.
2YB	100	.....	New Plymouth, N. Z.
.....	1000	1238	Belfast, Ireland.
.....	.....	1236	Liege, Belgium.
.....	.....	1239	Rancagua, Chile.

1240 kcs. 241.8 m.

CMAB	20	1249	Pinar del Rio, Cuba.
CMJN	50	.....	Camaguey, Cuba.
KGCU	250	.....	Mandan, N. Dak.
KLPM	250	.....	Minot, N. Dak.
KTAT	1000	.....	Fort Worth, Texas.
KTFI	500	.....	Twin Falls, Idaho.
LKS	500	1247	Stavanger, Norway.
PRP1	1500	1249	Oporto, Portugal.
SBE	600	1245	Boden, Sweden.
WACO	1000	.....	Waco, Texas.
WKAQ	1000	.....	San Juan, P. R.
WXYZ	1000	.....	Detroit, Mich.
XEFW	70	.....	Tampico, Tams.
2NC	2000	1245	Newcastle, Australia.
.....	50	1249	Valparaiso, Chile.

1250 kcs. 239.9 m.

CX36	250	.....	Montivideo, Uruguay.
KFMX	1000	.....	Northfield, Minn.
KFOX	1000	.....	Long Beach, Calif.
WAAM	1000	.....	Newark, N. J.
WCAL	1000	.....	Northfield, Minn.
WDSU	1000	.....	New Orleans, La.
WGCP	250	.....	Newark, N. J.
WLB	1000	.....	St. Paul, Minn.
WODA	1000	.....	Paterson, N. J.
WRHM	1000	.....	Minneapolis, Minn.
XEFA	500	.....	Mexico City, D. F.
.....	1500	.....	Beziers, France.
.....	500	.....	Nimes, France.
.....	2000	1256	Nurnberg, Germany.

1260 kcs. 238.0 m.

CW36	30	.....	Salto, Uruguay.
KOIL	1000	.....	Council Bluffs, Iowa.
KRGV	500	.....	Harlingen, Texas.
KUOA	1000	.....	Fort Smith, Ark.
KVOA	500	.....	Tucson, Ariz.
KWWG	500	.....	Brownsville, Texas.
SCV	200	1265	Orebro, Sweden.
WLBW	500	.....	Erie, Pa.
WNBX	250	.....	Springfield, Vt.
WTOC	500	.....	Savannah, Ga.
12M	10	.....	Auckland, N. Z.
3WR	50	.....	Wangaratta, Australia.
.....	3000	1265	Bordeaux, France.
.....	1000	1265	Nimes, France.
.....	20	1265	Santiago, Chile.

1270 kcs. 236.1 m.

CMBC	150	.....	Havana, Cuba.
CT1BP	50	1275	Lisbon, Portugal.
KGCA	100	.....	Decorah, Iowa.
KOL	1000	.....	Seattle, Wash.
KVOR	1000	.....	Colorado Springs, Colo.
KWLC	100	.....	Decorah, Iowa.
LKK	500	1274	Kristianssand, Norway.
LS9	3500	.....	Buenos Aires, Arg.
TUA	500	1275	Tunis, Tunisia.
WASH	500	.....	Grand Rapids, Mich.
WFBR	500	.....	Baltimore, Md.
WJDX	1000	.....	Jackson, Miss.
WOOD	500	.....	Grand Rapids, Mich.
ZP4	150	1275	Asuncion, Paraguay.
2SM	1000	.....	Sydney, Australia.

1280 kcs. 234.2 m.

KFBB	1000	.....	Great Falls, Mont.
LU7	200	.....	Putna Alta, Arg.
WCAM	500	.....	Camden, N. J.
WACP	500	.....	Asbury Park, N. J.
WDOD	1000	.....	Chattanooga, Tenn.
WIBA	500	.....	Madison, Wis.
WRV	500	.....	Dallas, Texas.
WTNJ	500	.....	Trenton, N. J.
3TR	50	.....	Sale, Australia.
4GC	20	.....	Otago, N. Z.
.....	2000	1283	Lodz, Poland.
.....	1000	1284	Sao Paula, Brazil.

1290 kcs. 232.4 m.

CMHL	20	.....	Cienfuegos, Cuba.
CX38	100	.....	Montivideo, Uruguay.
KDYL	1000	.....	Salt Lake City, Utah.
KFUL	500	.....	Galveston, Texas.
KLCN	100	.....	Blytheville, Ark.
KTSA	1000	.....	San Antonio, Texas.
WEBC	1000	.....	Superior, Wis.
WJAS	1000	.....	Pittsburgh, Pa.
WNBZ	50	.....	Saranac Lake, N. Y.
XEAC	100	1295	San Luis Potosi, S. L. P.
XFB	500	.....	Jalapa, Ver.
2ZB	7.5	.....	Napier, N. Z.
2ZH	65	.....	Napier, N. Z.
4BK	200	.....	Brisbane, Australia.
.....	250	1292	Kiel, Germany.
.....	250	1292	Noorkoping, Sweden.

1300 kcs. 230.6 m.

CMKJ	20	.....	Guantanamo, Cuba.
CE28	30	.....	Salto, Uruguay.
KALE	500	.....	Portland, Ore.
KFAC	1000	.....	Los Angeles, Calif.
KFH	1000	.....	Wichita, Kans.
KFJR	500	.....	Portland, Ore.
SCB	1250	1301	Malamo, Sweden.
SCO	250	1301	Noorkoping, Sweden.
SCQ	250	1301	Trollhattan, Sweden.
SCR	50	1301	Uddevalla, Sweden.
VOKW	30	.....	St. John's, Nfld.
WBRR	1000	.....	Brooklyn, N. Y.
WEVD	500	.....	New York, N. Y.
WFAB	1000	.....	New York, N. Y.
WHAZ	500	.....	Troy, N. Y.
WIOD	1000	.....	Miami, Fla.
WOQ	1000	.....	Kansas City, Mo.
3BA	50	.....	Ballarat, Australia.
3ZE	45	.....	Greymouth, N. Z.
3ZR	80	.....	Greymouth, N. Z.
.....	200	1301	Halsingborg, Sweden.
.....	250	1304	Oliveira, Portugal.
.....	20	1305	Santiago, Chile.

1310 kcs. 228.9 m.

CHCK	100	.....	Charlottetown, P. E. I.
CKCV	100	.....	Quebec, Que.
KCRJ	100	.....	Jerome, Ariz.
KFBK	100	.....	Sacramento, Calif.
KFGQ	100	.....	Boone, Iowa.
KFPL	100	.....	Dublin, Texas.
KFPM	15	.....	Greenville, Texas.
KFXR	100	.....	Oklahoma City, Okla.
KFYO	100	.....	Lubbock, Texas.
KGBX	100	.....	Springfield, Mo.
KGXC	100	.....	Wolf Point, Mont.
KGEZ	100	.....	Kalispell, Mont.
KGFW	100	.....	Kearney, Neb.
KIFH	100	.....	Juneau, Alaska.
KIT	100	.....	Yakima, Wash.
KMED	100	.....	Medford, Ore.
KRMD	100	.....	Shreveport, La.
KTSM	100	.....	El Paso, Texas.

INDEX BY FREQUENCIES AND DIAL NUMBERS

KXRO	100	....	Aberdeen, Wash.
SCS	200	....	Umea, Sweden.
WMAL	100	....	Laurel, Miss.
WBEO	100	....	Marquette, Mich.
WBOW	100	....	Terre Haute, Ind.
WBRE	100	....	Wilkes-Barre, Pa.
WCLS	100	....	Joliet, Ill.
WDAH	100	....	El Paso, Texas.
WEBR	100	....	Buffalo, N. Y.
WXL	50	....	Royal Oak, Mich.
WFBG	100	....	Altoona, Pa.
WFDF	100	....	Flint, Mich.
WGAL	100	....	Lancaster, Pa.
WGH	100	....	Newport News, Va.
WHAT	100	....	Philadelphia, Pa.
WIAS	100	....	Ottumwa, Iowa.
WJAC	100	....	Johnstown, Pa.
WKAV	100	....	Laconia, N. H.
WKBB	100	....	Joliet, Ill.
WKBC	100	....	Birmingham, Ala.
WLBC	50	....	Muncie, Ind.
WMBO	100	....	Auburn, N. Y.
WNBH	100	....	New Bedford, Mass.
WOL	100	....	Washington, D. C.
WRAW	100	....	Reading, Pa.
WROL	100	....	Knoxville, Tenn.
WSAJ	100	....	Grove City, Pa.
WSJS	100	....	Winston-Salem, N. Car.
WTEL	100	....	Philadelphia, Pa.
WTJS	100	....	Jackson, Tenn.
WTRC	100	....	Elkhart, Ind.
XEFB	100	1315	Monterrey, N. L.
XEI	150	....	Morelia, Mich.
5AD	300	....	Adelaide, Australia.
.....	500	1319	Flensburg, Germany.

1320 kcs. 227.1 m.

CMCY	1000	1325	Havana, Cuba.
KGHF	250	....	Pueblo, Colo.
KGMB	250	....	Honolulu, Hawaii.
KID (	250	....	Idaho Falls, Idaho.
TGW	250	....	Guatemala City, Gua.
WADC	1000	....	Akron, Ohio.
WSMB	500	....	New Orleans, La.
1ZJ	26	....	Auckland, N. Z.
2MO	50	....	Gunnedah, Australia.
.....	10000	1328	Fecamp, France.

1330 kcs. 225.4 m.

CMJI	45	1335	Ciego de Avila, Cuba.
CX40	100	....	Montivideo, Uruguay.
KGB	1000	....	San Diego, Calif.
KMO	250	....	Tacoma, Wash.
KSCJ	1000	....	Sioux City, Iowa.
TITR	75	1333	San Jose, C. R.
WDRC	500	....	Hartford, Conn.
WLSA	500	....	Cincinnati, Ohio.
WTAQ	1000	....	Eau Claire, Wis.
2ZIH	15	....	Hastings, N. Z.
4RO	250	....	Rockhampton, Australia.
6CK	1500	1337	Cork, Ireland.

1340 kcs. 223.7 m.

CW40	30	....	Paysandu, Uruguay.
KEFY	1000	....	Spokane, Wash.
KGDY	250	....	Huron, S. Dak.
KGNO	250	....	Dodge City, Kans.
LOAA	10000	1344	Luxemburg, Lux.
SCG	200	1346	Halsingborg, Sweden.
WCOA	500	....	Pensacola, Fla.
WLEC	250	....	Portland, Maine.
WSPD	1000	....	Toledo, Ohio.
2XN	5	....	Lismore, Australia.
4ZR	5	....	Otago, N. Z.
.....	100	1345	Santiago, Chile.

1350 kcs. 222.1 m.

CPX	1000	....	LaPaz, Bolivia.
JRL	7.5	....	San Pedro Sula, Hond.
KIDO	1000	....	Boise, Idaho.
KWK	1000	....	St. Louis, Mo.
LS6	1500	....	Buenos Aires, Arg.
SCF	150	1355	Hudeiksvall, Sweden.
WAWZ	250	....	Zarephath, N. J.
WBNX	250	....	New York, N. Y.
WCDA	250	....	New York, N. Y.
WEHC	250	....	Emory, Va.
WMSG	500	....	New York, N. Y.
3KZ	200	....	Melbourne, Australia.

1360 kcs. 220.4 m.

CMCR	150	1365	Havana, Cuba.
CMJP	7.5	....	Moron, Cuba.
KGER	1000	....	Long Beach, Calif.
KGIR	500	....	Butte, Mont.
PRAX	2000	1364	Rio de Janeiro, Brazil.
WCSC	500	....	Charleston, S. Car.
WFBL	1000	....	Syracuse, N. Y.
WGES	500	....	Chicago, Ill.
WJKS	1000	....	Gary, Ind.
WQBC	500	....	Vicksburg, Miss.
2ZR	50	....	Nelson, N. Z.
.....	1500	1364	Beziers, France.
.....	250	1364	St. Etienne, France.

1370 kcs. 218.8 m.

CMGE	30	1375	Cardenas, Cuba.
CX42	500	....	Montivideo, Uruguay.
HRB	2300	....	Tegucigalpa, Hond.
KCRC	100	....	Enid, Okla.
KFBL	50	....	Everett, Wash.
KFJM	100	....	Grand Forks, N. Dak.
KFJZ	100	....	Fort Worth, Texas.
KFLX	100	....	Galveston, Texas.
KGAR	100	....	Tucson, Ariz.
KGDA	100	....	Mitchell, S. Dak.
KGFG	100	....	Oklahoma City, Okla.
KGFL	100	....	Roswell, N. Mex.
KGKL	100	....	San Angelo, Texas.
KIGA	100	....	Clovis, N. Mex.
KMAC	100	....	San Antonio, Texas.
KONO	100	....	San Antonio, Texas.
KOOS	100	....	Marshfield, Ore.
KRE	100	....	Berkeley, Calif.
KSO	100	....	Des Moines, Iowa.
KUJ	100	....	Walla Walla, Wash.
KVL	100	....	Seattle, Wash.
KWKC	100	....	Kansas City, Mo.
ON4GT	100	1375	Brussels, Belgium.
WBTM	100	....	Danville Va.
WCBM	100	....	Baltimore, Md.
WDAS	100	....	Philadelphia, Pa.
WGL	100	....	Fort Wayne, Ind.
WGLC	50	....	Hudson Falls, N. Y.
WHBD	100	....	Mount Orab, Ohio.
WHBQ	100	....	Memphis, Tenn.
WHDF	100	....	Lalumet, Mich.
WIBM	100	....	Jackson, Mich.
WJBK	100	....	Detroit, Mich.
WJEW	100	....	Williamsport, Pa.
WJTL	100	....	Atlanta, Ga.
WLEY	100	....	Lexington, Mass.
WLYA	100	....	Lynchburg, Va.
WMBR	100	....	Tampa, Fla.
WPFB	100	....	Hattiesburg, Miss.
WQDM	100	....	St. Albans, Vt.
WRAK	100	....	Williamsport, Pa.
WRAM	100	....	Wilmington, N. Car.
WRDO	100	....	Augusta, Maine.
WRJN	100	....	Racine, Wis.
WSVS	50	....	Buffalo, N. Y.
XEFV	100	....	Juarez, Chih.
.....	200	1373	Plymouth, G. B.
.....	500	1373	Salzburg, Austria.

INDEX BY FREQUENCIES AND DIAL NUMBERS

1380 kcs. 217.3 m.

CMJC	500	1382	Camaguey, Cuba.
KOH	150	.....	Reno, Nev.
KQV	500	.....	Pittsburgh, Pa.
LU6	5	.....	Mar del Plata, Arg.
ON4CE	200	1388	Chatelineau, Belgium.
ON4EX	100	1388	Ottomont, Belgium
SKK	250	1382	Karlstad, Sweden.
WKBB	1000	.....	LaCrosse, Wis.
WSMK	200	.....	Dayton, Ohio.
XETB	125	.....	Torreón, Coah.
4BH	600	.....	Brisbane, Australia.
.....	500	1382	Königsberg, Germany.
.....	10	1388	Rancagua, Chile.

1390 kcs. 215.7 m.

CMBD	40	1395	Havana, Cuba.
HHH	15	1395	San Pedro, D. R.
KLRA	1000	.....	Little Rock, Ark.
KOY	500	.....	Phoenix, Ariz.
LT10	100	.....	Sante Fe, Arg.
SCE	200	1391	Halmstad, Sweden.
WHK	1000	.....	Cleveland, Ohio.
2GN	50	.....	Goulburn, Australia.

1400 kcs. 214.2 m.

CMCH	50	1405	Havana, Cuba.
CMCM	15	1405	Havana, Cuba.
KLO	500	.....	Ogden, Utah.
KOCW	250	.....	Chickasha, Okla.
WARD	500	.....	Brooklyn, N. Y.
WBBA	500	.....	Lafayette, Ind.
WBBC	500	.....	Brooklyn, N. Y.
WFOX	500	.....	Brooklyn, N. Y.
WKBF	500	.....	Indianapolis, Ind.
WLTH	500	.....	Brooklyn, N. Y.
2ZL	20	.....	Hastings, N. Z.
3GL	50	.....	Geelong, Australia.
.....	1000	.....	Aberdeen, G. B.

1410 kcs. 212.6 m.

CKFC	50	.....	Vancouver, B. C.
CKMO	100	.....	Vancouver, B. C.
CX44	20	.....	Montivideo, Uruguay.
KFLV	500	.....	Rockford, Ill.
KGRS	1000	.....	Amarillo, Texas.
WAAB	500	.....	Boston, Mass.
WBCM	500	.....	Bay City, Mich.
WDAG	1000	.....	Amarillo, Texas.
WHBL	500	.....	Sheboygan, Wis.
WHIS	250	.....	Bluefield, W. Va.
WODX	500	.....	Mobile, Ala.
WRBX	250	.....	Roanoke, Va.
WSFA	500	.....	Montgomery, Ala.
2KO	200	1415	Newcastle, Australia.

1420 kcs. 211.1 m.

CW44	30	.....	Paysandu, Uruguay.
HAE-2	3000	1428	Magyaróvár, Hungary.
KABC	100	.....	San Antonio, Texas.
KBPS	100	.....	Portland, Ore.
KCMC	100	.....	Texarkana, Ark.
KFIZ	100	.....	Fond du Lac, Wis.
KGFF	100	.....	Shawnee, Okla.
KGGC	100	.....	San Francisco, Calif.
KGIW	100	.....	Trinidad, Colo.
KGLX	100	.....	Las Vegas, Nev.
KGKX	100	.....	Sand Point, Idaho.
KICK	100	.....	Red Oak, Iowa.
KIDW	100	.....	Lamar, Colo.
KORE	100	.....	Eugene, Ore.
KUMA	100	.....	Yuma, Ariz.
KWCR	100	.....	Cedar Rapids, Iowa.
KXL	100	.....	Portland, Ore.

OA4M	12	1428	Lima, Peru.
WAGM	100	.....	Presque Isle, Maine.
WAMC	100	.....	Anniston, Ala.
WAZL	100	.....	Hazleton, Pa.
WEHS	100	.....	Cicero, Ill.
WELL	50	.....	Battle Creek, Mich.
WENC	100	.....	Americus, Ga.
WHDL	100	.....	Tupper Lake, N. Y.
WHFC	100	.....	Cicero, Ill.
WILM	100	.....	Wilmington, Del.
WJBO	100	.....	New Orleans, La.
WJMS	100	.....	Ironwood, Mich.
WKBI	100	.....	Cicero, Ill.
WLBK	100	.....	Kansas City, Kans.
WMAS	100	.....	Springfield, Mass.
WMBC	100	.....	Detroit, Mich.
WMBH	100	.....	Joplin, Mo.
WPAD	100	.....	Paducah, Ky.
WSPA	100	.....	Spartanburg, S. Car.
WTBO	100	.....	Cumberland, Md.
1ZB	20	.....	Auckland, N. Z.
1ZS	5	.....	Auckland, N. Z.
3AW	300	1425	Melbourne, Australia.
.....	1000	.....	Newcastle, G. B.

1430 kcs. 209.7 m.

CFCT	500	.....	Victoria, B. C.
HAC	1200	.....	Budapest, Hungary.
KECA	1000	.....	Los Angeles, Calif.
KGNF	500	.....	North Platte, Neb.
LP9	1500	.....	La Plata, Arg.
WBAK	1000	.....	Harrisburg, Pa.
WCAH	500	.....	Columbus, Ohio.
WFEA	500	.....	Manchester, N. H.
WHEC	500	.....	Rochester, N. Y.
WHP	500	.....	Harrisburg, Pa.
WNBK	500	.....	Memphis, Tenn.
WOKO	500	.....	Albany, N. Y.
2WL	50	1435	Woolongong, Australia.

1440 kcs. 208.2 m.

CMBL	20	1445	Havana, Cuba.
CSIRS	1000	1448	Oporto, Portugal.
KDFN	500	.....	Casper, Wyo.
KLS	250	.....	Oakland, Calif.
KXYZ	250	.....	Houston, Texas.
ON4RC	100	1448	Brussels, Belgium.
TIFS	7.5	1441	Cartago, C. R.
WBIG	500	.....	Greensboro, N. Car.
WCBA	250	.....	Allentown, Pa.
WMBD	500	.....	Peoria, Ill.
WSAN	250	.....	Allentown, Pa.
WTAD	500	.....	Quincy, Ill.

1450 kcs. 206.8 m.

CX46	100	.....	Montivideo, Uruguay.
KTBS	1000	.....	Shreveport, La.
ON4CE	100	1455	Verviers, Belgium
ON4EB	50	1455	Antwerp, Belgium
ON4FG	25	1455	Danpremy, Belgium.
SCA	150	.....	Boras, Sweden.
TIEP	7.5	.....	San Jose, C. R.
WGAR	500	.....	Cleveland, Ohio.
WHOM	250	.....	Jersey City, N. J.
WSAR	250	.....	Fall River, Mass.
WTFI	500	.....	Athens, Ga.
XEAB	7.5	.....	Nuevo Laredo, Tams.
3ZM	100	.....	Christchurch, N. Z.

1460 kcs. 205.4 m.

CW46	20	.....	Tucumã, Uruguay.
KSTP	25000	.....	St. Paul, Minn.
SCW	200	.....	Ornskoldsvik, Sweden.
WJSV	10000	.....	Washington, D. C.
ZP5	150	1465	Aauncon, Paraguay.
7UV	200	1465	Ulverstone, Australia.

INDEX BY FREQUENCIES AND DIAL NUMBERS

1470 kcs. 204.0 m.

KGA 5000 Spokane, Wash.
 LU9 50 Azul, Arg.
 SCE 200 Gavle, Sweden.
 WLAC 5000 Nashville, Tenn.

KGIZ 100 Grant City, Mo.
 KGKB 100 Tyler, Texas.
 KGKY 100 Scottsbluff, Neb.
 KNOV 100 Austin, Texas.
 KPJM 100 Prescott, Ariz.
 KPQ 100 Wenatchee, Wash.
 KREG 100 Santa Ana, Calif.
 KXO 100 El Centro, Calif.

1480 kcs. 202.6 m.

CMBK 15 1485 Havana, Cuba.
 CMBR 40 1485 Havana, Cuba.
 KOMA 5000 Oklahoma City, Okla.
 SCM 250 Kristinehamn, Sweden.
 WKBW 5000 Buffalo, N. Y.
 2AY 50 Albury, Australia.

WFDV 100 Rome, Ga.
 WHEF 100 Kosciusko, Miss.
 WKBV 100 Connorsville, Ind.
 WKBZ 100 Ludington, Mich.
 WKEU 100 LaGrange, Ga.
 WLOE 100 Boston, Mass.
 WMBQ 100 Brooklyn, N. Y.
 WMIL 100 Brooklyn, N. Y.
 WMPC 100 Lapeer, Mich.
 WNBF 100 Binghamton, N. Y.

1490 kcs. 201.2 m.

CX48 50 Montivideo, Uruguay.
 SCH 250 Jonkoping, Sweden.
 WCKY 5000 Covington, Ky.

WOPI 100 Bristol, Tenn.
 WPEN 100 Philadelphia, Pa.
 WRDW 100 Augusta, Ga.
 WSWB 100 Rutland, Vt.
 WWRL 100 Woodside, N. Y.
 WWSW 100 Pittsburgh, Pa.

1500 kcs. 199.9 m.

KDB 100 Santa Barbara, Calif.
 KGFI 100 Corpus Christi, Texas.
 KGFK 100 Moorhead, Minn.

3AK 50 Melbourne, Australia.
 250 1515 Biarritz, France.
 10000 ... Riga, Latvia.

REVISED INDEX OF CANADIAN STATIONS BY CALL LETTERS

*Not in official list; evidently to be deleted.

CFAC 690 Calgary, Alta. CFBO 1030 St. John, N. B. CFCA 1120 Toronto, Ont. CFCF 600 Montreal, Que. CFCH 930 North Bay, Ont. CFCN 1030 Calgary, Alta. CFCO 1210 Chatham, Ont. CFCT 1430 Victoria, B. C. CFCY 630 Charlottetown, P. E. I. CFJC 1120 Kamloops, B. C. CFLC 930 Prescott, Ont. CFNB 1210 Fredericton, N. B. CFQC 890 Saskatoon, Sask. CFRB 690 Toronto, Ont. CFRC 915 Kingston, Ont. CHCH* 1200 Montreal, Que. CHCK 1310 Charlottetown, P. E. I. CHGS 1120 Summerside, P. E. I. CHLP 1120 Montreal, Que. CHLS* 730 Vancouver, B. C. CHMA 580 Edmonton, Alta. CHML 890 Hamilton, Ont. CHNC* 840 Toronto, Ont. CHNS 1050 Halifax, N. S.	CHRC 645 Quebec, Que. CHWC 1010 Regina, Sask. CHWK 780 Chilliwack, B. C. CHYC* 730 Montreal, Que. CJCA 730 Edmonton, Alta. CJCB 880 Sydney, N. S. CJCJ 690 Calgary, Alta. CJGX 630 Yorkton, Sask. CJOC 580 Lethbridge, Alta. CJOR 1210 Vancouver, B. C. CJRM 880 Moose Jaw, Sask. CJRW 880 Fleming, Sask. CKAC 730 Montreal, Que. CKCD 1010 Vancouver, B. C. CKCI* 645 Quebec, Que. CKCK 1010 Regina, Sask. CKCL 580 Toronto, Ont. CKCO 1010 Ottawa, Ont. CKCR 645 Waterloo, Ont. CKCV 1310 Quebec, Que. CKFC 1410 Vancouver, B. C. CKGW 840 Toronto, Ont. CKIC 1010 Wolfville, N. S. CKLC* 840 Red Deer, Alta. CKLW 540 Windsor-London, Ont.	CKMC 1210 Cobalt, Ont. CKMO 1410 Vancouver, B. C. CKNC 1030 Toronto, Ont. CKOC 1010 Hamilton, Ont. CKOV 1200 Kelowna, B. C. CKPC 930 Preston, Ont. CKPR 780 Ft. William, Ont. CKTB* 635 St. Catharines, Ont. CKUA 580 Edmonton, Alta. CKWX 1010 Vancouver, B. C. CKX 930 Brandon, Man. CKY 910 Winnipeg, Man. CNRH* 815 Halifax, N. S. CORY* 840 Toronto, Ont. CRCA 580 Moncton, N. B. CRCO 880 Ottawa, Ont. CRCV 1100 Vancouver, B. C. 10-AB 1200 Moose Jaw, Sask. 10-AK* 1200 Stratford, Ont. 10-AT* 1158 Trail, B. C. 10-BI* 1200 Prince Albert, Sask. 10-BP* 1199 Wingham, Ont. 10-BQ* 1200 Brantford, Ont. 10-BU* 1200 Canora, Sask. 1210 Hull, Quebec
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TIME CONVERSION TABLE

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

INDEX BY LOCATIONS WITH MAP KEY

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

ILLINOIS			KANSAS		
	Watts	Keys.		Watts	Keys.
Carthage J-18	50	WCAZ 1070	Abilene K-15 bl	5000	KFBI 1050
Chicago I-20	10000	KFKX 1020	Coffeyville M-15 tr	500	KGGF 1010
	10000	KYW N 1020	Dodge City L-13	250	KGNO 1340
	500	WAAF 920	Kansas City K-16	100	WLFB 1420
	25000	WBBM C 770	Lawrence K-16	500	KFKU 1220
	1500	WCFL R 970		1000	WREN B 1220
	100	WCRW 1210	Manhattan K-15	500	KSAC 580
	100	WEDC 1210	Topeka K-16	1000	WIBW C 580
	50000	WENR N 870	Wichita L-15	1000	KFH C 1300
	500	WGES 1360			
	25000	WGN C 720	KENTUCKY		
	1000	WIBO 560	Covington K-22	5000	WCKY N 1490
	20000	WJJD 1130	Hopkinsville M-20	1000	WFTW C 940
	50000	WLS N 870	Louisville L-21	25000	WHAS C 820
	5000	WMAQ N 670		100	WLAP 1200
	500	WMBI 1080	Paducah M-19	100	WPAD 1420
	500	WPCC 560			
	100	WSBC 1210	LOUISIANA		
	100	WEHS 1420	Monroe P-18	100	KMLB 1200
	100	WHFC 1420	New Orleans R-19	100	WBBX 1200
	100	WKBI 1420		1000	WDSU C 1250
	100	WJBL 1200		100	WJBO 1420
	100	WEBQ 1210		100	WJBW 1200
	100	WCLS 1310		500	WSMB N 1320
	100	WKBB 1310		10000	WWL 850
	100	WJBC 1200	Shreveport P-17	100	KRMD 1310
	500	WMBD C 1440		1000	KTBS N 1450
	500	WTAD 1440		100	KWEA 1210
	500	KFLV 1410		10000	KWKH 850
	100	WHBF 1210			
	100	WCBS 1210	MAINE		
	100	WTAX 1210	Augusta F-28	100	WRDO 1370
	100	WDZ 1070	Bangor F-29	100	WABI 1200
	250	WILL 890		500	WLBZ C 620
	5000	WCBD 1080	Portland F-28	1000	WCSH R 940
				250	WLEC 1340
			Presque Isle D-29 lc	100	WAGM 1420
INDIANA			MARYLAND		
Anderson J-21	100	WHBU 1210	Baltimore J-26	10000	WBAL B 1060
Connersville K-21	100	WKBV 1500		250	WCAO C 600
Elkhart I-21 bc	100	WTRC 1310		100	WCBM 1370
Evansville L-20	500	WGBF 630		500	WFBR R 1270
Fort Wayne J-21	100	WGL C 1370	Cumberland J-25	100	WTBO 1420
	10000	WQWO C 1160	Hagerstown J-25 rc	100	WJEJ 1210
Gary I-20	1000	WJKS 1360			
Hammond I-20 bc	100	WWAE 1200	MASSACHUSETTS		
Indianapolis J-21	1000	WFBM C 1230	Babson Park G-28	500	WBSO 920
	500	WKBF 1400	Boston G-28	500	WAAB C 1410
Lafayette J-20	500	WBAA 1400		25000	WBZ B 990
Muncie J-21	50	WLBC 1310		1000	WEEI R 590
South Bend I-20	100	WFAM C 1200		1000	WHDH 830
	500	WSBT C 1230		100	WLOE 1500
Terre Haute K-20	100	WBOW 1310		1000	WNAC C 1230
			Fall River H-28	250	WSAR 1450
			Lexington G-28	100	WLEY 1370
IOWA			New Bedford H-28	100	WNBH 1310
Ames I-17	5000	WOI 640	Springfield H-27	1000	WBZA B 990
Boone I-17	100	KFGQ 1310		100	WMAS 1420
Cedar Rapids I-18	100	KWCR B 1420	Worcester G-28	100	WORC C 1200
Council Bluffs J-16	1000	KOIL B 1260		250	WTAG R 580
Davenport I-18	50000	WOC R 1000			
Decorah H-18	100	KGCA 1270	MICHIGAN		
	100	KWLC 1270	Battle Creek I-21	50	WELL 1420
Des Moines I-17	100	KSO B 1370	Bay City H-22	500	WBCM C 1410
	50000	WHO R 1000	Calumet E-19	100	WHDF 1370
Iowa City I-18	500	WSUI 880	Detroit H-22	100	WJBK 1370
Marshalltown I-17	100	KFJB 1200		10000	WJR B 750
Ottumwa J-17	100	WIAS 1310		100	WMEC 1420
Red Oak J-16	100	KICK 1420		1000	WWJ R 920
Shenandoah J-16	500	KFNF 890		1000	WXYZ 1240
	500	KMA 930	East Lansing H-21	1000	WKAR 1040
Sioux City I-15	1000	KSCJ C 1330			
Waterloo I-17	500	WMT C 600			

INDEX BY LOCATIONS WITH MAP KEY

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

	Watts		Kcys.		Watts		Kcys.
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 rc	100	WJMS	1420	NEW HAMPSHIRE			
Jackson I-21	100	WIBM	1370	Laconia G-28 lc	100	WKAV	1310
Kalamazoo I-21 tl	1000	WKZO	590	Manchester G-28	500	WFEA	C 1430
Lapeer H-22	100	WMPC	1500	Portsmouth G-28 tc	250	WHEB	740
Ludington H-20	100	WKBZ	1500	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	1200	Jersey City I-27	500	WAAT	940
Minneapolis G-17	50000	WCCO	C 810	Newark I-27	250	WHOM	1450
	1000	WDGY	1180		1000	WAAM	1250
	1000	WLB	1250		250	WGCP	1250
Moorhead F-15	100	WRHM	1250	Paterson I-27	1000	WODA	1250
Northfield G-17	1000	KGFK	1500	Red Bank I-27	100	WJBI	1210
	1000	KFMX	1250	Trenton I-26	500	WTNJ	1280
St. Paul G-17	25000	WCAL	1250	Zarephath I-27	250	WAWZ	1350
		KSTP	N 1460	NEW MEXICO			
MISSISSIPPI				Albuquerque N-7	250	KGGM	1230
Greenville O-18	100	WKFI	1210	Clovis O-11 tr	100	KICA	1370
Gulfport Q-19	100	WGCM	1210	Roswell M-10	100	KGFL	1370
Hattiesburg Q-19	100	WPFB	1370	NEW YORK			
Jackson P-19	1000	WJDX	N 1270	Albany G-27 bl	500	WOKO	C 1430
Kosciusko O-19 bc	100	WHF	1500	Auburn H-25	100	WMBO	1310
Laurel P-19 br	100	WAML	1310	Binghamton H-26	100	WBNF	1500
Meridian P-20	500	WCOC	880	Brooklyn I-27	500	WARD	1400
Vicksburg P-18	500	WQBC	1360		500	WBBC	1400
MISSOURI					1000	WBBR	1300
Cp. Girardeau L-19	100	KFVS	1210		500	WFOX	1400
Columbia K-17	500	KFRU	630		500	WLTH	1400
Grant City J-16	100	KGJZ	1500		100	WMBQ	1500
Jefferson City L-17	500	WOS	630		100	WMIL	1500
Joplin M-16	100	WMBH	1420	Buffalo H-24	1000	WBEN	R 900
Kansas City K-16	1000	KMBC	C 950		100	WEBR	1310
	100	KWKC	1370		1000	WGR	C 550
	1000	WDAF	R 610		5000	WKBW	C 1480
	500	WHB	860		50	WSVS	1370
	1000	WOQ	1300	Canton F-26	500	WCAD	1220
St. Joseph K-16	2500	KFEQ	680	Chester	50	WGNV	1210
St. Louis L-18	500	KFUO	550	Elmira H-25 c	1000	WESG	1040
	100	KFWF	1200	Freeport I-27	100	WGBB	1200
	50000	KMOX	C 1090	Hudson Falls G-27	50	WGLC	1370
	500	KSD	R 550	Jamestown H-24	50	WOCL	1210
	1000	KWK	B 1350	New York City I-27	50000	WABC	C 860
	1000	WEW	760		250	WBNX	1350
	100	WIL	1200		50000	WBOQ	860
Springfield M-17	100	KG BX	1310		250	WCDA	1350
MONTANA					50000	WEAF	R 660
Billings F-9	1000	KGHL	N 950		500	WEVD	1300
Butte F-7	500	KGIR	N 1360		1000	WFAB	1300
Great Falls E-8	1000	KFBB	1280		500	WINS	1180
Kalispell D-7	100	KG EZ	1310		250	WHN	1010
Missoula E-7	100	KGVO	1200		50000	WJZ	B 760
Wolf Point E-11	100	KG CX	1310		5000	WLWL	1100
NEBRASKA					500	WMCA	570
Clay Center J-14	1000	KMMJ	740		250	WMSG	1350
Kearney J-14 bc	100	KGFW	1310		500	WNYC	810
Lincoln J-15	5000	KFAB	C 770		1000	WOV	1130
	100	KFOR	1210		250	WPAP	1010
	500	WCAJ	590		500	WPCH	570
Norfolk I-15	1000	WJAG	1060		250	WQAO	1010
North Platte J-13	500	KCNE	1430		250	WRNY	1010
Omaha J-15	500	WAAW	660	Rochester G-25	25000	WHAM	B 1150
	1000	WOW	R 590		500	WHEC	C 1430
Scottsbluff I-11	100	KCKY	1500				
York J-15	500	KG BZ	930				

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	B 570
Troy G-27	500	WHAZ	1300
Tupper Lake F-26	100	WHDL	1420
Utica G-26	100	WIBX	1200
Woodside I-27	100	WWRL	1500
White Plains H-27 bl	100	WFAS	1210

NORTH CAROLINA

Asheville M-23	1000	WWNC	N 570
Charlotte M-24	25000	WBT	C 1080
Gastonia M-24	100	WSOC	1210
Greensboro M-24	500	WBIC	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
	100	WJW	1210
Canton I-23	10	WHBC	1200
Cincinnati K-22	100	WFBE	1200
	1000	WKRC	C 550
	50000	WLW	N 700
Cleveland I-23	500	WSAI	R 1330
	500	WGAR	B 1450
	1000	WHK	C 1390
	500	WJAY	610
Columbus J-22	50000	WTAM	R 1070
	500	WAIU	640
	500	WCAH	C 1430
	1000	WEAO	570
	100	WSEN	1210
Dayton J-22	200	WSMK	1380
Mount Orab K-22	100	WHBD	1370
Toledo I-22	1000	WSPD	C 1340
Youngstown I-23	500	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	WNAL	1010
Oklahoma N-15	100	KFXR	1310
	100	KGFG	1370
	5000	KOMA	C 1480
	1000	WKY	N 900
Ponca City M-15	100	WBBZ	1200
Shawnee N-15	100	KGFF	1420
Tulsa M-15	5000	KVOO	N 1140

OREGON

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

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

PENNSYLVANIA

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

PHILIPPINES

Cebu	500	KZRC	937.5
Manila	1000	KZKA	1110
	50000	KZRM	618.5

PORTO RICO

San Juan W-34	1000	WKAQ	1240
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RHODE ISLAND

Providence H-28	500	WEAN	C 780
	500	WJAR	R 890
	100	WPAW	1210
	100	WPRO	1210

SOUTH CAROLINA

Charleston O-25	500	WCSC	1360
Columbia N-24	500	WIS	N 1010
Greenville N-23 tc	100	WFBC	1200
Spartanburg N-23	100	WSPA	1420

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	730		100	CKCI	645
	500	CKUA	580		100	CKCV	1310
Lethbridge C-8	100	CJOC	580	SASKATCHEWAN			
Red Deer A-8	1000	CKLC	840	Canora B-13 tl	15	10-BU	1200
BRITISH COLUMBIA				Fleming C-13	500	CJRW	880
Chilliwack B-3	100	CHWK	780	Moose Jaw C-11	500	CJRM	880
Kamloops B-5	100	CFJC	1120		25	10-AB	1200
Kelowna C-6 tl	100	CKOV	1200	Prince Albert A-11 rc	25	10-BI	1200
Trail C-6 c	25	10-AT	1155	Regina C-12	500	CHWC	1010
Vancouver B-3	100	CHLS	730	Saskatoon B-11	500	CKCK	1010
	500	CJOR	1210	Yorkton B-13	500	CFQC	890
	100	CKCD	1010		500	CJGX	630
	50	CKFC	1410	NEWFOUNDLAND			
	100	CKMO	1410	St. Johns A-35	75	VOAS	810
	100	CKWX	1010		100	VOGY	890
	500	CRCV	1100		30	VOKW	1300
Victoria C-3	500	CFCT	1430		100	VONF	1195
					500	VOWR	750
MANITOBA				CENTRAL AMERICA			
Brandon D-14	500	CKX	930	COSTA RICA			
Winnipeg D-15	5000	CKY	910	Cartago	7.5	TIFS	1441
NEW BRUNSWICK					30	TIGA	1014
Fredericton D-29	100	CFNB	1210	San Jose	15	TIC	882
Moncton D-30	500	CRCA	580		30	TICR	1180
St. John D-30	500	CFBO	1030		7.5	TIEA	833
NOVA SCOTIA					7.5	TIEP	1450
Glace Bay C-32	2000	VAS	685		30	TIFB	714
Halifax E-31	500	CHNS	1050		75	TIGP	666
Sydney C-32	100	CJCB	880		50	TISO	600
Wolfville D-31	50	CKIC	1010		75	TITR	1333
ONTARIO					7.5	TITV	999
Brantford H-23 tr	15	10-BQ	1200		30	TIVL	860
Chatham H-22	100	CFCO	1210		7.5	TIXA	614
Cobalt E-23	100	CKMC	1210	GUATEMALA			
Ft. William E-19 bl	100	CKPR	780	Guatemala City	250	TGW	1320
Hamilton H-24	50	CHML	890	HONDURAS			
	100	CKOC	1010	San Pedro Sula	7.5	JRL	1350
Kingston G-25	50	CFRC	915	Tegucigalpa	2300	HRB	1370
North Bay F-23 c	100	CFCH	930	SALVADOR			
Ottawa F-25	100	CKCO	1010	Salvador CC-19 br	500	RUS	664
	500	CRCO	880	MEXICO			
Prescott F-25	100	CFLC	930	AGUASCALIENTES			
Preston H-23	100	CKPC	930	Aguascalientes W-11 bc	350	XFC	805
St. Catharines H-24 tl	1000	CKTB	635	BAJA CALIFORNIA			
Stratford H-23 tc	15	10-AK	1200	Mexicali O-4 tc	7.5	XEAO	560
Toronto G-24	100	CFAA	1120	Tiajuana N-3 bc	2500	XEFD	855
	10000	CFRB	690	CHIHUAHUA			
	5000	CHNC	840	Chihuahua R-9	100	XEF1	1000
	100	CKCL	580		250	XFF	915
	5000	CKGW	840		5000	XEAN	750
	100	CKNC	1030		100	XEFV	1370
	5000	CPRY	840		500	XEJ	1015
Waterloo G-23	100	CKCR	645	COAHUILA			
Windsor I-22 tc	5000	CKLW	540	Piedras Negras S-12 tr	10000	XEPN	585
Wingham G-23	25	10-BP	1199	Saltillo, Coah. U-12	10	XEL	1000
PRINCE EDWARD ISLAND				Torreón U-11 tl	125	XETB	1380
Charlottetown C-31	500	CFCY	630	Villa Acuna R-12 c	75000	XER-XEF	735
	100	CHCK	1310	D. F.			
Summerside C-31	100	CHGS	1120	Coyoacan Y-13	100	XEFZ	1500
QUEBEC				Mexico City Y-13	250	XEAD	875
Hull	100		1210		100	XEAI	1090
Montreal E-26	500	CFCF	600		10000	XEB	1030
	100	CHCH	1200				
	100	CHLP	1120				
	5000	CHYC	730				
	5000	CKAC	730				

INDEX BY LOCATIONS WITH MAP KEY

		Watts	Keys.			Watts	Keys.	
		500	XEFA	1250		50	CMJG	1050
		500	XEG	1075		300	CMJK	790
		100	XEK	990		50	CMJL	960
		1000	XEN	711		50	CMJN	1240
		5000	XEFO	940	Cardenas W-24	30	CMGE	1375
		1000	XEP	780	Ciego de Avila W-26	30	CMJH	1150
		250	XETA	1140		45	CMJI	1335
		1000	XETR	610		50	CMJO	1110
		500	XETW	830	Cienfuegos W-25	40	CMJU	1125
		5000	XEW	910		20	CMHL	1290
		500	XEX	1210	Colon W-24	100	CMGA	834
		2000	XFG	638	Cruces	15	CMHK	1225
		1000	XFI	818	Guantanamo X-28 tc	20	CMKJ	1300
		5000	XFO	940	Havana W-23	1000	CMAF	680
		500	XFX	860		150	CMAY	965
		50	XEC	1000		150	CMBC	1270
Toluca Y-12						150	CMBD	965
HIDALGO						225	CMBG	1070
Pachuca Y-13 rc	100	XETU	890			150	CMBJ	1140
JALISCO						15	CMBK	1485
Guadalajara, Ja. X-10	100	XEA	1000			20	CMBL	1445
	500	XED	1155			150	CMBN	1185
MICHOACAN						40	CMBR	1485
Morelia, Mich. Y-12	125	XEI	1310			150	CMBS	780
NUEVO LEON						150	CMBW	925
Monterrey, N. L. U-13	100	XEFB	1315			250	CMBY	1230
	100	XEFJ	1000			150	CMBZ	1010
	250	XEH	1132			500	CMC	840
	500	XET	690			150	CMCA	1230
PUEBLA						150	CMCB	1070
Puebla Z-13	100	XETH	840			250	CMCD	1140
QUERETARO						250	CMCF	890
Queretaro X-12 br	40	XEFS	1000			50	CMCH	1405
SAN LUIS POTOSI						250	CMCJ	1185
San Luis Potosi W-12 bc	100	XEAC	1295			15	CMCM	1405
TAMAULIPAS						250	CMCN	925
Matamoros U-14 tr	500000	XEM	660			1000	CMCQ	780
	150000	XETM	845			150	CMCR	1365
N. Laredo S-13	7.5	XEAB	1450			150	CMCU	630
	100	XEFE	1000			150	CMCW	965
	150000	XENT	1115			1000	CMCY	1325
Reynosa, Tams. T-14	10000	XEAW	965			40	CMDB	1395
Tampico, Tams. W-14	70	XEFW	1240			3150	CMK	730
	250	XES	1055			500	CMQ	630
VERA CRUZ						1400	CMW	600
Jalapa Y-14	500	XFB	1290			750	CMX	890
Vera Cruz, Ver. Z-14	500	XETF	630	Matanzas W-24	30	CMGB	1265	
	100	XEU	1010		30	CMGC	820	
YUCATAN						100	CMGF	987
Merida, Yuc. X-19	10	XEFC	1020			15	CMGH	1040
	105	XEY	546.8			7.5	CMJP	1360
WEST INDIES						20	CMAB	1249
CUBA						30	CMHI	1030
Caibarien W-25	250	CMHD	950			150	CMKC	1034
Camaguey W-26	150	CMJC	1382			250	CMKC	790
	50	CMJE	1175	DOMINICAN REPUBLIC				
	200	CMJF	930	San Pedro de Marcoris	15	HHH	1395	
				Santo Domingo	15000	HIJK	1180	
					1000	HIX	630	
				HAITI				
				Port au Prince X-30	1000	HHK	920	
				MIQUELON ISLANDS				
				St. Pierre	2000	.....	572	

Map Key: For locating cities not shown on the RADEX Map of North America, use the small letters following the square in which that city is located thus: tl top left, tc top center, tr top right, bl bottom left, bc bottom center, br bottom right, l left, c center, r right.

INDEX BY COUNTRIES AND CITIES

SOUTH AMERICA

ARGENTINE

Azul	50	LU9	1470
Bahia Blanca	500	LU2	800
Buenos Aires	1000	LP4	670
	1500	LP6	590
	500	LR1	790
	5500	LR2	910
	7500	LR3	950
	20000	LR4	990
	1600	LR5	830
	2100	LR6	870
	1000	LR7	750
	3000	LR8	1150
	5000	LR9	1030
	5000	LS1	710
	5500	LS2	1190
	5000	LS5	1110
	1500	LS6	1350
	2000	LS8	1230
	3500	LS9	1270
	4500	LU3	630
Cordoba	500	LV2	920
	350	LV3	620
LaPlata	1500	LP9	1430
Las Heras	350	LV10	860
Mar del Plata	50	LU6	1380
Mendoza	170	LT4	760
Punta Alta	200	LU7	1280
Rosario	4500	LT1	780
	250	LT3	1080
	350	LT8	840
	500	LV9	900
	100	LT9	1060
San Juan	1500	LV1	730
	500	LV5	1120
Santa Fe	100	LT10	1390
Tucuman	200	LV7	820

BOLIVIA

La Paz	1000	CPX	1350
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BRAZIL

Curityba	8	PRAN	789
Franca	50	PRAZ	1110
Juiz de Fora	200	PRAJ	789
Mogy das Cruzes	50	PRAY	789
Pelotas	50	PRAD	920
Pernambuco	300	PRAP	967
Porto Alegre	3000	PRAG	706
Ribeirao Preto	10	PRAI	857
Rio de Janeiro	2000	PRAA	750
	500	PRAB	937
	500	PRAC	857
	500	PRAK	1153
	2000	PRAK	1364
	1000	PRAE	921
	500	PRAR	1006
Sao Paula	1000	.....	1284

CHILE

Rancagua	10	.....	1239
	10	.....	1388
Santiago	1000	CE62	625
	1000	CE70	705
	1000	CE74	745
	1000	CE78	785
	1000	CE82	825
	1000	CE86	865
	1000	CE90	905
	1000	CE94	945
	1000	CE98	980
	100	CE102	1025
	250	.....	985
	.....	.....	1105
	100	.....	1145
	100	.....	1185
	100	.....	1225

	20	.....	1265
	20	.....	1305
	100	.....	1345
Valparaiso	100	CE88	880
	50	.....	785
	20	.....	1045
	20	.....	1153
	50	.....	1249

COLOMBIA

Bogota	2000	HJN	690
	20	HJ3ABD	881

PARAGUAY

Asuncion	1000	ZP1	1135
	300	ZP3	1000
	150	ZP4	1275
	150	ZP5	1465

PERU

Lima	5000	OAX	790
	12	OA4M	1428

URUGUAY

Montivideo	1000	CX6	850
	1000	CX10	730
	500	CX12	770
	1000	CX14	810
	.....	CX16	850
	250	CX18	890
	2000	CX20	930
	250	CX22	970
	1000	CX24	1010
	2000	CX26	1050
	250	CX30	1130
	200	CX32	1170
	500	CX34	1210
	250	CX36	1250
	100	CX38	1290
	100	CX40	1330
	500	CX42	1370
	20	CX44	1410
	100	CX46	1450
	50	CX48	1490
Paysandu	30	CW40	1340
	30	CW44	1420
	30	CW32	1180
	50	CW34	1220
	30	CW36	1260
	30	CW38	1300
Tucuaembo	..	CW30	1140
	20	CW46	1460

VENEZUELA

Caracas	5000	YV1BC	960
	100	YV2BC	882
	50	YV3BC	1200

EUROPE

AUSTRIA

Graz	7000	.....	852
Innsbruck	500	.....	1058
Klagenfurt	500	.....	662
Linz	500	.....	1220
Salszburg	500	.....	1373
Vienna	15000	.....	581
	... ..	.....	780

BELGIUM

Antwerp	50	ON4EB	1455
Brussels	100	ON4FO	1219
	100	ON4GT	1375
	3600	ON4RB	589
	100	ON4RC	1448
	15000	No. 1	590
	15000	No. 2	887
Chatelneau	200	ON4CE	1388
Dampremy	25	ON4FG	1453
Ghent	400	ON4RG	1219

INDEX BY COUNTRIES AND CITIES

NORWAY

Aalesund	350	LKA	671
Bergen	1000	LKB	824
Bodo	500	LKD	662
Fredrikstad	700	LKF	815
	700	.....	820
Hamar	700	LKH	536
	700	.....	522
Kristianssand	500	LKK	1274
Notodden	50	LKN	671
Oslo	6000	LKO	1083
Porsgrund	700	LKP	662
Rjukan	180	LKR	671
Stavanger	500	LKS	1247
Tromsøe	110	LKM	662
Trondelag	1200	LKT	608
Trondheim	1200	.....	605

POLAND

Cracow	1500	.....	959
Katowice	16000	.....	734
Lodz	2000	.....	1283
Lwow	16000	.....	788
Poznan	1900	.....	896
	1500	.....	1098
Wilno	16000	.....	533

PORTUGAL

Lisbon	2000	CT1AA	1056
	10	CT1AN	1056
	50	CT1BM	1056
	150	CT1BO	936
	50	CT1BP	1275
	10	CT1DH	952
	10	CT1DS	1058
	50	CT1EB	1056
	50	CT1GK	1062
	150	CT1GL	885
Oliveira de Azmeis	250	.....	1304
Oporto	1000	CS1RS	1448
	1500	PRP1	1249
Parede	1500	696

RUMANIA

Bucharest	12000	761
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SPAIN

Almeria	1000	EAJ18	1193
Barcelona	8000	EAJ1	860
	1000	EAJ15	1193
	5500	896
	400	.....	1220
Cadiz	750	EAJ2	708
Cartagena	2000	EAJ7	707
Madrid	700	EAJ19	1121
	1000	EAJ22	662
Oviedo	600	EAJ8	662
Salamanca	1500	EAJ5	815
San Sebastian	1500	EAJ3	1121
Seville	1500	.....	1121
Valencia	1500	.....	1121

SWEDEN

Boden	600	SBE	1245
Boras	150	SCA	1450
Eskilstuna	200	SCB	1220
Falun	500	SCC	977
Goteborg	10000	SBB	932
Gavle	200	SCE	1470
Halmstad	200	SCE	1391
Halsingborg	200	SCG	1346
	200	.....	1301
Horby	10000	SBH	1166
Hudiksvall	150	SCF	1355
Jonkoping	250	SCH	1490
Kalmar	200	SCI	1202
Karlstad	250	SCK	1382
Kiruna	200	SCL	1220
Kristinehamn	250	SCM	1480
Malmberget	250	SCN	689

Malmö	1250	SBC	1301
Norrköping	250	SCO	1301
	250	.....	1292
Orebro	200	SCV	1265
Ornskoeldsvik	200	SCW	1460
Ostersund	600	SBF	747
Saffle	400	SCP	1220
Stockholm	75000	SBA	689
Sundsvall	10000	SBD	554
Trollhattan	250	SCQ	1301
	250	.....	1193
Uddevalla	50	SCR	1301
Umea	200	SCS	1310
Upsala	150	SCU	662
Varberg	300	SCU	1220

SWITZERLAND

Basle	500	.....	1229
Berne	500	.....	1220
Beromunster	60000	.....	653
Sottens	25000	.....	743

U. S. S. R.

Alexandrovsk	1200	RW38	580
Astrakhan	10000	RW35	589
Dnepropetrovsk	3000	RW30	869
Engels	1000	RW55	959
Gornel	1000	RW40	621
Gorki	10000	RW42	598
Groznyi	1200	RW23	676
Ijevsk	4000	RW69	825
Ivanovo-Voznesensk	10000	RW31	625
Karaganda	10000	RW46	653
	1200	RW46	686.5
Kazan	10000	RW17	644
Kharkov	10000	RW20	815
Krasnodar	1000	RW33	650
Leningrad	10000	RW70	860
Magnitogorsk	10000	.....	571
Makhatch-Kala	1200	RW27	689
	120000	.....	563
Moskva	1000	RW37	792.5
Moskva Imeni Stalina	100000	RW39	707
Mourmansk	10000	.....	743
Naltchik	1200	RW51	748.1
Nijni-Novgorod	10000	.....	598
Odessa	10000	RW13	662
Oufa	10000	RW22	617
Penza	1200	RW56	640
Simferopol	4000	RW52	630.2
	10000	RW52	725
Smolensk	2000	RW24	531
Stalin	10000	RW26	779
Syktyvkar	1200	RW41	563
Tcheboksary	1200	RW74	680
Tcheliabinsk	1500	RW68	824
Tiraspol	4000	RW57	838
Tomsk	1200	RW48	554
Vinnitza	10000	RW75	968
Vladikavkaz	10000	RW64	752
Vladivostok	700	RW28	635
	10000	RW28	725

YUGOSLAVIA

Belgrade	2800	.....	697
Ljubljana	7000	.....	522
Zagreb	750	.....	977

ASIA

CEYLON			
Colombo	1750	.....	600

CHINA

Canton	1000	CMB	681.4
Hangchow	1000	XGOD	973.4
Hong Kong	12000	ZBW	845
Loyang	250	XGOB	1090

INDEX BY COUNTRIES AND CITIES

Nanking	15000	XGOA	681.4	MOROCCO			
Peiping	100	XOPP	951.8	Casablanca	25	CNO	983
Tientsin	500	XOTN	624.6	Rabat	6000	.....	721
FORMOSA							
Taihoku	10000	JFAK	670	TUNISIA			
INDIA							
Bombay	3000	VUB	840	Tunis	500	TUA	1275
Calcutta	3000	VUC	810	UNION OF SOUTH AFRICA			
Lahore	100	VUL	882	Bloemfontaine	750	ZTB	588
Madras	200	VUM	770	Cape Town	1000	ZTC	810
Rangoon	350	2HZ	857	Durban	1000	ZTD	731
INDO-CHINA							
Saigon	12000	F31CD	840	Johannesburg	15000	ZTJ	667
JAPAN							
Akita	300	JOUK	645	Pretoria	50	ZTP	1000
Asahikawa	300	JOCG	655	OCEANIA			
Fuku	300	JOFG	990	AUSTRALIA			
Fukuoka	500	JOLK	680	Adelaide	300	5AD	1310
Hakodate	500	JOVK	680		5000	5CL	730
Hiamamatsu	500	JODG	635		1000	5DN	960
Hiroshima	10000	JOFK	850		300	5KA	1200
Kanazawa	3000	JOJK	710	Albury	50	2AY	1480
Kochi	500	JORX	720	Ballarat	50	3BA	1300
Kokura	1000	JOSK	735	Bendigo	200	3BO	970
Kumamoto	10000	JOSK	790	Brisbane	600	4BC	1145
Kyoto	300	JOOK	960		600	4BH	1380
Maebashi	500	JOBG	970		200	4BK	1290
Matsuye	500	JOTK	625		5000	4QG	760
Nagano	500	JONK	940	Canberra	50	2CA	1050
Nagasaki	500	JOAG	930	Corowa	7500	2CO	560
Nagoya	10000	JOCK-1	810	Crystal Brook	7500	5CK	635
	10000	JOCK-2	1175	Geelong	50	3GL	1400
Niigata	500	JOOK	920	Goulburn	50	2GN	1390
Okayama	500	JOKK	700	Gunnedah	50	2MO	1320
Osaka	10000	JOBK-1	750	Hamilton	200	3HA	1010
	10000	JOBK-2	1085	Hobart	50	7HO	890
Sapporo	10000	JOIK	830		3000	7ZL	580
Sendai	10000	JOHK	770	Kalgoorlie	100	6KG	1220
Shizuoka	500	JOPK	780	Launceston	200	7LA	1100
Tainan	1000	JFBK	720	Lismore	50	2XN	1340
Tokushima	500	JOXK	980	Mackay	100	4MK	1190
Tokyo	10000	JOAK-1	870	Maryborough	50	4MB	1060
	10000	JOAK-2	590	Melbourne	50	3AK	1500
KOREA							
Keijo	1000	JODK-1	690		5000	3AR	610
	10000	JODK-2	900		300	3AW	1425
MANCHURIA							
Dairen	500	JOAK	645		500	3DB	1180
Hoten	1000	JOAK	760		200	3KZ	1350
	1500	ZILY	900		5000	3LO	800
SIAM							
Bangkok	2500	HSPI	857		500	3UZ	930
AFRICA							
ALGERIA							
Aigiers	13000	.....	824	Newcastle	25	3YB	1145
EGYPT							
Alexandria	200	.....	780		200	2HD	1110
Cairo	500	.....	1080		200	2KO	1415
	500	.....	710		2000	2NC	1245
	300	.....	780	Perth	300	6ML	1135
Port Said	500	.....	1080		200	6PR	880
KENYA							
Nairobi	1000	VQ7LO	750		5000	6WF	690
				Port Pirie	50	5PI	1041
				Rockhampton	2000	4RK	910
					250	4RO	1330
				Sale	50	3TR	1280
				Swan Hill	50	3SH	1080
				Sydney	5000	2BL	855
					1000	2CH	1210
					5000	2FC	665
					3000	2GB	950
					1500	2KY	1070
					1000	2SM	1270
					1000	2UE	1025
					1500	2UW	1125
				Toowoomba	50	4GR	1000
				Townsville	100	4TO	1170
				Ulverstone	200	7UV	1465
				Wagga	50	2WG	1155
				Wangaratta	50	3WR	1260
				Woollongong	50	2WL	1435

100 BEST S. W. STATIONS

NEW ZEALAND			
Auckland	500	1YA	820
	20	1ZB	1420
	26	1ZJ	1320
	10	1ZM	1260
	25	1ZQ	1190
	80	1ZR	1090
	5	1ZS	1420
Christchurch	500	3YA	980
	250	3ZC	1200
	100	3ZM	1450
Dunedin	500	4YA	650
	20	4ZB	1080
	10	4ZF	1080
	100	4ZL	1220
	45	4ZM	1080
	40	4ZO	1080
	50	4ZW	1080
Eketahuna	10	2ZE	1210
Gisborne	75	2ZJ	1150
Greymouth	110	2ZM	1150
	45	3ZE	1300
	80	3ZR	1300
Hamilton	45	1ZH	630
Hastings	15	2ZI	1330
	20	2ZL	1400
Invercargill	8	4ZI	1160
	125	4ZP	1160
Napier	7.5	2ZH	1290
	65	2ZH	1290
Nelson	50	2ZR	1360
New Plymouth	100	2YB	1230
Otago	20	4ZC	1280
	5	4ZR	1340
Palmerston North	150	2ZF	1050
	200	2ZO	1050
Wairoa	105	2ZP	900
Wanganui	120	2ZK	600
Wellington	5000	2YA	720
	400	2ZW	1120

One Hundred Best Short Wave Stations

By Frequencies and Wave Lengths

Submitted by our readers as being most regularly received. Times are given in Eastern Standard. First column gives frequency in megacycles (for kilocycles read the decimal-point as a comma) and the second column, wave-lengths in meters.

For complete lists of short-wave stations see the following issues of this magazine:

September: Foreign stations arranged by countries.

November: American stations by states.

December: Canadian stations by provinces and Complete list by call letters.

April: Complete list by frequencies and waves.

Stations marked with an asterisk (*) will not verify.

	Broadcast B.	Phone P.					
4.174	71.82	British Ships	P	6.140	48.83	W8XK, Pittsburgh, Pa. Relays KDKA 4-11 p.m.	B
4.174	71.82	German Ships	P	6.246	48.00	*HJ3ABF, Bogota, Colombia, 8-11 p.m.	B
4.283	70.00	Italian Ships	P	6.272	47.80	H11A, Santiago de los Caballeros, S. Domingo, 1:40-4:40 p.m., Sunday	B
4.513	66.43	VPN, Nassau, Bahamas, Phones Hialeah P		6.378	47.00	*HJ5ABB, Cali, Colombia	B
4.753	63.08	*WOO, Ocean Gate, N. J. Phones Ships P		6.618	45.31	PRADO, Riobamba, Ecuador, Thur. 9-11 p.m.	B
5.045	59.42	*VRT-ZFA Hamilton, Bermuda. Phones WNB-GMBJ nights	P	6.618	45.30	WVD, Seattle, Wash. Phones Ketchikan, night	P
5.766	52.00	XAM Merida, Yucatan. Tests XDA 10 a.m.-8 p.m. irreg.	P	6.662	45.00	WXH, Ketchikan, Alaska. Phones Seattle, night	P
5.879	51.00	*XDA Mexico City. Tests XAM 10 a.m.-8 p.m. irreg.	P	6.675	44.91	DGK, Nauen, Germany. Heard 9 p.m. with WEJ	P
5.925	50.60	HJ4ABE, Medellin, Colombia. Mon., Wed., Fri., 7:30 to 10:30 p.m.; Tues., Thur., Sat., Sun., 6-8 p.m.	B	6.752	44.41	*WOO, Lawrenceville, N. J. Phones England	P
5.996	50.00	RV59, Moscow, USSR. 3-6 p.m.	B	6.888	43.54	*KEQ, Kahuku, Hawaii. Phones California nights	P
6.005	49.93	HJ1ABB Barranquilla Colombia. 8-10 p.m.	B	7.139	42.00	HJ4ABB, Nanzales, Colombia, Sat. 10 p.m.-mid.	B
6.005	49.93	VE9DR, Montreal, Quebec. Daily, 7:30 a.m.-mid. Sunday, noon-11 p.m.	B	7.396	40.54	*WEM, Rocky Point, N. Y.	P
6.017	49.83	DJC, Zeesen, Germany	B	7.402	40.50	*HJ3ABD, Bogota, Colombia. 9-11 p.m., daily	B
6.040	49.64	W1XAL, Boston, Mass. Irregular	B	7.465	40.16	*HJP, Bogota, Colombia. Phones Hialeah P	P
6.050	49.56	GSA, Daventry, England. To Canada 6-8 p.m.	B	7.518	39.89	*KDK-KKH, Kahuku, Hawaii, 9 p.m. and 2 a.m.	P
6.057	49.50	W3XAU, Philadelphia, Pa., irreg.	B	7.562	39.65	*KWY, Dixon, Calif. Phones Hawaii and Manila	P
6.070	49.39	VE9CS, Vancouver, B. C., Fri. 12:30-1:45 a.m.; noon to mid.	B	7.605	39.42	*KWY, Dixon, Calif. Phones Hawaii and Manila	P
6.090	49.23	VE9BJ, St. John, N. B., 5 p.m. and 11 p.m.	B	7.685	39.01	TIB, Cartago, Costa Rica. Phones Hialeah P	P
6.092	49.22	VE9GW, Bowmanville, Ont. 11 a.m.-3 p.m.; Sun., 7-8 p.m.	B	7.790	38.49	HBP, Geneva, Switzerland, Sun. 5-5:45 p.m.	B
6.095	49.18	W9XF, Chicago, Ill., 4:30-8 p.m.; 9:30 p.m.-2 a.m.	B	8.103	37.00	HCB, Quito, Ecuador, 7:30-9:45 p.m. Except Monday.	B
6.096	49.17	W3XAL, Boundbrook, N. J., Sat. 4:30 p.m.-1 a.m.	B	8.328	36.00	German Ships	P
6.116	49.02	W2XE, Wayne, N. J., 6-11 p.m.	B	8.464	35.42	DAF, Norden, Germany. Phones Ships P	P
6.119	49.00	YV1BC, Caracas, Venez. Relays 960 kes. 10:30 a.m.-1 p.m.; 5:15-10 p.m.	B	8.562	35.02	*WOO, Ocean Gate, N. J. Phones Ships P	P
6.121	48.98	VE9HX, Halifax, N. S. Sat. and Sun., 5:30-10:30 p.m.	B				

100 BEST S. W. STATIONS

8.566	35.00	Italian Ships	P	13.219	22.68	British Ships	P
8.831	33.95	British Ships	P	13.296	22.55	OGA, Drummondville, Que. 9 a.m.-2 p.m.	P
9.012	33.27	*KEJ, Bolinas, Calif. Tests irregularly	P	13.337	22.48	*YVQ, Maracay, Venezuela. Phones Hialeah, days	P
9.273	32.33	GCB, Rugby, England. Phones Canada nights	P	13.500	22.09	GBB, Rugby, England. Talks Canada daytimes	P
9.290	32.27	Rabat, Morocco. Sun., 2:30-5 p.m.	B	13.816	21.70	SUZ, Cairo, Egypt. 7 a.m. and 3:30 p.m.	P
9.340	32.10	CGA, Drummondville, Quebec. Phones England, nights	P	14.450	20.75	GBW, Rugby, England. 6 a.m. and 6 p.m.	P
9.410	31.86	PLV, Bandoeng, Java. Irregular	P	14.480	20.70	YMA, Managua, Nicaragua. Phones Hialeah, days	P
9.480	31.63	PLW, Bandoeng, Java. Phones Australia 3-8 a.m. irreg	P	14.545	20.69	TIR, Cartago, Costa Rica. Phones Hialeah, days	P
9.500	31.56	YV3BC, Caracas, Venezuela. 4:30-10 p.m.; Sun., 7:30-9:30 p.m.	B	14.545	20.69	RXF, Panama City, Panama. Phones Hialeah, days	P
9.503	31.55	VK3ME, Melbourne, Australia. Wed., 5-6:30 a.m.; Sat., 5-7 a.m.	B	14.930	20.08	TGA, Guatemala City, Guatemala. Phones Hialeah, days	P
9.510	31.53	GSB, Daventry, England. To S. Africa 1-5:30 p.m. To Canada 6-8 p.m.	B	14.980	20.01	*HJB, Bogota, Colombia. Phones Hialeah days	P
9.520	31.49	OXY, Skamleback, Denmark, 2-6:30 p.m.	B	15.055	19.91	KAY, Manila, P. I. 3-7 a.m.	P
9.530	31.46	W2XAF, Schenectady, N. Y., 7 to 11 p.m.	B	15.055	19.91	*WNC, Hialeah, Florida. Phones Pan-American stations, days	P
9.552	31.38	DJA, Zeeoen, Germany, 2 p.m.-6:30 p.m.	B	15.120	19.83	HVJ, Vatican City. 10-10:30 a.m.	B
9.560	31.36	W1XAZ, Springfield, Mass., 7 a.m.-1 a.m.	B	15.140	19.81	GSF, Daventry, England. 4:30-6:30 a.m. 1-5:30 p.m.; 6-8 p.m.	B
9.580	31.30	HLB, Geneva, Switzerland, Sun., 5-5:45 p.m.	B	15.190	19.73	DJB, Zeesen, Germany. 8 a.m.-noon	B
9.585	31.28	GSC, Daventry, England, 4:30-6:30 a.m.; 8:30 a.m.-12:30 p.m.; 1-5:30 p.m.; 6-8 p.m.	B	15.204	19.72	W8XX Pittsburgh, Pa. Relays KDKA 9 a.m.-4 p.m.	B
9.585	31.28	W3XAU, Philadelphia, Pa., irregular	B	15.234	19.68	Pontoise, France. 8 a.m.-11 a.m.	B
9.585	31.28	VK2ME, Sydney, Australia. Sun., 12-2 a.m.; 5-9 a.m.; 11:30 a.m.-1:30 p.m.	B	15.258	19.65	W2XE, Wayne, N. J. 11 a.m.-1 p.m.	B
9.592	31.25	CT1AA, Lisbon, Portugal. Tues.-Fri., 5-7 p.m.	B	15.320	19.57	W2XAD, Schenectady, N. Y. Daily 1-3 p.m.; Sat.-Sun., to 4	B
9.67	31.00	TI4NRH, Heredia, Costa Rica. Daily, 5:30-6:30 p.m.	B	15.410	19.46	*KWO, Dixon, Calif. Phones Hawaii 2-7 p.m.	P
9.702	30.90	LQA, Buenos Aires, Argentina.	P	15.863	18.90	FTK, Ste. Assise, France. Phones Saigon, mornings	P
9.862	30.40	EAQ, Madrid, Spain, 5:30-7 p.m.	B	16.024	18.71	*KKP-KKU, Kahuku, Hawaii. Phones Dixon, days.	P
9.895	30.30	LSN, Buenos Aires, Argentina, 6 p.m. and 6 a.m.	P	17.512	17.12	DFB, Nauen, Germany. Phones Venezuela, mornings	P
9.990	30.01	KAZ, Manila, P. I. 3-7 a.m.	P	17.770	16.90	GSG, Daventry, England. To India 9:30-11:30 a.m.	B
10.060	29.80	*VRT-ZFB, Hamilton, Bermuda. Phones WNB days	P	17.761	16.88	PHI, Huizen, Holland. 5:40-11:40 a.m.	B
10.163	29.50	German Ships	P	17.772	16.87	DJE, Koenigswusterhausen, Germany	B
10.212	29.35	PSH, Rio de Janeiro, Brazil. Tests W2XBJ evenings	P	17.772	16.87	W3XAL, Boundbrook, N. J. 8 a.m.-4 p.m.	B
10.246	29.26	DIQ, Nauen, Germany	B	17.830	16.82	PCV, Kootwijk, Holland. 6-9 a.m.	P
10.520	28.50	VK2ME, Sydney, Australia. Irreg.	P	18.116	16.55	LSY, Buenos Aires, Argentina	P
10.830	27.68	*KWV, Dixon, Calif. Phones Hawaii and Manila	P	18.296	16.39	*YVR, Maracay, Venezuela. Heard about 10 a.m.	P
11.530	26.00	XAM, Merida, Yucatan	P	18.444	16.25	*HJY, Bogota, Colombia. 11 a.m. and 4 p.m.	P
11.710	25.60	VE9JR, Winnipeg, Manitoba. Tues., 6:30-8:30 p.m.; Fri., to 9	B	18.611	16.11	GAU, Rugby, England. Phones N. Y., days	P
11.710	25.60	Pontoise, France. 4-7 p.m.	B	18.670	16.06	*OCI, Lima, Peru. 2 p.m.	P
11.725	25.57	PHOHI, Eindhoven, Holland	B	18.820	15.93	PLE, Bandoeng, Java. Tues.-Fri., 5:40-10:40 a.m.	P
11.750	25.51	GSD, Daventry, England. To Oceania 4:30-6:30 a.m.; 1-5:30 p.m.	B	18.856	15.90	ZSS, Capetown, South Africa. Phones Rondon, mornings	P
11.753	25.51	DJD, Koenigswusterhausen, Germany. 1-6 p.m.	B	18.958	15.82	LSR, Buenos Aires, Arg. 11 a.m. and 4 p.m.	P
11.760	25.50	*XDA, Mexico City. Tests XAM 1 p.m. and 6 p.m.	P	19.282	15.55	FTM St. Assise, France. 10 a.m.-2 p.m.	P
11.800	25.40	I2RO, Rome, Italy. 11 a.m.-12:30 p.m.; 1-6 p.m.	B	19.678	15.24	*CEC, Santiago, Chile. 11 a.m. and 4 p.m.	P
11.823	25.36	W2XE, Wayne, N. J. 3-5 p.m.	B	19.684	15.23	EAQ, Madrid, Spain. Phones	P
11.865	25.27	GSE, Daventry, England. To India 8:30 a.m.-12:30 p.m.	B	19.895	15.07	LSG, Buenos Aires, Argentina. 10:30 a.m.-3:30 p.m.	P
11.872	25.25	W8XK, Pittsburgh, Pa. Relays KDKA 4-10 n.m.	B	21.020	14.27	LSN, Buenos Aires, Argentina. 8 a.m. and 4 p.m.	P
11.898	25.20	Pontoise, France. 11:30 a.m.-2:30 p.m.	B	21.054	14.24	*WKA, Lawrenceville, N. J. 8 a.m.-4 p.m.	P
12.148	24.68	GBS, Rugby, England. Phones N. Y. afternoon	P	21.069	14.23	PSA, Rio de Janeiro, Brazil. 8 a.m.	P
12.241	24.41	GBU, Rugby, England. Phones N. Y. nights	P	21.400	14.01	*WKK Lawrenceville, N. J. 8 a.m.-4 p.m.	P
12.394	24.19	DAF, Norden, Germany. Phones Ships	P	21.470	13.96	GSH, Daventry, England	B
12.820	23.38	CNR, Rabat, Morocco. Sun., 7:30 a.m.-9 a.m.	B	21.451	13.93	W8XK, Pittsburgh, Pa. 9 a.m.-2 p.m.	B
12.839	23.36	WOO, Ocean Gate, N. J. Phones Ships	P				
13.035	23.00	German Ships	P				

The Hundred Best S. W. Stations by Calls . . .

British Ships 13.219 22.68 8.831 33.95 4.174 71.82	P	GSE Daventry, England 11.865 25.27	B	LSN Buenos Aires, Arg. 9.895 30.30 6 p.m.-6 a.m. 21.020 14.27 8 a.m.-4 p.m.	P
*CEC Santiago, Chile 19.678 15.24 11 a.m.-4 p.m	P	GSF Daventry, England 15.140 19.81 4:30-6:30 a.m.; 1-5:30 p.m.; 6-8 p.m.	B	LSR Buenos Aires, Arg. 18.958 15.82 11 a.m.-4 p.m.	P
CGA Drummondville, Que. 13.296 22.55 9 a.m. to 2 p.m. 9.340 32.10 Nights	P	GSB Daventry, England 17.770 16.90	B	LSY Buenos Aires, Arg. 18.116 16.55	P
CNR Rabat, Morocco 12.820 23.38	P	GSB Daventry, England 21.470 13.96	B	*OCI Lima, Peru 18.670 16.06 2 p.m.	P
CT1AA Lisbon, Portugal 9.592 31.25 Tues.-Fri. 5-7 p.m.	B	GSH Daventry, England 21.470 13.96	B	OXY Skamleback, Denmark 9.520 31.49 2-6:30 p.m.	B
DAF Norden, Germany 17.260 17.37 Talks to Ships 12.394 24.19 8.464 35.42	P	HBL Geneva, Switzerland 9.580 31.30 Sun. 5-5:45 p.m.	B	PCV Kootwijk, Holland 17.830 16.82 6-9 a.m.	P
DFB Nauen, Germany 17.512 17.12 Phones YVQ	P	HBP Geneva, Switzerland 7.790 38.49 Sun. 5-5:45 p.m.	B	PHI Huizen, Holland 17.761 16.88 Irregular	B
DGK Nauen, Germany 6.675 44.91	P	HCJB Quito, Ecuador 8.103 37.0 7:30-9:45 p.m.; except Monday	B	PHOI Huizen, Holland 11.725 25.57	B
DIQ Nauen, Germany 10.246 29.26	B	HI1A Santiago de los Caballeros, Santo Domingo 6.272 47.80 1:40-4:40 p.m., Sun.	B	PLE Bandoeng, Java 18.820 15.93 Tues., Fri., 10:40 a.m.	P
DJA Zeesen, Germany 9.552 31.38 2 p.m.-6:30	B	*HJB Bogota, Colombia 14.930 20.08	B	PLV Bandoeng, Java 9.410 31.86	P
DJB Zeesen, Germany 15.190 19.73 8 a.m.-noon	B	*HJP Bogota, Colombia 7.465 40.16	P	PLW Bandoeng, Java 9.480 31.63	P
DJC Zeesen, Germany 6.017 49.83 Irregular 11.753 25.51	B	*HJY Bogota, Colombia 18.444 16.25 11 a.m.-4 p.m.	P	Pontoise, France 15.234 19.68 8-11 a.m. 11.898 25.20 11:30 a.m.-2:30 p.m. 11.710 25.60 4-7 p.m.	B
DJD Zeesen, Germany 17.761 16.88	B	HJ1ABB Barranquilla, Colombia 5.996 50.0 8-10 p.m.	B	PRADO Riobamba, Ecuador 6.618 45.31 Thurs., 9-11 p.m.	B
DJE Zeesen, Germany 17.761 16.88	B	*HJ3ABD Bogota, Colombia 7.402 40.50 9-11:15 p.m.	B	PSA Rio de Janeiro, Brazil 21.069 14.23 8 a.m.	B
EAQ Madrid, Spain 9.862 30.40 5:30-7 p.m.; Sat. 3 p.m.	B	*HJ3ABF Bogota, Colombia 6.246 48.00 8-11 p.m.	B	PSH Rio de Janeiro, Brazil 10.212 29.35	P
FTK Ste. Assise, France 15.863 18.90 Phones Saigon	P	HJ4ABB Manzales, Colombia 7.139 42.00 Sat. 10 p.m.-mid.	B	Rabat, Morocco 9.290 32.27 Sun., 3-5 p.m.	B
FTM Ste. Assise, France 19.282 15.55 10 a.m.-2 p.m.	P	HJ4ABE Medellin, Colombia 5.925 50.60 Mon., Wed., Fri., 7:30-10:30 p.m.; Tues. Thurs., Sat. and Sun., 6-8 p.m.	B	RAU Tashkent, USSR 15.104 19.85 Phones Moscow	P
German Ships 13.035 23.00 10.163 29.50 8.328 36.00 4.174 71.82	P	HJ5ABB Cali, Colombia 6.378 47.00	B	RV59 Moscow, USSR 5.996 50.0 3-7 p.m.	B
GAU Rugby, England 18.611 16.11 Phones N. Y., days	P	HJV Vatican City 15.120 19.83 10-10:30 a.m.	B	*RXF Panama City, Panama 14.485 20.69	P
GBB Rugby, England 13.500 22.09	P	I2RO Rome, Italy 11.800 25.40 11 a.m.-12:30 p.m.; 2:30-5:30 p.m.	B	SUZ Cairo, Egypt 13.816 21.70 7 a.m.-3:30 p.m.	P
GBS Rugby, England 12.148 24.68 Phones N. Y., days	P	Italian Ships 8.566 35.00 4.283 70.00	B	TGA Guatemala City, Guatemala 14.545 20.63	P
GBU Rugby, England 12.241 24.41 Phones N. Y., nights	P	KAY Manila, P. I. 14.980 20.01	B	TIR Cartago, Costa Rica 14.484 20.7 7.685 39.01	P
GBW Rugby, England 14.450 20.75 6 a.m.-6 p.m.	P	KAZ Manila, P. I. 9.990 30.01	B	TI4NRH Heredia, Costa Rica 9.670 31.00 5:30-6:30 p.m.	B
GCB Rugby, England 9.273 32.33 Phones Canada nights	P	*KDK-KKH Kahuku, Hawaii 7.518 39.89 9 p.m.-2 a.m.	P	VE9BJ St. John, N. B. 6.090 49.23 5 p.m.-11 p.m.	B
GSA Daventry, England 6.050 49.50 Broadcasts for Canada 6-8 p.m.	B	*KEJ Bolinas, Calif. 9.012 33.27	P	VE9CS Vancouver, B. C. 6.070 49.39 Daily 8-10 p.m.	B
GSB Daventry, England 9.510 31.53 Broadcasts for South Africa 1:00-3:00 p.m.; West Africa 3:00-5:30 p.m.; Canada 6-8 p.m.	B	*KKP Kahuku, Hawaii 16.024 18.71	P	VE9DR Montreal, Que. 6.005 49.93 7:30 a.m.-mid.; Sun. noon to 11:15 p.m.	B
GSC Daventry, England 9.585 31.28 4:30-6:30 a.m.; 8:30 a.m.-12:30 p.m.; 1-5:30 p.m.; 6-8 p.m.	B	*KWO Dixon, Calif. 15.410 19.46 2-5 p.m.	P	VE9GW Bowmanville, Ont. 6.092 49.22 11 a.m.-3 p.m.; Sun., 7-8 p.m.	B
GSD Daventry, England 11.750 25.51 Broadcasts for Australasia 4-30-6:30 a.m.; 1-5:30 p.m.	B	*KWX Dixon, Calif. 7.605 39.42	P	VE9HX Halifax, Nova Scotia 6.121 48.98 Sat. and Sun., 5:30-10:30 p.m.	B
		*KWV Dixon, Calif. 10.830 27.68	P	VE9JR Winnipeg, Man. 11.710 25.00 Tues. 6:30-8:30 p.m. Fri. to 9.	B
		*KWY Dixon, Calif. 7.562 39.65	P	VK2ME Sydney, Australia 19.520 28.50 9.585 31.28 Sun., 12-2 a.m.; 5-9 a.m.; 11:30 a.m. 1:30 p.m.	B
		LQA Buenos Aires, Argentina 9.702 30.90	P	VK3ME Melbourne, Australia 9.503 31.55 Wed. 5-6:30 a.m.; Sat. 5-7 a.m.	B
		LSG Buenos Aires, Arg. 19.895 15.07 10:30 a.m.-3:30 p.m.	P		

100 BEST S. W. STATIONS

VPN Nassau, Bahamas	P	W1XAZ	Springfield, Mass.	B	W9XF	Chicago, Ill.	B
4.508 66.50 Phones WNC		9.560	31.36 7:00 a.m.-1:00 a.m.		6.095	49.18 4:30-8 p.m.;	9:30-2
*VRT-ZFA Hamilton, Bermuda	P	W2XAD	Schenectady, N. Y.	B		a.m.	
5.045 59.42		15.320	19.57 Daily 1-3 p.m.; Sat.,		XAM	Merida, Yucatan	P
*VRT-ZFB Hamilton, Bermuda	P		Sun. to 4.		5.766	52.00	
10.000 29.80		W2XAF	Schenectady, N. Y.	B	11.530	26.00	
*WEM Rooky Point, N. Y.	P	9.530	31.46 Daily, 7-11 p.m.		*XDA	Mexico City	P
7.396 40.54		W2XE	Wayne, N. J.	B	5.879	51.00	
*WKA Lawrenceville, N. J.	P	15.258	19.65 11 a.m.-1 p.m.		11.760	25.50	
21.054 14.24 8 a.m.-4 p.m.		11.523	25.36 3-5 p.m.		YMA	Managua, Nicaragua	P
*WKK Lawrenceville, N. J.	P	6.116	49.02 6-11 p.m.		14.480	20.70	
21.400 14.01 8 a.m.-4 p.m.		W3XAL	Boundbrook, N. J.	B	*YVQ	Maracay, Venezuela	P
*WNC Hialeah, Florida	P	6.096	49.17 Sat. 4:30 p.m.-1 a.m.		13.337	22.48	
15.051 19.92 Phones Pan-American stations		17.772	16.87 8 a.m.-4 p.m.		*YVR	Maracay, Venezuela	P
*WOO Ocean Gate, N. J.	P	W3XAU	Philadelphia, Pa.	B	18.296	16.39	
12.839 23.36 'Phones Ships		9.585	31.28 Irregular		YV1BC	Caracas, Venz.	B
8.561 35.02		6.057	49.50		6.119	49.00 Relays 960 kcs.;	10:30 a.m.-1 p.m.;
4.749 63.13		W8XK	Pittsburgh, Pa.	B		5:15-10 p.m.	
WVD Seattle, Wash.	P	6.140	48.83 Relays KDKA 4-11 p.m.		YV3BC	Caracas, Venezuela	B
6.618 45.30		11.872	25.25		9.500	31.56 4:30-10 p.m.;	Sun.,
WXH Ketchikan, Alaska	P	15.204	19.72 Relays KDKA 9 a.m.-4 p.m.		ZSS	Capetown South Africa	P
6.662 45.00		21.451	13.93 9 a.m.-2 p.m.		18.856	15.90 Phones London	
W1XAL Boston, Mass.	B						
6.040 49.64 Irregular							

Stations Caught

(Continued from page 34)

grand superhet. I have stations in 42 states and D. of C. Also 21 in Canada, 8 in Mexico, and 3 in Cuba. I cannot understand why I have not as yet been able to receive stations outside of continental North America. Will some reader with a set like mine comment on their success along this line?"

"Just a note to let RADEX know how DXing is in Schenectady now," comments George B. Holland, Jr., 1340 Baker Ave., Schenectady, N. Y. "Pacific 100-watters are coming in fine. Have KPCB, KJBS, CKWX, KERN, KGFJ, KWG, KFXM, with CKWX, KWG verified, and the others yet to be heard from. My set goes from 540 kcys. to 1725, and the following are my results: 540 to 1500 kcys., 568 with 283 verified; 1500 to 1725 kcys., 8 experimental with 3 verified, 76 amateurs with 13 verified, 18 police with one verified. Where is Z2BA? Heard him calling CQ at 3:37 a. m. EST February 1st. I can't locate anything like it in Call Book. Have had KGU the last two mornings but not good enough for a veri."

ZL2BA is an amateur in Welling-

ton, N. Z. Does anyone know of a Z2BA?

HJN, Please Verify

"During the last ten months I have logged 275 stations on my 9-tube Radiola," remarks George W. Haskell, Box 58, So. Paris, Maine, "and have verifications from 206. I heard the much discussed HJN, Bogota, Colombia, program on the morning of December 17th and have written them two letters without response so far. I don't know as my record is anything remarkable, as I have logged the most of these stations in the evening, or early morning, and have not 'burned the midnight oil' to any great extent. Among my verifications I have WTOG, WIOD, CHNS, KFI, KNX, WDAE, CFCN, KPO, 10-BP, 10-BQ, WMCY, KTM, WEXL, WCOC, KGRS, WKAQ and WGST."

"Nothing exciting happened in the increasing of my log to 583 stations, nine of which have already been deleted," remarks Luther E. Grim, 505 S. Main St., Red Lion, Pa. "KDB, KXL, KLX, XEJ, KREG and KPJM are the only exceptionally good ones logged. I received my verification from VONF. If anyone else who lives more than 1000 miles from St. John's has logged and verified this

station, I'd like to hear from him or her. Doesn't look like the heavy static will help me boost my log to 600 before the end of April."

"My set is a 5-tube Lafayette, with a 100-foot aerial under the roof," advises Delbert C. Thomas, Triangle Fraternity, State College, Pa. "Have been DXing only a few months, having received my set in September, but so far have a b.c. log of 280 stations, including HJN and YV1BC. Have also received 10-BQ and 10-AK, with 10-BQ verified. Have received 11 California stations with four 500-watters. By transposing my aerial lead-in to the grid of the first detector tube, I can receive short-wave stations and have a log of 39 police and airport stations and 30 amateur stations. Not a bad log for only a few months."

His First Year

"This is my first year at DXing," says Kenneth Korstian, 2407 Club Blvd., Durham, N. C. "It began about January 1st. As I have done no DXing after about 11:00 p. m., I have only a list of 125 stations on the b. c. band and ten on the beginning of short wave up to 1750 kcys. My best catch was WAAW, a 500-watter, Omaha, Nebr. Another 500-watter that I can get easily is WCOC of Meridian, Miss. I would like to hear from someone on building a short-wave converter and a transmitter. I am using a Colonial 10-tube superhet."

"I am writing to tell you my results at DXing this season," says Charles Leboeuf, Box 222, North Grosvenordale, Conn. "I have been able to log 167 stations, making a total of 473. My best catches are: WKAQ, 10-BQ, VONF, CMJK, KGEK, HIX, HJN, and XEK, a 100-watt station in Mexico. All verified. I have also logged YV1BC and Poste Parisien, verifications on the way. Besides these stations I have logged and verified 46 states, North Dakota and Wyoming being the exceptions. I logged all 473 on an 8-tube Majestic Model 91."

"Well, I have boosted my log to 541 and 358 verified. My best verified include: 10-BQ, KGFJ, KERN, KJBS, KFXM, WGCM, CMCU, XEN, CHCK, WIBG, VONF, KDFN, KOB, KGEK, KGKL, KFXX, KGCR and CHLP," reports *Clarence Burnham, 147 East Main St., Gloucester, Mass. "Have requests for verification out to YV1BC, WKAQ, CHCO, KLP, WSVS, KOH, KGIR, CMJK, and KALE, which I consider good catches. Have also heard HHK, KGFI, KVL, KREG, and VOAS. On my log I have 164 100-watters or less, with 132 verified. Have 28 on the Pacific coast with 14 verified."

"Last night I logged my 800th station, and decided to celebrate by sending a line to RADEX, the thing that started me on this hobby of DXing in January, 1932," declares Ivor Nixon, 265 Pacific Ave., Toronto, Ont. "This total includes 439 shortwave stations (mostly amateurs) and 361 broadcast. The latter includes 35 2000-milers, and among them are such stations as CJOR, KGFJ, KFVD, KXL, KVL, KJBS, YV1BC, KERN, KWG and KPPC. This last I consider my best. The receiver is the same old one-peanut-tuber."

From an Arizona Airport

"I started in DXing about last December with a Majestic 11-tube pentode 307 model, which is a product of 1933, very new," comments Henry Castano, Yuma Airport, Yuma, Ariz. "This place where the field is located is about six and a half miles from the city of Yuma, which I think is a very good location for getting real distance. Mr. Redondo, who is the proud owner of this radio, is also manager of this field, and myself, his DXer, have received stations from 50 watters to 100,000 watters."

"On November 20, 1930, I bought a 7-tube battery Crosley radio, and to date have tuned in 399 stations, from 6 provinces, 1 from Newfoundland, from all U. S. states, except Mississippi, Nevada and Washington, WKAQ, Porto Rico, 7 Cubans, 6

Mexicans, HJN and YV1BC from South America," reports K. Hildebrand, Doaktown, N. B. "The three provinces that I still need are Saskatchewan, Alberta and British Columbia. During February added 35 new stations to my log. My best catches are WHBC, 10 watts; 10-BQ, 15 watts; 10-BP, 25 watts; WCAZ, KBTM, KCMC, KGFJ, KMLB, KDFN, XEJ, CMCW, HJN and YV1BC."

"I have had my 11-tube Majestic for two months and have had 247 stations in the U. S., 11 in Canada, 3 in Cuba, 7 in Mexico, and KGU, in Hawaii," reports Wm. McDaniel, The Gazette, Charleston, W. Va. "Of the 247 in the U. S., 27 are on the Pacific Coast and are in 42 states. I also have had 3 police stations, and a station announced as W2XAR, New York. These come in above 1500 kcys., as I have some extra space on my dial. W2XAR is on from 5:00 to 6:00 p. m. on weekdays."

"I have been getting the 'good old reliable' for the last two years," declares Frank Frazier, 225 Menomonee St., Chicago, Ill., "and have had 247 stations verified since, including Porto Rico, Mexico and Canada. My best stations are WOCL, 25 watts; KGCX, WGNV, KRMD, 50 watts; KFPL, KGFF and WJBY, 50 watts. Received verification from WCSC today that they are on from 7:00 a. m. to 2:00 p. m. and 5:00 to 10:00 p. m. CST. I have a Graybar 310."

Gets 24 from Oceania

"Through the DX calendar I have been able to pick up close to 40 new stations since the first of January," admits F. L. Biss, Brittmount, Minn. "The first issue I bought was January, 1933. I have picked up 123 new stations this year, 24 of them are in Australia and New Zealand. KGU, KGMB, YV1BC, HJN, CFBO, and scores of others. This certainly has been an excellent season. I would like to correspond with a DXer in Delaware."

"Since my last report I have received 20 more stations, bringing my

total up to 305," remarks L. A. Brodhecker, Box 82, Brownstown, Ind. "In this total are five ship stations at 600 meters, two police calls below the 1500 band, two stations from Mexico City, one from Porto Rico, 24 stations in California. The total also represents 45 states; 15 out of Canada, including 10-AB, 6 stations from Havana, and 7 from Mexico. Am headed now for the 350 mark. My first report was 165 stations."

"I use a little Clarion AC-61 model, 6 tubes, and in less than two years have a log of 529 calls, all at present on the air—deletions don't count with me—only live ones," boasts Stanley A. Schmuck, 94 Otis St., East Cambridge, Mass. "My list includes stations in U. S., Canada, Cuba, Mexico, Porto Rico, Venezuela, and France. Among them are 10-BI, CKOV, YV1BC and Poste Parisien. All heard on the regular b.c. band, and a few a little below 200 meters."

"During a period of less than a month I have received 163 stations in the U. S., Canada, Mexico and Cuba," comments C. E. Bryant, Jr., Booneville, Ark. "I have received 40 states in the U. S. I also have received a station on every kilocycle between 540 and 1500 with some long-wave stations, about 520. We have a 10-tube long-wave Clarion which gives excellent service. I have no trouble at all separating stations on different kilocycles."

Completes State Roster

"Since I last wrote you," advises Ralph V. Caldwell, R. D. 1, Clarksville, Pa., "I have received a few new stations. Up to the last day of January, I had 572 stations. I added up to February 25th fourteen stations, or a total of 586. Among the best I heard during February were KPJM, KDB, KECA, KID, and XES. My best in January, KGEK, KGIR, WAGM, and KXO, and, thanks to RADEX, I got the one station that I have been hunting for, KDFN, Casper, Wyo., completing my list of the states."

"DX is exceptionally good here in

Baltimore," reports B. L. Ahman, Jr., 3313 Westerwald Ave., Baltimore, Md. "I just listened to HJN (685 kcys.) Bogota, Colombia, on Sunday morning at 3:45 a.m. Their signals were very loud and clear. I am waiting for a verification. I have just received verifications from CKMO, CJRM, WKAQ, CMBY, KFVD, 10-BQ, WELL and WGNV. Also others to raise my veris to 294 to date, with 470 even logged. I logged for four years before verifying."

"I have only been DXing during the past season," admits Raymond A. Mitchell, 921 1/2 Fourth Ave. So., Nashville, Tenn., "and with a Zenith 7-tuber I have heard 265 stations on the 97 channels of the b.c. band. Have heard a station on 95 of the channels. I have 146 of these verified. My best catches are KFPM, a 15-watter, in Greenville, Texas; 10-BP, a 25-watter in Wingham, Ont.; WKAQ, San Juan, P. R., and YV1BC, Caracas, Venezuela, all four of which are verified."

"My log of stations on the broadcast band, at the present time, contains 641 stations," declares Raleigh A. Biss, 129 W. Lake St., Chisholm, Minn., "including 12 Mexicans, 3 Cubans, and WKAQ, San Juan. A few of the best catches are WRAM, KCMC, WOPI, WDRG, WALZ, WINS, KXO, KABC, WAWZ, WJEJ, WKBC, KGGM, WSIX, XEX, XEE, XEJ, KGAR, KGDM, KWSC, CMBD, CKCI, CJOC and CJOR. I have heard all states with the exception of Vermont, New Hampshire, Delaware and South Carolina."

Some Brief Reports

"I just started DXing three months ago, and now have 137 stations," writes Cameron Greenleaf, Hewlett, L. I., N. Y. "I am a boy of 13 and therefore can't stay up late. Some of my best catches are: WBAP, WFAA, WOAI, KMOX, KWK, WOWO, WHO, WOC, KSL, KDYL, XER, XEAW, KTHS, KVOR, WMAL, KIDO, KFAB, 6 in Canada and 5 in Florida. I have had short-wave stations W1XAU, W1XAZ,

W1XAL, and police stations WRDS and WMP."

"I have a Silvertone 6-tube superheterodyne," remarks *Victor Jason, 25 Greenman Ave., N. Y. Mills, N. Y. "I have had it for about a month. So far I have logged about 143 stations and some of my farthest stations are WKAQ, CMK, CMC, CMAF, CMCY, XEW, XEO, XER, XEPM, XEAW, XENT, KFI, KGO, KSL, KOA and WLBC, a 50-watter from Muncie, Ind."

"My present log stands at 370 with 44 of 100 watts or less," reports Clarence Markel, Jr., 622 1/2 N. 7th St., Quincy, Ill. "A few of the best are WJBK, WEXL, CHML, 10-AB, WBHS, KTFI, WWRL, XET and XES. This list includes 43 states with 20 police calls and 24 s. w. My best police calls are WMP, WPED, WPEH, and KGPL."

"I have had good luck with my DeForest Crosley, 8-tube set," reports Oliver Stevens, 1835 Gerrard St. E., Toronto, Ont., "and have received some excellent catches, such as KGKO, KFSD, WBAC, XEK, XEU, KFVD, WBBZ, WABL, KTFI, KDYL, XEM, WSMB, WQBC, KGFG, WSFA, and here's a peach, CKWX, 100 watts, Vancouver, B. C. Try and beat that!"

Mrs. L. P. Ayres, 9 Fern Ave., Carbondale, Pa., reports a total log of 626 stations on her RCA-60 with all states except Wyoming and Nevada. She has 25 stations of from 5 to 50 watts in 15 states and Canada and 150 stations 100-watts in 38 states, Canada, Mexico and Cuba.

"I have a two-tube Crosley receiver and have had 360 broadcasting stations, 80 police calls, and 2 Canadian s. w. stations," comments Charles Muffly, RFD No. 3, Grafton, Ohio. "My best DX is KTFI, Twin Falls, Idaho, using 500 watts. My farthest distance is KGA, Spokane, Wash., using 5000 watts."

His Pet "Pestations"

"I have a 5-tube Gloritone receiver," comments Edward Bond, 318

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Power St., Akron, Ohio. "Since May, 1932, I have heard 338 identified stations, including five s.w. heard on the regular b.c. set. My best catch is KFIO. All of these are on the air at the present time or listed in RADEX. I would like to nominate for stations (pests) such stations as WEIW and WEXL, who are on the air too much of the time."

"I have not written to RADEX for a long time, so here goes," salutes Kazimir Nowotarski, 2484 Thurman Ave., Cleveland, Ohio. "My log has been increased to 611 stations, all of which have been received on my two-tube receiver. My best verified catches are: 2YA, CKMO, KRP, KXO, KFPM, KPCB, 10-AB, 10-BI, 10-BF, 10-BQ, KGFU, CHGS, WKAQ, KFPM, KFAD and YVIBC. I have 53 stations on the Pacific coast, of which 40 are verified."

"I am only 13 years old and as I go to school I have no time to DX, except on Friday, Saturday and Sunday," comments Don Martinez, 1469 26th Ave., San Francisco, Calif., "but I managed to get around 211 stations in about six months, with 94 verified, which includes 18 Japanese, one Chinese in Nanking; 2CO in Corowa; 2YA in Wellington, KGU in Honolulu, and KGBU, Ketchikan, and a number of Canadians and Mexicans. I am still trying for Europe and South America and hope to get them soon." "I have 351 stations, but they are darn hard to get now," complains

*Names marked with an asterisk would like to hear from other Radexers, particularly those owning the same kind of set.

Final DX Reports

(Continued from page 30)

keys. I also logged an hour of 2YA's program on Sunday morning, March 12, from 3:30 to 4:30 CST. This program came in very good though the speaker with very little fading. I have sent for verifications from both of these stations."

"I have been DXing since August, 1932, and in that short time I have heard 319 stations," writes Morton Meehan, 563 Adams Ave., Elizabeth, N. J. "My best are: HJN (awfully loud), KVI, KTM, CMQ, XES, 10-BF, 10-AR, NAA, KGNQ, WHEJ, WKAQ, CKY, WABZ, KOY, WJW, KMLB, KTFI, KHQ, CMX, CMG, and a flock of others. About 10:00 p. m. when the weather is good for DXing, I have heard CMC between KOA and CKGW. You have them listed as being on CKGW's channel. I heard

la, New Zealand, Australia, China, Japan, Porto Rico, Alaska, Hawaii, as well as continental North America. He has verifications from 4BH, 2YA, YVIBC, two Honolulu stations and many others. Gilbert says that 2B1, 4RK, 2YA and 4BH come in exceptionally well quite often but that 5CK with more power is very difficult. The set operates on batteries.

Verifying Locals

"The following will prove a DXer should verify locals," suggests Karl J. Halpern, 495 E. 3rd St., Brooklyn, N. Y. "WPAP, WHN and WRNY are to be under one call, WHN, transmitter 750 watts. WQAO on Sunday only for church programs. WMSG, WBNX, WCDA, all to WYNN. Yes, good old Ed Wynn, owner. Transmitter 500 watts. WAWZ, early mornings 5:00 to 8:00 a. m. and special Sunday services. WYNN on from 8:00 a. m. to 1:00 a. m. What will a local fan do about WPAP, WHN (500 watts), WRNY, WMSG, WBNX and WCDA? How can he prove he heard those stations when he hasn't a verify?"

"The Australian, New Zealand and Japanese stations have been exceptional good the past month," records E. N. Luken, Crooks, S. Dak. "4BC, 2BL and 2CO seem to be the best and to put on the best programs although the last few mornings 2UE in Sydney has been real strong. I consider my best catch down that way to be 2GN, Goulburn, Australia, as they claim only 50 watts power though that doesn't seem possible. These stations come in strongest here between 4:00 and 5:00 a. m. CST; however I can usually hold 4BC and 2UE till 6:00 a. m."

"I own a Philco 7-tube set and have a total of 463 stations," informs* Russell McCoy, 432 Madison St., Gary, Ind. "Although a DXer since early radio, have not done so awfully much DXing this winter, due to illness, but my first night at the set this fall brought me my two prize catches since radiating. They were YVIBC

WMMN on a test program one morning, by turning the dial up toward 880 kcys. I heard CMX. You have WMMN and CMX both on 890 kcys. I heard them. I would like to hear from DXers from the Southern and New England states."

Little Radex Clubs

"Three of us, all Radex readers, have started a little gathering," announces R. E. Moran, 1309 Wellington St., Ottawa, Ont., "and we meet every Sunday afternoon at each other's homes and review the weekend activities in DXing. I have a log around 475. Ernest Ball a log of 500 or more, and Fred Wakrell over 600. The three of us heard a station on 1180 kcys. on Sunday a. m. March 26, playing band selections. I heard it again on Monday, the 27th, at 4:29 a. m. EST, playing band selections. I had similar experience. If so, would he please get in touch with me."

"I think that I can consider myself very fortunate during the past month," boasts Charles Meyer, Jr., 411 Blake St., St. Joseph, Mo. "On March 26 I was very agreeably surprised to hear a voice on 720 kcys, state that my station was 2YA, Wellington, New Zealand. I listened to them from 4:00 until they signed off at 4:25 a. m. The reason I was so amazed was because I am not using an aerial but a Muter aerial eliminator, grounded to a pipe driven about two feet in the ground in the furnace room where the ground is as dry as a bone. Among my better catches in 1938 are: KPCB, KFXM, WJEJ, KGFQ, KXL and XEFB (100-watt-tube); WGSV, WGNV, XEFV, WEXL and WGLC (50-watt-tube)." "With a three-tube receiver of his own design, Gilbert Van Vranken, Jr., 2230 N. El Molino Ave., Pasadena, Calif., has achieved some remarkable results. His total log of 299 stations, loud-speaker reception, includes stations in Argentine, Colombia, Venezuela,

and WKAQ, the latter with plenty of volume. Although I have this list of stations, have yet to hear from six states: Vermont, Maine, Delaware, New Mexico, Nevada and Wyoming, and would appreciate tip on them."

"On Sunday, April 9th, around 9:30 p. m. EST, I tuned my set below the broadcast band, at about 1530 kcys. and heard chimes being played," remarks Tony Lima, 185 St. Patrick St., Toronto, Ont. "There were three different kinds, each lasting about one to one and a half minutes. I heard the announcer say 'W1X' or some other letters which I did not hear on account of the static. I also heard him say 'Boston' which I think is the location. They signed off at 9:40 p. m. Will you please try to identify this station for me."

East Versus West

"I believe that 100-watters on the east coast come in much better than 100-watters on the best coast," thinks Allan E. Knain, Northwood, N. Dak. "I'd like to hear from others in the center line of the U. S. and what they think about it. I would also like to hear from all DX clubs; also Midwest 16-tube owners. My best catch, I believe, is 4BH and 4BC. Also had 2CO, 3AR, 5CK, 6WF, 2YA, 4QG, KGU, YV1BC; CKPR at noon, and 50-watters on both coasts, Canada and Mexico."

"In the April issue of your magazine there was a correspondent from Texas who wanted to know of some Texan who had received a station of some distance," writes Mrs. Oscar Duncan, 531 W. Munson St., Denison, Texas. "On our radio map which my late husband made, I found our farthest stations were CKMO, Vancouver, B. C., 730 kcys., and CNRV, Vancouver, 1030 kcys. From Denison that is a distance over 1600 miles. Hope this will be of interest to the inquirer."

"I've owned two radios and DXing is to me half the pleasure of owning a set," declares Ed Cash, 9915 Yosemite, Detroit, Mich. "On my first ma-

chine, a Brandeis, I logged 118 stations in about a year and a half. With my present radio, a Kennedy, I've logged 210 stations in one year and one month. On the long wave the Kennedy's selectivity is wonderful, at least one station has been logged on every channel. The short wave section has been a disappointment."

Of his Midwest 16-tube set, J. A. Shanks, Box 2, Route 4, Russellville, Tenn., writes: "It has a very low noise level and plenty of power even on the 15-watt Canadians. It is excellent on the short waves also." He reports a grand total of 2309 stations between 14 meters to 200 meters. He has received 606 stations in the broadcast band.

Off Frequency

"It was the night of Saturday, April 8th, at about 9:30," remarks John C. Greenleaf, Jr., Meadowview Ave., Hewlett, N. Y., "I was listening to KOIL, Council Bluffs, when in the background I heard, 'This is station WNBW, Carbondale,' or words to that effect. I turned the dial and it suddenly came louder. That was on 1230 kcys., and WNBW is on 1200 kcys. Then it died away and I haven't heard it since."

"JOAK uses two transmitters, one on 590 kcys. and one on 860 kcys.," advises R. R. Rawstron, 296 Main St., Claremont, N. H. "JOCK now has a wave of 810 kcys. and 1180 kcys. So these calls count as two stations or four stations. Personally I lean to the four-station status, as they are really four transmitters, if my information is correct."

"I tuned in a station on about 690 kcys. at 3:15 a.m. EST, April 16th," reports Russel Hicks, 105 Navarre St., Monroe, Mich. "I heard an orchestra playing a symphony. It lasted until 3:41 a.m. and at 3:41 1/2 I heard three blasts from a trumpet and the station signed off. Could it have been HJN?"

"I wish you would print in one of your issues," urges R. S. Seaward, 4650 Post St., Jacksonville, Fla.,

"that I would like to hear from Atwater Kent Model 480 owners and the results and kinds of aeriels they are using."

"Reception has been very freakish the past week," declares Robert Rosenberger, 17 Janssen Place, Kansas City, Mo. "I have pulled in LR8, LS8 Viborg, Finland, and Poste Parisien, also LR2. LR2 is now on 910 and can be caught before XEW comes on strong in the evening."

"About 4 a.m. this morning I heard KGBU after a couple of years' occasional trying for them," remarks J. A. Rigness, Morris, Minn. "Also XEFV, WDRW, WRDW and WEEU."

Editor's Note: When a name is preceded by an asterick (*) it indicates the writer would like to hear from others, preferably those owning the same kind of set.

Some DX Tips

"I have been DXing since the fall of 1929, and have to date logged 478 stations, using a Radiola 18," reports Sidney R. Steele, 3606 Homewood Ave., Toledo, Ohio. "All states, except Nevada, have been logged and I have nine states and the District of Columbia complete. Some of my best catches are KFXM, KGFK, CKPR, KRMD, the last three using 50 watts; KXA, KID, WAGM and KDFN. But the greatest thrill of all was VONF, St. John's, Nfld., received March 15th at 3:57 a.m. Following is from VONF's verification: 'Regular Broadcast Schedule, Newfoundland time 1½ hours later than EST. Daily 12:00 to 2 p.m., except Sunday when the broadcast begins at 12:30 p.m. Daily, except Sunday, 6:00 to 8:00 p.m. continuing some nights until 9:00 p.m. Sunday 8:00 to 9:00 p.m. The latest news concerning Newfoundland's sealing fleet is broadcast daily at 10:00 p.m.'"

"Here is some information on CHGS," advises Stewart Hunter, Box 200, Kensington, P.E.I. "Weekdays 7:30 a.m. to 9:00 a.m. Musical Clock program; 10:30 to 11:30 a.m. Home Hour; 11 to 12:30 Rural Program;

12:30 to 2:00 p.m. other programs; on again at 4:00 p.m. and sign off at 8:00 p.m. They also broadcast all the Canadian Radio Commission programs and hockey matches. Saturday evenings George Wade and his Corn Huskers 9 to 10:00 p.m. Sunday mornings on at 11:00 a.m. church broadcast till 12:00 and recordings until 1:00 p.m. Time and weather reports, sign off. On again at 2:30 p.m. to 8:15 p.m. CFCY, Charlotte-town, has a shortwave transmitter on 49 meters. VE9EH has about 250 watts. Am not sure about the power."

Radio Normandie, Fecamp, France, puts on a special DX every night until 10:30 EST, says Robert Rosenberger, 17 Janssen Place, Kansas City, Mo. He has received one of them on 1345 kcs. FQN on 565 kcs. is on until 8:30 EST Wednesday evenings. Robert recently tuned in 6CK, Cork, Irish Free State.

Gustave Solomon, 404 Bon Accord Block, Winnipeg, Man., gives us some interesting information in regard to CKY. He gives their time on the air as follows: Sundays, 11:00 a.m. to 5:30 p.m. and 7:00 to 11:00 p.m. Weekdays on at 8:30 a.m. until 2:00 p.m. and 3:30 to 11:00 p.m.

Rudolph Kuré of Cincinnati, who thinks that "RADEX is getting more helpful every month and that the May issue is a marvel" gives the time on the air of HJN as follows: 12:45 p.m. until 2:00 p.m. and 7:30 p.m. until 10 p.m. We assume that these times are those of Bogota standard.

"Those listeners in the east who have not heard WSAR, Fall River, Mass., can try for him on Monday nights until 9:00 o'clock, when WHOM comes on," suggests Samuel Klink, 844 So. 16th St., Newark, N. J.

In September there will be complete new data from broadcasting stations with their time on the air, a new and enlarged DX Calendar, and a new plan for securing short-wave station information. Watch for it.

The Most Friendly Station

(Continued from page 11)

defects in modulation. But nevertheless, TI4NRH is working every afternoon on 31 meters, in mid-ocean, hi, hi, or between Schenectady and Madrid. Its power is marvellous, as hundred of reports estate to be like local stations anywhere from Canada to Peru.

The wave is very steady, with little fading, and the music, either recordings or spanish talent, distinguished by bugle calls between numbers, known the world thruout.

The Verifications

The station verifies each report, by sending a beautiful certificate printed in five colors, the only and most unique demonstration of its kind, ardently desired by fans.

The station publishes a Magazine in spanish entitled URA, which is sent to Members which also have a beautiful Diploma of Membership and a lapel button in 3 enamel colors. The URA has special stationery and lovely seals to go in accordance with the biggest aim to develop a most friendly Club, already represented in the Madrid last Convention, and having Delegates in all the American Continents. All that, has been the conclusion of pure amateurship in radio, developed with the aim to please in the land of Heredia, a name which was put in the map, by the station TI-4-NRH.

Fading and Other Troubles

(Continued from page 10)

spects, and you will obtain every bit of efficiency that it is possible to give. The -80 rectifier need not be replaced with a newer type because it now gives as much amperage and poten-

tial as is necessary to run your set.

Phones on Kolster

How shall I attach headphones to my Kolster K-140 receiver, and where are the speaker wires? The maker advises against the operation of this set with the speaker disconnected as it may ruin the receiver.

Phones are connected to this receiver as shown in Figure 4, of the February issue of RADEX, on page 3. Use two 1.0 mfd. fixed condensers, 500 volt test, and a 50,000 ohm resistor. Two wafer adapters for -47 tubes will be needed.

The manufacturer's caution about operating the set with the speaker disconnected means with the entire speaker cable plug pulled out of its socket. Place your speaker silencing switch in either the green or brown wire leading to the smaller of the dual speakers from the *second* speaker plug leading to the speaker voice coils. This cuts out the voice coils of both speakers and renders them inoperative, but permits the rest of the speaker field coils and unit to remain in the circuit so as to not damage the power pack of the set. Be careful about your wiring insulation, for the -47 tubes operate on 400 volts, a potential seriously high if carelessly handled.

Using Old Tubes

Can I modernize my Atwater Kent model 40 receiver? I have the original tubes, except the -27, which came in the set in 1930.

You state you are using the original tubes, except the -27. Old tubes pull down the efficiency of the set, and we are sure that if you retube the receiver the results will be greatly satisfactory. Although the tubes may seem to test well, they are too far gone to be useful further. You might try replacing the -27 with a 56. The -71A can be replaced with a -45 if a suitable voltage reducing adapter is used in the socket for more power and volume. Your present -27 is the

detector tube. The -26s in the set cannot be replaced with newer types.

If this set is noisy it might be well to test the by-pass condenser located on the right-hand side of the volume control. This condenser by-passes the choke of the speaker, the terminals connecting to one speaker post and to the plate of the -71A tube. Frequently this trouble occurs in the AK 40 receiver. And of course, the condenser plates should be cleaned to remove all traces of dust.

Short-Wave Signals Cut Off

I have a Pilot Super-Wasp battery model k-110. The set was noisy and I took it apart and resoldered every connection. It now cuts off and on rapidly as if a wire still is loose. The regeneration control will not increase the volume even if pulled down until it falls into oscillation. There is no gradual increase in volume. The position where the set oscillates very loud is where the antenna condenser is set around 50 to 65, and the other around 50 to 90. At other points there is no oscillation. What do you think is wrong?

It is hardly ever possible to state definitely the cause of signal cut-off. In most cases this has been found due to some defect in a filter or by-pass condenser which shorts for a time and then heals automatically for a short time. Sometimes connections to condensers will open for a time due to some expansion or contraction of the material of which the condenser is made.

Critical performance of the regeneration control is usually due to excessive detector plate potential, too large a plate coil, too large a throttle condenser, too large a choke coil in the detector plate circuit, or failure properly to by-pass the detector plate supply lead. It must be realized that trouble may develop from any combination of these factors. The remedy usually applied to such circuits is to provide a resistance-capacity filter at the detector plate input. This consists of a 1.0 mfd. condenser con-

nected between the plate input lead and the ground or cathode, and a 50,000 to 100,000 ohm resistor in series with the plate lead. Sometimes a $\frac{1}{4}$ to $\frac{1}{2}$ megohm resistor across the primary or secondary of the first audio transformer will correct the trouble.

Wiring Up AK Model 20

My Atwater Kent model 20 battery set is now being used after a long period of rest. Having lost the wiring hook-up diagram I wish to verify the wiring to the batteries, for the set only brings in nearby stations of great power.

The red wire of the battery cable connects to the positive A and negative B battery terminals; the black wire to negative A; the blue wire to the $4\frac{1}{2}$ volt C battery, negative terminal; the yellow wire to the $22\frac{1}{2}$ volt B battery; the white wire to the $66\frac{1}{2}$ volt B battery; and the brown wire to the 90-volt B and also one side of the loud speaker. Your tubes should be tested and replaced if weak. Clean the set carefully to free it of all dust, especially between the variable condenser leaves. If it persists being weak test the transformers for burned-out primaries, or open fixed condensers or broken wires in the r.f. coils.

QUICK INDEX to STATION DATA

Broadcasting Stations

Verification Information.....	April No. 68
Time on the Air	
Sunday	Sept. No. 61
Monday	Oct. No. 62
Tuesday	Nov. No. 63
Wednesday	Dec. No. 64
Thursday	Jan. No. 65
Friday	Feb. No. 66
Saturday	Mar. No. 67
European Time on the Air.....	Mar. No. 67
Trans-Pacific Time on the Air.....	Feb. No. 66
Call Letter Index.....	May No. 69
Slogans, Addresses, etc.....	May No. 69

Short Wave Stations

Foreign by Countries.....	Sep. No. 61
World by Calls.....	Dec. No. 64
World by Frequencies.....	Apr. No. 68
United States by States.....	Nov. No. 63
Canada by Provinces.....	Dec. No. 64
Police Broadcasters of U. S.....	Mar. No. 67
Sunday on the Short Waves.....	Mar. No. 67
Canadian Police	May No. 69

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