THE JANUARY 1932

# RADEX INDEX

WHAT'S ON THE AIR TONIGHT?



(25°)

Many Changes in Mexico
How to Buy a Radio Set
The Short Wave Stations of
North America

# RADIO THEORY MODERN PRACTICE

A New Book in Simple Terms Profusely Illustrated

With chapters on Radio Principles, Vacuum Tubes, Receiver Circuits with diagrams of many of the best-known sets, Short Waves, Aerials, Loud Speakers, Radio Troubles, Radio Instruments, Broadcasting Transmitters, Television, etc.

224 pages, printed in large type, bound in flexible cloth, every point illustrated with drawing or diagram.

Price, \$1.00, postpaid

# RADEX Radio Map of North America

The size of twelve pages of RADEX, in two colors, with all the locations of broadcasting stations in every country in North America. Time zones accurately shown. Scale for quickly measuring distance to any station.

The first real radio map ever published.

Price, 25 cents, postpaid

# Headphone Adapter

for

# Modern A. C. Sets

Permits the use of the radio at night when others want to sleep and brings in those tantalizing DX stations that can't quite be brought out on the loud speaker.

Requires no risky changes in the wiring. Simply remove the last tube before the speaker and insert adapter in the socket. This cuts out power stage and reduces volume to comfortable point. If last stage is in push-pull, remove both tubes and place adapter in either socket.

Can be used with any set using four-prong tubes in last stage

Price, \$1.50, postpaid

For five-prong tubes (Pentode) an extra adapter is required—price, \$1.00 or \$2.50 complete.

# I. C. A. PHONES

Complete with Head Bands

Specially made of lightweight material and give true reproduction of the broadcast signals. They are made of molded bakelite and lightweight nickle-plated metal. Extremely sensitive and reproduce the faintest signals.

2000 ohms.

Price, \$2.75, postpaid

# Leatherette Cover

For Your RADEX

A new cover just received. Most beautiful we have ever used. A rich brown trimmed in gold. Large pockets into which the covers of your latest RADEX are easily slipped. Matches the beauty of your set, protects your book and gives solid backing for making entries.

You'll be delighted with this cover.

Price, 50 cents, postpaid

THE RADEX PRESS » 5005 Euclid Avenue, Cleveland, Ohio

# **JANUARY 1, 1932**



# RADIO INDEX



11201 01 01 111 111 111 111

## FRED CLAYTON BUTLER

Editor and Publisher

IGHTH YEAR	Contents	NUMB	ER 55
Frontispiece — Alice She has a mello	e Joy of the Prince Albert Quarter ow voice of low register.	Hour.	
Buying and Servicing	ng a New Set		2
Puzzles Found in R	adio Calls		4
"Hello, Everybody;	This Is Kate Smith"		6
Tubes and Tuning	Troubles		8
In the Wide Field o	f Radio		11
Intimate Stories of t	the Radio Great		14
Voices From the Sk	<b>y</b>		16
	Air		18
The January Change	es		19
Tuning American St	ations From Europe, By Ollie Ross		27
Key to the Chain St	ations		31
What's On the Air 7	Fonight?		33
A Complete Index b	y Frequencies		40
A Complete Index b	y States and Cities		54
A Complete Index b	y Call Letters		60
Short Wave Stations	s of North America		66 .

Published Monthly Excepting July and August See Subscription Blank on Page 22

\$1.75 per Year

25c per Copy

# THE RADEX PRESS

5005 Euclid Avenue

Cleveland, Ohio

"Entered as second-class matter April 23, 1931, at the post office at Cleveland, Ohio, under the Act of March 3, 1879."

Printed in U.S. A.

# BUYING and SERVICING A SET

TOST people discuss, examine and test, radio sets with the same test, radio sees ..... precise seriousness they exhibit when purchasing a fine motor car, yet they will spend equally as much for winter clothing with hardly a passing thought. A radio set no longer is an expensive luxury, but its selection becomes a matter of importance. And in spite of this caution many persons fail to procure sets that give satisfactory performance. Consequently, we sometimes hear opinionated and unjust tirades on the fallacies of radio. Much of this trouble can be avoided, but it remains for radio dealers and servicemen to set their own houses in order.

The prospective purchaser of a radio set, if he is a novice, is soon befuddled when he wanders past the many radio stores while in search of a new receiver. He sees the brilliant signs that loudly proclaim to passersby that one may become the lucky owner of a fine 7-tube "Staticette" radio set for the sum of only \$46.95; on another store front he is told that the same set sells within for \$56.50; then, when finally at home after a weary afternoon, he reads in the evening paper that a local house-furnishing store has arranged for a carload of 7-tube "Staticettes" to be sold at the sensational price of \$36.75, and only five dollars down! Then, to climax the uncertainty. the bewildered prospect picks up a magazine and reads that the manufacturer's price is set at \$56.50, and the usual ballyhoo states that the 7-tube "Staticette" is the world's newest model.

High-Pressure Salesmanship

The next day our brave adventurer goes forth to buy a radio. He soon falls an easy victom to a high-pressure radio salesperson; he rushes home with a gorgeous masterpiece, complete with five of the latest tubes, guaranteed by the salesman to do the work of eight. The name of the set really does not matter; it cost only \$29.95. Then follows tragedy—an evening of squawks and howls, while double-voiced broadcasters talk huskily from deep down in a well that seems filled with many com-

# Helpful Hints by B. Francis Dashiell

peting announcers and musicians. The next day our chagrined and exasperated purchaser again returns homeward after a hopeless argument with the bland and alibi-oiled salesman. So, as a result, this home now has a radio that is neither good-for-nothing nor pleasant to use—it is never turned on.

Then, too, there is another picture that should be painted—that of the owner of a perfect set, who, for some reason or other, has been compelled to send it out to a serviceman for minor repairs or adjustments. Perhaps a clicking sound was due to some loose connection, and a drop of solder would be the magic wand to make the set as good as new. But the unknown repairman was ambitious; he needed money, and was a brother-under-the-skin to the high-power radio salesperson.

### When the Set Came Back

When the receiver at last went home it had been given three new tubes, a replacement in its powerpack, adjustments to the speaker, and perhaps the shaft and dial had been rebalanced. And the cost of this highly technical work was twenty dollars! As soon as the receiver was connected, it howled, rattled in the speaker, brought in old stations at new dial settings, used only half of the scale, and otherwise appeared generally ruined. The indignant owner, after a strenuously warm session with the serviceman, decided nothing further could be done about it, and returned home sadly to gaze upon a perfectly useless radio set.

We all know how automobile owners have experienced similar feelings, for many valuable motor cars have gone into the shops for adjustments, only to come out with valves and timing tinkered with so as to ruin the smooth purr of the engine, with grease and marks over the body, and generally maladjusted throughout. The same situation exists with radio in one or two spots in

every locality. Some inexperienced persons working as expert servicemen, just as blacksmiths become garagemen over night during the first days of motor cars, give the black eye to the legitimate servicing business. Few people, unfortunately, are in a position to judge the abilities of the repairmen they select, and there is no law or regulation making mandatory the registration and licensing of men permitted to work on valuable radio and automotive apparatus.

#### The Ideal Set

Since buying a radio set is a matter of great moment in most homes, everyone wishes to have a receiver that gives a fine tone and has excellent reproduction. It must have high selectivity and be able to pick up stations from afar, free of noise and static, neat to look upon, and lastly, it must be reasonably priced. While these ideals are best kept in mind when buying a radio, it must be remembered that the radio millennium has not yet been reached!

Unless a purchaser knows just what he wants, either from observation of other receivers that are known to give excellent results, or practical radio experience, it is well to follow the old adage about "making haste slowly." The uninitiated purchaser might do well to examine the sets displayed on the floors of old and trusted stores; it is not always necessary to go to unknown radio dealers. Radio sets are classed as furniture and are handled as such by many large stores. A concern known by its honesty and integrity will give a fair deal, and do everything within its power to make satisfied customers. There is too much competition in radio these days to permit the accruing of permanent profits through unfair salesmanship. The writer recommends, however, when possible, to deal with established radio stores where the personnel is well versed in radio, but one should avoid the "fly-bynight" sales and outlet houses that can never make good their exaggerated claims.

One of the most confusing situations to confront radio purchasers is the matter of price cutting on similar receivers in different stores. When an established price is set by the maker for a certain model, then dealers are bound to sell at that price. But the thought that seldom occurs to the buyer is that these sets of equal numbers of tubes selling at different prices are not similar receivers. They are different models which have appeared at various times from the factories of the makers. The older the model, the lower the price, yet on the surface the sets seem to be one and all the same. Manufacturers make several types of sets within similar cabinets, and the newest have improvements and refinements not to be found in previously issued receivers. How to



Ann Leaf, the charming and talented organist, has found the ideal studio costume—so much more comfy than formals.

guard against this form of window display advertising deception by certain dealers is a matter that cannot be prescribed for; the purchaser must rely on the advice of the more honest and conscientious dealer, or by personal examination and study of the characteristics of the set he desires to buy.

No one can advise what set is best to purchase. It is always safe to select one that is being nationally advertised, and known to be tried and tested in the fire of time and public opinion. If the dealer actually is behind the product he handles.

(Continued on page 28)

# PUZZLES IN RADIO CALLS

# A Challenge to Keen Wits

HAT Puzzle No. 1 in November made a lot of readers work pretty hard for their free copy.

"The first one last month sure was a dandy," comments Herbert Bryan, 909 W. Hughitt St., Iron Mountain, Mich. "The most tedious I ever encountered," is Walter Reck's opinion of the same puzzle. His address is 2110 Loth St., Cincinnati, Ohio. "Three o'clock in the morning found me almost smothered under reams of scratch paper," he adds. "Would like to try solving more of that type." "Anyone that works this nightmare, deserves a year's subscription," opines T. J. Johnson, Bowlegs, Okla.

"Your puzzles are always varied, unusual and extremely interesting," thinks Lieut. Gordon R. Jackson, 420 North Pasadena Ave., Pasadena, Calif. "Please continue them."

#### Answers for December

Following are the calls used in No. 1 by Earl R. Roberts: By some oversight we failed to mention the most important part of Mr. Roberts' puzzle which was that the last column was to spell a state. How many noticed that the word "Jalisco" appeared in the last column?

WS WMC WRBJ CMBA CMBL WKBI KLS

In No. 2 the following calls appeared in order: WOI- WNAC-WOR-WORC-WLEY -WOL -KFYO -NAA -WEBR - WASH-KONO-KIT-WHIS-XEV-WGN-CHCA - TIC - XET - XETO - KROW - WELL - WHA - WHAT - WIL - WILL - WEW-XED-WENR-VAS-RUS-CJRM-KORE-CKY-KYW-WILM. Thirty-five calls in all; how many did you miss?

No. 3, by T. J. Johnson, was correctly filled in as below:

C CMX CMKEX CHWCKFC WHKLX KOMO C

Well December is past. Better luck in January. Get the answers to the three problems which follow to us by January 20th and receive your February RADEX or a map free. Your subscription will be extended one issue instead if request is made. Unless otherwise mentioned, all calls are from the main index of the December issue of RADEX. Corrections are made in the index in January after the puzzle page is compiled and hence may not agree with the definitions given.

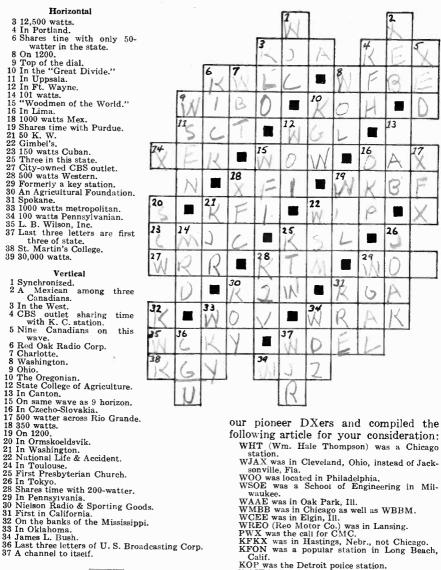
January Puzzles

Number 1: Fill in the squares vertically from the top down, with the call letters of eight stations, and the names of two states will appear horizontally from left to right.

W		W		W		С	
	Α		D		F		C

Number 2: Here is an elimination puzzle: How many stations, listed in the Index by Call Letters in the December RADEX, can not be made from the letters in the following sentence, using any letter only as many times as it appears in the sentence? "Can the quick brown fox jump over a few lazy black dogs?" Send in a list of the stations which cannot be made from this sentence.

Number 3: A cleverly designed and symmetrical cross-call puzzle is presented by George Raba, Stevensville, Mich. There are no reverse calls used, but Mr. Raba has taken a few from the list of World stations published in the October RADEX. All others will be found in the regular index of the December issue.



# Turning Back the Pages of Time or When Radio Was an Infant

Horizontal

watter in the state.

3 12,500 watts. 4 In Portland.

12 In Ft. Wayne. 14 101 watts.

28 500 watts Western.

35 L. B. Wilson, Inc.

1 Synchronized.

3 In the West.

wave. 6 Red Oak Radio Corp. 7 Charlotte.

8 Washington. 9 Ohio. 10 The Oregonian.

13 In Canton.

18 350 watts. 19 On 1200.

24 In Toulouse.

33 In Oklahoma. 34 James L. Bush.

37 A channel to itself.

26 In Tokyo.

16 In Czecho-Slovakia.

20 In Ormskoeldsvik. 21 In Washington.

three of state. 38 St. Martin's College. 39 30,000 watts.

4 CBS outlet sharing with K. C. station.

5 Nine Canadians on

Vertical

8 On 1200.

16 In Lima. 18 1000 watts Mex.

21 50 K. W. 22 Gimbel's. 23 150 watts Cuban. 25 Three in this state.

31 Spokane.

While in a reminiscent mood, Ray E. Everly, 102 West Washington St., Newton, Ill., got out an old 1925 copy of RADEX. "I found some things that will recall the good old days gone by for

KOP was the Detroit police station. WAIT in Massachusetts. WGO and WQJ were in Chicago. WRM was not WILL then.
WTAP was in Cambridge, Ill., instead of Texas. WTAD was in Carthage, Ill., not Quincy.
WWI was Ford Motor at Dearborn. KDPM was Westinghouse in Cleveland. WCX was what WJR is now. AA3 was the present KFUP. CY was the Mexican call instead of X. WAAB was in New Orleans, not Boston. WCEE was on a farm near Elgin, Ill. WEAR was Goodyear Rubber in Cleveland. 2AB, 2CX, 5EV, etc., were the Cubans.

# "Hello, Everybody; this is KATE SMITH"

# An Interview by SUSIE SEXTON

HEN the swinging doors of the broadcasting room in the New York studios of the Columbia System banged behind her with a boom on Monday night, at the end of the La Palina program, broadcast over a network of twenty-eight stations, Kate Smith—two hundred and twenty-seven pounds of blonde good nature wearing spectacles—stepped out into a group of admiring song-writers with wistful eyes.

No, they were not those smart Oxfords. Just silver-rimmed "specs" such as any self-respecting grandmother might wear over her ears. Kate wears them as a disguise continually now, except when she is on the stage in the theatre or in her own home. She just grew tired of having men and women stare into her blue eyes wherever she went. People are rude that way.

This great big girl of radio can claim all the best Swanee traditions save one. That's langour. There is nothing tropical about her happy-go-lucky gestures. She moves and acts with the rush and crispness of a northern gale. Or an airplane propeller at top speed.

Out in the open spaces of the corridor she waltzed, two-stepped, tangoed and dipped until the elevator arrived. No handsprings. Always humming a Southern melody. Without a song Kate Smith could not breathe.

A short ride to her apartment on Park Avenue, a penthouse. Kate tapped, shuffled, clogged and hummed her way across the lobby and was whirled to the roof. Her song preceded her evidently.

"Hello, Baby," shouted Al, a South American baritone, as soon as her key turned in the lock.

"Come on in, Big Girl," trilled Ben, a tenor from Panama. The tenor and the baritone are the singing parrots of the Smith family. Not sacred, but never profane. Their owner, who does not smoke nor drink, will not tolerate profanity either. Occasionally Al comes

out with "Oh, God," and is promptly silenced.

A life-sized St. Bernard—done in wool—crouched under the grand piano in a protective manner that would have given any two-gun man a chill. Under the radio curled a fluffy cat. Mickey Mouse in scarlet breeches wagged his rubber tail in the corner. Kate loves animals as well as she loves people. But she has to be content with reproductions on a New York roof.

French doors opened on a terrace banked with evergreens. A rhythmic but unusual chirp broke the October stillness.

"Crickets," shouted Kate. "Climbed fourteen floors to get here."

The radio was going full blast.

"Never shut it off day or night," laughed Kate in her hearty contralto. She turned the dial to fortissimo, or more so.

A red moon hung over the one hundred and fourth story of the Empire State tower, down yonder.

"Where did you get the idea for your theme song, 'When the Moon Comes Over the Mountain?' I asked.

#### The Birth of a Song

"From watching my own Virginia moon rising hundreds of times as a young girl," she said. "Riding through the country during the Spring or Autumn I always waited for the rising of the moon over those mountains. It is one of the loveliest sights in the world. Every time I saw it I felt like singing. So the words came naturally when I sat down to write the lyric with Howard Johnson. You know I was born in Virginia—a little town called Greenville. The family moved to Washington when I was six months old. But I always went back and forth. Still do."

Incidentally, "When the Moon Comes Over the Mountain" has attained almost as great popularity as the writer. Three quarters of a million copies have been sold in sheet music and 200,000 phonograph records. About 90,000 copies of her other hit, "Making Faces at the Man in the Moon," have been sold.

Then Kate told me how she came to

be called "the songbird of the South." That description has followed her name on every program since she first appeared professionally. It dates back to the time when Kate was about two hundred pounds easier on the scales and eighteen years younger.

One afternoon the Blue Devils of France thundered down the streets of Washington with snappy tread and clicking heels. As the band struck up a tune in the distance there was a crash in the Smith's back yard. A doll carriage was overturned and all the tea things shattered to bits on the stone flags. Suddenly a pair of chubby legs emerged from the debris, kicking heavenward. They righted themselves with disastrous results in the pansy bed. Then started on a run for the front gate.

It took some little effort for young Kate to propel her dimpled knees to the top of the gate. But like most determined women, she got there. She straightened her petticoat and the bow on top of her blonde curls. Her eyes shone.

When the blue ranks of the Frenchmen swung into view there was Kate to greet them. She was singing at the top of her voice "Oh, How I Hate to Get Up in the Morning."

The Frenchmen saluted with their eyes. It was great. Indulgent passers-by smiled on the plump youngster and murmured:

"Listen to that little songbird."

Years later when Kate was pulling out of the national capitol to make good in New York in that musical show "Honeymoon Lane," her mother called her back.

"What is it, Mother," inquired Kate.
"Don't forget, Kate," said her mother,
Mrs. Charlotte Smith, "they always
called you 'the little songbird' down
here."

And that is how she came to be billed everywhere as "the songbird of the South." Although she never took a music lesson and cannot read a note. No longer little, she is still the kind of girl who likes to please her own or anybody else's mother. So the name has persisted through her appearances in vaudeville and such productions as



From left to right, Kate Smith. No wonder folks think "a lot of her."

"Flying High" during the six years of her professional career.

You'd never believe it, but Kate hates to be introduced in public and blushes when she has to take a bow. Makes her feel funny she says.

She gives a lot of credit to her manager, Ted Collins, vice-president of the Columbia Phonograph Company, who looks as good-natured as Kate herself.

"I owe a lot to Mr. Collins," says Kate.
"And to Jack Miller, who plays my accompaniments. But, if course, if I had not had a good voice I would not have succeeded even with their help."

Those memory songs? Only two percent of Kate's audiences do not like them. The other ninety-eight raise the roof with their cries for more.

The most popular? "When You and I Were Young, Maggie," with "Silver Threads Among the Gold" as runner-up. That tuneful "Harvest Moon" takes third place.

If you think "Swanee River" is the most popular Dixie melody, you're greatly mistaken. There are thousands yearning for the Carolinas—moon, gal, and all.

# TUBES and TUNING TROUBLES

Editor's Note

The diagnosis of radio troubles at long range is rather difficult unless we have the essential facts which must be considered. Our readers can assist us be giving complete details, especially, the exact style, model, number and make, of the receiver and tubes. Don't be afraid to tell us too much; we like to read your letters. Also, remember that the local "serviceman" has a distinct advantage over our "long-range prescribing" because he has the set before him, and, therefore, we are frequently compelled to recommend his services for making meter tests, voltage analyses, alterations, replacements, and general repairs. We spare no efforts to find the solution of your problems, and this service is free to the readers of RADEX who may choose to use it

**Tubes Are Antiques** 

My Fada eight-tube set tunes too broadly. I bought it in 1929 and it still has the original tubes. I have received over 400 stations, but now the receiver does not work as well as it used to. What shall I do?

This receiver appears to be about three years old, and few of the models of that day will tune as sharply as the newer and modern super-heterodynes. But, because of the age of the tubes. we are inclined to feel that they are much too old for further efficient operation. It is suggested that you have them tested and replaced with new ones. This will do much toward sharpening up the tuning of your set. Nowadays, however. station interference makes it well-nigh impossible to receive a distant station without some cross-talk interference, and this gives a set the appearance of having rather broad tuning facilities.

Perhaps you have too much aerial. About sixty feet in length should be sufficient. A small fixed condenser (.00025 microfarads capacity) in series with the aerial and the set should make the tuning less broad.

Changing Radiola's Power Tubes

I have a Radiola 30 receiver which has given good service, but I wish to replace the present -10 power tube with a -71 A. How can I do this?

# With Suggestions by The TECHNICAL EDITOR

When the -71A tube is plugged into the socket intended for the -10 power tube, the filament is overloaded by  $2\frac{1}{2}$  volts, which is sufficient to burn out and destroy the tube. This voltage must be reduced before the -71A can be used in place of the -10 tube. Open one of the A leads to the filament lugs on the socket and insert a 25 ohm resistor in series with the circuit. This will permit approximately five volts on the filament of the -71A tube—its correct working voltage.

The plate of the -71 tube will, however, be connected to a higher plate voltage than necessary for its proper operation. There is no satisfactory arrangement whereby 135 volts may be picked off the powerpack. The higher voltage may make no difference for the plate feeds an output transformer which prevents the flow of direct current into the speaker windings. But heating of the -71A tube may result. The tube may be operated on 90 volts, and this source can be taken from the ninth binding post in the right-hand compartment (the one that connects to G of the -91 tube). Connect to the end of the output transformer opposite to the end of the same primary coil that connects to the plate of the -71A tube. Cut the present wire connecting the end of the primary coil and let it remain disconnected.

Additional Battery Speaker

I am anxious to attach an additional speaker, of the battery type, to my present electric set. How should I go about this?

A battery speaker, or magnetic type, may be attached to an electric set using the dynamic type of speaker in much the same manner as head-telephones are connected. Several articles have appeared in RADEX showing how these connections are made—follow the same method for your battery speaker. Or the speaker coil may be connected across the primary of the output transformer that feeds the voice coil of the dynamic speaker.

#### Hums and Howls

My Victor R-22 gives a low hum from the -27 detector tube when loud static or signals go through. I sometimes have to remove the tube to stop the noise. How can this annoyance be stopped?

This trouble, no doubt, may be classed as microphonic. When the -27 tube, or detector, is agitated either by external vibrations or internal current surges because of extremely powerful static outbursts or signal notes, it breaks into oscillation with resulting hums and howls. The tube should be covered with a metal screen which should be grounded. There is also a howl arrester that is sold by dealers, and when it is slipped down over the offending tube the howl usually ceases. Also, there is the real probability that the tube has served its purpose and may require replacing.

### Those Variable-Mu Tubes

Is it practicable to change the -24 tubes in my Lyric set over to the new -35s?

You have not given the particular model number of your Lyric, but in this case we believe the change can be effected by using adapters made for the purpose. While there will be little gain in efficiency you may notice somewhat better selectivity. The change cannot injure the receiver. See the article in December RADEX which deals with the change in question.

#### An Additional Speaker

I have been using a battery set and have wires running about the house for a portable Baldwin speaker with horn. I now have a super-heterodyne set made by Montgomery Ward, it is a. c. operated, and has seven tubes and dynamic speaker. Can I continue to use my Baldwin horn around the house?

You cannot use the Baldwin speaker with your new a. c. set with the same degree of satisfaction as with the old battery receiver. The proper speaker to use with an a. c. set should have the same



The Paul Sisters, harmonizing team, who are heard with Phil Spitalny during the Tea Dansante programs, Julia is standing and Ruth is seated. (NBC-WEAF network, daily except Saturday and Sunday, 4:30 to 5:00 p.m., EST.)

characteristics as the dynamic speaker built in the receiver. Otherwise there will be distortion, since the two speakers are not matched, and this is more pronounced when using a horn type speaker. Of course, you can use the speaker, connected to the a. c. set as explained elsewhere in an answer to another question in this department.

#### Receiver Loses Volume

Can you tell me why it is that my Majestic receiver, model 25 chassis, loses its volume at least one-third within a few minutes after turning it on? Stations that are heard the first one or two minutes are lost later as the sound diminishes.

Such conditions are almost invariably due to faulty tubes. We suggest that you have each tube carefully tested by your dealer, paying especial attention to the power tubes and the rectifier. It takes some time for some makes of tubes to warm up and there may be a critical operating temperature in one or more of your tubes. When this point is reached reception is best, but as soon as the tube becomes too warm it loses sensitivity. This fault is not unknown. Then, too, a defective automatic volume control circuit frequently causes trouble such as you describe.

#### Aerial Too Long

My aerial is about 150 feet in length. I have a ground to a buried copper pipe, and this seems to work better than a ground to the water pipes. What is your opinion?

The aerial is entirely too long; it should be cut down to not more than 60 feet in length. This will, without question, give you better selectivity, but you may lose some volume on distant signals. Your ground is satisfactory, but in all cases a good water pipe ground is better than a buried ground, for the water pipes run about for miles underground. We do not understand your failure to obtain good results with the water pipe ground. Have you made sure the connections are mechanically and electrically perfect?

#### **Fuses Blow Out**

When my electric fuse blows out when my radio is switched on what causes it to do so?

There is a short circuit on the line and a sudden surge of amperage flows through the wires. The capacity of the tiny lead wire in the fuse cannot stand the overloading, it becomes hot, and quickly melts, thus opening the circuit and saving the apparatus from destruction and damage. The fuse is a protective device. When it burns out because of a radio short circuit, one may look for trouble in the power transformer of the receiver, for this coil, the primary, is connected across the 110-volt power lines with a control switch in series with the connecting cord. The transformer should be tested for a ground or short circuit. Or there may be some trouble in the switch or some of the wiring of the 110-volt circuit.

#### Condenser Capacity

How may the layman determine the capacity of the large condensers in the radio set?

It is practically impossible for the layman to determine the capacity of the condensers in the set. A complicated mathematical formula is used, and it is necessary to know much about the construction of the condensers before applying the constants and factors of the formula. Otherwise, one must have certain meters and measuring devices in order to find the condenser capacity.

### Loud Volume Uses More Current

Does a radio receiver use more current when the volume is turned all the way up to its loudest intensity?

When a radio set is turned up full strength it is doing more work than when it is turned down to a low tone. Work, of course, cannot be done without the expense of some form of energy, and in the case of a radio receiver, this energy is provided in the form of an electrical current. The set, therefore, consumes more current and is slightly more expensive to operate at full volume. The total consumption of current, even at full strength, is slight, and the additional expense may be considered almost negligible, unless you are using costly B batteries in a powerful battery receiver.

# Short Circuits in Power Transformers

What is the result of a short circuit between some of the turns of wire in the (Continued on page 30)

# In the WIDE FIELD of RADIO

"The time has come . . . to talk of many things"

ELL, here we are again in the regular monthly meeting of the RADEX Radio Club. The minutes of the previous meeting will be approved without reading and we will proceed to the discussion of new business.

Our readers will remember that we published last month an intimation of a shake-up in Mexico. Well, the list of Mexican stations furnished to the Newark News was evidently right and our hunch was wrong. We are now in receipt of an official list from the Mexican Government of broadcasting stations in that country and we find 14 Mexican stations now on 1000 kcs. Why so many of the Mexicans want to bunch together on this particular frequency is beyond us, but there they are and we are correcting our records accordingly.

Samuel F. Owens, 233 Roberts Ave., Glenside, Pa., has this to say: "Under a heading 'Commission Swings Axe' you delete WIBO, WPCC, WNJ, WHOM, WCHI, WJAZ and WMBA, yet you still list them in the index. Rather contradictory, is it not?" Unfortunately, action by the Commission isn't always final. Most of these stations have appealed to the courts and secured injunctions pending hearings. Thus, while they are deleted according to the Commission's records, they are still on the air and consequently are listed in the index.

Aerial Length Again

Mr. Owens has this to say about the length of aerials: "This business of shortening aerials is hokum. It was all right in the old days when sets weren't so sharp, but with a present-day set, the more aerial the better. I'm using 280 feet now and have five-kc selectivity every place except on 1170. WCAU is only four miles from me. Can get 1160 and occasionally 1180. WOAI booms in. Just a little home-made super with automatic volume control. Eleven tubes in all, counting the extra rectifier for the speaker. A Jensen Imperial. Now have 492 stations with 435 verified. a nice

jump over last month. The verified list includes KGFJ, KPCB, KGAR, KXRO, etc. Received my verification from XEQ (received on 750) and they sent me a ten-spot (ten pesos, worth about five cents American).

Karl J. Halpern, 1435 Coney Island Ave., Brooklyn, N. Y., also disagrees with Max Plung about long aerials, and he ought to know, for Karl uses one 700 feet long and reports his reception as excellent.

"RADEX is right," confirms Samuel F. Owens, 233 Roberts Ave., Glenside, Penna., "WFDV is on 1390 kcs. I picked them up and verified them on 1310, though they still use cards with 1370 on them." And then, for fear we will think too much of ourselves, he adds: "Maybe you think there aren't any mistakes in RADEX but I can find plenty. Just received my December issue this morning so haven't had time to find them yet, but I'm going to think this thing through and see how much I can find wrong with it." RADEX doesn't profess to be



Red of hair and blue of voice, this decorative young woman is Columbia's latest find. A contrato, she answers to the name of Verne Burke. (Sundays, The Chicago Knights, 6:00 to 6:30 EST.)

more than 99.9% right and we always welcome the pointing out of the other .1% by our readers. In fact we depend upon them to keep RADEX up to its standard.

Mr. Owens submits the following answers to other readers: "For Gordon H. Wightman, his station is XEB. For Virgil Engleman, his station is XEN. (While XEN's verification gives 711 kcs. as their frequency, they actually come in on 705.) Mr. Engleman heard the news report. Each item is separated by the sounding of the bell. They always announce their call in Spanish very slowly before signing off. Don't know what the idea of the train is."

Double Calls

"Why do several stations list two call letters for the same equipment, such as WABC-WBOQ, KYW-KFKX, etc.?" asks Howard Spies, 1217 Louisiana Ave., N. W., Canton, Ohio. Such doubling up of calls usually indicate two stations that have been merged. The extra call is sometimes retained, for what reasons we do not know unless it has some value as a basis for a second station if it is desired to start one later. C. M. Falconer suggests that we indicate these stations so our readers will not keep trying for a station that exists only as a call. We are following this suggestion and indicating by small letters, such as a, b, c, those stations which are really one.

"Why do you not give us the list of world stations in each issue?" is the query that comes from several of our readers. There are no changes from day to day in the world stations as there are in those in North America, or at least no central medium for ascertaining such changes. The list would therefore be just a duplication of the one in the previous edition and this seems an unnecessary use of good space. We will continue to give the world list at frequent intervals, first by locations and then by frequencies. The issues containing these lists should be marked by our readers and saved for ready reference. A complete new list is due this month from the International Bureau of the Telegraph Union at Berne, Switzerland. As soon as this list is received, it will be arranged for publication in the first issue thereafter.

A new re-allocation of wave lengths is under way that will affect all American stations on short waves. This will be as sweeping a readjustment as that of broadcasting stations in November, 1928. It will be published as soon as available. In the meantime we are publishing the present list as far as we have been able to secure it.

"May we inform you officially that we have adopted the RADEX map as the official map with which to determine airline distances from city to city?" writes A. W. Oppel, Vice-Chairman of DX Qualifications of the Newark News Radio Club. "The RADEX map is considered by this committee as the most reliable map to determine these distances as a basis for awarding our 'Super-Ace Certificates.' Mounted on cardboard and nicely framed, your map is at all times hanging on the wall of the auditorium of the Club." The NNRC now has over 1000 members, divided into five grades, according to their records. To become a Super-Ace one must have 500 stations verified, including fifty 2000 miles or more distant. Meetings are held once a month during the DX season and the club has a page of its own every day in the News.

Some Kind Words

Dale C. Kellogg, R. D. 2, Norwalk, Ohio, takes exception to our slogan "Doubles the Pleasure of Radio." He says it tripled theirs! With his new Atwater Kent he has brought in 172 stations in six months, having at least one on every channel except 540, 1010, 1030 and 1380.

Says James S. Massey, 5927 Ridge Ave., Roxboro, Philadelphia: "Everyone says that your 'little book" is a great help in radio. I don't see why they call it a little book. Of course it is not a large, clumsy book, but that is not what makes a book big; it is what is in it. In this respect RADEX is truly the largest book of its kind."

Howard Spies, 1217 Louisiana Ave., N. W., Canton, Ohio, asks a hard one. "Can anything be done to eliminate interference between several stations on the same frequency? WSMB constantly interferes with WADC, both on 1320, although the latter is only twenty miles

away and twice as powerful as WSMB." We can imagine no device except a directional loop aerial that could possibly tune out or even reduce one station and not the other. "I am using a 'Claratone' wave trap, which is effective except on the local station which is only a mile distant," adds Mr. Spies. "On good nights I am able to get WCAU, three channels away, but the local is always faintly heard in the background."

"I have a Zenith Model 67 and lately there has been a buzzing sound which increases when the volume is turned down," complains Jos. Churray, Canonsburg, Pa. "I've checked over tubes and wires. Can you tell me what is wrong?" Before we can answer this or similar questions, we must know whether the noise is within the set or outside it. The first step, therefore, is to remove the ground and aerial wires. If the noise continues it is from the set; if it stops it is outside the set. We published an article entitled "Fighting Radio's Worst Enemy," in the April, 1931, RADEX No. 48, which should help in locating these troublesome noises.

## A Few DX Tips

Ray E. Everly, 102 W. Washington St., Newton, Ill., contributes the following information: KMCS, 1120 kcs., Inglewood, Calif., will move to Los Angeles in January and have new G. E. equipment. KWEA, Shreveport, La., has a new short-wave station, W9XX, on 1604 kcs. Lannie Stewart, who was formerly at Siloam Springs, Ark., and Fort Smith, Ark., is Engineer. It verifies for ten cents. Following are all-night stations on the Pacific Coast: KMCS, KMTR, KFOX, KJBS and KGFJ.

"Was over to WPCH this afternoon," writes Karl J. Halpern, 1435 Coney Island Ave., Brooklyn, N. Y., "and spoke to the chief engineer. He said that you were misinformed about WPCH moving from 810 to 570. He says WPCH will not move even when WCCO gets 50,000 watts." We are putting WPCH back to 810 on this information.

Among the stations on whom the Commission swung the axe, was WIBR, Steubenville, Ohio. In a letter to C. S. Wells, 15 Academy St., Concord, N. H., W. E. Kelly, of the above station, says:

"In answer to your inquiry, we regret to inform you that we have already been put off the air by the Federal Radio Commission." We are accordingly deleting this station. In answer to the question by Roger F. Vore, Mr. Wells states that he has a Silver-Marshall S. W. Converter with which he is much pleased and he will be glad to write anyone interested in short waves. He is now experimenting with various types and makes of broadcast receivers.

Some months ago we deleted station KFQW, Seattle, Wash., in accordance with action taken by the Commission. Receiving many letters from readers that they were still hearing this station, we reinstated them. Now the Commission removes the call letters from their records and we are again deleting KFQW.



Lowell Thomas, President and Founder of the Tall Story Club. Chapters are being formed everywhere. Golfers, fishermen and DXers are barred.

Readers report they are still receiving WGM, Jeannette, Pa. Prosecution of this station is in the hands of the Department of Justice and trial will be held in Pittsburgh about December 8th.

Station XETF advises us they are now on 630 kcs. and that their slogan is "La Voz de Veracruz El Primer Puerto de Mexico." (The Voice of Veracruz, the Main Port of Mexico.)

Eugene Cole, Michigan College of Mining and Technology, Houghton, Mich., thinks the networks ought to add some stations to their chains from outlying districts instead of trying to get so many in the big centers. He says:

(Continued on page 29)

# Intimate STORIES of the RADIO Great

Program Personalities by "BETTY"

TOHN W. HOLBROOK, suave young man who nightly switches the voices of celebrities in and out of some fifty million homes, went to work in the NBC studios one night not so long ago both surprised and cautious. He hoped and prayed that no harsh irritants would affect his own voice box, for on that particular day of days, before members of the American Academy of Arts and Letters, he had been presented the academy's annual gold medal for employing the best English before the microphone. He knew not only the King's English, said Hamlin Garland, award chairman, but eminently combined "English English and American English" as an example for the two continents. "My pleasure is exceeded only by my surprise," said Holbrook in reply to compliments on his voice and his taste in using it. "And, imagine," he added," as he relaxed in the studios later,"I once wanted to be a champion ski-jumper. This has been my lucky year. First, I am brought here from Boston for network announcing. Then I get this surprise. But luckiest of all, the young lady has said 'yes'." He introduced Katherine Renwick, petite NBC actress, formerly on the stage with Irene Bordoni and others. They met in the NBC studios and will be married soon.





Aileen Clark, a typically modern girl of the Middle West, is one of radio's newest stars. She rose to enjoy popular radio acclaim over night, after studying for years on slender resources and without family encouragement. Miss Clark is probably the only girl in radio who won a highly remunerative commercial contract within twenty-four hours after she took her original and only radio audition. Many of the radio stars of today have served months and even years of apprentice ship in the studios before obtaining a sponsor. On August 26, 1931, she obtained her momentous audition. On August 27th she signed a contract to appear exclusively on the Club Valspar program, broadcast each Saturday from 9:30 to 10:00 p.m., EST., over an NBC-WEAF network. Aileen is 24 years old. She was born in St. Louis, Mo., of parents without any marked artistic talents. At an early age, however, she recognized the merits of her own voice and soon became engrossed in vocal study. When she was 17 she made her debut with the St. Louis Symphony and gained enthusiastic comments from music critics and lovers. She was such a child then that her parents would not let her embark on a career away from St. Louis. Miss Clark was graduated from high school and Washington University, St. Louis, where she studied French, Spanish, Italian and German. One of St. Louis' patrons of music sponsored a subscription to send Miss Clark to study in New York. The amount was not large and she had to earn her own way. For four years she sang in Chester Hale's ensemble at the Capitol Theatre, New York. Last summer she decided to take a fling at broadcasting, with triumphant results. Aileen is married and has a boy three years old. Her husband was a football player at Washington and Jefferson. They were childhood friends.



Howard Lanin, who conducts the Campbell Soup orchestra, began conducting when 17 years old, and since has waved the stick in ballrooms of Palm Beach, Bar Harbor, Pinehurst, Newport, London, Paris and Cannes. He was born in Philadelphia in 1898, and still lives there, commuting to New York every day. His father was a violinist, his mother a pianist and his eight brothers all musicians. Early indications gave rise to the belief that he would out-trumpet Gabriel, but he turned to the traps and drums and beat his way to international musical recognition. Howard made his first professional appearance when he was 11 years old and received 35 cents a night at a movie theatre. Lew White, now famous organist, was also an entertainer there. White struck for more money, Lanin followed; fifty cents was demanded and they won out. Howard landed in the Nixon Theatre, where he played for the first performance of Charlie Chaplin. There also was a sunburned youth with an unruly forelock

of hair, who chewed gum, twirled a lariet and cracked jokes. Howard shook hands with Will Rogers. An engagement at the Stone Harbor, N. J., Yacht Club started "the society maestro" on his way. He was 17 then. He first faced the "mike" at WDAR, now WLIT, of Philadelphia, in the days of crystal sets of 1921. Even then he pulled an average of 2,000 fan letters daily. Lanin reads detective stories for relaxation, drives a big automobile and hopes some day to live in Europe. He is 5 feet, 91/2 inches tall; has black hair, dark brown eyes and a ruddy complexion. His build is stocky and he packs a punch in boxing. Lanin is married and has three children. His wife is his honest critic. She goes to first nights and comes home to tip him off to the hit tunes. You can hear Lanin on the Campbell Soup program four nights a week, Monday, Wednesday, Thursday and Friday, at 7:15-7:30 p.m., EST.



Betty Council broke into big league radio playing the role of a hard-boiled mountain woman in a dramatic production under pretext that she was a radio veteran of three years' experience. As a matter of fact it was the first time she had ever been before a microphone. It was just two years ago that Betty

bluffed her way past the portals of radio broadcasting, and since then has acted and played in many important radio programs. Her work in the Radio Guild and True Story productions has won her particular attention. When NBC inaugurated its Crime Prevention series, Miss Council starred in the inaugural dramatic playlet. She has also played dramatic parts with Peggy Winthrop over NBC networks. Previous to her radio debut, she appeared in stage work as understudy to the feminine lead in "The Trial of Mary Dugan." Her last appearance on Broadway was in "Scarlet Pages," in which she was understudy to Elsie Ferguson. Betty's husky Georgia drawl is now heard every Friday evening, when she is mistress of ceremonies on the Pond's Dance Program heard over NBC-WEAF network Fridays from 9:30 to 10:00 p.m., EST. Horseback riding and swimming are her favorite sports, but she describes herself as "a rather lazy Southern girl." She was born in Americus, Georgia, 21 years ago; is five feet seven inches tall, has naturally wavy brown hair and large hazel eyes.

#### "I Knew Them When-"

Those were the Good Old Days! When Freddie Rich played a rickety piano in an East Side nickelodeon; when Ben Bernie demonstrated fiddles in a New York department store; when Irene Beasley taught school; when Jacques Renard played violin for Paylowa: when Tony Wons tended furnace: when Eddie Duchin was a pharmacist: when Noble Sissle was one-half of Sissle and Blake of "Shuffle Along:" when Kate Smith sang for the soldiers bound for "Over There;" when Morton Downey was fired from a job in an installment furniture store; when George Hall directed the orchestra for Fritzi Scheff at the old Palais Royale in New York: when Fred Berrens was noted in vaudeville for his female impersonation act; when Ben Alley worked as a road-paver in his native West Virginia; when the Mills Brothers entertained on the streets of Piqua, Ohio; when Bing Crosby clerked in a law office in Spokane, Wash. But they'll all take the present. Who wouldn't!

# Voices from the Sky

ESS than five years ago radio telephone communication between a plane in the air and a station on the ground was regarded as a remarkable achievement of radio engineering. Now it is accepted as one of the commonplace features of air transport on most well organized lines.

American Airways, for example, equip all of their planes with two-way radio. Pilots talk back and forth with the ground during flights, periodically reporting their position, altitude, the weather and visibility, quite as a matter of course and think nothing of it.

This telephone service is an adjunct to the radio beacon signal, which guides the pilot on his flight between larger airports. It serves as a double check—keeps the ground force informed at all times as to the exact location of ships in the air and keeps the pilot informed as to the weather ahead.

The apparatus as used on American Airways' planes weighs about 200 pounds, a considerable item in airplane construction, but has come to be regarded as an essential part of the ship. Modern transport planes have built-in radio equipment and antennae as an integral feature.

Radio fans with short-wave receiving sets are accustomed to the familiar call-and-answer signals of the sky. Between New York and Boston, for instance, six planes are operated in each direction daily. New England short-wave listeners can pick up their receivers at almost any hour of the day and hear at fixed intervals a conversation to the following general effect:

"Boston to 9633. Come in, please."
"9633 to Boston. 125 north 5. Scattered clouds 5000 feet. Visibility unlimited."

"Boston to 9633. Okay."

Coming out of the still ether, this business-like greeting between land and air has a weird sound. The listener finds it hard to believe that "9633," a mere speck in the sky, is speeding along overhead somewhere at 110 miles an hour.

The orthodox position report is given "by the numbers." For this purpose an aviation strip map is used. Strip maps cover territory twenty miles wide on a straight line between two airports. They are divided into ten-mile squares, each numbered. When the pilot reports "125 north 5," he means he is passing over point 125 east of New York, five miles north of course. The ground operator can then make allowance for wind direction and figure exactly where the plane will be each minute until the next report comes in.

When there are several planes in the air at once, regular time intervals are assigned to each, but every pilot is constantly listening through his ear phones and can get into communication with the ground or any other ship at a moment's notice.

Two fixed antenna systems are supported on and above the wings. One is used for the beacon receiver, so that service need never be interrupted. The other is used for short-wave communication with the ground. A 12-volt storage battery of large capacity supplies all the energy required for transmitter and receivers.

High voltage for the receiver and the transmitter is obtained from separate dynamotors operating from the battery. The receiver dynamotor runs continuously. The transmitter dynamotor is started only when about to transmit.



"Singin' Sam, The Barbasol Man," one-man minstrel show. (CBS on Mondays, Wednesdays and Fridays at 8:15 EST.)

The short-wave apparatus is as able to function with the plane grounded as when aloft. Both pilot and co-pilot have individual headphones and transmitters as an added feature of safety and convenience.

Radio telephone communication has become such a common part of transport work on American Airways coast-tocoast system that pilots wonder how they ever managed to get along without it.

# Some More Slogans

CFCT	The Mecca of Tourists.
CFCY	The Pioneer Radio Voice of Canada's
	Garden Province.
CFQC	The Hub City of the West.
	The Hub City of the West.
CFRB	Just Plug In, Then Tune In.
CHGS	Holman's Guarantees Satisfaction.
CHNS	The Key Station of the Maritimes.
CJCA	The Sunniest Spot in Sunny Alberta.
CHCD	Canada's Western Catanas Alberta.
OHOD	Canada's Western Gateway.
CKCK	The Queen City of the West.
CKCO	The Voice of Hamilton.
CKMO CKY	The Tourist's Mecca of the Pacific.
CKY	Manitoha's Own Station.
CMBS	Majestic Radio Station.
CMGF	Counda From Version 17-11
	Sounds From Yumuri Valley.
CMHC	If You Hear the Koo of the Cuckoo, You
	Are in Tuinucu.
CNRA	Voice of the Maritimes.
KBTM	"The Voice of Crowley's Ridge."
KFIU	A Voice From the Far North.
	A voice From the Far North.
KFJY	Fort Dodge, Iowa, Center of the State.
KFJZ	The Voice of Texas.
KFPW	"Fort Smith's Radio Station."
KFXY	Voice of the Grand Canyon at Flagstaff,
KGBX	The Foster Hall Station.
	The Poster Hall Station.
KGHF	The Voice of Pueblo.
KGIR	The Voice of Montana.
KOCW	The Friendly Station in a Friendly Town.
KOH	The Voice of Nevada.
KRE	Looking Through the Golden Gate.
KSTP	The Call of the Marth
	The Call of the North. The Reciprocal Station.
KTSL	The Reciprocal Station.
KTW	Hear Ye! Hear Ye! The Gospel. The Voice of the Ozarks.
KUOA	The Voice of the Ozarks.
KYW	The 24-Hour Station.
WAAT	The Voice of the Gate of the Garden
	State.
WABZ	The Delle V. A. V.
	The Radio Voice of Louisiana.
WALR	On the Main Street of America.
WBBM	World's Best Bradcast Medium.
WBBZ	Serving the Southern Half of Kansas and
	the Northern Half of Oklahama
WBIG	the Northern Half of Oklahoma. Where Business Is Good.
WBZ	The Decedenation Continue of M.
WDZ	The Broadcasting Station of New Eng-
	land.
WCBA	The Voice of the Lehigh Valley.
WCBD	Where God Rules Man Prospers.
WCBM	The Voice of Keith's.
WCRW	The Gold Coast Station.
WELK	The Voice of the Till
	The Voice of the Elks.
WHFC	The Voice of the West Towns. The Capital Times Station.
WIBA	The Capital Times Station.
WIBX	The Gateway to the Adirondacks.
WILM	The Gateway to the Adirondacks. The Friendly Voice of Wilmington.
WISN	The News at Milwaukee.
	The Principally Day Justin Cont.
WJBW	The Friendly Broadcasting Station.
WJSV	A Voice From the Heart of the Nation.
WKBB	The Voice of Joliet.
WKBH	Service to the Middle West.
WKBZ	The Voice of Western Michigan.
WKJC	
WAJU	Your Own Station.

Louisville's Own Station. WLAP Where Listeners Become Friends. WLBF The Voice of Southside Virginia. WLBG WLBL WLBX Wisconsin, Land of Beautiful Lakes. Radio Voice at Gateway of Long Island. WLEY The Lexington Air Station. Quaker City Siren. WLIT WMAZ Watch Mercer Attain Zenith. WMBD World's Most Beautiful Drive. WMBH Where Memories Bring Happiness. The West Point of Christian Service. WMBI Everything for Radio at Tampa. Where the White Way Begins. WMBR WMCA WMPC Where Many Preach Christ. The Voice of Triple Cities. WNBF The Gateway to Cape Cod. WNBH WNOX Smokey Mountain Station. Municipal Station of the City of New WNYC Vork WOQ The Voice of Unity. WPAW The City of Diversified Industries. WPEN First Wireless School in America. WPSC The Voice of the Nittany Lion. WRAW The Schuylkill Valley Echo. WRHM Welcome Rosedale Hospital, Minneapolis WRUF The Voice of Florida. The Gateway to Dixie. WSAI We Serve Allentown Nationally. WSAN WSBC World Storage Battery Station. WSM WSMB WSMK We Shield Millions. We Shield Millions.
America's Most Interesting City.
The Home of Aviation.
The Old Gold Studio
Watch Seneca Vocational School.
The Voice of Central New York. WSUI WSVS WSYR The Voice of Agriculture.
Telling Dixie About Everything. WTAD WTFI WWNC The Radio Voice of the Asheville Citizen. WWRL The Voice of Queens County. Sunshine Station Between the XER The Nations. XETA Radio Cultural. XETF La Voz de Vera Cruz. Land of the Aztecs.

# What the Listener Wants

ISTENER reaction is so quick in making itself known that the evils of broadcasting "are hurled into the very teeth of those who permit them to be committed."

Thus spoke John W. Elwood, NBC vice president, in a recent address in which he expounded what he calls "The Listener's Decalogue." It is Mr. Elwood's conviction that the evils of radio are so easily detected and so quickly reported as to be almost self-corrective. Sins of the broadcasters, he said, are visited not upon the third or fourth generations, but immediately upon those committing them.

Following are the ten points of the listener's credo Mr. Elwood expounds; how well the broadcasters, network and individual alike, would do to heed them to the letter.

1. I am the listener. I am the final

word in determination of the popularity of a radio program.

2. I speak not in self praise with too lengthy indulgence. I will listen to a reasonable amount of sales talk, but make it snappy.

3. Tell me not the same story again and yet again. I have no desire to memo-

rize your stuff.

4. Use discretion and taste as to the character and timing of your message. Crash not in upon my uplifted mood inspired by noble music with barkings about your product.

5. Make your program high class whatever type it may be. Rather would I hear a first-class harmonica player than a third rate symphony orchestra.

6. Speak not in the tongue of the liar, neither use superlatives until I sicken.

7. Emit not wisecracks on important occasions, neither be solemn nor soggy at lissome moments.

8. Sell not shaving cream in the afternoon nor broadcast household hints at night.

9. Introduce not guest speakers of unpleasing voice. If they speak not well, let someone else read their stuff.

10. Conform to the rules of good taste, courtesy, decency, and common sense. You enter my humble abode as an invited guest, but mistake not the warmth of my welcome for an invitation to become a permanent lodger. These be my whims and caprices. By them are you judged. Hearken to me and practice these precepts lest I give you the razzberry and turn off the darn thing, clap on my hat and go to the movies.

# Their Time on the Air

THE following information regarding time on the air has been secured from the stations concerned, from newspaper clippings, and from our readers. The times shown can be quickly converted into your own time by use of the following table:

Your Zone	EST	Vhere Time i CST	s Given as MST	PST
EST CST MST PST	Subt. 1 hr. Subt. 2 hrs.	Subt.1 hr.	Add 2 hrs. Add 1 hr. Subt. 1 hr.	Add 2 hrs. Add 1 hr.

State	City	Coll	Kcys.	Watts		State	City	Call	Kcys.	Watts
Arizona Thursday	Prescott midnight to 2 a	KPJM .m., MST.	1500	100	- 1	ppine Is'ds (Noon Mor	nday EST is 1 a	KZRM .m. Tuesda	y, Manila	50000 time.)
California Daily, 8:4	Hollywood 5 a.m2 a.m., 1	KNX PST.	1050	5000		6-11 p.m	J:30-11:30 a.m.	; 12:15-1:15	p.m.; 3-	5 p.m.;
	Long Beach .m3 a.m., PST.	KFOX	1250	1000		Monday, 6 Balance we	i:30-7:30 a.m.; eek, same as M	12:15-1:15 onday, but	p.m.; 5-6 on till 11	p.m. p.m.
	Los Angeles 3 a.m., PST.	KTM	780	500			CANA ia Vancouver		1210	500
	Oakland	KROW -8 p.m.; 9-	930 11 p.m.,	500 PST.	1	Sunday, 10	0:30 a.m9 p.m m11:30 p.m. (	ı., PST.		
Mon., We Tues., Thu	a.m2:30 p.m.; 6 d., Fri., 8-9 a.m.; ur., Sat., 8-9 a.m.	1-6 p.m.; 7 ; 1-6 p.m.;	7:30-8:30 7:30:11	p.m. p.m.	Man	itoba Sunday, 11	a.m12 noon;	CKY 4-6 p.m.; 7-	780 8:30 p.m.,	5000 CST.
Mon., Wee	San Francisco d., Fri., 7-8 a.m.; .m., PST. lr., Sat., 7-8 a.m.;	9 a.m1 p.:	930 m.; 6-7:	500 30 p.m.;	(Fi	Daily, 9:30 riday on ti	a.m2 p.m.; 3 ll 11 p.m.)			
Tues., Thu 11-1 a.n	ir., Sat., 7-8 a.m.;	9 a.m1 p.	m.; 6-7:	30 p.m.;	\$	Sun., Wed.	, Thur., 9 p.m. 9:30-10 p.m.	CNRW -9:30 p.m.,	780 CST	5000
		KGO Γ.	<b>7</b> 9 <b>0</b>	7500	Onta	rio	Toronto pt Sunday, fro	CKGW	690 EST	5000
	a.m12 mid., PS' .m12:30 a.m.	KJBS	1070	100			Wingham 0:30 a.m12:10	10BP	1200	25 : 6:45-
	noon-7 p.m., PST.	KPO	680	5000	7	8:10 p.m Fuesday, 1	., EST. 2-1 p.m.: 7-9 p.:	m.		
Sunday, 8 Daily, 7 p.	a.m11 p.m., PS' .m12 mid.		• • • •	4000	Ś	Phursday, Special DY	7-9 p.m. ( (1190 kc.) 1	-2:30 a.m.	on morni	ings of
Sunday, 8	a.m11 p.m., PS'	КТАВ Г.	560	1000	Sooke	tobowop	, 10th and 20 .	CIDW:	1 repruar	y.
Daily, 7 a.	m1 a.m. 30 a.m11 p.m., l	KYA	1230	1000	Ĭ	Sunday, 10 Daily, 4:30 Monday	:30 a.m12 no -7:30 p.m. Thursday, Frid Moose Jaw	on; 4:30-7:8	30 p.m., (	JST.
Daily, 7 a.	m12 mid.		1200	250	,	wonday, lunday 19	Moose Jaw noon-3:30 p.m.	CJRM MST	665	500
Daily till 1	Twin Falls l a.m., MST.	KTFI	1320	250	Ĩ	Daily, 8:30 on till 1 a	-11 a.m.; 12-2:8	30 p.m.; 7:	0-12 mid.	. (Sat.,
Sunday, 8 Daily 6:30	Chicago a.m2 a.m., CST ) a.m9 p.m.; 11 j	WBBM	770	25000		Œ	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			
		WPPC	560	500		' The	Month		anges	;
Monday, 7 Tuesday, 7	p.mmid., CST. '-7:30 p.m. ':30-8 p.m.				580	CKCL	Frequent Toronto, Ont., Manila, P. I.,	from 960.		
	Cicero 8 p.m., CST. p.m.	WEHS	1420	100	620 630 680	KZRM XETF	Veracruz, Mex	ico, from 68	<b>3</b> 5.	
Indiana	Muncie	WLBC	1310	50	750 780	XFG XEQ XEZ	Mexico, Mexico Juarez, Mexico Mexico, Mexico	o, from 1015	j.	
Daily, 7 a.	a.m4:30 p.m., C m11 p.m.				810 870	WPCH XFF	New York Cit Chihuahua, M	y, from 570		
DX Tuesd Iowa	ay nights till 1:30 Ames	a.m. WOI	640	5000	970 1000	CMBT XEA	Havana, Cuba Guadalajara, I	, from 790. Mexico, fron	1200.	
Daily, 7 a.	m4 p.m., CST. Des Moines	WHO	1000	5000		XEC XEE	Toluca, Mexic Oaxaca, Mexic	o, from 133	3.	
Sunday, 9 Daily, 7 a.	a.m11 p.m., CS7 m12 mid.	r. 				XEJ	Juarez, Mexico	xico, from 857.	80.	
Daily, 7 a	Ottumwa m1 p.m.; 5-7 p.r Milford	WIAS a., CST.	1420	100		XEL XEU	Saltillo, Mexic Veracruz, Mex	ico, from 80	0.	
DX every	other Thursday, 3	KFBI a.m., CST	1050	5000	1130	XEV XEY XEH	Puchla, Mexico Merida, Mexico	o, from 547		
	cember 31, Janua Paducah 30 a.m.; 11-2 p.m			100 T	1150 1300	CJOR XEM	Monterrey, Me Vancouver, B. Tampico, Mex	C. from 12	10.	
New Jersey	Zarephath Sunday till 2 a.m.	WAWZ	1350	250	635	СКТВ	New Stat	tions	0.	
Ohio	Columbus m11:30 p.m., ES Spartanburg	WSEN	1210	100	1000	WGEO XEFI	St. Catherines, York, Pa. Chihuahua, Me			
Saturday, 8	3:30-9 p.m., EST.		1420	100		XEFS XETC	Queretaro. Me: Jalapa, Mexico	xico.		
Tennessee Sunday, 6 :	Memphis a.m11 p.m., CST	WMC L	780	500	1020	XETG XEFD XEFC	Torreon, Mexic	.O.		
Daily, 6:30		WNBR	1430	500	1050 1230	XETQ	Tijuana, Mexic Merida, Mexic Mexico, Mexic	0. 0.		
Daily, 7 a.r	ı.m10 р.m., СЅТ m11 р.m.	WREC	600	500	1270 1360	XEFB XEG XETB	Monterrey, Me Mexico, Mexico	exico. O.		
Sunday, 6 a. Daily, 6 a.r	a.m11 p.m., CST m12 mid.		000	500	1380 1500	XETE	Torreon, Mexic Coyoacan, Mex	cico.		
DX Sunda	y mornings near	KGFI	1500 f each	100 month,	620 850	KZRM WWL	Manila, P. I., 5 New Orleans, I	600 to 50,00	0. 10000	
Starting : Washington	1 a.m., CST. Tacoma	KVI	760	1000	890 1120	CMX KFSG	Havana, Cuba, Los Angeles, C	500 to 100	D.	
Wisconsin	a.m4:30 p.m.; 1 Janesville	0-12 mid., WCLO	PST. 1200	100	1400	XEP	Laredo, Mexico	. 2500 to 20	00.	
Daily, 6:30	а.п., СоТ.					(C	ontinued on	paye 30	<b>'</b> )	

# RIDING The ETHER WAVES

# Seeking the Distant Stations

HE radio season is now on infull swing and DXers are daily adding to their and Divers are using assumed logs. Several new stations in Mexico this month provide interesting targets. A number of special DX programs are scheduled in this issue for which our long-distance marksmen will want to aim. Let's go.

Rudolph Kure. 301 Warner St., Cincinnati, Ohio, submits the following information regarding experimental station W9XX: "Here is some more news from the owner of W9XX that will be of interest to members of our RADEX

Radio Club.

"Watch out for tests over Radio Experimental Station W9XX, beginning December 1, transmitting from Gidden's Castle, the highest point in Louisiana, on a frequency of 1604 kilocycles, using from two (2) up to a hundred (100) watts of power; will run from 4 to 5 a.m., Central Standard Time; this station issues a beautiful DX card for cost of 10 cents to cover postage and printing, and a beautiful magazine on low waves for 25 cents for a 24-page copy; all mail for W9XX should be addressed to P. O. Box number 1543, Shreveport, Louisiana.

"This station sends out a swell signal on five (5) watts of power or even on only two (2) watts. A fine chance for faithful subscribers of your splendid magazine, who are able to pull in shortwave stations with their regular broadcast band radio receivers, to secure a most desirable verification on fly power. The station comes in three notches above the 1500 kilocycle frequency. It requires fairly sharp tuning to bring it in."

### Some Foreign Targets

George W. Burns, 2466 Wahl Terrace, Cincinnati, Ohio, contributes the following time on the air for some foreign stations:

CPX, La Paz, Bolivia, South America. Frequency 1325 kcs. (226 meters). Hours are, daily except Sunday: 10:3011:10 a.m.; 5:00-6:00 and 8:00-10:00 p.m., eastern standard time. Power, 1 kw.

LS2, Buenos Aires, Argentina. Frequency 1190 kcs., power 15 kw. Broadcasts daily 10:00 a.m. to 2:00 p.m.; 2:30-4:30 and 5:00-11:30 p.m., Buenos Aires time (which is one or two hours later than eastern time).

OKR, Bratislava, Czecho-Slovakia. Frequency 1076 kcs., power 14 kw. Transmits daily except Sunday, 4:30 a.m. to 4:00 p.m., eastern standard time.

### Special DX From XET

"XET puts on a special DX for the U. S. every Tuesday, beginning at midmight CST," is the tip from P. J. Hauss, 221 S. Butler Ave., Indianapolis, Ind. "XEB can be heard from as early as 11:00 p.m. until they sign off at 1:00 or 1:15 a.m., CST. KABC puts on a special program every Sunday night from 11:30 until 12:30 a.m., CST. XEN broadcasts local and foreign news and comment 11:00 to 12:00 p.m., CST. KGBU will put on a DX program every Thursday morning from 3:00 to 5:00 a.m., CST, during January, February and March.' Mr. Hauss now has 570 on his list and would like to correspond with other DXers, particularly those in other countries.

### More Tips

The Prairie State DX Club sends the following info regarding KWEA, Shreveport: 1210 kcs., 100 watts. Schedule: Sunday, 4:30 to 6:00 p.m. Daily, 7:00 a.m. to 2:00 p.m. and 5:00 to 10:00 p.m. DX midnight to 1:00 a.m. and 2:00 to 4:00 a.m. All CST. KWEA issues a DX souvenir card for ten cents.

KFJB, Marshalltown, Iowa, advises Leslie T. Bradbury, 130 North Harvard Ave., Ventnor City, N. J.: "Later, we plan to go on once each week from 11:00 p.m. until 2:00 a.m., CST, with what will be called the 'Wash Day Lunch' program. This will be Monday nights and Tuesday mornings."

"Here's a tip for DXers," proffers James Pinkerton, 47 Jasper St., Paterson, N. J. "WSIX, Springfield, Tenn., will

run a DX anniversary program on January 7th, which will, no doubt, run a good part of the night and next morning."

DX tips from Harry Sugar, 1808 Oak Hill Ave., Youngstown, Ohio: CHGS, Summerside, P. E. I., special DX broadcast every first Sunday of the month, starting at 1:00 o'clock, EST. CMC, Havana, every Monday, Wednesday, Thursday, Friday and Sunday, 7:00 to 11:00, EST.

Louis Renaldo, 483 Wilmot Ave., Burlington, Wis., gives the following list of stations which are on the air every morning after 5:00 a.m., CST: WSAZ, XER, KMMJ, KFXF, KGBZ, KFBI, WDBO and WKBC.

"While DXing one Sunday morning, I heard WSOC, Gastonia, N. C., say that they broadcast regular DX programs every Sunday morning about 2:00, EST," says John M. Lennon, 122 Linden St., Camden, N. J.

"WILL, of Urbana, Ill., tells me that they put on a DX program starting at midnight the first Saturday of each month," writes Ivan D. Ide, Box 312, Genoa, Ill.

"Tell your readers to try for 10-BQ, Brantford, Ont., on 1200 kes. with 5 watts, some Sunday from 2:00 to 4:30 p.m.," suggests Douglas Wood, Nixon, Ont.

KFXJ, Grand Junction, Colo., conducts DX tests on Thursdays, 1:00 to 4:00 a.m., MST, or 3:00 to 6:00 a.m., says Stuart B. Leland, New Canaan, Conn.

Verifying Russians

M. B. Murphy, Glenn Ranch, Calif., sends us correspondence he has had regarding his reception of Russian stations. He says: "To obtain a reply from Russia every letter must be addressed, not to Russia, but to the Union of Soviet States Republic. A friend who just returned from Russia says any correspondence addressed to 'Russia' is burned forthwith. To insure a reply enclose an International Reply Coupon, costing nine cents at any post office. My letter to Moscow, dated February 20th, was not answered until August 17th. So, DXers, be patient." The Soviet authorities sent Mr. Murphy a typewritten monthly program which includes such subjects

# FREE Your Choice of NINE Meters!

To do your radio work properly you need meters. Here is your opportunity to get them at no extra cost. See the list of nine meters below. Heretofore we have offered the choice of any one of these meters free with an 8-weeks subscription for RADIO WORLD, at \$1, the regular price for such subscription. Now we extend this offer. For the first time you are permitted to obtain any one or more or all of these meters free, by sending in \$1 for 8 weeks' subscription, entitling you to one meter; \$2 for 16 weeks, entitling you to two meters; \$3 for 26 weeks, \$6 for 52 weeks, entitling you to six meters. Return coupon with remittance, and check off desired meters in squares opposite.

RADIO WORLD is the first and only national Radio Weekly. In tenth year. The news of the progress of the entertainment, science and business of radio when it is news. 15c a copy; newsdealers everywhere.

RADIO WORLD 145 West 45th Street   New York N. Y. (Just East of Broadway)
Enclosed please find \$forweeks subscription for RADIO WORLD and please send as free premium the meters checked off below.
☐ I am a subscriber. Extend my subscription. (Check off if true.)
NAME
ADDRESS
CITYSTATE

as "Present Day Russian Menchevism," "Natural Resourses of the U.S.S.R." "The Essence of Socialistic Methods." "The Mechanization of the Donbass." How would you like this, you objectors to advertising talks?

### Eastern Reception in the West

In response to the inquiry of Herbert V. Haussler regarding reception conditions of Eastern stations on the Pacific Coast, G. W. Lowry, Jr., R. 1, Box 175, Everett, Wash., gives his experience: "I have a five-tube Radiodyne battery set. I get the Atlantic Coast frequently; following are some of my catches: WSM, WEAF, WOR, WSB, WJZ, WHAS, KDKA, WBAL, WTIC, WBT, WPG, WAPI and WHAM. I receive the Japanese stations better than the East Coast, though, when they break through. Out here on the Coast about every wave has a coast station on it to hamper reception. All Columbia River stations fade badly on my set." Mr. Lowry wants to know what station he heard just below KOA on about 840, signing off at 10:00 p.m., when it was 4:00 a.m., PST. The announcer was speaking English, but static cut out the call.

The Prairie State DX Club sends out this notice to its members: "Mail addressed to XER, Villa Acuna, Coahuila, Mexico, will be returned marked "Fraudulent." but mail addressed to the same station at Del Rio, Texas, goes through." The why of this is a post office mystery. We have just had a letter addressed to XED. Revnosa, Tams, Mexico, returned to us marked "Fraudulent." We wonder of XED is also on the blacklist or if this station was confused with XER.

The Club also advises that WDZ. Tuscola, Ill., will have a DX program from 1:00 to 2:00 a.m. December 20th and WMIL from midnight to 2:00 a.m.

December 28th.

Frank A. Johnson, 59 West 66th St., Chicago, Ill., quotes the following from a verification received from XEQ: "XEQ is the International Radio Service, 'The Voice of Mexico,' Suite 1202, Mills Bldg., El Paso, Texas. Eagle Radio Broadcasting Companies, Inc., Exclusive American Representative. The Eagle Radio Broadcasting Co. has four stations: XETG, Torreon, Mexico; KGFI, Corpus Christi, Texas; XFF, Chihuahua, Mexico, and XEQ, Ciudad Juarez, Mexico." Mr. Johnson states that he has picked up eight new ones the past month, bringing his total well over the 1300 mark. "Many of my catches are no longer on the air," explains Mr. Johnson. "I have seen stations come and go, for I have been using the headphones since 1919-a long time to be listening in."

# INSURE YOUR RADIO ENJOYMENT

SEND THIS BLANK TODAY

The Radex Press, 5005 Euclid Avenue. Cleveland, Ohio for which send me postpaid my choice of your offers Enclosed find \$\_ as checked below: 25c One radio map of North America □ One copy of the next RADEX 25c ☐ Trial subscription, next five issues of RADEX \_\_\_\_\_\_\$1.00 One year's subscription to RADEX, 10 issues, and Radio Map free 1.75 ☐ Two subscriptions to RADEX with one leatherette cover and Radio Map, both free\_\_ 3.50 One two-year subscription with leatherette cover and Radio map, both free 3.50 ☐ Leatherette Cover \_\_\_\_\_ Write Name Plainly Street and Number City and State\_\_\_\_\_ 55

### A Courteous Station

Edwin S. Thompson, 2025 N. 15th St., Philadelphia, Pa., has a good word for KFWI who wrote him a very cordial personal letter which was received just 13 days after he wrote them. Incidentally KFWI mentioned their new 1000-watt transmitter. Have they increased their power? Mr. Thompson, although located in a congested residence district, with a full quota of doctors and dentists with electrical apparatus trolley cars and other disturbers of the peace, has brought in 344 stations on his Majestic 92 since October 24th, 1929. From his summer home on the Atlantic at Ocean City, N. J., he received KFI at 6:15 PST, still daylight in the West.

"Just got my RADEX map of North America," says Orrin L. Case, 403 Clairmont St., Port Huron, Mich., "and it sure is a dandy. I feel certain if all DX fans only knew what a big help this map would be to them, they sure would get one. I have enjoyed radio more since I got my map than ever before." Mr. Case would like to hear from some one who can get HHK.

"You might tell the fans that the Newark New Radio Club is on the air every Saturday, 5:00 to 5:30 p.m., EST, over WAAT, 940 kcs., with a very fine musical program and, of course, a lot of DX tips," says the Executive Secretary of that Club, Roland Trenchard.

#### **CMCW Wants Receptions**

"I get a foreign station around 1035 kcs. that sometimes plays American dance music, but signs off without giving their call letters," reports John McGill, Jr., Olive Hill, Ky. (This is probably XEB, Mexico City, on 1030.) "On my old 8-tube Crosley, I have logged over 200 stations in the U. S., including many on the West Coast. I have eight Canadians, four Mexicans and five Cubans. CMCW, Havana, announced they would answer all letters from the U. S. A." John is eighteen and would like to hear from other young DXers. He is anxious to receive KOB, HHK and VAS.

"Give CMCY a hand," exclaims Charles Rowland, 23 Myrtle Drive, Pontiac, Mich. "They verify promptly and give lots of dope on their future programs; most Cubans don't." In five weeks, 258 stations, is Mr. Rowland's record. He wants to know where WTAY is located. He picked them up about 1480. He thinks he heard T14-NRH, but they announced only as NRH and he wonders if they drop the T-14 in announcing. Mr. Rowland listened to a Spanish-speaking station on 790 recently for more than an hour and not a word of English. They came in at 1:12 a.m., EST, on November 8th. Can anyone help him?

#### Who Were These?

"On the morning of November 29th, at 4:05, EST, I heard a distant station on about 755 kcs.," reports Edward H. Schulz, 188 Carl St., Buffalo, N. Y. "It came in very weak. Queer music is the first thing I heard, then an announcer spoke in English and later in a foreign language, probably Spanish." This was probably XEQ, Juarez, Chih., now on 750. Mr. Schulz has received about sixty one hundred-watters for a total of 303. He picked up a ten-watter in Carbondale, Pa.

"On Monday night, November 9th, at 11:30 p.m. to 11:45 p.m., I tuned in a station at 920 kcys.," begins Chandler B. Stewart, 59 Parker Ave., Collingdale, Pa. "Someone crowed like a rooster. At 11:45 someone talked from this station to his friends in California, naming about five of them. He said he was in Mexico and having a fine time. Announcement was in Spanish. What station did I have?"

John J. Barlow, 2803 Woolsey St., Berkeley, Calif., would like to know how far away the following stations are being received: KRE, Berkeley; KFRC, San Francisco, KYA, San Francisco, and KXO, El Centro. He would like to hear from other DXers and wants time on the air for KGJF, KVOO, KFDM, KFQD, KIDO, KGIR, KGRS and WDAG.

Lloyd W. Grant, 456 Fourth St., West, Birmingham, Ala., needs the following stations to complete his roster of the states and asks for information as to the best time to tune for them: WDEL, WCSH, KGHL, KFBB, WFEA, WEAN, WJAR and KIDO.

"On Saturday morning, November 7th, at 3:30 a.m., EST, I heard a station

which I understood to be KTM in Los Angeles," writes D. Wharton, 22 Elmwood Ave., Rye, N. Y. "They came in on 384 meters. Pretty good for a 500-watter."

Fred Wakerell, 380 Slater St., Ottawa, Canada, wants to know when WCBD is on the air. Mr. Wakerell logged 69 stations on 49 frequencies in one evening on his Zenith recently.

Donald F. Logan, 17 Park Road, Truro, N. S., Canada, would like to hear from DXers who get Nova Scotia, New Brunswick and Prince Edward Island.

"How about asking some of the DX fans to get us a little 'dope' on Alaska?" Richard D. Caddell, 605 Ridge Ave., N. S., Pittsburgh, Pa., wants to know.

#### **How About WCOC?**

In spite of the fact that the station specifically asked for reports of reception and stated they would return verifications promptly with an Ekko stamp free of charge, Chas. E. Summers, 28 Gallatin Ave., Buffalo, N. Y., complains that three different reports of reception of WCOC, Meridian, Miss., remain unanswered as do five follow-up letters. He thinks WCOC must want reports only from Meridian and vicinity.

"WODA, Paterson, N. J., will not verify, so save postage and do not write to them," the Transcontinental DX Club advises its members.

"I recently won the prize from KFXM, San Bernardino, Calif., for long distance reception," reports S. R. Lewis, R. 3, Box 688A, Toledo, Ohio. "My total log is now 750, of which I have 375 verified. More than 200 of these are of 100 watts or less, all verified. I recently caught WHBC, Canton, Ohio, on 1200, using but ten watts. They are on the air at 6:30, EST, most every morning."

"Last Saturday night, instead of tuning at random as usual, I made up a list of fifteen stations I had never had and by patient and persistent tuning, I brought in ten of them. Ain't dat sumpin'?" inquires R. E. Moran, 31 Rochester St., Ottawa, Ont. "I am going to use this plan every DX night and see if I can raise my average."

"With my Atwater Kent Model 55, I get very clearly at night the short-wave police stations, WPDR, KGKM, WRDS, WPDB, WPDC, KGPC, WKDU and the amateur W3XK at Silver Springs, Md.," reports F. S. Keeble, 323 Ozark St., Hot Springs, Ark. "I receive as far west as KFI, Los Angeles, north to WCCO, Minneapolis, east to WGY, Schenectady."

"The Japanese stations are coming in fine here," states Clyde W. Ham, 100 S. Lafayette St., Shelby, N. C. "In the past ten days I have had three new ones, JOCK, JOFK and JOBK. I have verifications from JOIK and JOGK already. Have also had 4QG, 2BL and 3LO. I listened to 4QG for over thirty minutes."

"I listened to two Australian stations without missing a morning from October 17th to October 26th," records Albert Palmer, R. D. 2, Sta. A., East Liverpool, Ohio. "On November 5th from 4:00 to 6:00 a.m., EST, I tuned in 2BL, 4QG, 3LO, 2FC, JOAK, JOHK, JOCK and five West-Coasters." Rather a large morning, we'd call it.

Verifying 502 out of 610 is the claim of Joseph Leo Hueter, 1802 W. Columbia Ave., Philadelphia. He has a long string of JO's and Anzacs, Hawaii, Alaska, Germany, Norway. He will answer letters from DXers anywhere.

Henry Kenderdine, Perkasie, Pa., has brought in 220 stations on his 11-tube Philco since May and "still going strong." He would like to correspond with other DX fans in Eastern Pennsylvania.

"The first night I used my headphones I brought in JOHK, JOIK, in Japan and 3LO and 4QG in Australia," says F. L. Askew, (no address given).

"On the first Sunday in October, I tuned in the seven big Japanese stations with exceptional volume," writes Everett Clark, Box 127, Marietta, Okla. "I have logged 254 stations in the broadcast band, including every channel except 540. We listened to all of the high-powered broadcasters as far east as WLW and north to WJR all through the day, when there is no static. Not long ago I tried out a short-wave converter. I got all the U. S. short-wave program stations,

plenty of hams, caught the airplane calls from a passing mail plane whose motor I could hear both direct and through the radio. I also heard on the twenty-meter band a fellow from the NBC in San Francisco talking to another in Japan, arranging an international broadcast. His signal was as loud at 3:00 p.m. as WFAA's 50 kw. only 100 miles away." Mr. Clark has a nine-tube Model 61 Majestic Super.

### A Polish Chain Program

"The first radio hookup in the Polish language ever undertaken in the U.S. was inaugurated Sunday, December 6th," writes Valentine Sadowski, 188 Miller Ave., Buffalo, N. Y. "It featured the Very Rev. Justin Figas, Superior Provincial of the Franciscans, whose headquarters are at Corpus Christi Church, Buffalo. The program originates in the studios of WEBR and goes to Chicago; WJBK. Detroit: WJAY, Cleveland; KQV, Pittsburgh, and WKBI, Scranton, known as the Great Lakes Chain. All of these cities contain large Polish populations. Father Justin is an outstanding Polish speaker and has been broadcasting from WEBR for two years. The new program will be on the air each Sunday from 6:00 to 7:00 p.m."

The International Radio Club of Miami, Fla., J. B. Rice, President, has just concluded its second annual international radio party. More than 200 broadcasting stations in North America cooperated in putting Miami on the air in song and story. The program continued for three days, originating in the studios of station WIOD. The CBS and NBC gave their assistance to make this huge party a success. The Miami Herald published a large reproduction of the RADEX map of North America with a ring around each of the cities in which the program was reproduced.

"Reds Seize Radio Station; Broadcast Attack on U. S.," is the headline of a newspaper dispatch from Mexico City dated November 8th. "A band of communists forced their way at pistol point into radio station XEW here last night, tied up the operator and took complete control of the plant to broadcast an

attack on the government of President Ortiz Rubio and "Yankee Imperialism." The intruders had disappeared when police arrived." Who logged that one?

Station CKAC, La Presse of Montreal, is now installing Canada's first television station, using Western Television Corp. equipment.

"I have picked up stations FR7, LB2 and EG7 broadcasting between 65 and 67 kcys. Can you tell me who they are?" is the inquiry of K. L. Corless, 420 Forest Ave., Royal Oak, Mich.

"I have caught 182 stations in the past ten weeks," reports F. H. Dodge, P. O. Box 388, Colorado Springs, Colo. "DX reception is considered very rotten here. For about six months in the year there is always an electrical storm within a radius of 150 miles. In addition to this I am in a location which is bothered with one oil heater, an airplane buzz from a hospital and some poor ground connections on the power line transformers. Perhaps someone can tell me of an interference eliminator which will mitigate those three items of trouble." Mr. Dodge submits a list which pretty well covers North America. One odd note from his log is that WGN comes in with a very weak signal, while WMAQ, with onefifth the power, evidently is well received. "That station which Mr. Wightman wants identified was XEB, Mexico City," Mr. Dodge adds. "I have often heard the same cuckoo and a few nights ago I caught the announcement."

XEV, on 785, gives a DX program every Sunday morning from 1:30 to 2:30, EST, reports Samuel F. Ownes, 233 Roberts Ave., Glenside, Pa.

### **Push Button Troubles**

"Why does my G. E. radio, Model H-32, cut out at intervals which seems to be whenever an electric switch is turned on or off in the house?" inquires Carroll F. Bright, Denton, Md. This is a phenomenon we are unable to explain. Sometimes when a light is switched on or off, a radio set will instantly burst forth with greater volume or it may be decreased. Of course, the aerial picks up the noise of the electrical contact, but there seems to be no reason why it

should have any other effect on the set. "When the set was first purchased," Mr. Bright continues, "the -47 tubes would rattle each time there was a deep note, but I exchanged them for new ones and I have not been troubled since."

"I noticed Mr. Looby's complaining about WCAU and WTEL in the December issue," says Earl C. Pinkerton, 4182 Paul St., Philadelphia, Pa. "I had the same trouble with WCAU until I eliminated my outside aerial entirely, using only the ground wire attached to the aerial post. This gave me great improvement of reception and selectivity on all stations—better, in fact, than with an outside aerial. However, WCAU still covers from 1140 to 1210 kcs. on my set."

"The Mexican which comes in about 705 of which two of your readers make inquiry, is XEM in Tampico," says R. N. Putnam, 920 12th Ave., No. Fargo, N. Dak. The new official list from Mexico gives the frequency of XEM as 1300, but XEN, at Mexico City, is still listed at 711. Mr. Putnam would like to hear from anyone who has used the Stewart-Warner S-W converter or any other good converter which he can use with his Philco 9-tube Superheterodyne.

### Here's a New One

Try bringing in the new CKTB, St. Catherines, Ont., on 635 from 7:00 to 7:30 p.m., EST.

"I have brought in 235 stations on my Majestic 8-tube set with 25-foot aerial," advises Howard Schlobohm, 2209 Himrod St., Brooklyn, N. Y. "As I am only fourteen I am not permitted to stay up very often. My best catch was WSPA, Spartansburg, S. C., on 100 watts. Howard sends us a list of stations with their time on the air.

"I have owned an RCA No. 80 for a year and have logged 507 stations with more than 250 verified," is the report that comes from Jas. B. Wooten, 760 Selma St., Mobile, Ala. "Have just completed installing -235s in my set. You can bet it is good, too. Tone is improved about 60%. Selectivity and sensitivity showed improvement. I am now able to get 700, the Spanish-speaking station, at 705 and then 710, not five minutes,

but for thirty minutes. Anyone wishing to put 235s in his set should get the drawing from the manufacturers and that will explain everything. This spring I will install two 250s in place of the 245s I will have a radio then!"

Del Hoisington, 10 Pleasant St., Derry, N. H., would like to hear from someone who owns a Bosch 48C. He also wants a list of coming DX programs. We know of no better list that the one we are publishing from month to month. Usually the special DX programs do not reach us in time for publication in a monthly magazine. Most of them are set but a short time ahead. All of the DX clubs give notice of special DX programs and those which are backed by newspapers have them published in their DX page.

"Here is an experiment I tried som? time ago and I hope you will print it, writes T. E. DeLong, 400 West Franklin St., Liberty, Mo. "I conceived the idea of erecting two aerials and cutting in a variometer. I ran one aerial through the outer coil and the other one through the inner coil and from there to the aerial post of the set. I then tried grounding the third tap to the regular ground and here are some of the results: In daylight between 12:00 o'clock and 2:00, I picked up Louisville, Ky., Cincinnati, Denverall with speaker volume. That night I donned the headphones and tried DXing. My best catch was KPCB, a 100-watt station in Seattle, just 1475 miles away. I have studied RADEX so much that a prominent radio dealer here gives me a fine part-time job, accompanying his salesmen and twirling the dials for them. They just mention some town and thanks to your simple system of tuning and a good memory, I can usually tune them right in."

Two DX tips come from T. J. Johnson, Bowlegs, Okla. KGKY, Scottsbluff, Nebr., on 1500, broadcast a DX program every Friday night from 11:00 to 2:00 a.m., MST. WAWZ, Zarephath, N. J., on 135, has a test program every Tuesday morning, 4:00 to 5:00, CST. Mr. Johnson's log has now reached an even 400, with 296 verified. He has logged 110 of the 129 stations within 500 miles.

# Tuning American Stations from Europe

OME six months ago, I left the United States to visit foreign countries throughout the world and to test radio reception in Europe, Asia and South and Central America. Now I am writing you some facts concerning radio reception at various points throughout the world.

After leaving San Francisco, the first tests were made in Costa Rica, where reception was very poor and only Mexican, South American and U.S. stations were heard. I next tried reception in Panama but here also we found the results very unsatisfactory. After leaving the Canal Zone, however, reception was excellent on our ship all the way across the Atlantic until we reached Africa. In the vicinity of Capetown, reception of European and African stations was very good, though no American station was heard. In Morocco. Spain and France, reception was much better. In France, in fact, it was one hundred percent better than any other place so far found.

#### California from Poland

Here in Europe I have visited stations and tried reception in France, Germany, Poland, Hungary, Austria, Czecho-Slovakia and Russia, and found reception favorable, especially at the present time. (I am writing this from Warsaw, Poland.) We not only tuned in every station in Europe, Asia and Africa, but many stations in South America, Mexico, Canada and the United States. We were able to tune in the following American stations frequently: KNX, KFI, KPO, KGO, KROW, KGW, KSL, WENR, KWKH, WFLA, KDKA, WGY, WEAF, WTIC and WCSH.

The tests I made throughout Europe were with a Phillips receiver and I am sure greater success could have been obtained with American sets such as Philco, Kellogg, Majestic or Norden-Hauck. Here again I have found that with proper grounding systems, reception was very greatly improved. Hundreds of people that I have met through-

# Ollie Ross is on a World-Wide Tour

out Europe were surprised to note the improvement in reception due to a perfect ground.

#### Invitation to Visit Prince

I am happy to say that I was very well received by officials of radio stations that I have had the good fortune to visit in Europe and other parts of the world. A short time ago I received an invitation to visit Prince Dhai Manohai Lal, at Lahore, India, where we were to spend several months at Kashimer Hills, which is claimed to be the Paradise on earth. If I am to visit all the cities and all the people from whom I have had invitations, it will indeed require at least eighteen months more of traveling. It is very cold here and snow is falling every day and I am not sure how many other places I will be able to visit.

You can't imagine how happy I would be to find a copy of RADEX here in Europe so that I could know what is happening in Radio at home in the United States. While visiting in Europe I have had the pleasure of reading many letters from DX fans in America. In many radio stations, officials have asked me to say a few words to DX fans at home. Let me say here that DXers should be more careful to state the exact time, numbers heard and the exact words that are said or mentioned by foreign announcers. In many letters no mention is made of items heard nor time nor any facts concerning the particular broadcast. It is absolutely necessary that all the above items be given or otherwise a verification will not be made.

Please convey my greetings to the readers of RADEX.

Next month, Susie Sexton will have an interesting story on the actors behind the scenes in "The Rise of the Goldbergs."

# Buying a New Set

(Continued from page 3)

he will agree to rigid trial tests, and money-back guarantees. No one should buy a set until he has tested it in his own home. When a dealer hedges about allowing this test, he should immediately be branded as unreliable. Some dealers agree to the sending of two or three styles at the same time for comparison tests, so the most suitable can be chosen. The small profits in midget sets, however, usually preclude any such enterprising efforts to complete the sale.

The set to be selected should have a guarantee, especially for time, and it must be cheerfully replaced within a reasonable period if it fails to please. In disputed cases the full purchase price should be refunded without delay. Most reliable dealers, of which there are many in every community, adhere to these sound principles of good business. Then, too, there is another side to the story; the unreasonable customer whom no one can please—for him we hold no brief.

Some people expect to get wonderful results from midgets with only four tubes, and complain because a neighbor obtains fine tone and distance from an 11-tube superheterodyne. Certainly there are Fords and Lincolns in radio, just as in automobiles, and one should expect results in corresponding measure. But, when one buys a radio set after careful and comparative selection during actual tests in the home, has a complement of reputable and tested tubes, perfect grounds and aerials, a reasonable freedom from local and man-made static. and good home acoustics, he can blame no one but himself if there is dissatisfaction.

Sooner or later the set owner will be confronted with the need for a service-man. Radio sets get sick; they need doctors, or must visit a hospital. Good radio men are everywhere available, and most of the larger radio shops now have complete servicing departments. This branch of radio is as important as the automobile garage business. An honest serviceman will not tinker with the parts of a receiver that function per-

fectly, simply to make the itemized list of work done a little more imposing and costly. Instead, he will make a careful test and repair or replace only those parts that cause the trouble. There are some radio men, garage mechanics, dentists, doctors and barbers who insist upon delving into this or that—and the average person never returns to them again. Such practices are not good business, and the wise radio man will not indulge in unethical tricks.

Honest repairmen cannot work only for glory. A complete diagnosis of a modern radio receiver takes a long time. unless the trouble and remedy are obvious-such as a bad tube or broken wire. The serviceman must make a fair charge: he has installed expensive testing apparatus and other equipment. If he comes to your home to give the receiver an examination, he usually charges about one dollar, but a physician visiting an ill person would charge several times that amount—and do less manual work and remain a shorter time. Some repairmen charge a flat rate of about two dollars an hour for work done in their shop, and itemized and fixed costs for certain duties prevail. When a serviceman offers a rough estimate for a repair job, but finds other things necessary, he should perform no work on the extras until he has communicated with the owner and explained the situation. This sort of thing is the cause of most of the friction between the owner and service-

After a set has been returned home, and it fails to give good reception, or appears worse than it was before being repaired, the honest and capable worker will again go to work, leaving nothing undone until he repairs the trouble or rectifies the damage he has done. Then there should be no additional charges. The serviceman who is anxious to please and make a name for himself has spent much of his time and money in preparing himself for his task; his future business and reputation are at stake, and he will give cheerful and conscientious service every time.

Did a friend of yours get a new set for Christmas? Tell him about RADEX.

# In the Field of Radio

(Continued from page 13)

"Daylight reception in our community is possible only with the most expensive sets so we, most of us, are unable to receive any network programs until 7 or 8:00 o'clock in the evening."

"I have four different aerials that can be used in any combination, but whenever I switch on the ground, my volume is reduced to about one-half," comments Henry Gilfillan, 705 W. Walnut, Kalamazoo, Mich. "In fact I get best results DXing if I use my ground as an aerial." Henry wants to know why there are two WTIC's. There aren't, but WTIC has two frequencies; one for chain programs synchronized with WEAF and the other for local programs. WBAL on the same frequency has a similar arrangement with WJZ.

For the information of Fred W. Janssen and others, Otto F. Schulze, 2753 Mildred Ave., Chicago, Ill., points out "that anyone having proof of reception from radio stations may convert them into Ekko stamps by sending them to the Ekko Co., 400 W. Madison St., Chicago, who will, upon receipt of ten cents, mail the station stamp and return proof of reception."

Station WIBO, Chicago, confirms the information in RADEX that they mail all listeners enclosing dime with report of reception, an Ekko stamp. They are at a loss to understand complaints regarding them.

W. E. Doty, 310 West 78th St., New York City, thinks the station Chas. C. Norton had was KGPL on 1712 kcs., owned by the City of Los Angeles, and not KGBL.

"Some one asked if Pacific Coasters heard stations on the Atlantic," says L. H. Miller, 212 N. H. Street, Fresno, Calif., and adds: "About two weeks ago I heard CMK, Havana, and WSB, Atlanta. Last night I heard KDKA, Pittsburgh. These stations were received on a four-tube Meteor midget. My aerial is 100 feet of 24-carat gold-plated sevenstrand wire and my ground is an old automobile radiator buried three feet in rock salt."

Ovide C. Harris, 4206 Gen. Ogden St., New Orleans, La., wants to know the best time to tune for Japanese stations in his locality. Also "Who are makers of an apparatus called Supertone? What is the meaning of 'By electrical transcription for broadcast purposes only?' In reply to his last question, this is merely a high-sounding name for phonograph records. Many programs nowadays are made up in studios and sent to subscribing broadcasting stations for reproduction in their studios. The plan is the same as in the talkies, where the films are made in studios and sent to theatres everywhere for showing.

"On Sunday morning, between 2:00 and 2:30, EST, November 29th, I heard a station on 1340 or 1350 kes. which sounded to me like 3-BA or 3-PZ calling WLX, and about an hour later I heard him calling Palm Beach, Fla.," reports Alfred Razzando, R. F. D. 1, Fayette City, Pa. This may have been amateur station W3BA (Alfred W. Kurz, Jr., 5551 N. Sixth St., Philadelphia, Pa.) or W3PA (Arthur S. Mattes, State Police Barracks, Reading, Pa.) or W3PZ (Joseph F. Slowik, 2207 E. Baltimore St., Baltimore, Md.). WLX is listed to Army Barracks in the Philippines. Alfred now has over 300 stations with only Wyoming lacking in the U.S.

Roger D. Causse, P. O. Box 6688, Lester, Pa., wants information regarding KRA, broadcasting on 50.3 meters about 4:00 a.m., EST. Mr. Causse wants to know how RUS can be assigned to El Salvador when the official key letter for that country is YS. He now has 35 stations verified more than 2000 miles away, and is awaiting verifications from seventeen foreign stations. For short wavers, Mr. Causse advises that a new station, CMCI, Havana, Cuba, announces that they intend to make the short-wave programs a regular feature.

"While I was listening to WOI, Ames, Iowa, on 640 kcs., during the Ames-Nebraska game, Saturday afternoon, WBBM was clearly heard in the background on the same frequency as WOI, 640. When I turned to WBBM's correct frequency, 770 kcs., there was WBBM carrying on. Might the reason have been a harmonic of some sort? This query comes from Greer McCrory, 606 Second St., S. W., Cedar Rapids, Iowa.

Noe Duranceau, 231 Hunter St., Peterboro, Ont., thinks WSVS, Buffalo, must have greater power than we give them as he gets it every day since November 17th, while before that he never received them. How about it, Buffalo, has WSVS increased power lately? This reader would like time on the air for the following stations: CHCS, WBIS, KFKX, WBOQ, WEEU, WCBD. Some of these exist only as call letters as shown in this issue of the index.

"On November 30, at 2:10 a.m., I heard a call on 1360 kcs.," states John J. Swatko, 316 Second Ave., Homestead, Penna. "It was 'WWOE calling, do you hear me, KCCO3?' Can someone give me some information on this? We fear the latter call is incorrect, but who is WWOE? Mr. Swatko submits the slogan: "Without RADEX you are lost at Radio."

Bela Bacskai Payerle, Managing Editor of "Kanadai Magyar Aisag," wants to know the stations broadcasting programs in Hungarian (Magyar) and the time; Who can supply this information? Mr. Payerle's address is 375 Hargrave St., Winnipeg, Man.

"Is WJSV ever on the air when WLAC and KSTP are silent?" queries C. W. Thomas, McAlester, Okla. "I have never been able to get them on account of

interference."

# The Month's Changes (Continued from page 19)

		Location
900	WLBL	Stevens Point, Wis., to Ellis, Wis.
1180	KOB	State College, N. M., to Albuquerque,
		N. M.
1200	KSMR	Santa Maria, Calif., to Bakersfield, Calif.
	wbbz	Ponca City, Okla., to Arkansas City, Kas.
1310	KGFW	Ravenna, Neb., to Kearney, Neb.
1370	WJTL	Tifton, Ga., to Atlanta, Ga.
		Deleted
1300	KGEF	Los Angeles, Calif.
	XETY	Mexico, Mexico.
<b>1360</b>	XETO	Mexico, Mexico.
1420	KFQW	Seattle, Wash.
	WIBR	Steubenville, Ohio.
1490	WJAZ	Chicago, Ill.
		Chains
950	KGHL	Billings, Mont., new NBC.
1260	KOIL	Council Bluffs, Iowa, CBS to NBC.
1360	KGIR	Butte, Mont., new NBC.
1440	WBIG	Greensboro, N. C. New CBS.
	77.63.779	Calls
890	KGJF	Little Rock, Ark., to KARK.
1200	CMJA	Camaguey, Cuba, to CMJG.
1430	WFEA	Owners
1430	WFEA	Manchester, N. H., to New Hampshire
	1	Broadcasting Co. Permit to Change Frequency
1370	КЕЛ	Astoria, Ore., to 1210.
1010	11.1.01	Permit to Move
1370	KFJI	Astoria, Ore., to Klamath Falls, Ore.
1010	TTT.OI	Astoria, Orc., to Elamann Pans, Ore.

## Radio Troubles

(Continued from page 10)

power transformer furnishing current to a radio set?

If the short circuit is between but a few turns of wire in the primary winding of the power transformer there likely will be no evidence of the trouble. But if many turns are thrown out of use by a general short circuit the transformer will become hot after a short period of operation; its transforming efficiency will be impaired because the magnetic field will become weakened and it cannot induce sufficient voltage in the secondary windings; and, in most cases, the 110-volt wire leading to the receiver will be overloaded, and the fuses will burn out, thus saving the coils from further heating and electrical strain.

#### Power Tube Causes Hum

When the -26 tube in the power amplifier of my Victor RE-45 receiver is moved it develops a hum which may be stopped by still further moving of the -26 tube. Why is this?

The -26 tube in the power stage of your receiver is fitted with a potentiometer across the two filament leads to the socket. This arrangement is supposed to suppress the tendency of the tube to hum. If properly adjusted, the device will prevent the hum of the tube. It is evident that, by moving the tube, the suppressor is not adjusted properly or there is a loose connection. We suggest that this particular socket and resistor be examined for poor connections or defects. If this fails, the tube may need replacing or shielding with a hum or howl arrester.

## Changing From 6 to 12-Volt Tubes

I have a Silver-Marshall 710 receiver that I would like to change from six-volt battery tubes to the new two-volt tubes. How can I do this work myself? Also, if I should use a six-volt storage battery, how can I reduce it down to two volts for the new tubes?

The change will not increase the efficiency of your receiver—in fact, it will be slightly less. But there will be a saving in battery current, and better adaptability for isolated regions. It will (Continued on page 32)

# KEY TO CHAIN STATIONS

		Columbia		National	
State Alabama—	City	WABC WBRC 930	Red-WEAF	Blue—WJZ	Both WAPI 1140
Arizona—	Birmingham	WBIC 900			KTAR 620
Arkansas—	Hot Springs	7/1 D.4. 1900			KTHS 1040
California-	Little RockLos Angeles	KLRA 1390 KHJ 900	*********		KECA 1430
02					KFI 640
	San Diego	KGB 1330 KFRC 610			KFSD 600 KGO 790
					KPO 680
Colorado—	Colorado Springs. Denver.	KVOR 1270 KLZ 560			KOA 830
Connecticut—	Hartford.	WDRC 1330	WTIC 660	**********	
Dist. of Col.— Florida—	Washington	WMAL 630			WRC 950 WFLA 620
1 101 144	Jackson ville				WJAX 900
	Miami Orlando	WQAM 560 WDBO 1120			WIOD 1300
	St. Petersburg				WSUN 620
Georgia	Tampa	WDAE 1220 WGST 890			WSB 740
•	Savannah	WTOC 1260			
Illinois	Chicago	WBBM 770 WGN 720	WCFL 970	WLS 870	KYW 1020
		WJJD 1130			
		200000000000000000000000000000000000000			WENR 870
Indiana—	Fort Wayne	WGL 1370 WOWO 1160			WMAQ 670
_	Indianapolis	WFBM 1230			
Iowa	Council Bluffs		1111111111111	KOIL 1260	WOC 1000
	Des Moines				WHO 1000
	Sioux City	KSCJ 1330 WMT 600			
Kansas—	Topeka	W1BW 580			
Kentucky—	WichitaCovington	KFH 1300			WCKY 1490
•	Hopkinsville.	WFIW 940 WLAP 1010			WHAS 820
Louisiana—	Louisville. New Orleans	WDSU 1250			WSMB 1320
Maine—	Bangor Portland	WLBZ 620	WCSH 940		
Maryland—	Baltimore	WCAO 600	WFBR 1270	WBAL 760	
Massachusetts—	- Boston	WAAB 1410 WNAC 1230	WEEI 590	WBZA 990	
	Springfield			WBZ 990	
Michigan-	Worcester Bay City	WORC 1200 WBCM 1410	WTAG 580	*********	
	Detroit	WXYZ 1240	WWJ 920	WJR 750	14.1114
Minnesota—	Minneapolis. St. Paul.	WCCO 810	4		KSTP 1460
Mississippi	Jackson	TAIDO OFO			WJDX 1270
Missouri—	Kansas City St. Louis	KMBC 950 KMOX 1090	KSD 550	WREN 1220 KWK 1350	WDAF 610
Montana	Billings				KGHL 950
Nebraska	Butte			. 10 - 4 - ( 4 7 - 4 )	KGIR 1360
Nevada	Omaha	KOH 1380			WOW 590
New Jersey—	Reno	WPG 1100	1.543.144.1		
New York-	AlbanyBuffalo	WOKO 1430 WGR 550	WBEN 900		S
		WKBW 1480			
	New York City Rochester	WABC 860 WHEC 1430	WEAF 660	WJZ 760 WHAM 1150	
	Schenectady		WGY 790		
North Carolina-	Syracuse	WFBL 1360			WWNC 570
	Charlotte	WBT 1080			
	Raleigh. Greensboro.	WBIG 1440			WPTF 680
North Dakota—	Bismarck	: iii : ii : ii : ii : ii : ii : ii :		********	KFYR 550
Ohio-	FargoAkron	WADC 1320			WDAY 940
	Cincinnati	WKRC 550	WSAI 1330 WTAM 1070	WLW 700 WGAR 1450	
	Cleveland	WHK 1390 WAIU 640	WIAM 1070	WGAR 1430	
		WCAH 1430			

State	City	Columbia WABC	Red-WEAF	National Blue—WJZ	Both
	Toledo	WSPD 1340			
	Youngstown.	WKBN 570			
Oklahoma—	Oklahoma City	KFJF 1480			WKY 900
	Tulsa				KVOO 1140
Oregon	Portland	KOIN 940		KEX 1180	KGW 620
Pennsylvania—	Harrisburg	WHP 1430			
•	Oil City	WLBW 1260			
	Philadelphia	WCAU 1170	WFI 560	[1],,,,,,,,,,,	
		WIP 610	WLIT 560		
	Pittsburgh	WJAS 1290	WCAE 1220	KDKA 980	
Rhode Island-	Providence	WEAN 780	WJAR 890		
South Carolina-	- Columbia				WIS 1010
South Dakota-	Yankton	WNAX 570			
Теппеssee	Chattanooga	WDOD 1280			
	Knoxville	WNOX 560		Tables of the contract of	
	Memphis	WREC 600			WMC 780
	Nashville	WLAC 1470			WSM 650
Texas—	Dallas	KRLD 1040			WFAA 800
		WRR 1280			
	Fort Worth				WBAP 800
	Houston	KTRH 1120			KPRC 920
	San Antonio	KTSA 1290			WOAI 1190
	Waco	WACO 1240			11 0111
Utah	Salt Lake City	KDYL 1290			KSL 1130
Virginia—	Norfolk	WTAR 780			1100
v ii guiia	Richmond	17 27111			WRVA 1110
	Roanoke	WDBJ 930			***************************************
Washington-	Seattle	KOL 1270		KJR 970	KOMO 920
W & SHILLING COLF	Spokane	KFPY 1340		KGA 1470	KHQ 590
	Tacoma	KVI 760		11011	11114 050
West Virginia-	Wheeling	WWVA 1160			
Wisconsin-		WTAQ 1330			
WISCOUSII	Eau ClaireLaCrosse.	WKBH 138			
	Madison	W 171511 190			WIBA 1280
		WISN 1120			WTMJ 620
	Milwaukee	W 10N 1120			
C . 1	Superior	CFRB 690			
Canada	Toronto				CKGW 840 CFCF 1030
	Montreal	CKAC 730			CFCF 1030

## Radio Troubles

(Continued from page 30)

be necessary to remove the resistors now in the circuit and replace them with short lengths of wire. One of these is a 1-ohm resistance in the rear of the switch and in series with the entire filament battery or A circuit. It should be replaced with a piece of wire. There is another—(3-ohm resistor)—that is grounded at one end to the metal chassis and connected at the other to the -A side of the first four radio frequency or screen-grid tubes; replace it also with a length of wire so as to close the circuit.

Replace the present tubes with four -32 screen-grid tubes, two -30 detector-amplifier tubes, and one -33 pentode power tube. Connect the plate of the -33 to terminal 3 of the power output transformer in the right-hand section of the receiver in case the connection is not made that way at present. A 7-ohm resistance is used to cut down the six volts of the storage battery to the two volts necessary for these tubes. Connect

in series, and do not turn on the battery unless all of the tubes are in place in their sockets.

#### Interfering Howls

I have trouble with my set when tuning below 300 meters with the high voltage switch on. There are loud howls and squawks on each side of the stations being tuned in. What is the reason and remedy?

The noises you complain of are common and beyond your control. many stations operating below 300 meters cause severe interference, and when a set is tuned in to stations in this band there will be many howls and squawks. You have not mentioned the make of your receiver, but some sets create a bedlam of howls and squeals when stations are tuned in on the lower wave lengths. There is no remedy with your particular set until our Government thins out many stations that are now crowded together on similar wave lengths. Tune in a station with the volume toned down, and when cleared up, make louder by increasing the volume.

# WHAT'S ON THE AIR TONIGHT?

COLUMBIA.....WABC

NATIONAL, Red....WEAF

NATIONAL. Blue\_\_\_\_WIZ

For quick reference, fill in below the dial numbers at which you best hear the three chains. You can then turn quickly to one that has the feature you want.

Time is given by Eastern Standard; for Central, subtract one hour; for Mountain, subtract two hours; and for Pacific, subtract three hours.

#### \_WABC Columbia\_ DAILY (Except Sunday)

12:30 Columbia Revue (Ex. Sat.) CFIRB KDYL KFH KFJF KFPY KFRC KGB KHJ KLZ KMOX KOH KVI KVOR WABC WACO WADC KVI KVOR WABC WACO WADC
WBRC WDBO WDOD WDRC WDSU
WEAN WFBL WGR WHEC WHP
WISN WJAS WKBH WLAP WLBW
WMAL WMT WNAC WOKO WORC
WOWO WPG WQAM WSPD WTAQ WWVA WXYZ

2:30 American School of Air (Ex. Sat.) KDYL KFH KEJF KEPY KFI KGB KHJ KLZ KMBC KMC KFŔC KGB KHJ KLZ KMBU KMOX KOH KOL KRLD KTSA KVI KVOR WABC WADC WBBM WBCM WBRC WBT WCAO WCCO WDAE WDBJ WDBO WDOD WDRC WDSU WEAN WFBL WFBM WGR WHEC WHK WHP WIBW WISN WAS WKBH WHP WIBW WISN WAS WKBH WKRC WLAP WLBW WLBZ WMAL WARC WLAF WLSW WLSZ WAMAL WMT WNAC WNAX WOKO WORC WOWO WPG WQAM WSPD WTAQ WTOC WWVA WXYZ

7:00 Myrt and Marge (Ex. Sat.) KMOX WABC WADC WCAO WCAU WDRC WEAN WFBL WGR WJAS WKRC WMAL WNAC WOKO WSPD WWVA

WWVA
7:15 Cremo, Bing Crosby
WABC WACO WADC WBIG WBT
WCAH WCAO WCAU WDAE WDBJ
WDBO WDRC WEAN WFBL WGR
WHEC WHK WHP WJAS WKRC
WLBW WLBZ WMAL WNAC WOKO
WORC WOWO WQAM WRR WSPD
WTAR WTOC WXYZ

7:30 Baker, Boswell Sisters (Ex. Tues..

Thurs., Sat.) KFH KMBC KMOX WADC WCAII WCCO WDRC WEAN WFBL WGR WHK WISN WJAS WKRC WNAC WOKO WORC WSPD WWVA WXYZ 7:45 Camel, Morton Downey

7:45 Camel, Moroton Downey
KFH KFJF KLRA KMOX KRLD
KSCJ KTRH WABC WACO WADC
WBIG WBRC WBT WCAH WCAU
WCAU WCCO WDAE WDBJ WDBO
WDOD WDRC WDSU WEAN WFBL WFBM WGR WGST WHEC WHE WHP WIBW WISN WJAS WKRO WHP WIBW WISN WJAS WKRC WLAC WLAP WLBZ WMAL WMT WNAC WNAX WNOX WOKO WORC WQAM WREC WSPD WTAR WTOC WWVA WXYZ KMBC

8:00 Columbians, Freddie Rich (Ex.

Tues, Thurs. Sat.)
CFRB KDYL KFH KFJF KFPY
KGB KHJ KMBC KMOX KOH
KRLD KVOR WABC WACO WADC
WBCM WBRC WBRT WCAO WCCO
WDAE WDBO WDOD WDRC WBSU WEAN WEBL WEBM WGL WGR WGST WHEC WHK WHP WIBW WISX WJAS WLAP WLBW WLBZ WMAL WMT WNAX WOKO WORC WPG WQAM WSPD WTAQ WTOC

### National, Red\_\_\_ DAILY (Except Sunday)

8:00 Gene and Glenn

WBEN WCAE WCSH WEAF WEEI WFI WGY WJAR WRC WSAI WTAG WTAM WTIC WWJ

8:15 Morning Devotions
KFYR WBEN WCAE WCKY WCSH WEAF WFBR WFI WFLA WGY WHAS WIBA WIOD WIS WJAR WJAX WJDX WOW WPTF WRC WRVA WSMB WTAG WTIC WWJ WWNC

8:30 Cheerio

CKGW KPRC WAPI WBEN WCAE WCKY WOSH WDAF WEAF WEEL WFBR WFL WFLA WGY WHAS WIOD WIS WJAR WJAX WJDX WKY WOAI WOW WRC WRVA WSB WSM WPTF WRC WRVA WSB WSM WSMB WTAG WTAM WTIC WWJ WWNC

3:00 Woman's Radio Review (Ex. Sat.) KSD KYW WBEN WCAE WCSH WDAF WEAF WEEL WFI WGY WHO WJAR WOC WOW WRC WSAI WTAG WTAM WTIC WWJ

4:30 Phil Spitalny Tea Dansante KSD WBEN WCAE WEAF WGY WHO WJAR WOC WEEL WTAG WTAM WWJ

S::00 Lady Next Door (Ex. Thur.)
KSD WEAF WENR WJAR WRC
WTAG WTAM

5:45 Russ Columbo and Orch. (Ex.

Tues, Thur., Sat.)
KSD WBEN WCSH WDAF WEAF
WEEL WENR WFBR WGY WHO
WJAR WLIT WOC WOW WRC WSAI WTAG WTIC WWJ

6:00 Waldorf-Astoria Orchestra

CKGW KF8D KGO K8D KSL WAPI WCAE WCKY WEAF WEEL WENR WEI WHAS WIOD WIS WIDX WKY WRC WSM WTAM

6:45 Swift, Stebbins Boys (Ex. Sat.) WEST WEST WCAE WCSH WEAF WEEL WFI WGY WJAR WRC WSAI WTAG WTAM WTIC WWJ

7:15 Campbell, Lannin Orch. (Ex. Tues., Sat

WBEN WCSH WDAF WEAF WENR WFBR WGY WJAR WLIT WOW

WRC WSAI WTAG WTAM
7:30 Prince Albert, Alice Joy
KFYR KSTP WBEN WCSH WDAF
WDAY WEAF WEBC WEEL WFBR WEE1 WIOD WIS WDAY WEAF WEBC WEET WEBR WFLA WGY WIBA WIOD WIS WJAR WJAX WKY WLIT WOAI WRC WRVA WSAI WTAG WTAM WTMJ WWJ WWNC

7:45 The Goldbergs, Comedy Sketch WBEN WCAE WEAF WENR WGY WSAI WTAM WWJ

10:00 Lucky Strike Walter Winchell (Ex.

Mon., Wed., Fri.) KFI KFSD KFYR KGO KGW KHQ KOA KOMO KPRC KSD KSL KSTP KTAR WAPI WBEN WCAE WCSH

### WEAF | National, Blue\_\_\_\_WJZ DAILY (Except Sunday)

12:30 National Farm and Home Hour KDKA KFAB KFYR KOA KPRC KSTP KTHS KVOO KWK KYW WAPI WBAL WBZA WCKY WDAF WDAY WEBC WFLA WGAR WHAM WHAS WHO WIBA WIOD WJAX WJAX WJR WJZ WLW WMC WOC WOW WPTF WRC WREN WRVA WSB WSM WSMB

5:30 Old Pappy Negro Sketches KWK WJZ WREN

5:45 Little Orphan Annie WBAL WFLA WGAR WHAM WIOD WJAX WJZ WLW WPTF WRVA

6:00 Raising Junior (Ex. Wed.) KWK KYW WBAL WEBC WGAR WHAM WIBA WJZ

6:45 Literary Digest, Lowell Thomas KDKA WBAL WBZA WHAM WJZ WLW

6:45 Little Orphan Annie KFYR KPRC KSTP KWK WDAY WEBC WENR WKY WOAI WREN

7:00 Amos 'n' Andy CFCF CKGW KDKA WBAL WBZA WCKY WFLA WGAR WHAM WIOD WJAX WJR WJZ WLW WPTF WRC

WRVA 7:15 Tastyeast Jesters (Ex. Tues., Wed.,

KDKA WBAL WBZA WCKY WFLA WGAR WHAM WIOD WJAX WJZ WPTF WREN WRVA

WITE WREN WRVA 7:30 Phil Cook, Quaker Man (Ex. Sat.) KDKA KWK WBAL WBZA WENR WGAR WHAM WJZ WREN

8:45 Sisters of Skillet (Ex. Mon., Wed.,

KDKA KFYR KOIL KPRC KSTP KVOO KWK WBAP WBZA WDAY WEBC WHAM WJZ WKY WLS WOAI WREN WTMJ

10:00 Russ Columbo and Orchestra (Ex. Mon., Wed., Fri.) WK WBAL WCKY WGAR WJR

KWK WBAL WJZ WREN

10:30 Clara, Lu and Em (Ex. Mon.) KDKA KWK KYW WBAL WBZA WCKY WGAR WHAM WJR WJZ WREN

11:00 Amos 'n' Andy KECA KFSD KGO KGW KHQ KOA KOLL KOMO KPRC KSL KSTP KTHS KWK WBAP WDAF WEBC WENR WHAS WIBA WJDX WKY WMAQ WMC WOAI WREN WSB WSM WSMB WTMJ

WSMI WSMID WIME 11:15 Literary Digest, Lowell Thomas KFYR KOIL KWK WDAY WEBC WMAQ WREN

11:45 Lew White, Organ (Ex. Tues., Fri.) KDKA KFAB KFYR WBAL WENR WJZ WRC WREN WSB

12:00 Mildred Bailey and Jesters (Ex. Tues., Fri.

KDKA WENR WGAR WJR WJZ

Columbia WABC National, Red WEAF National, Blue SUNDAY

Mon., Wed., Fri.)
CFRB KDYL KFH KFJF KFY
KGB KMBC KMOX KOH KRLD
KTSA KVOR WABC WACO WADC
WHCM WBRC WBT WCAO WCO
WDBJ WDBO WDOD WDRC WDSU WEAN WFBL WFBM WGL WGR WHEC WHK WHP WIBW WISN WLAC WLAP WLBW WLBZ WMAL WMT WNAC WNAX WOKO WORC WPG WQAM WSPD WTOC WWVA WXYZ

8:15 Singing Sam, Barbasol (Ex. Tues.,

WXYZ

WAYY 8:15 Sterling, Abe Lyman's Band (Ex. Mon., Wed., Fri.) KFJF KMBC KMOX WABC WADC WCAO WCAU WCCO WDRC WDSU WEAN WFBL WFBM WGN WGR WGST WHK WJAS WKRC WAAL WNAC WREC WSPD WXYZ 8:20 Vet. Suith Le Philos (Ex. Episod)

8:30 Kate Smith, La Palina (Ex. Fri. and Sat 1

Sat.)
KMBC KMOX WABC WADC WBCM
WCAH WCAO WCAU WCCO WFBL
WFBM WGR WHEC WHK WISN
WJAS WKRC WLAP WMAL WSPD

10:30 Chesterfield, Shilkret Orch. CFRB KDYL KFJF KFPY KGB KLZKMBC KOH KTSA KVOR WAAB WABC WACO WADC WBCM WBRC
WBT WCAO WDAE WDBJ WDBO
WDOD WDRC WDSU WEAN WFBL
WFBM WHEC WHP WIBW WISN WFBM WHEC WHP WIBW WISN WJAS WKBW WKRC WLAP WLBW WLBZ WMAL WMT WNAX WOKO WORC WOWO WPG WQAM WSPD WTAQ WXYZ 10:45 Myrt and Marge (Ex. Sat.) KDYL KFPY KFRC KHJ KLZ KMBC KOIN KOL WBBM WCCO WLAP WXYZ

WLAP WXYZ

11:00 Cremo, Bing Crosby
KDYL KFH KFJF KFPY KLRA
KLZ KMBC KMOX KOH KOIN
KOL KSCJ KTRH KTSA WBCM
WBRC WCCO WDOD WDSU WFBM
WGN WGST WIBW WISN WLAC
WLAP WMT WNAX WNOX WOWO WREC

11:15 Street Singer (Ex. Tues., Thurs.,

Sat.) CFRB KDYL Sat.)
CFRB KDYL KFH KFJF KFPY
KGB KLZ KMBC KOH KTSA KVOR
WAAB WABC WACO WADC WBCM
WBRC WBT WCAO WDAE WDBJ
WDBO WDOD WDRC WDBU WEAN
WFBL WFBM WHEC WHP WIBW
WISN WIAS WKBW WLAP WLBW
WLBZ WMT WNAX WOKO WORC
WOWO WQAM WSPD WTOC
11:15 Jack Miller and Orch. (Ex. Mon.,
Wed Fri.)

Wed, Fri.)
CFRB KFJF KFPY KFRC KGB
KLZ KMBC KOH KVOR WAAB
WABO WACO WADD WDBCM WBRC
WBT WCAO WDBJ WDBO WDOD
WDSU WEAN WFBL WFBM WHEO WHP WIBW WISN WKBW WLAC WLAP WLBW WLBZ WMT WNAX WOKO WORC WOWO WQAM WSPD WTOC

11:30 Camel, Morton Downey KDYL KFPY KFRC KGB KHJ KLZ KOH KOIN KOL WGN WOWO

WDAF WDAY WEAF WEBC WEEI WENR WFAA WFBR WFI WFLA WGY WHAS WHO WIBA WIOD WIS WJAR WJAX WJDX WKY WIS WIAR WJAX WJDX WKY
WMC WOAI WOC WRC WRVA
WSAI WSB WSM WSMB WTAG
WTAM WTIC WTMJ WWJ WWNC 11:00 Marion Harris, Songs (Ex. Mon.,

Wed.) KSD WCAE WEAF WFI WGY WIOD WIS WJAX WRC WTIC WWJ WWNC

WIS WAA WAO HO HO HAD HELD WENT WHAS WHO WJDX WMC WOC WOW WSB WSM WSMB

#### SUNDAY

11:30 Major Bowes' Family WCKY WDAF WEAF WENR WHO WOC WTAM WTIC

1:30 Silver Flute

130 Silver rute CPCF KSD WBEN WCAE WDAF WEAF WEEI WFI WGY WHO WJAR WMAQ WOC WTAG WTAM WTIC WWJ

1:45 Old Company's Program CFCF CKGW WBEN WCSH WEAF WEEI WFI WGY WJAR WRC WTAG WTIC

WTIC
2:15 Bright Spot, Pettis Orch.
CFCF CKGW KECA KFSD KFYR
KGW KHQ KOA KPO KPIC KSD
KSL KSTP KTAR KVOO KYW
WAPI WBEN WCAE WCSH WDAF
WDAF WEAF WEBRC WEEI WFAA
WFBR WILA WGY WHAS WHO
WIOD WJAR WJAX WJDX WKY
WLIT WMC WOAI WOC WOW
WFTF WIC WRVA WSAI WSB WSM
WSMB WTAG WTAM WTIC WTMJ WSMB WTAG WTAM WTIC WTMJ

2:30 Moonshine and Honeysuckle, Drama WEEL WEBR WGY WJAR WMAQ
WOW WRC WTAG WTAM WTIC

WWJ

WWJ.
3:00 Wayne King's Orchestra
KSD KYW WBEN WCAE WCSH
WDAF WEAF WEEI WGY WHO
WJAR WLIT WOC WOW WRC
WSAI WTAG WTAM WTIC WWJ
2:20 D.S. Parks C. August 3:30 Dr. S. Parkes Cadman

3:30 Dr. S. Parkes Cadman
KFSD KFYR KGO KGW KHQ KOA
KOMO KPRC KSD KSL KSTP
KTHS KVOO KYW WCAE WCSH
WDAF WDAY WEAF WEBC WEEI
WFBR WFLA WGY WHAS WIOD
WIS WJAR WJAX WJDX WKY
WMC WOAI WOW WPTF WRC
WRVA WSAI WSB WSM WSMB
WIAG WTIC WWJ WWNC
606 EINALD FASIL GALLO OAL

WIYA MOAI MOST WISH WITCH WITC

5:00 Cosmopolitans, String Ensemble CFCF WCAE WCSH WDAF WEAF WEEI WFBR WFI WGY WHO WJAR WOC WRC WSAI WTAG WTAM WTIC 11:30 Moring Musicale KFAB KPO KPRC KWOO KWK WAPI WBAL WDAY WFLA WHAM WIZ WKY WLW WMC WHAS WJZ WKY WLW WN WPTF WREN WSM WTMJ KOA

12:30 Balkan Mountain Men KDKA KECA KEX KGA KJR KPO WBAL WCKY WGAR WHAM WJZ

WBAL WCKY WGAR WHAM WJZ 1:00 Seninels of the Republic KDKA KFAB KFYR KGO KGW KOA KOMO KPIRC KSL KSTP WAPI WBAL WDAY WEBC WGAR WHAS WIBA WIOD WJAX WJZ WRC WSM

1:15 Walter Damrosch Hour 1:15 Walter Damrosch Hour
KDKA KPAB KF! KFSD KFYR
KGO KGW KOA KOMO KPRC KSL
KSTP KTAR KVOO KWK WBAL
WBZA WDAY WEBC WFAA WFLA
WHAS WIBA WIOD WIS WJDX
WJR WJZ WKY WLW WMAQ WOAI
WRC WREN WSB WSM WSMB WWNC

WWNC
2:15 Careless Love, Negro Drama
KDKA WBAL WCKY WJZ WREN
2:30 Yeast Foamers, Kay's Orch.
KDKA KECA KFSD KGW KHQ
KOA KOIL KPO KPRC KSL KSTP
KTAR KTHS KVOO KWK KYW
WAPI WBAL WBZA WEBC WFAA
WFLA WGAR WHAM WHAS WIOD
WIS WJAX WJDX WJR WJZ WKY
WLW WMC WOAI WPTF WREN
WRVA WSB WSM WSMB WTMJ
WWNC WWNC

3:00 National Youth Conference 3:00 National Touth Conterence
KDKA KFSD KGO KGW KHQ KOA
KOMO KPRC KTHS KVOO WAPI
WBAL WCKY WFLA WGAR WIOD
WIS WJAX WJDX WJZ WKY WMAQ
WMC WOAI WPTF WRVA WSB
WSMB WWNC

4:00 Travelogue, Malcolm LaPrade CFCF CKGW KDKA KWK WBAL WBZA WGAR WJZ WLW WMAQ 4:30 Musical Showmen

4-30 Musical Showmen
CKGW KDKA KOIL KWK WBAL
WHAM WJZ WMAQ
5-00 National Vespers
KFI KFSD KFYR KGO KGW KHQ
KOMO KPRC KSTP KTHS KVOO
KWK WBAL WBZA WCKY WDAY
WEBC WFAA WFLA WGAR WHAM
WIBA WIOD WIS WJDX WJZ WKY
WMAQ WOAI WPTF WREN WRVA
WSB WSM WSMB WWNC
5-30 Simoniz Guardsmen
KOIL KWK KYW WBAL WBZA

KOIL KWK KYW WBAL WBZA WGAR¶WHAM WJZ WLW WREN

6:45 Adventures Barbara Wayne KWK WBAL WBZA WGAR WJR WJZ WLW WMAQ WREN 7:00 Willys-Overland Orchestra

KDKA KFI KFSD KFYR KGO KGW KHQ KOA KOII, KOMO KSL KSTP KTAR KWK KYW WBAL WCKY WDAY WEBC WGAR WIBA WJR WJZ WREN WTMJ

7:15 Dalhart Instrumental Trio KDKA KWK WBAL WFLA WHAM WHAS WJZ WLS WREN WRVA WWNC

WWNC
7:30 The Three Bakers
KDKA KFI KFSD KFYR KGO KGW
KHQ KOA KOMO KPRC KSL KSTP
KTAR KVOO KWK KYW WBAL
WBZA WDAY WEBC WFAA WFLA
WGAR WHAM WHAS WIBA WIOD
WJDX WJR WJZ WKY WLW WMC
WOAI WREN WRVA WSB WSM
WSMB WTMJ

#### **SUNDAY**

1:00 Cathedral Hour

CFRB KDYL KFJF KFPY KLZ KMBC KOH KOL KRLD KTSA KVI KMBC ROH ROL KRLD KISA KYI KYOR WAAB WABC WADC WBCM WBRC WBT WCAH WCCO WDBJ WDBO WDOD WDRC WDSU WFBL WGL WGR WHEC WHP WJAS WKBH WLAP WLBW WLBZ WMAL WOKO WORC WOWO WPG WQAM WTOC WWVA WXYZ

1:45 Venida Program KMBC KMOX WAAB WABC WBBM WCAU WDRC WFBL WGR WHK WJAS WKRC WMAL

2:00 Sons of Eli, Spirituals
KMBC KMOX KRLD WABC WADC
WBBM WBRC WBT WCA WCAU
WCCO WDRC WDSU WEAN WFBL
WGR WHK WJAS WKRU WLAC
WMAL WNAC WOWO

2:30 Columbia Church of Air 2:30 Columbia Church of Air
KDYL KFH KFJF KFPY KFRC
KGB KLZ KMBC KOH KOL KVOR
WAAB WABC WACO WADC WBCM
WBT WCAO WCCO WDAE WDBJ
WDBO WDOOD WDRC WDSU WFBM
WGL WHEC WHP WIBW WJAS
WKBH WKBW WKRC WLAP WJBW
WLBZ WMAL WOKO WORC WPG
WQAM WTOC WWVA WFBL

3:00 N.Y. Philharmonic Symphony Orch. 3:90 N. I. Philharmonic Symphony Orch.
CFRB KDYL KFFI KFPY KFRC
KGB KHJ KLZ KMBC KMOX KOH
KOL KVI KVOR WAAB WABC
WACO WADC WBRC WBT WCAO
WCCO WADC WBBJ WDBO WDSU
WEAN WFBM WGL WHEC WHK WILP WISN WJAS WKBH WKBW WKRC WLAP WLBW WLBZ WMAL WOKO WORC WQAM WSPD WTOC WWVA WXYZ

7.00 PA WAYZ 5.00 Rev. Donald Grey Barnhouse KFH KRLD WAAB WABC WADC WBT WCAU WCCO WFBL WGR WJAS WKRC WLAC WOWO WSPD WAYZ

WXYZ
5:30 Blue Coal Radio Revue
CFRB WAAB WABC WCAO WCAU
WDRC WEAN WFBL WGR WHEC
WHP WOKO WORC
6:00 Chicago Knights
KDYL KFJF KFPY KFRC KGB
KHJ KLZ KMOX KOH KOL KRLD
KYI KVOR WACO WIBW WISN
WKRC WLAP WWYA
6:30 Ranad Managia Managia

KLRA KMBC KMOX KSCJ WCCO WGL WGN WIBW WISN WMT WSPD WXYZ

WSPD WXYZ
7:00 The World's Business
KFH KFJF KFPY KFRC KGB KHJ
KLZ KMBC KOH KOL KRLD KYL
KVOR WABC WACO WADC WBT
WCCO WDAE WDBJ WDBO WDOD
WDSU WFBM WGL WGR WHEC
WHP WIBW WISN WJAS WKBH
WKRC WLAP WLBW WLBZ WMAL
WNAX WOKO WPG WQAM WTOC
WWVA KDYL WFBL
7:15 Svlyanians — Orchestra

WWVA KDYL WFBL

7:15 Sylvanians — Orchestra

KMBC KMOX WABC WCAO WCAU

WCCO WDRC WGL WGN WGR

WJAS WKRC WNAC WOKO WXYZ

7:30 Luden's Novelty Orchestra

KDYL KLZ KMBC KMOX KRLD

WABC WBT WCAO WCAU WCCO

WDSU WFBM WGN WGR WHK

WKBH WKRC WMAL WNAC WNAX

WFEO WXYZ WGST WREC WXYZ WGST

5:30 General Electric Hour KECA KEX KFYR KGA KJR KOA RPO KPRC KSD KSL KSTP KTAR KVOO WAPI WBAP WBEN WCAE WCSH WDAF WDAY WEAF WEBC WOSH WDAF WDAY WEAF WEBC WEEI WENR WFBR WFI WFLA WGY WHAS WHO WIBA WIOD WIS WJAR WJAX WJDX WKY WMC WOAI WOC WOW WPTF WRC WRVA WSAI WSB WSMB WTAG WTAM WTIC WTMJ WWJ WWNC

6:00 Catholic Hour

6:00 Catholic Hour
KEX KFYR KGA KJR KOA KPO
KPRC KSD KSTP KTAR KVOO
WBAP WBEN WCAE WCSH WDAF
WDAY WEAF WEBC WEEL WENR
WFBR WFLA WGY WHO WIBA
WIOD WJAR WJAX WJDX WKY
WLIT WMC WOAI WOC WOW
WRC WRVA WSAI WSB WSM WSMB WTAG WTIC WWJ WWNC

6:30 Through the Opera Glass KPRC WDAF WEAF WGY WRC WTIC WWNC

7:15 Jolly Time Revue
KSD WB'N WCAE WCSH WDAF
WEAF WFBR WGY WJAR WLS WRC WSAI WTIC

7:30 Iddent Club of Air KSD WBEN WCAE WCSH WDAF WEAF WGY WHO WJAR WLIT WLS WOC WRC WSAI WTAG WTAM WTIC WWJ

R-10 CWAS

8-00 Chase & Sanborn Hour
CFCF CKGW KPRC KSD KSTP
KTHS KVOO WBEN WCAE WCSH
WDAF WEAF WEBC WFAA WFLA
WGY WHAS WHO WIOD WJAR
WJDX WKY WLIT WLS WMC
WOAI WOC WOW WRC WSAI
WSB WSMB WTAG WTAM WTIC
WTMJ WWJ

WEAF WENR WFAA WFBR WFI WFLA WGY WHO WIOD WIS WJAR WJDX WOC WOW WRC W6-

WJOX

SUBJECT OF STANDARD S WSMB WTAG WTAM WWJ WWNC

10:15 National Oratorio Society
KGW KOA KOMO 10:15 National Oratorio Society
KFSD KGO KGW KOA KOMO
KPRC KSTP KTAR WAPI WBEN
WCAE WCSH WEAF WEEI WFBR
WFI WGY WHAS WJAR WKY
WOAI WRC WSB WTAG WTAM
WTIC WTMJ

10:45 Seth Parker's Neighbors KPRC KSTP KYW WBEN WEAF WEBC WEEI WHAS WIBA WIS WJAR WMC WOAI WSB WTMJ WWJ WWNC

11:15 Ralph Kirbery, Dream Singer WEAF WEBR WFI WGY WHO WOC WOW WWJ

11:30 Jesse Crawford, Organ WDAF WEAF WENR WFBR WGY WHO WJAR WOC WRC WWJ

8-00 Enna Jettiek Melodies
CFCF CKGW KDKA KFI KFSD
KFYR KGO KGW KHQ KOA KOIL
KOMO KPRC KSL KSTP KTAR
KTHS KVOO KWK KYW WBAL
WBZA WDAY W®BG WFAA WFLA
WGAR WHAM WHAS WIBA WIOD
WIS WJDX WJR WJZ WKY WLW
WMC WOAI WREN WRVA WSB
WSM WSMB WWNC
8-15 Colliers Radio Hour

WING WINCO KIS Collers Radio Hour KDKA KFI KGO KGW KHQ KOA KOMO KSL KWK KYW WBAL WBZA WGAR WHAM WJR WJZ WLW WREN

WEN WEEN 9:15 Bayuk Siag Party KDKA KWK KYW WBAL WBZA WGAR WJR WJZ WLW WREN

WIAR WOR WAD WEW WREN 9:45 Kellogg Slumber Music KDKA KWK KYW WBAL WBZA WHAM WJR WJZ WLW WREN 10:15 Thrillers, Dramatic Program KDKA KWK WBAL WBZA WENR WGAR WHAM WJZ WREN

10.45 Land of Wonder and Fear KDKA KWK WBAL WBZA WENR WGAR WHAM WJZ WREN

HI 1:00 David Novalis, Violinist
KDKA KFAB KOA KPRC WBAL
WENR WGAR WJR WJZ WKY WENR WGAR WREN WWNC

HILLS WAS IS A STATE OF THE WAS INCIDENCE OF THE WA

#### MONDAY

7:45 Waves of Melody KOIL KWK WBAL WCKY WHAM WJZ WMAQ WREN

8:00 Archer Gibson, Organ CKGW WBAL WHAM WJR WJZ CKGW WREN

WALDA 8:30 Death Valley Days, Drama KDKA KFI KFSD KFYR KGO KGW KHQ KOA KOMO KSL KSTP KTAR KWK WBAL WBZA WEBC WGAR WHAM WIBA WJZ WLS WREN

WREN
9:00 Maylag Orchestra
KDKA KPI KFYR KGO KHQ KOA
KOMO KPRC KSL KSTP KVOO
KWK WBAL WBZA WDAY WEBC
WFAA WGAR WHAM WJR WJZ
WKY WLS WMC WOAI WREN
WSM WTMJ

WBM W 1963 9:30 Musical Dominos KDKA KWK KYW WBAL WBZA WGAR WHAM WJR WJZ WLW WREN

WALEA
10:00 Musical Express
KDKA KFI KFSID KGO KGW KHQ
KOA KOMO KSL KSTP KTAR
KWK WBAL WBAP WBZA WEBC
WFLA WGAR WHAM WIOD WJAX
WJR WJZ WKY WMAQ WMC
WOAI WREN WRVA WSB WSM WTMJ

T1:00 Slumber Music CFCF WBAL WIOD WIS WJR WJZ WRC WWNC

#### TUESDAY

4:00 U.S. Army Band KFAB KFYR KOA KPO I WAPI WBZA WGAR WIBA WJZ WRC WREN WSM KPO KSTF

WJZ WRC WREN WSM 7:15 Gaytees Orchestra Odette Myrtil KOIL KWK WBAL WENR WJ WLW WREN WJZ 7:45 Back of the News

WXYZKFRC

8:00 Devils, Drugs and Doctors KDYL KPPY KILJ KLZ
KMBC
KMOX KOIN KOL KSCJ KTSA
WABC WADC WBRC WCAO WCAU
WCCO WDRC WDSU WEAN WFBL
WFBM WGN WGR WGST WHEC
WHK WBW WJAS WKRC WLAC
WMAL WNAC WREC WRR WSPD

8:15 Manhattan Serenaders
KDYL KFJF KFPY KFRC KGB
KMOX KOH KOL KTSA KVOR
WABC WACO WADC WBRC WCAO
WCCO WDAE WDBO WDOD WDRC WFBM WGL WGR WHEC WHP WIBW WISN WJAS WLAP WLBW WLBZ WOKO WORC WSPD WTOC WXYZ

8:45 Angelo Patri, Your Child KMBC KMOX WABC WADC WCAO WCAU WCCO WDRC WEAN WFBL WGN WGR WHK WJAS WKRC WMAL WNAC WOWO WSPD WXYZ

9:00 Sheaffer Pen, Phil Baker CFRB KDYL KFJF KFPY KFRC KGB KLZ KMBC KMOX KOH KOL KTSA KVOR WABC WADC WBRC WBT WCAO WCCO WDAE WDBJ WDBO WDOD WDRC WDSU WEBJ WFBM WHEC WHP WIBW WISN WJAS WLAP WLBW WLBZ WMAL WNAC WNAX WOKO WORC WOWO WQAM WSPD WTOC

9:30 Romance of the Sea, Drama CRFB KDYL KFPY KFRC KLZ KMBC KMOX KOIN KHJ KOL MADC WANDE KMOA KOIN KOL WABC WADC WCAO WCAU WDRC WEAN WFBL WGN WGR WHK WJAS WKRC WMAL WNAC WOWO WSPD WXYZ

10:00 Hopper Variety Show

10:00 Hopper variety Show
KDYL KPH KFJF KLZ KMBC
KMOX KTSA WAAB WABC WADC
WBBM WCAO WCAO WCAO WDRC
WDSU WFBL WFBM WGST WHEC
WHK WISN WAS WKBW WKRC
WLAP WLBZ WMAL WOKO WORC
WOWO WREC WSPD WXYZ KRLD

16:30 Ernest Hutcheson, Pianist CERB KEH KEJF KEPY KGB KLZ CFRB RFH RFJT RFJY RGB KLZ
KOH KOL KVOR WABC WADC
WBCM WBRC WBT WCAO WDAE
WDBJ WDBO WDDO WDRC WDSU
WEAN WFBL WHEC WHP WIBW
WJAS WKBW WLAP WLBW WLBZ
WMAL WNAC WOKO WORC WPG
WQAM WSPD WXYZ

11:00 The Gauchos, Tito Guizar KDYL KFH KFJF KLZ KMOX KOH KOL KVOR WABC WADC WBCM WBT WCAO WDAE WDBJ WDBO WDRC WFBL WFBM WGR WHK WHP WIBW WKRC WLBZ WMAL WNAC WNAX WOKO WPG WQAM WSPD WTOC WXYZ

11:30 Ben Bernie and Orchestra KDYL KFH KFJF KGB KHJ KLRA KOH KOL KVOR WABC WADC WBCM WBRC WBT WCAO WCCO WDAE WDBJ WDBO WDRC WEAN
WFBL WGL WGR WHEC WHP
WIBW WISN WJAS WKRC WLAP
WLBW WLBZ WMAL WNAC WNAX WOKO WPG WOAM WSPD WTOC WYYZ

12:00 Eddie Duchin and Orchestra KDYL KFJF KFPY KMBC KOH KOL KVOR WABC WBCM WCCO WEAN WFBL WGR WHP WIBW WISN WKRC WLBW WNAC WNAX WOKO WSPD

#### Columbia WABC | National, Red WEAF | National, Blue WJZ MONDA Y

8:00 Soconyland Sketches WBEN WCSH WEAF WEEI WGY WJAR WTAG WTIC

8:30 Voice of Firestone KSD KTHS CFCF CKGW KPRC CFCF CKGW KPRC KSD KTHS
KVOO WBEN WCAE WCSH WDAF
WEAF WFAA WFBR WFLA WGY
WHAS WHO WIOD WIS WJAR
WJAX WJDX WKY WLIT WMAQ
WOAI WOC WOW WRC WRVA
WSAI WSB WSBB WTAG WTAM
WTIC WWJ WWNC WEEI

\*\*POPA \*\* A. P. Cruzick\*\*

9:30 Parade of the States

KFI KFYR KGO KGW KHQ KOA KFI KFYR KGO KGW KHQ KOA KOMO KPRC KSD KSL KSTP WCAE WCSH WDAF WEAF WEEI WENR WFAA WGY WHAS WHO WJAR WJAX WKY WLIT WMC WOAI WOC WOW WRC WSII WEN WEET WHO WEEL WRC WSB WSM WTAG WTAM WTIC

10:45 Phantom Caravan CFCF WBEN WCAE WCSH WEAF WEEL WENR WGY WHO WJAR WOC WRC WTAG WWJ

#### TUESDAY

7:00 Mid-Week Federation Hymn Sing KEX KGA KJR KOA KSTP KTAR WBEN WCAE WEAF WFI WJDX WSAI WSB WSM WTAG WTIC

WSAI WSB WSM WIAG WIIG 8:00 Blackstone, Sanderson-Crumit KSD KSTP KYW WBEN WCAE WCSH WDAF WEAF WEBC WEE WFI WGY WHO WJAR WOC WOW WRC WSAI WTAG WTAM WTIC WW.II

9:00 McKesson Musical Magazine

9:00 MICRESSON INUSICAL MARBAZINE KETI KEPSD KEYR KGO KGW KHQ KOA KOMO KPRC KSD KSL KTAR KTHS KVOO WBEN WCAE WCSH WDAF WDAY WEAP WEBC WEEI WFI WFLA WCIY WHAS WHO WIOD WIS WJAR WJAX WJDX WKY WIS WMC WOAI WOC WOW WRC WRVA WSAI WSB WSM WSMB WTAG WTAM WTIC WTMJ WWJ 9:30 The Fuller Man

9:30 The Fuller Man
KFCA KGO KGW KHQ KOA KOMO
KSD KSL KSTP KYW WBAP WBEN
WCAE WCSHI WDAF WEAF WEBC
WFEI WFI WGY WHO WJAR WKY
WOAI WOC WOW WRC WSAI
WSB WTAG WTAM WTIC WTMJ

11:15 Jesse Crawford, Organ WEAF WEEL WFL WIOD WJAR WRC WTIC WWNC

WWI

11:30 Jack Denny and Orchestra
CFCF KPRC KSD KTHS WCAE
WEAF WFI WJAR WJAX WOW
WRC WTAM WTIC WWJ

12:05 Rudy Vallee and Orchestra KFYR KSD KTHS WBEN WCAE WDAF WEAF WHO WIBA WOC WOW WRC WSB WSM WTIC WTMJ 12:30 Waldori-Astoria Dance Orch. KGO KPRC KSD KSTP WCAE WEAF WENR WHO WOC WRC KSL WCKY WDAY WEBC WFLA WIOD WIS WJZ WRC WREN

8:00 Armstrong Quakers KDKA KOIL KWK WBAL WBZA WHAM WJR WJZ WLS WLW WREN

8:30 Heel Hugger Harmonies KFI KFSD KGW KHQ KOA KOIL KOMO KPO KSL KTAR WHAM WJZ WLS WREN

WJZ WES WREN
9:00 Household Finance Program
KDKA KWK WBAL WBZA WHAM
WJZ WMAQ WREN

9:30 Great Personalities KDKA KOIL KWK WBAL WBZA WENR WGAR WHAM WJR WJZ WLW WREN WRVA

10:45 Paris Night Life KDKA KYW WBAL WBZA WCKY WGAR WHAM WJZ WREN

11:45 Dream Pictures, Archer Gibson KFAB WBAL WENR WGAR WJR WJZ WREN

#### WEDNESDA Y

7:45 Believe It or Not Ripley KDKA WBAL WBZA WHAM WIS WJZ WPTF WRVA WWNC 8:00 College Memories Male Quartet KPI KFSD KFYR KGO KGW KHQ KOA KOIJ, KOMO KPRC KSL KSTP

KTAR KVOO KWK KYW WBAL WCKY WDAY WEBC WFAA WGAR WHAM WHAS WIBA WJDX WJR WJZ WMC WOAI WREN WSB WSM WSMB WTMJ

8:15 Guy Robertson Baritone KFYR KOA KOIL KPRC KSL KSTP KEYR KOA KOIL KPRC KSL KSFF KVOO KWK KYW WBAL WBAP WBZA WCKY WDAY WEBC WFAA WFLA WGAR WHAM WHAS WIBA WIOD WJAX WJDX WJR WJZ WKY WMC WOAI WREN WRVA WSB WSM WSMB WTMJ WWNC

WSD WSM WSME WIND WING 8:30 Jack Frost Melody Moments KDKA WBAL WGAR WHAM WJR WJZ WLS WLW 9:00 Adventures of Sherlock Holmes KDKA KWK WBAL WBZA WGAR WHAM WJR WJZ WLW WMAQ WREN

9:30 Dutch Masters Program KDKA KWK WBAL WBZA WENR WGAR WHAM WJR WJZ WLW WREN

KDKA KWK KYW WBAL WBZA WGAR WHAM WJR WJZ WREN 11:00 Slumber Music

WBAL WIOD WJR WJZ WWNC 12:15 Larry Funk and Orchestra KFYR KOA KSTP KTHS WBAL WENR WGAR WJR WJZ WSB WSM 12:30 Ernie Holst's Orchestra

KOA WENR WGAR WREN WSB WSM WJR WJZ

#### THURSDAY

4:14 U.S. Navy Band WHAM WJR WJZ WRC WREN 5:00 Coffee Matinee KDKA KFAB KWK KYW WBAL WBZA WGAR WHAM WJZ WLW WREN

7:45 Famous Fallacies of Business 7:45 Famous Failacies of Dusiness
KFI KFSD KGO KGW KHO KOA
KOMO KTAR WBAL WCKY WEBC
WPLA WGAR WIS WJAX WJZ
WLS WRC WREN WRVA WWNC 8:00 Dixie Spiritual Singers

KDKA KOIL KWK WBAL WBZA WCKY WHAM WJZ WLS WREN

WSB WSM WTIC

12:30 Ann Leaf at Organ KDYL KEJF KEPY KLZ KMBC KMOX KOH KOL KVOR WABC WBCM WCCO WEAN WFBL WGR WIBW WISN WLBW WNAC WNAX WOKO WSPD

MONDAY

6:45 Reis and Dunn WAAB WABC WACO WBRC WBT WDAE WDBJ WDBO WDOD WDRC WFBM WGL WHP WISN WKBW WFRC WLAP WLBW WLBZ WMAL WMT WNAC WOKO WORC WQAM WSPD WTOC WWVA

8:45 Pompeian Makeup Box CFRB KMBC KMOX WABC WADC WCAO WCAU WDRC WEAN WFBL WGN WHK WJAS WKBW WKRC WMAL WNAC WOWO WSPD WXYZ

9:00 Vapex — Mills Bros.

9300 VAPEX — WINIS BYOS.
KMBC KMOX WABC WADC WCAO
WCAU WDRC WEAN WFBL WGN
WHK WJAS WKBW WKRC WMAL
WNAC WOKO WOWO WSPD WXYZ WNAC WOKO WOWO WSPD WXYZ
9:15 Metropolitans, Round Towners
CFRB KFH KFJF KFPY KMRC
KMOX KOH KYOR WABC WBCM
WBRC WBT WCAO WDAE WDBJ
WDBO WDOD WDRC WDSU WEAN
WHEC WISN WJAS WKBW WLAP
WLBW WLBZ WMT WNAC WNAX
WORC WOWO WPG WQAM WTOC
WADO WTAQ WXYZ
9:30 Bourjois, Evening in Paris
KDYL KFJF KFPY KFRC KHJ

9:30 Bourjois, zeening in Faris KDYL KFJF KFPY KFRC KHJ KLZ KMBC KMOX KOIN KOL KRLD WABC WADC WBT WCAO WCCO WDSU WEAN WFBL WGN WGST WHEC WHK WJAS WKBW WKRC WMAL WNAC WOWO WSPD WXYZ WCAU

WAYZ WCAU
10:00 Burns Panatela, Guy Lombardo
KDYL KFJF KFPY KFRC KHJI KLZ
KMRC KMOX KOL KRLD
KTRH KTSA WABC WADC WBBM
WCAO WCAU WCCO WDRC WEAN
WFBL WFBM WHTK WJAS WKBW
WKRC WMAL WNAC WOWO WSPD WXYZ

11:30 Madriguera's Biltmore Orch WAAB WABC WBRC WBT WCAO WDAE WDBJ WDBO WDOD WDRC WDSU WEAN WLBZ WMAL WORC WPG WQAM WTOC

11:45 Geo. Olson and Orchestra WAAB WABC WBRC WBT WCAO WDAE WDBJ WDBO WDOD WDRC WDSU WEAN WLBZ WMAL WORC WPG WQAM WTOC

TUESDAY

6:45 Pertussin, Frank Stretz Orch.

KMBC KRLD WAAB WABC WBBM WCAU WDRC WEAN WHK WKBW WMAL WXYZ

T.30 Kaltenborn Edits News
KMBC KMOX WABC WADC WBBM
WBC KMOX WCCO WDRC WEAN
WFBL WFBM WGR WHK WJAS
WKRC WLBW WNAC WSPD WXYZ

WKRC WLBW WNAU WSPD WAYL
8:45 Geradine, Walter Winchell
KMBC KMOX WABC WADC WCAO
WCAU WDRC WEAN WFBL WGN
WGR WHK WJAS WKRC WMAL
WNAC WOWO WSPD WXYZ
9:00 Ben Bernie's Blue Ribbon Orch

KDYL KFH KFJF KFPY KFRC KHJ KLZ KMBC KOIN KOL KTRH KTSA WABC WADC WBIC WBT WCAO WCAU WCCO WDRC WDSU WEAN WFBL WGN WHK WJAS WEDNESDAY

8:00 Snoop and Peep, Sketch CFCF CKGW WBEN WCAE WCSH WEAF WGY WHO WIOD WJAR WLS WOC WSAI WWNC

KSD WBEN WCAE WCSH WEAF WEEL WGY WHO WJAR WLS WOC WOW WRC WSAI WTAG WWJ

8:30 Sousa and his Band KFYR KSD KYW WBEN WCAE WCSH WDAY WEAF WEBC WEEI WFBR WFLA WGY WHAS WIOD WIS WJAR WLIT WOW WRC WRVA WSMB WTAG WTAM WTIC WTMJ WWJ WWNC

9:00 Halsey-Stewart Program CKGW KFI KGO KGW K KOMO KPRC KSD KS KHQ KOA CNGW KFI KGO KGW KHQ KOA
KOMO KPRC KSD KSI. KSTP
KVOO KYW WBEN WCAE WCSH
WEAF WEEI WFBR WGY WHAS
WHO WJAR WJAX WLIT WMC
WOAI WOC WOW WRC WRVA
WSAI WSB WSM WSMB WTAG
WTAM WTMJ WWJ

9:30 Mobiloil Concert 9:30 Mobiloil Concert
KFT KFPR KGO KGW KHQ KOA
KOMO KPRC KSD KSL KSTP
KTAR KVOO WBEN WCAE WCSH
WDAF WDAY WEAF WEBC WEEL
WFBR WFLA WGY WHAS WHO
WIOD WIS WJAR WJAX WJDX
WLIT WMAQ WMC WOAL WOC
WOW WPTF WRC WRVA WSAL
WSB WSM WSMB WTAG WTAM
WTIC WTMJ WWJ WWNC
10:30 Coca Cola Program

10:30 Coca Cola Program 10:30 Coca Cola Program
CFCF KFI KFSD KGO KGW KHQ
KOA KOMO KPRC KSD KSL KSTP
KTAR KTHS WAPI WBAP WBEN
WCAE WCSH WDAF WEAF WEBC
WEEL WENR WFBR WFLA WGY
WHAS WHO WIOD WIS WJAX
WJDX WKY WLIT WMC
WOC WOW WRC WRVA WSAI
WSR WSW WSAM WSAM WSAM WIAX WIDX WKY WIIT WMC WOC WOW WRC WRVA WSAI WSB WSM WSMB WSUN WTAG WTAM WTIC WTMJ WWJ WWNC

HI:00 Radio Digest, Nellie Revell KSD WCSH WEAF WGY WOW WRC WTAM WWJ

11:30 Vincent Lopez and Orchestra KSD WAPI WBEN WCFL WCKY WEEI WGY WJAR WOW WRC WSB WW.I

12:30 Paul Whiteman's Orchestra KYW WEAF WHO WOC WRC

THURSDAY

7:00 Vermont Lumber Jacks WBEN WCAE WCSH WEAF WEEL WENR WFBR WFI WGY WJAR WSAI WTAG WTIC WWJ

WSAI WTAG WTIC WWJ
\$:90 Fleischmann, Rudy Vallee
CFCF CKGW KECA KGO KGW
KHQ KOA KOMO KPRC KSD KSL
KSTP KTAR WAPI WBAP WBEN
WCAE WCSH WDAF WEAF WEBC
WEEL WFBR WFI WFLA WGY
WHAS WHO WHOD WIAR WJAX
WJDX WKY WMAQ WMC WOAI
WOC WOW WRC WRVA WSAI
WSD WSAW WSAM WTAG WTAM WOC WOW WRC WRVA WSAI WSB WSM WSMB WTAG WTAM WTIC WTMJ WWJ

9:00 Arco Dramatic Musicale 9:00 Arco Dramatic Musicale
CKGW KFI KGO KHQ KOA KOMO
KSD KSL KSTP KYW WAPI WBAP
WBEN WCAE WCSH WDAF WEAF
WEBKO WEEI WFBR WFI WGY
WHAS WHO WIOD WJAR WJAX
WJDX WKY WMC WOAL WOC WOW
WRC WRVA WSAI WSB WSM
WSMB WTAG WTAM WTIC WTMJ 8:15 Rin Tin Tin Thriller KDKA KOIL KWK WBZA WGAR WHAM WJZ WLS WLW WREN 8:30 Pickard Family

WBZA WJR WJZ WLS WLW WREN 9:00 Blackstone, Sanderson-Crumit KDKA WBAL WBZA WCKY WHAM WJZ

9:30 Maxwell House Ensemble 9:30 (MAWKE) HOUSE ENSEMBLE
KDIKA KECA KFSD KGO KGW
KHQ KOA KOMO KPRC KSL KSTP
KTAR KWK KYW WAPI WBAL
WBAP WBZA WEBC WFLA WHAM
WHAS WIOD WJAX WIDX WJR
WJZ WKY WLW WMC WOAI WREN WRVA WSB WSM WSMB WTMJ 10:00 A. & P. Dance Gypsies

KDKA KWK WBAL WBZA WGAR WHAM WJR WJZ WLW WMAQ WREN

10:45 Paris Night Life

KDKA KYW WBAL WBZA WCKY WGAR WHAM WJZ WREN

12:15 Earl Hines and Orchestra KFYR KOA KTHS WENR WGAR WIR WIZ WREN WSB WSM 12:30 Larry Funk and Orchestra WGAR WJR WJZ WREN

FRIDAY

11:00 Walter Damrosch Hour 11:00 Water Damrosch Hour
CKGW KDKA KFAB KFYR KOA
KPRC KSD KSL KSTP KTHS KVOO
KWK KYW WAPL WBAL WBAP
WBZA WCAE WCSH WDAP WDAY
WEAF WEBC WEEL WENR WFAA WFBR WFLA WGAR WHAM WHAS WTMJ WWJ WWNC

4:15 Radio Guild 4:15 Radio Guild
CKGW KFAB KFSD KGO KGW
KOA KOMO KPRC KSL KSTP
KVOO WAPI WBAL WDAY WEBC
WGAR WHAM WHAS WIBA WIS
WJAX WJDX WJR WJZ WKY
WMAQ WMC WOAI WPTF WRC
WREN WRVA WSB WSM WSMB 7:45 Believe It or Not Ripley

KDKA WBAL WBZA WIS WJZ WPTF WRVA WWNC

8:00 Nestle's Program KDKA KOIL KWK WBAL WBZA WCKY WGAR WHAM WJR WJZ WLS WREN

8:30 Smith Bros., Trade and Mark WBAL WGAR WJZ WLS WLW 9:00 Interwoven Pair

9:00 Interwoven Pair
KDKA KFI KFSID KGO KGW KHQ
KOA KOMO KPRC KSI. KSTP
KTAR KWK KYW WAPI WBAI,
WBZA WCKY WEBC WFAA WGAR
WHAM WHAS WIOD WJAX WJR
WJZ WKY WMC WOAI WREN
WRVA WSB WSM WSMB WTMJ

WILLA WSB WSM WSMB WIND 930 Armour Program KDIKA KFI KGO KGW KHQ KO KOIL KOMO KPRC KSL KSTP KWK KYW WAPI WBAL WSZA WEBG WGAR WHAM WHAS WIOD WJAX WJDX WJR WJZ WKY WHA.
WJZ WK.
WRVA WMC WOAL WREN WIND WSM WSMB WTMJ WLW WSB

10:60 Paul Whiteman's Paint Men KDKA KFI KFSD KFYR KGO KCW KHQ KOA KOIL KOMO KPRC KSL KSTP KTAR KVOO KWK WBAL WBAP WBZA WCKY WDAY WEBC WENR WFLA WGAR WHAM

WKBN WKBW WKRC WLAC WMAL WNAC WOWO WRR WSPD WXYZ

9:30 Romances of Sea, Drama CFRB KMBC KMOX WABC WADC WCAO WCAU WDRC WEAN WFBL WGN WHK WJAS WKBW WKRC WMAL WNAC WOWO WXYZ

10:00 Minneapolis Symphony Orch. CFRB KDYL KFH KFJF KFPY KGB KHJ KLZ KMBC KOH KOL KRLD KVOR WAAB WABC WADC WBCM WBRC WBT WCAO WCCO WDBJ WDBO WDOD WDRC WDSU WEAN WFBM WHEC WHP WISN WJAS WEBM WHEC WHP WISN WIAS WKBW WKRC WLAC WLAP WLBW WLBZ WMAL WMT WNAX WOKO WORC WOWO WPG WQAM WSPD WTOC WXYZ

11:45 Geo. Olsen and Orchestra GFRB KDYL KFH KFJF KFPY KFRC KLZ KMBC KOH KOL KVOR WAAB WABC WADC WBCM WBRC WBT WCAO WDBJ WDBO WDOD WDRC WDSU WFBL WGL WHP WIBW WISN WKBW WLAC WLAP WLBW WLBZ WMAL WMT WNAX WOKO WORC WPG WQAM WSPD WITOC

12:00 Romanelli and Orchestra
CFRB KFPY KFRC KLZ KMBC
WCO WCO WIBW WISN WKBW WKRC WLBW
WMMT WNAC WNAX WOKO WPG WSPD

#### WEDNESDA Y

8:45 Modern Male Chorus KFPY KGB KHJ KLZ KMBC KMOX KOH KVOR WABC WBRC WBT WDRC WDSU WEAN WGR WHEC WHP WLAC WLBZ WMT WNAC 9:00 Gold Medal Fast Freight

KFH KMBC KMOX KSCJ WABC WADC WCAO WCCO WDBJ WDRC WEAN WFBL WFBM WGN WHK WHP WJAS WKBW WKRC WMAL WMT\_WNAC WOKO WOWO WSPD WXYZ WCAU

9:30 Eno Crime Club CFRB KMBC KMOX WABC WADC WCAO WCAU WDRC WEAN WFBL WGN WHK WJAS WKBW WKRC WMAL WNAC WOWO WSPD WXYZ

10:00 Vitality Personalities 10:00 Vitality Personalities
KDYL KFJF KBPY KFRC KHJ
KLRA KLZ KMBC KMOX KOIN
KOL KRLD KTRH KTSA WABC
WADC WBBM WBRC WBT WCAO
WCAU WCCO WDRC WDSU WEAN
WFBL WFBM WGST WHK WISN
WJAS WKBW WKRC WLAC WLAP
WMAL WNAC WKOO WOWO WREC
WSPD WXYZ WCAH

WSPD WXYZ WCAH
10:15 Weed Tire Chain Orch.
KDYL KFJF KLZ KMBC KMOX
KRLD WAAB WABC WADC WCAO
WCAU WCCO WDRC WFBL WGN
WHK WJAS WKBW WKRC WLBZ
WMAL WOWO WSPD WXYZ

10:30 Howard Barlow Orchestra 10:30 Howard Barlow Orchestra CFRB KFRC KGB KLZ KMBC KOH KTSA WABC WBRC WBT WCAO WDBO WDRC WDSU WHEC WHP WIBW WKBW WLAP WLBZ WMAL WMT WPG WTAQ

10:45 Columbia Concerts Program WHP WKBW WLAC WLBZ WMAL WPG

9:30 Adventures of Sherlock Holmes CFCF CKGW KSD WBEN WCSH WDAF WEAF WEEI WENR WFI WGY WHO WJAR WOC WOW WRC WSAI WTAG WTAM WTIC WWJ

11:30 Jesse Crawford, Organ KSD WEAF WFI WHO WJAR WOC WOW WRC WTIC WWJ

11:45 Cab Calloway and Orchestra KSD WCKY WEAF WFI WGY WHO WJAR WOC WRC WTIC WWJ

#### FRIDAY

8:00 Cities Service Program CKGW KECA KGO KGW KHQ KOA KOMO KPRC KSD KSL KSTP KTHS KYW WBEN WCAE WCSH WDAF WEAF WEBC WEEI WFAA WGY WHO WJAR WKY WLIT WOAL WOC WOW WRC WSAI WOAI WOC WOW WRC WSAI WTAG WTAM WTIC WTMJ WWJ

9:00 Clicquot Club, Reser's Orch.
KSD WBEN WCAE WCSH WDAF
WEAF WEEI WGY WHO WJAR
WLIT WLS WOC WOW WRC WSAI WTAG WTIC WWJ

WIAG WILE WWJ
9:30 Pond's, Leo Reisman Orch.
KSD WBEN WCAE WCSH WDAF
WEAF WENR WFBR WGY WJAR
WLIT WOC WOW WRC WSAI WTAG WTAM

10:00 NBC Artists' Service Program OFFICE WEEN WCAE WCSH WEAF WEEI WFBR WGY WJAR WLIT WMAQ WOW WRC WSAI WTAG WTAM WWJ

10:30 RKO Theater of Air KFI KFSD KFYR KGO KGW KHQ KFI KFSD KFYK KGO KGW KHQ KOA KOMO KSD KSL KTAR WBEN WCAE WCSH WDAY WEAF WEEL WENR WFBR WFLA WGY WHAS WIBA WIOD WJAR WJAX WJDX WKY WLIT WMC WOAI WOC WOW WRC WRVA WSAI WSB WSMB WRC WRVA WSAI WSB WSMB WTAG WTAM WTIC WTMJ WWJ

WIND WIAR WOW WRC WWJ

12:05 Coon-Sanders' Orchestra KFYR KSD KSTP WBAP WEAF WOW WRC WTMJ

#### SATURDAY

7:15 Laws That Safeguard Society
KECA KEX KFSD KFYR KGA
KJR KOA KPO KPRC KTAR KTHS
WAPI WHEN WCAE WCSH WDAY
WEAF WEBC WENR WFI WGY
WHO WJAR WJDX WOC WOW
WSAI WTAG WTIC
8:00 Civic Concents Program

8:00 Civic Concerts Program
CKGW KSD WBEN WCAE WCSH CKGW KSD WBEN WCAE WCSH WDAF WEAF WFBR WFI WHO WIOD WIS WJAR WJAX WMAQ WOC WOW WRC WTIC WWJ WWNC 8:30 Advisory Council on Radio KFSD KFYR KGO KGW

KOA KOMO KPRC KSD KSL KSTP KTAR KYW WBEN WCAE WCSH WDAF WDAY WEAF WEBC WEEI WDAY WEAF WEBC WEEL
WFBR WFI WFLA WGY WHAS WHO
WIBA WIOD WIS WJAR WJAX
WJDX WOC WOW WRC WRAW
WSAI WSB WSM WSMB WTAG
WTAM WTIC WTMJ WWJ WWNC

WIAM WHO WIND WAY WAY WAY 9,000 Arthur Pryor and Orchestra
KFI KFSD KFYR KGO KGW KHQ
KOA KOMO KPRC KSD KSL KSTP
KTAR KYW WAPI WBAP WBEN
WCAE WCSH WDAF WDAY WEAF (continued next column)

Columbia WABC | National, Red WEAF | National, Blue WJZ

WHAS WIOD WJAX WJDX WJR WJZ WKY WMC WOAI WREN WRVA WSB WSM WSMB WTMJ

10:45 Waves of Melody KDKA KWK KYW WBAL WBZA WCKY WGAR WHAM WJR WJZ WREN

11:30 Jack Denny and Orchestra CFCF KFYR KOA KPRC KSTP WBAL WEBC WENR WIBA WIS WJR WJZ WRC WREN

#### SATURDAY

5:00 Colorado Cowboys CKGW KDKA KEX KFSD KGO KJR KOA KPO WBAL WENR WGAR WHAM WHAS WJZ WREN WSM 7:30 Sonata Recital

CFCF KDKA KECA KFSD KPO WAPI WGAR WREN WSB WSM WART WGAR WREIN WSB WSM 7:45 Hollywood Nights KDKA KOIL KWK WBAL WCKY WGAR WHAM WJR WJZ WMAQ

WREN WBZA

NREN WOZE 8:00 Danger Fighters Drama KDKA KPI KFSD KFYR KGO KGW KHQ KOA KOIL KOMO KPRC KSL KSTP KTAR KWK WAPI WDAY WEBC WHAM WHAS WIBA WJDX WJZ WLS WMC WOAI WREN WSB WSM WSMB WTMJ

8:30 Dance with Countess D'Orsa CFCF CKGW KDKA KWK WBAL WBZA WGAR WHAM WJR WJZ

CFCF CKGW KDKA KWK WBAL WBZA WGAR WHAM WJR WJZ WLW WMAQ WREN 9.00 Chicago Civic Opera CFCF CKGW KWK WBAL WBZA WCKY WGAR WHAM WJZ WLS WREN

9:30 The First Nighter Drama 9:30 The First Nighter Drama
KDKA KPI KFSD KFYR KGO
KGW KHQ KOA KOIL KOMO KSL
KSTP KTAR KWK KYW WBAL
WBZA WDAY WEBC WGAR WHAM
WJR WJZ WLW WREN WTMJ
10:15 Cuckoo Burlesque Skit

CFCF CKGW KWK WBZA WGAR WHAM WJR WJZ WMAQ WREN 10:45 Twenty Fingers of Harmony CFCF KDKA WBAL WHAM WJR WJZ WREN

12:15 Paul Whiteman and Orchestra KYW WGAR WJR WJZ WREN

National, Red\_\_\_\_WEAF WEBC WEEI WFBR WFI WFLA WGY WHAS WHO WIBA WIOD WIS WJAR WJAX WJDX WKY WMC WOAI WOC WOW WRC WRVA WSAI WSB WSMB WTAG WTAM WTIC WTMJ WWJ WWNC

9:30 Club Valspar, Aileen Clark CFCF CKGW KSD WBEN WCAE WCSH WDAF WEAF WEEI WFBR WFI WGY WHO WJAR WMAQ WOC WOW WRC WSAI WTAG WTAM WTIC WWJ

WTAM WTIC WWJ
11:30 Rudy Vallee and Orchestra
KEX KFYR KGA KJR KOA KPO
KPRC KSD WBEN WCKY WDAY
WEAF WFI WHAS WHO WJAR
WMC WOC WRC WTIC WWJ
12:00 Rajh Kirbery, Dream Singer
KFYR KGA KJR KOA KPO KPRC
KSD WBEN WEAF WGY WIBA
WRC WSB WTIC WWJ

WRC WSB WITC WWI 12:05 Coon-Sanders Orchestra KFYR KGA KJR KOA KPO KPRC KSD WBEN WEAF WGY WIBA WOW WRC WSB WTAM WTIC WWJ

#### Columbia WABC | Columbia THURSDAY

6:45 Pertussin, Frank Stetz Orch. KMBC KRLD WAAB WABC WBBM WCAU WDRC WGST WJAS WKBW WXYZ

7:30 Kaltenborn Edits News WCAO WCAU WCCO WDRC WEAN
WFBL WFBM WGR WHK WJAS
WKRC WLBW WNAC WSPD WXYZ

8:45 Angelo Patri, Your Child KMBC KMOX WABC WADC WCAO WCCO WDRC WEAN WFBL WGO WGR WHK WJAS WKRC WNAC WOWO WSPD WXYZ WCAU WMAL

9:00 Vapex, Mills Bros. KMBC KMOX WABC WADC WCAO WCAU WDRC WEAN WFBL WGN WHK WHP WJAS WKBW WKRC WMAL WNAC WOWO WSPD WXYZ

9:00 Snowdrift Southern Melodies FIGURE WITH SUMMER METOGRES
WELL WAS WELL WAS WELL WAS WELL WHO WE WOOD WOOD WOOD WAS WAS WREC WRO WAS WREC WRO WOOD WAR

9:30 Love Story Hour KMBC KMOX WABC WADC WCAO WCAU WDRC WEAN WFBL WGN WHK WJAS WKBW WKRC WMAL WNAC WOWO WSPD WXYZ.

10:00 Schaffner-Marx Trumpeters
KFJF KLZ KMBC KMOX KRLD
WAAB WABC WADC WBBM WCAO
WCAU WCCO W DRC WDBU WEAN
WFBL WFBM WGST WHK WJAS
WKRC WLAP WMAL WOWO WSPD WXYZ

10:30 Grand Opera Miniatures WAAB WABC WBT WDRC WEAN WHP WLBZ WTAQ

#### FRIDAY

8:30 March of Time, Drama
KDYL KFPY KFRC KHJ KLZ
KMBC KMOX KOIN KOL WABC
WADC WBT WCAO WCAB WCAU
WORC WDSU WEAN WFBL WGN
WGR WHK WHP WJAS WKRC WLAC WMAL WNAC WOWO WSPD WXYZ

9:00 Radio Reproductions KMBC KMOX WABC WCAO WCAU WDRC WEAN WFBL WGM WHK WJAS WKBW WKRC WMAL WNAC WXYZ

WALL 9:15 Liberty Magazine Hour KMBC KMOX WABC WADC WCAO WCAU WDRC WEAN WFBL WGN WHK WJAS WKBW WKRC WMAL WNAC WOWO WSPD WXYZ

WAAU WOWO WSPD WAYZ
9-45 Friendly Five Footnotes
KFJF KLZ KMBC KMOX KRLD
WABC WBRC WBT WCAO WCAO
WCAO WDSU WEAN WFBL WGN
WHK WJAS WKBW WKRC WLAC WMAL WMT WNAC WNOX WREC WXYZ

WAYZ
10:00 Pillsbury Pageant
KFJF KMBC KMOX KRLD WABC
WADC WBBM WBT WCAO WCAU
WCCO WDBJ WDRC WEAN WFBL
WGST WHK WAS WKBW WKRC
WMAL WNAC WOKO WORC WOWO
WEEC WSPD WTAR WXYZ
10:20 Pageally

10:30 Round Towners, Irene Beasley KFRC KGB KOH WABC WADC WBT WHEC WHP WIBW WKBW WLBZ

10:45 Tito Guizar, Spanish Tenor KGB WABC WADC WBT WKBW WLBZ WMAL WOKO WHP KFPY KHJ KOH WABC WEAN WHP WIBW WKBW WNAC WOKO

WPG

SATURDAY

7:00 Frederick William Wile KFPY KFRC KGB KHJ KOH WABC WADC WBT WEAN WHEC WHP WIBW WLBZ WMAL WNAC WOKO

7:30 Reis and Dunn KFPY KFRC KGB KHJ KOH WABC WADC WBT WHEC WHP WLBZ WNAC WOKO

9:00 Carborundum, Indian Legend KMOX WAAB WABC WCAU WGN WHK WKBW WXYZ

9:30 Smith Bros., Shilkret Orch.
KFH KPJF KLZ KMBC KMOX
WAAB WABC WADC WCAO WCAU
WCCO WDRC WEAN WGN WGST
WHEC WHK WHP WJAS WKBW
WJAP WLBZ WMT WOWO WSPD WXYZ

9:45 Four Clubmen, Irene Beasley KGB KOH WABC WADC WBT WEAN WHEC WHP WIBW WKBW WLBZ WMAL WPG

10:00 National Radio Forum KFPY KFRC KGB KHJ KOH WABC WADC WBT WEAN WHEC WHP WIBW WKBW WLBZ WMAL WNAC WOKO WPG

10:15 Hank Simmons Showboat KFPY KFRC KGB KHJ KOH WABC WADC WBT WEAN WHEC WHP WIBW WKBW WLBZ WMAL WNAC WOKO WPG

11:45 Geo. Olsen and Orchestra KFPY KOH WABC WADC WHP WIBW WKBW WMAL

12:00 Guy Lombardo and Orchestra KFPY KGB KOH WABC WEAN WHEC WHP WIBW WKBW WNAC WOKO WPG

### The Editor Listens In

The Mills Brothers: Novel and easy to listen to. Wonderful harmony and interesting orchestral imitations.

Turn the Dial

Swift, Stebbins Boys: Just another program. Much ado about nothing.

Turn the Dial

The Goldbergs: One of the best dialog acts on the air. Vivid pictures of the life of a Jewish family as good as anything Fannie Hurst or Montague Glass ever wrote.

Turn the Dial

Kate Smith: Bless her heart. Just the voice of her helps the cares of the day to fold their tents.

Turn the Dial

Cremo, Bing Crosby: Getting awful tired of those twenty words, no more, no less.

Turn the Dial

Carveth Wells: Better than the Geo graphic Magazine.

Turn the Dial

Moonshine and Honeysuckle: Another good one. Thrilling dramas from the lives of mountaineers. Fueds and shootin' and real he-men.

Turn the Dial

Wonder Program: We wonder how they get away with it.

Turn the Dial

Walter Damrosch Hour: The kids of today are mighty lucky to get this for a lesson.

Turn the Dial

Adventures of Barbara Wayne: "Yes and no, mostly no."

Turn the Dial

The Three Bakers: Leads the world in two things: tries the hardest to be funny and fails the most.

Turn the Dial

#### NOTICE OF COPYRIGHT

The method of logging by wave-lengths or frequencies was devised by The Radex Press in 1924 and has been copyrighted and recopyrighted each year since that time. The arrangement of stations in groups by frequencies or wave-lengths with dial readings in connection therewith is fully covered by our copyright and all infringers will be vigorously prosecuted.

#### KEY

Frequency in kilocycles. Wavelengths in meters. Night power in watts in third column. Second column symbols: \*Verifies reception for postage or sends station stamp for 10c. †Verifies for postage; no stamp. \$ Stamp only. ‡ Does not verify. \$ Does not reply. \$ Verification 25c, reply card 10c. Fourth column symbols: D, Daytime only. Dn, Daytime but may use some evening hours. \$, Sunday only. X, Has permit to increase power. † Uses greater power in daytime. CP, Has construction permit only. N, NBC chain. C, Columbia chain. Z, Has permit to change frequency. Y, has permit to change location. 

| These stations are synchronized. 1-2-3, Small figures indicate stations sharing time. a-b-c, Small letters indicate stations with two sets of calls. Some Canadian, Cuban and Mexican stations have odd frequencies; correct frequency shown in fourth column. Dashes (-\_-) have no meaning.

540 kilo	ocycles :	555.6 meters	
CKX †	500	Brandon, Manitoba	Manitoba Telephone System
550 kilo	ocycles s	545.1 meters	
KFDY † KFUO * KFYR † KOAC † KSD † WGR * WKRC †	500 1+ 500 2+ 1000 1+N 1000 2- 500 2-N 1000 C	Brookings, S. D. St. Louis, Mo. Bismarck, N. D. Corvallis, Ore. St. Louis, Mo. Buffalo, N. Y. Cincinnati, Ohio	S. D. State College Concordia Theological Seminary Meyer Broadcasting Co. State Agricultural College Pulitzer Publishing Co. Buffalo Broadcasting Co. WKRC Incorporated
560 kilo	ocycles 5	535.4 meters	
KFDM * KLZ * KTAB * WFI * WIBO * WLIT † WNOX * WPCC * WQAM *	500 X+ 1000 C 1000 1 500 1N 1000 3+ 500 1N 1000 X+C 500 3S 1000 C	Beaumont, Texas Denver, Colo. San Francisco, Cal. Philadelphia, Pa. Chicago, Ill. Philadelphia, Pa. Knoxville, Tenn. Chicago, Ill. Miami, Fla.	Magnolia Petroleum Co. Reynolds Radio Co., Inc. Associated Broadcasters Strawbridge & Clothier Nelson Bros. Bond & Mortgage Co. Lit Brothers WNOX, Inc. North Shore Congregational Church Miami Broadcasting Co.
570 kilo	ocycles 5	526.0 meters	
KGKO * KMTR * KXA * TGW WEAO † WKBN * WMAC * WMCA * WNAX * WNYC † WSYR * WWNC *	250 + 500 500 50 1C 250 1C 250 2a 1000 C 500 3 1000 C 500 3	Wichita Falls, Texas Hollywood, Cal. Seattle, Wash. Guatamala Columbus, Ohio Youngstown, Ohio Syracuse, N. Y. New York City Yankton, S. D. New York City Syracuse, N. Y. Asheville, N. C.	Wichita Falls Broadcasting Co. KMTR Radio Corp. American Radio Tel. Co. Ohio State University WKBN Broadcasting Corp. Clive B. Meredith Knickerbocker Broadcasting Co., Inc. House of Gurney, Inc. Dept. of Plants and Structures Clive B. Meredith Citizens Broadcasting Co., Inc.
580 kilo	cycles 5	516.9 meters	
CFCY * CHMA CKCL * CKUA † KGFX KSAC ‡ WIBW * WOBU * WSAZ * WTAG *	500 250 500 500 200 500 2+ 1000 2+C 250 1+ 250 N	Charlottetown, P. E. I. Edmonton, Alta. Toronto, Ont. Edmonton, Alta. Pierre, S. D. Manhattan, Kans. Topeka, Kansas Charleston, W. Va. Huntington, W. Va. Worcester, Mass.	The Island Radio Co. Christian and Missionary Alliance The Dominion Battery Co. University of Alberta Dana McNeil State Agricultural College Topeka Broadcasting Assn., Inc. WOBU, Inc. WSAZ, Inc. Telegram Publishing Co.

590 kilocycles 508.2 meters	
CMW       -       1400       588       Havana, Cuba         KHQ       -       1000       +N       Spokane, Wash,         WCAJ       *       500       1       Lincoln, Nebr.         WEEI       †       1000       N       Boston, Mass.         WKZO       *       1000       D       Kalamazoo, Mich.         WOW       *       1000       1N       Omaha, Nebr.	Columbus Commercial & Radio Co. Louis Wasmer, Inc. Nebraska Wesleyan University Edison Elec. Illuminating Co. WKZO, Inc. Woodmen of the World
500 kilocycles 499.7 meters	
CNRO † 500 Ottawa, Ont. KFSD * 500 +N San Diego, Cal. WCAC † 250 2+ Storrs, Conn. WCAC * 250 C Baltimore, Md. WICC * 250 2+ Bridgeport, Conn. WMT * 500 C Waterloo, Jowa WREC * 500 +C Memphis, Tenn.	Canadian National Railways Airlan Radio Corp. Conn. Agricultural College Monumental Radio, Inc. Bridgeport Broadcasting Station, Inc. Waterloo Broadcasting Co. WREC, Inc.
510 kilocycles 491.5 meters	
KFRC * 1000 C San Francisco, Cal. WDAF * 1000 N Kansas City, Mo. WFAN * 500 Ca Philadelphia, Pa. WIP * 500 Ca Philadelphia, Pa. WJAY † 500 D Cleveland, Ohio	Don Lee, Inc. Kansas City Star Co. Keystone Broadcasting Co., Inc. Gimbel Bros. Co. Cleveland Radio Broadcasting Corp.
620 kilocycles 483.6 meters	
CMCJ 250 Havana, Cuba KGW * 1000 +N Portland, Ore. KTAR * 500 +N Phoenix, Arizona KZRM 50000 618.5 Manila, P. I. WFLA * 1000 +Na Clearwater, Fla. WLBZ † 500 C Bangor, Maine WSUN * 1000 +Na St. Petersburg, Fla. WTMJ * 1000 +N Milwaukee, Wis.	Rafael Rodriquez Oregonian Publishing Co. KTAR Broadcasting Co. Radio Corp. of the Philippines Chamber of Commerce Maine Broadcasting Co., Inc. Chamber of Commerce Milwaukee Journal
630 kilocycles 475.9 meters	0
Victoria, B. C.	Victoria Broadcasting Association The Hamilton Spectator Winnipeg Grain Exchange Wentworth Radio Broadcasting Co. Taylor & Bate, Ltd. Canadian National Railways Stephens College Evansville on the Air, Inc. M. A. Leese State Marketing Bureau Manuel Angel Fernandcz & Cia.
640 kilocycles 468.5 meters	
CHRC       100       645a       Quebec, Que.         CIKCI       100       645a       Quebec, Que.         CIKCI       50       645       Waterloo, Ont.         CMHJ       40       645       Cienfuegos, Cuba         KFI       50000       N       Los Angeles, Cal.         WAIU       500       C Dn       Columbus, Ohio         WOI       5000       D       Ames, Iowa	E. Fontaine Le "Soleil," Ltd. John Patterson Arturo Hernandez Earle C. Anthony, Inc. Associated Radiocasting Corp. State College of Agriculture
650 kilocycles 461.3 meters	
CPCB * 100 Dn Seattle, Wash. VSM * 5000 NX Nashville, Tenn.	Queen City Broadcasting Co. National Life & Accident Ins. Co.
660 kilocycles 454.3 meters	
CHWK † 100 665 Chilliwack, B. C. Moose Jaw, Sask.  CJRM † 500 665 Moose Jaw, Sask.  CMCO - 250 - Havana, Cuba  CRUS - 500 664 Salvador  WAAW * 500 D Omaha, Nebr.  WEAF † 50000 N□ New York City  WTIC * 5000 N□ Hartford, Conn.	Chilliwack Broadcasting Co., Ltd. Jas. Richardson & Sons, Ltd. Jas Richardson & Sons, Ltd. J. L. Stowers Juan Fernandez de Castro Republic of El Salvador Omaha Grain Exchange National Broadcasting Co., Inc. Travelers Broadcasting Service, Inc.
670 kilocycles 447.5 meters	
HIX - 100 669 Santo Domingo /OWR - 500 675 St. Johns, N. F.	Dominican Republic Wesley United Church

600 1 11 1 440 0	
680 kilocycles 440.9 meters	
KFEQ * 2500 D St. Joseph, Mo. KPO † 5000 NX San Francisco, Cal.	Scroggin & Co., Bank Hale Bros. & The Chronicle
WPTF * 1000 N Dn Raleigh, N. C.	Durham Life Insurance Co.
XFG 2000 683.3 Mexico, Mex.	Sria, de Guerra y Marina
690 kilocycles 434.5 meters	
CFAC _ 500 1 Calgary, Alta.	The Calgary Herald
CFRB * 5000 Ca Toronto, Ont. CJCJ * 500 1 Calgary, Alta.	Rogers-Majestic Corp., Ltd. Albertan Publishing Co., Ltd.
CNRX * 5000 a Toronto Ont	Albertan Publishing Co., Ltd. Canadian National Radways U. S. Navy
VAS † 10000 685 Glace Bay, N. S.	Canadian Marconi Co.
XET † 500 Monterrey, Mexico	Mexico Music Co., S. A.
700 kilocycles 428.3 meters	
WLW * 50000 N Cincinnati, Ohio	Crosley Radio Corp.
710 1-:11 422 2	
710 kilocycles 422.3 meters  KMPC * 500 Dn Beverly Hills, Cal.	D O M MI
WOR * 5000 X Newark, N. J.	R. S. MacMillan Bamberger Broadcasting Service, Inc.
XEN † 1000 711 Mexico City	Cia. Civil de Inversiones
720 kilocycles 416.4 meters	
WGN † 25000 C Chicago, Ill.	Chicago Tribune
720 Irilaayalaa 410 7 maatawa	
730 kilocycles 410.7 meters	W.C.H., II
CHLS 50 1 Vancouver, B. C. CHYC 5000 Sa Montreal, Que. CKAC 5000 Ca Montreal, Que.	W. G. Hassell Northern Electric Co., Ltd.
CKCD 50 I Vancouver, B. C.	Northern Electric Co., Ltd. La Presse Publishing Co., Ltd. Vancouver Daily Province
CKFC † 50 1 Vancouver, B. C. CKMO - 100 1 Vancouver, B. C.	United Church of Canada
CKWX † 100 1 Vancouver, B. C.	Sprott-Shaw Radio Co. A. Holstead & Wm. Hanlon
CMK 3150 Havana, Cuba CNRM * 5000 2 Montreal, Que.	Cuban Broadcasting Co., Hotel Plaza Canadian National Railways
XER 75000 735 Villa Acuna, Mex.	Dr. John R. Brinkley
740 kilocycles 405.2 meters	
KMMJ * 1000 Dn Clay Center, Nebr.	The M. M. Johnson Co.
WSB 5000 NX Atlanta, Ga.	Atlanta Journal Co.
750 kilocycles 399.8 meters	
WJR † 5000 NX Detroit, Mich.	WJR. The Goodwill Station, Inc.
XEQ 5000 Juarez, Chih.	Feliciano Lopez Islas
760 kilocycles 394.5 meters	
KVI * 1000 C Dn Tacoma, Wash.	Puget Sound Broadcasting Co., Inc.
WBAL * 1000 N□ Baltimore, Md. WEW * 1000 D St. Louis, Mo.	Consolidated Gas, Elec. & Power Co. St. Louis University
WJZ † 30000 N□ New York City	National Broadcasting Co., Inc.
770 kilocycles 389.4 meters	
KFAB * 5000 1X Lincoln Nebr.	KFAB Broadcasting Co.
WBBM * 25000 1Ca Chicago, Ill. WJBT 25000 1Sa Chicago, Ill.	WBBM Broadcasting Corp. WBBM Broadcasting Corp.
	Manitoha Telephone System
CNRW 5000 a Winnipeg, Manitoba	Manitoba Telephone System Canadian National Railways
KELW * 500 2 Burbank, Cal. KTM * 500 2+ Los Angeles, Cal.	Magnolia Park, Ltd. Pickwick Broadcasting Corp. Shepard Broadcasting Service, Inc.
WEAN * 250 +C Providence, R. I.	
WMC 500 +N Memphis Tenn	Shepard Broadcasting Service, Inc.
Strong	Shepard Broadcasting Service, Inc. Memphis Commercial-Appeal, Inc. WTAR Radio Corp. WTAR Radio Corp.

790 kilocycles 379.5 meters	
CMBS - 150 Havana, Cuba CMHC - 100 Tuinucu, Cuba KGO † 7500 N San Francisco, Cal. WGY † 50000 N Schenectady, N. Y.	Enrique Artalejo Frank H. Jones National Broadcasting Co., Inc. General Electric Co.
800 kilocycles 374.8 meters	
WBAP † 10000 IXN Fort Worth, Texas WFAA ¢ 50000 IN Dallas, Texas XFC - 350 805 Aguascalientes, Mexico	Carter Publications, Inc. News & Journal Gobierno del Estado de Aguascalientes
810 kilocycles 370.2 meters [	
WCCO * 5000 CX Minneapolis, Minn. WPCH * 500 D New York City	Northwestern Broadcasting, Inc. Eastern Broadcasters, Inc.
820 kilocycles 365.6 meters	
WHAS † 10000 NX Louisville, Ky. XFI _ 1000 818 Mexico City	Courier-Journal & Times Sria. de Ind., Commercio y Trabajo
830 kilocycles 361.2 meters [	
CMGA - 100 834 Colon, Cuba KOA † 12500 NX Denver, Colo. WEEU - 1000 DCP Reading, Pa. WHDH - 1000 D Boston, Mass. WRUF * 5000 Dn Gainesville, Fla.	Leopoldo V. Figueroa National Broadcasting Co., Inc. Berks Broadcasting Co. Matheson Radio Co., Inc. University of Florida
840 kilocycles 356.9 meters [	
CKGW * 5000 Na Toronto, Ont. CKLC † 1000 b Red Deer, Alta. CMC * 500 842 Havana, Cuba CNRD † 1000 b Red Deer, Alta. CPRY 5000 a Toronto, Ont.	Gooderham & Worts, Ltd. Alberta Pacific Grain Co., Ltd. Cuban Telephone Co. Canadian National Railways Canadian Pacific Railways
850 kilocycles 352.7 meters	
KWKH * 10000 1 Shreveport, La. WWL * 10000 1 New Orleans, La.	Hello World Broadcasting Corp. Loyola University
860 kilocycles 348.6 meters	
CMJE	Manuel Fernandez KMO, Inc. Atlantic Broadcasting Corp. Atlantic Broadcasting Corp. WHB Broadcasting Co. Secretaria de Educacion Publica
870 kilocycles 344.6 meters	
WENR 50000 1N Chicago, Ill. WLS 50000 1N Chicago, Ill. KFF 500 875 Chihuahua, Chih.	National Broadcasting Co., Inc. Agricultural Broadcasting Co. Gobierno del Estado de Chihuahua
880 kilocycles 340.7 meters	
CHML * 50 4 Hamilton, Ont. CJCB * 50 - Sydney, N. S. CKCV † 50 a Quebec, Que. CKPC † 50 4 Preston, Ont. CNRQ † 50 a Quebec, Que. KFKA † 500 2 Greeley, Colo. KLX * 500 2 Denver, Colo. KPOF * 500 2 Denver, Colo. WCOC * 500 + Meridian, Miss. WGBI * 250 1 Scranton, Pa.	Maple Leaf Radio Co., Ltd. N. Nathanson G. A. Vandry Metal Shingle & Siding Co. Canadian National Railways Midwestern Radio Corp. Tribune Publishing Co. Pillar of Fire, Inc. Mississippi Broadcasting Co., Inc. Scranton Broadcasters, Inc.

		-	
890 kil	ocycles	336.9 meters	
CFBO *	500	St. John, N. B.	CANC
CKCO t	100 3	Ottawa, Ont.	C. A. Munro, Ltd. Dr. G. M. Geldert
CKPR	50 3	Port Arthur, Ont.	Dougall Motor Car Corp.
CMCF †	250	Havana, Cuba	Raoul Karman
	1000 885	Havana, Cuba Havana, Cuba	Francisco Lavin
KARK * KFNF	250	Little Rock, Ark. Shenandoah, Iowa	Church of the Nazarene
KUSD *	$\begin{array}{ccc} 500 & 2+ \\ 500 & 2 \end{array}$	Vermillion S D	Henry Field Co. University of South Dakota Georgia School of Technology
WGST *	250 +C	Vermillion, S. D.	Coorgin School of Toulons
WILL †	250 2+	Urbana, III.	University of Illinois
WJAR *	250 +N	Providence, R. I.	The Outlet Co.
WKAQ * WMMN *	250 250 +	San Juan, P. R.	Radio Corp. of Porto Rico
XES \$	500	Providence, R. I. San Juan, P. R. Fairmont, W. Va. Tampico, Mexico	Floit-Rowe Broadcasting Co.
	200 222	rampico, Mexico	Difusora Portena XES
900 kil	ocycles	333 1 motors	
		333.1 meters	
KGBU † KHJ *	500 1000 C	Ketchikan, Alaska	Alaska Radio & Service Co.
KSĚI *	350	Los Angeles, Cal.	Don Lee, Inc.
TIC	50	Pocatelli, Idaho San Jose, Costa Rica Buffalo, N. Y.	Radio Service Corp.
WBEN *	1000 N	Buffalo, N. Y.	WREN Inc
WJAX * WKY *	1000 N	Jacksonville, Fla.	City of Jacksonville
WKY *	1000 N	Oklahoma City	WBEN, Inc. City of Jacksonville WKY Radiophone Co.
WLBL †	2000 D	Ellis, Wis.	Wisconsin Dept. of Markets
910 kil	00110	220 6 4	
DIO KII	ocycles	329.6 meters	
CFLC * CFQC CHNS * CJGC * CNRH	50 915	Prescott, Ont.	Radio Association
CHOC	500 1	Saskatoon, Sask.	The Electric Shop, Ltd.
CIGC *	500 Za 5000 b	Halifax, N. S.	Dalifax Herald, Ltd.
CNRH	500 Za	Halifay N S	Free Press Printing Co., Ltd.
CINKL *	5000 b	London, Ont. Halifax, N. S. London, Ont.	Canadian National Railways Canadian National Railways
CNRS	500 1	Saskatoon, Sask.	Canadian National Railways
XEW †	5000	Mexico City	Mexico Music Co.
920 kil	oovolos	225 0	
920 KII	ocycles	325.9 meters	
HHK *	1000	Port au Prince, Haiti	Republic of Haiti
KFEL † KFXF *	500 1 500 1	Denver, Colo.	Republic of Haiti Eugene P. O'Fallon, Inc.
	500 1 1000 N	Denver, Colo. Denver, Colo. Seattle, Wash.	Colorado Radio Corp.
KPRC *	1000 +N	Houston Tevas	Fisher's Blend Station, Inc.
WAAF	500 D	Houston, Texas Chicago, III.	Houston Printing Co. Drovers' Journal Publishing Co.
WBSO	500 D	Needham, Mass.	Babson Service Organization, Inc.
wwj †	1000 N	Detroit, Mich.	The Detroit News
930 kile	ocycles	322.4 meters	
CECH			
CFRC =	$\begin{array}{ccc} 100 & 3 \\ 50 & 3 + \end{array}$	North Bay, Ont. Kingston, Ont.	Northern Supplies, Ltd.
CJCA *	500	Edmonton, Alta.	Queen's University
CMCD	250 925	Havana, Cuba	The Edmonton Journal, Ltd. Angel Bertematy
CMCN	250 925	Havana, Cuba Havana, Cuba	Antonio Ginard
CMJF KFWI †	50 500 I	Camaguey, Cuba	John L. Stowers
VCP7	500 1 500 2+	San Francisco, Cal.	John L. Stowers Radio Entertainments, Inc.
KMA *	500 2 1	York, Nebr. Shenandoah, Iowa	Dr. George R. Miller May Seed & Nursery Co.
KROW *	500 1+X	Oakland, Cal.	Educational Broadcasting Corp.
WBRC * WDBI *	500 +C	Birmingham, Ala.	Birmingham Broadcasting Co. Inc.
WDBJ * WIBG *	500 2+ 500 1+X 500 +C 250 +C 25 S	Roanoke, Va.	Birmingham Broadcasting Co., Inc. Times-World Corp.
		Elkins Park, Pa.	St. Paul's P. E. Church.
940 kilo	ocycles .	319.0 meters [	
KGU †	1000 N		
KGU † KOIN *	1000 C	Portland Oregon	Marion A. Mulrony
KZRC	500 937.5	Honolulu, Hawaii Portland, Oregon Cebu, P. I.	KOIN, Inc.
WAAT	300 D	Jersey City, N. J.	Bremer Broadcasting Corp.
WCSH * WDAY *	1000 N	Jersey City, N. J. Portland, Maine Fargo, N. D.	Congress Square Hotel Co
WFIW *	1000 N 1000 C	rargo, N. D.	WDAY, Inc. WFIW, Inc.
WHA	750 D+	Hopkinsville, Ky. Madison, Wis.	WFIW, Inc. University of Wisconsin
XEO	5000	Mexico City	National Revoluncionario Party
050 1-21	. o.v.o1		
950 kild	ocycles :	315.6 meters	
CMHD KFWB *	250	Caibarien, Cuba	Manuel Alvarez
ICT. M.D.	1000	Hollywood, Cal.	Warner Bros. Broadcasting Corp.

INDEX BY FREQUENCIES	AND DIAL NUMBERS
KGHL          1000         N         Billings, Mont.           KMBC         *         1000         C         Kansas City, Mo.           T14NRH          75         948         Heredia, C. R.           WRC         †         500         N         Washington, D. C.	Northwestern Auto Supply Co., Inc. Midland Broadcasting Co., Inc. Armando Cespedes National Broadcasting Co., Inc.
960 kilocycles 312.3 meters	
CFCL - 500 2S Toronto, Ont. CHCK - 100	Dominion Battery Co. I. W. E. Burke R. H. Williams & Sons, Ltd. Cooperative Wheat Producers, Ltd. Leader Publishing Co., Ltd. Canadian National Carbon Co., Ltd. Domingo Fernandez Luis Perez Garcia Canadian National Railways International Broadcasting Co.
970 kilocycles 309.1 meters	
CMBT 500 Havana, Cuba CMGF 50 977 Matanzas, Cuba KJR * 5000 N Seattle, Wash. WCFL 1500 N Dn Chicago, III.	Emilio Perera Bernabe R. de la Torre Northwest Broadcasting System, Inc. Chicago Federation of Labor
980 kilocycles 305.9 meters	
CFCN - 10000 985 Calgary, Alta. KDKA - 50000 N Pittsburgh, Pa.	Western Broadcasting Co. Westinghouse Elec. & Mfg. Co.
990 kilocycles 302.8 meters	
WBZ † 25000 N□X Springfield, Mass. WBZA † 25000 □X Boston, Mass. XEK - 101 Mexico City	Westinghouse Elec. & Mfg. Co. Westinghouse Elec. & Mfg. Co. Arturo Martinez
1000 kilocycles 299.8 meters	
KFVD       *       250       Dn       Culver City, Cal.         WGEO       1000       D       York, Pa.         WHO       *       5000       N□X       Des Moines, Iowa         WOC       *       5000       N□X       Davenport, Iowa         XEA       100       Guadalajara, Jal.         XEC       50       Toluca, Mex.         XEF       100       N. Laredo, Tams.         XEFI       100       Chihuahua, Chih.         XEFS       40       Queretaro, Qro.         XEJ       *       101       Morelia, Mexico         XEJ       *       100       Juarez, Chih.         XET       10       Saltillo, Coah.         XETC       100       Jalapa, Ver.         XETG       100       Veraeruz, Ver.         XEV       100       Puebla, Pue.         XEY       105       Merida, Yuc.	Los Angeles Broadcasting Co. York Broadcasting Co. Central Broadcasting Co. Central Broadcasting Co. Central Broadcasting Co. Alberto Palos Sauza Jesus R. Benavides Alfonso Zorilla B. Rafael T. Carranza Feliciano Lopez Islas Salvador Sanchez Carlos Gutierrez M. Juan G. Buttner Antonio Garza Castro Juventino Sanchez Feliciano Lopez Islas Fernando Pazos Ciro Molina Partido Socialista S. E.
1010 kilocycles 296.8 meters	Acadia University
CKIC       50       Wolfville, N. S.         CMBW       150       Havana, Cuba         CMBZ       150       Havana, Cuba         KGGF       500       2       S. Coffeyville, Okla.         KOW       500       San Jose, Cal.         WHN       250       1       New York City         WIS       500       +N       Columbia, S. C.         WLAP       150       C       Louisville, Ky.         WNAD       500       2       Norman, Okla.         WPAP       250       1       New York City         WQAO       250       1       New York City         WRNY       250       1       New York City	Modesto Alvarez Manual y G. Salls Powell & Platz Pacific Agricultural Foundation, Ltd. Marcus Loew Booking Agency South Carolina Broadcasting Co., Inc. American Broadcasting Corp. of Ky. University of Oklahoma Palisades Amusement Park Calvary Baptist Church Aviation Radio Station, Inc.
1020 kilocycles 293.9 meters	
CMJH 15 1017 Ciego de Avila, Cub KFKX * 10000 Na Chicago, Ill. KYW * 10000 Na Chicago, Ill. WRAX † 250 D Philadelphia, Pa. XEFD 300 Tiajuana, B. C.	Luis Marauri Westinghouse Elec. & Mfg. Co. Westinghouse Elec. & Mfg. Co. WRAX Broadcasting Co. Carlos de la Sierra

ксүs. 1020

MTRS. 293.9

102	۸ 1 - ۹	1 -	1	201.1	
103	U KI	locyc	cles	291.1 meters	
CFCF CMK(	· *	500 150	N	Montreal, Oue.	Canadian Marconi Co.
CNRV	7 †	500	1034	Santiago de Cuba Vancouver, B. C.	M. P. Martinez
XEB	ŧ	1000		Mexico City, Mexico	Canadian National Railways El Buen Tono, S. A.
104	۸ 1 ۰	1			Di Buen Tono, S. A.
1040	U K1	locyc	les	288.3 meters	
KRLD	*	10000	Ca	Dallas, Texas	KRLD Radio Corp.
KTHS WKAF	<b>†</b>	10000 1000	Na D	Hot Springs Ark	Chamber of Commerce
WMAI	K *	1000	Dn	East Lansing, Mich. Buffalo, N. Y.	Michigan State College
		•	_		Buffalo Broadcasting Corp.
1050	J Ki	locyc	les	285.5 meters	
KFBI KNX	*	5000	Dn	Milford, Kansas	Formers & Dt. V. 6
XEFC	*	5000	77.5	Hollywood, Cal.	Farmers & Bankers Life Insurance Co. Western Broadcast Co.
ALIC	~ -	. 10		Merida, Yuc.	Hugo Molina Font.
1060	) ki	locyc	les	282.8 meters	
KWII	*	500	Dn	Postland O	
KWJJ WBAL WJAG WTIC	. *	10000	1N	Portland, Ore. Baltimore, Md.	KWJJ Broadcast Co., Inc.
WJAG	*	1000	Dn	Noriolk, Nebr.	Consolidated Gas Elec. & Pwr. Co. Norfolk Daily News
WIIC		50000	1N	Hartford, Conn.	Travelers Broadcasting Service Corp.
1070	) ki	locyc	les	280.2 meters	
CMBG	111	150	ics		
CMCB		150		Havana, Cuba Havana, Cuba	Francisco Garrigo
KJBS WCAZ	**	100	D	San Francisco, Cal.	Antonio Capablanca
WDZ	Ť	50 100	D D	Carthage, Ill. Tuscola, Ill.	Julius Brunton & Sons Co. Superior Broadcasting Service
WTAM	<b>.</b> *	50000	N	Cleveland, Ohio	lames L. Bush
1/10/	1-:1	l 1		_	National Broadcasting Co., Inc.
1000	KI	locycl		277.6 meters	
WBT WCBD	*	5000 5000	CX	Charlotte, N. C.	Station WBT, Inc.
WMBI	*	5000	1 Dn 1 Dn	Zion, III. Chicago, III.	Station WBT, Inc. Wilbur Glenn Voliva
				Cincago, III.	Moody Bible Institute
1090	kil	ocycl	es	275.1 meters	
KMOX	*	50000	С	St. Louis, Mo.	Voice of St. Louis, Inc.
1100	1-:1	1	ı		voice of St. Louis, Inc.
1100	KII	ocycl		272.6 meters	
KGDM WLWL	*	250 5000	DX	Stockton, Cal. New York City	E. F. Peffer
WPG	*	5000	1 1C	Atlantic City, N. J.	Missionary Society of St. Paul
1110	1 • 1				WPG Broadcasting Corp.
1110	KII	ocyc1	es	270.1 meters	
CMHI KSOO	-	15		Santa Clara, Cuba Sioux Falls, S. D. Richmond, Va.	Laviz y Paz
WRVA	*	2500 5000	Dn N	Sioux Falls, S. D.	Sioux Falls Broadcasting Assn., Inc.
	4				Larus & Bros. Co., Inc.
1120	Kıl	ocycl	es 🛚	267.7 meters 🍴	
CFCA	†	500	a	Toronto Ont	Star Pub & Ptg Co
CFJC CHGS	*	100 100		Kamloops, B. C. Summerside, P. E. I. Lethbridge, Alta	Star Pub. & Ptg. Co. N. S. Dalgleish & Sons R. T. Holman, Ltd.
CJOC CNRT	† *	100		Lethbridge Alta	R. T. Holman, Ltd.
CNRT KFIO		500	а	Toronto, Unt.	Harold R. Carson Canadian National Railways
KFSG	‡	100 500	D 3	Spokane, Wash	ODOKANE Broadcasting Cosp
KMCS	*	500	3 Y	Inglewood, Cal.	Echo Park Evang. Assn. Dalton's, Inc.
KRSC KTRH	‡ *	50 500	D 2C	Los Angeles, Cal. Inglewood, Cal. Seattle, Wash.	Radio Sales Corp. Rice Hotel
WDBO	*	500 500	+c	Orlando Fla	Rice Hotel
WDEL	<b>†</b>	250	+x	Wilmington, Del. Milwaukee, Wis. Milwaukee, Wis.	Orlando Broadcasting Co., Inc. WDEL, Inc.
WHAD WISN		250 250	1 1C	Milwaukee, Wis.	Marquette University
WTAW	1	500	2	College Station, Texas	Evening Wisconsin Co.
1130	1,:1.	201101			Agricultural & Mech. College
1100	KII(	ocycle	2S 2	65.3 meters	
KSL WIID	*	5000 20000	NX C Dn	Salt Lake City	Radio Service Corp. of Utah Loyal Order of Moose
WJJD WOV		1000	D	Mooseheart, Ill. New York City	Loyal Order of Moose
XEH		1000	1132	Monterrey, N. L.	International Broadcasting Corp. Constantino Tarnava

1140 k	ilocycl	es '	263.0 meters	
KVOO * WAPI * XETA	5000 5000 5000	1NX 1NX	Tulsa, Okla. Birmingham, Ala. Mexico City	Southwestern Sales Corp. Alabama Polytechnic Institute Manuel Espinosa Tagle
	ilogyal	06	260.7 meters	
1150 k	500	1155	Vancouver, B. C.	G. C. Chandler
CJOR * CMCQ : CMQ : WHAM *	600 250 5000	NX	Havana, Cuba Havana, Cuba Rochester, N. Y.	Andres Martinez Jose Fernandez Stromberg-Carlson Tel. Mfg. Co.
1160 k	ilocycl	les ?	258.5 meters	14
WOWO *	10000 5000	IC IC	Ft. Wayne, Ind. Wheeling, W. Va.	Main Auto Supply Co. West Virginia Broadcasting Corp.
1170 k	ilocycl	les 2	256.3 meters	
WCAU *	10000	CX	Philadelphia, Pa.	Universal Broadcasting Co.
1180 k	ilocycl	es 2	254.1 meters	
KEX *	5000	2N	Portland, Ore.	Western Broadcasting Co.
KOB *	20000 1000	2 1 Dn	Albuquerque, N. M. Minneapolis, Minn.	College of Agriculture X Mech. Arts Dr. George W. Young
WGBS 1	500		New York City	American Radio News Corp.
WMAZ	500		Macon, Ga.	Southeastern Broadcasting Co., Inc.
1190 k	ilocycl	les :	252.0 meters	
WOAI *	50000	N	San Antonio, Texas	Southern Equipment Co.
1200 k	ilocycl	es	249.9 meters	
OTTOTT	100		Kelowna, B. C.	J. W. B. Browne
CMGB .	7.5 - 30 - 100	1205	Matanzas, Cuba	Jose Anorga Pedro Nogueras
	30 100	Ď.	Camaguey, Cuba Paragould, Ark.	W. I. Beard's Temple of Music
KFIR 1	100	+	Marshalltown, lowa	Marshall Electric Co., Inc.
I/EWE	100 100	5+	St. Louis, Mo.	St. Louis Truth Center, Inc.
KGDY	100	+	Fergus Falls, Minn. Huron, S. D.	Jaren Drug Co. Voice of South Dakota
KGDY KGEK	100 100	<u> </u>	Huron, S. D. Yuma, Colo.	Voice of South Dakota
KGDY KGEK KGEW	100 100 100	9	Huron, S. D. Yuma, Colo. Fort Morgan, Colo. Los Angeles, Cal.	Voice of South Dakota
KGDY KGEK KGEW KGFJ KGHI	100 100 100 100 100 100	<u> </u>	Huron, S. D. Yuma, Colo. Fort Morgan, Colo. Los Angeles, Cal.	Voice of South Dakota Beehler Elec. Equipment Co. City of Fort Morgan Ben S. McGlashan O. A. Cook
KGDY KGEK KGEW KGFJ KGHI KGY	100 100 100 100 100 100 100	9 9 	Huron, S. D. Yuma, Colo. Fort Morgan, Colo. Los Angeles, Cal. Little Rock, Ark. Lacey, Wash.	Voice of South Dakota Beehler Elec. Equipment Co. City of Fort Morgan Ben S. McGlashan O. A. Cook St. Marten's College
KGDY KGEK KGEW KGFJ KGHI KGY KMLB KSMR	100 100 100 100 100 100 100 100	9	Huron, S. D. Yuma, Colo. Fort Morgan, Colo. Los Angeles, Cal. Little Rock, Ark. Lacey, Wash. Monroe, La.	Voice of South Dakota Beehler Elec. Equipment Co. City of Fort Morgan Ben S. McGlashan O. A. Cook St. Marten's College J. C. Liner Santa Maria Radio
KGDY KGEK KGEW KGFJ KGHI KGY KMLB KSMR KVOS	100 100 100 100 100 100 100 100 100	9 9 + D	Huron, S. D. Yuma, Colo. Fort Morgan, Colo. Los Angeles, Cal. Little Rock, Ark. Lacey, Wash. Monroe, La. Bakersfield, Cal. Bellingham, Wash.	Voice of South Dakota Beehler Elec. Equipment Co. City of Fort Morgan Ben S. McGlashan O. A. Cook St. Marten's College J. C. Liner Santa Maria Radio KVOS, Inc. Portable Wireless Tel. Co., Inc.
KGDY KGEK KGFJ KGHI KGY KMLB KSMR KVOS KWG	100 100 100 100 100 100 100 100	9 9 + D	Huron, S. D. Yuma, Colo. Fort Morgan, Colo. Los Angeles, Cal. Little Rock, Ark. Lacey, Wash. Monroe, La. Bakersfield, Cal. Bellingham, Wash. Stockton, Cal. Bangor, Maine	Voice of South Dakota Beehler Elec. Equipment Co. City of Fort Morgan Ben S. McGlashan O. A. Cook St. Marten's College J. C. Liner Santa Maria Radio KVOS, Inc. Portable Wireless Tel. Co., Inc. Pine Tree Broadcasting Corp.
KGDY KGEK KGEW KGFJ KGHI KGY KMLB KSMR KVOS KWG WABI	100 100 100 100 100 100 100 100	9 9 + D	Huron, S. D. Yuma, Colo. Fort Morgan, Colo. Los Angeles, Cal. Little Rock, Ark. Lacey, Wash. Monroe, La. Bakersfield, Cal. Bellingham, Wash. Stockton, Cal. Bangor, Maine New Orleans, La.	Voice of South Dakota Beehler Elec. Equipment Co. City of Fort Morgan Ben S. McGlashan O. A. Cook St. Marten's College J. C. Liner Santa Maria Radio KVOS, Inc. Portable Wireless Tel. Co., Inc. Pine Tree Broadcasting Corp. Samuel D. Reeks
KGDY KGEW KGFJ KGHI KGY KMLB KSMB KSMB WABJ WABJ WBBZ WBBZ	100 † 100 † 100 * 100 * 100 † 100 * 100 * 100 * 100 * 100 * 100 * 100 * 100	9 9 + D	Huron, S. D. Yuma, Colo. Fort Morgan, Colo. Los Angeles, Cal. Little Rock, Ark. Lacey, Wash. Monroe, La. Bakersfield, Cal. Bellingham, Wash. Stockton, Cal. Bangor, Maine New Orleans, La. Arkansas City, Kas. Huntsville, Ala.	Voice of South Dakota Beehler Elec. Equipment Co. City of Fort Morgan Ben S. McGlashan O. A. Cook St. Marten's College J. C. Liner Santa Maria Radio KVOS, Inc. Portable Wireless Tel. Co., Inc. Pine Tree Broadcasting Corp. Samuel D. Reeks C. L. Carrell The Hutchens Co.
KGDY KGEW KGFJ KGHI KGY KMLB KSMB KSMB WABJ WABJ WBBZ WBBZ	100 t 100 100 100 100 100 100 100 100 10	9 9 1 10CP	Huron, S. D. Yuma, Colo. Fort Morgan, Colo. Los Angeles, Cal. Little Rock, Ark. Lacey, Wash. Monroe, La. Bakersfield, Cal. Bellingham, Wash. Stockton, Cal. Bangor, Maine New Orleans, La. Arkansas City, Kas. Huntsville, Ala. Rapid City, S. D.	Voice of South Dakota Beehler Elec. Equipment Co. City of Fort Morgan Ben S. McGlashan O. A. Cook St. Marten's College J. C. Liner Santa Maria Radio KVOS, Inc. Portable Wireless Tel. Co., Inc. Pine Tree Broadcasting Corp. Samuel D. Reeks C. L. Carrell The Hutchens Co. State School of Mines
KGDY KGEW KGFJ KGHI KGY KMLB KSMR KVOS WABI WABZ WBBZ WBBZ WBHS WCAT	100 h	9 9 1 10CP	Huron, S. D. Yuma, Colo. Fort Morgan, Colo. Los Angeles, Cal. Little Rock, Ark. Lacey, Wash. Monroe, La. Bakersfield, Cal. Bellingham, Wash. Stockton, Cal. Bangor, Maine New Orleans, La. Arkansas City, Kas. Huntsville, Ala. Rapid City, S. D. Burlington, Vt. Janesville, Wis.	Voice of South Dakota Beehler Elec. Equipment Co. City of Fort Morgan Ben S. McGlashan O. A. Cook St. Marten's College J. C. Liner Santa Maria Radio KVOS, Inc. Portable Wireless Tel. Co., Inc. Pine Tree Broadcasting Corp. Samuel D. Reeks C. L. Carrell The Hutchens Co. State School of Mines Burlington Daily News WCLO Radio Corp.
KGDY KGEW KGFJ KGHI KGY KMLB KSMR KVOS WABI WABZ WBBZ WBBZ WBHS WCAT	100 h	9 9 1 10CP	Huron, S. D. Yuma, Colo. Fort Morgan, Colo. Los Angeles, Cal. Little Rock, Ark. Lacey, Wash. Monroe, La. Bakersfield, Cal. Bellingham, Wash. Stockton, Cal. Bangor, Maine New Orleans, La. Arkansas City, Kas. Huntsville, Ala. Rapid City, S. D. Burlington, Vt. Janesville, Wis.	Voice of South Dakota Beehler Elec. Equipment Co. City of Fort Morgan Ben S. McGlashan O. A. Cook St. Marten's College J. C. Liner Santa Maria Radio KVOS, Inc. Portable Wireless Tel. Co., Inc. Pine Tree Broadcasting Corp. Samuel D. Reeks C. L. Carrell The Hutchens Co. State School of Mines Burlington Daily News WCLO Radio Corp. Keystone Broadcasting Corp.
KGDY KGEK KGEW KGFJ KGHI KGY KSMR KSMR KVOS WABI WABI WABI WBBZ WBBZ WBHS WCAT WCAX WCLO WCOD	100   100	9 9 1 1 10CP 2	Huron, S. D. Yuma, Colo. Fort Morgan, Colo. Los Angeles, Cal. Little Rock, Ark. Lacey, Wash. Monroe, La. Bakersfield, Cal. Bellingham, Wash. Stockton, Cal. Bangor, Maine New Orleans, La. Arkansas City, Kas. Huntsville, Ala. Rapid City, S. D. Burlington, Vt. Janesville, Wis. Harrisburg, Pa. Worcester, Mass. South Bend, Ind.	Voice of South Dakota Beehler Elec. Equipment Co. City of Fort Morgan Ben S. McGlashan O. A. Cook St. Marten's College J. C. Liner Santa Maria Radio KVOS, Inc. Portable Wireless Tel. Co., Inc. Pine Tree Broadcasting Corp. Samuel D. Reeks C. L. Carrell The Hutchens Co. State School of Mines Burlington Daily News WCLO Radio Corp. Keystone Broadcasting Corp. Alfred Frank Kleindienst South Bend Tribune
KGDY KGEK KGEW KGFJ KGHI KGY KGMLB KSMR KSMR KWOS WABI WABZ WBBZ WBBZ WCAT WCAT WCLO WCOD WEPS WFAM	100 t	9 9 	Huron, S. D. Yuma, Colo. Fort Morgan, Colo. Los Angeles, Cal. Little Rock, Ark. Lacey, Wash. Monroe, La. Bakersfield, Cal. Bellingham, Wash. Stockton, Cal. Bangor, Maine New Orleans, La. Arkansas City, Kas. Huntsville, Ala. Rapid City, S. D. Burlington, Vt. Janesville, Wis. Harrisburg, Pa. Worcester, Mass. South Bend, Ind. Knoxville, Tenn.	Voice of South Dakota Beehler Elec. Equipment Co. City of Fort Morgan Ben S. McGlashan O. A. Cook St. Marten's College J. C. Liner Santa Maria Radio KVOS, Inc. Portable Wireless Tel. Co., Inc. Pine Tree Broadcasting Corp. Samuel D. Reeks C. L. Carrell The Hutchens Co. State School of Mines Burlington Daily News WCLO Radio Corp. Keystone Broadcasting Corp. Alfred Frank Kleindienst South Bend Tribune First Baptist Church
KGDY KGEK KGEW KGFJ KGHI KGY KMLB KSMR KVOS WABI WABIZ WBBZ WBBZ WBBZ WCAY WCAY WCOD WEOD WEFAM WFBE	100	9 9 1 1 1 1 1 1 2 2 3 7 8 10 +	Huron, S. D. Yuma, Colo. Fort Morgan, Colo. Los Angeles, Cal. Little Rock, Ark. Lacey, Wash. Monroe, La. Bakersfield, Cal. Bellingham, Wash. Stockton, Cal. Bangor, Maine New Orleans, La. Arkansas City, Kas. Huntsville, Ala. Rapid City, S. D. Burlington, Vt. Janesville, Wis. Harrisburg, Pa. Worcester, Mass. South Bend, Ind. Knoxville, Tenn. Cincinnati. Ohio	Voice of South Dakota Beehler Elec. Equipment Co. City of Fort Morgan Ben S. McGlashan O. A. Cook St. Marten's College J. C. Liner Santa Maria Radio KVOS, Inc. Portable Wireless Tel. Co., Inc. Pine Tree Broadcasting Corp. Samuel D. Reeks C. L. Carrell The Hutchens Co. State School of Mines Burlington Daily News WCLO Radio Corp. Keystone Broadcasting Corp. Alfred Frank Kleindienst South Bend Tribune First Baptist Church
KGDY KGEK KGEW KGFJ KGHI KGY KSMR KSMR KVOS WABI WABI WABZ WBHS WCAT WCAX WCOD WCOD WCOD WFAM WFBE WHBC WHBC WHBC	100 t	9 9 10 10 10 2 2 3 7 8 10 +4 4S	Huron, S. D. Yuma, Colo. Fort Morgan, Colo. Los Angeles, Cal. Little Rock, Ark. Lacey, Wash. Monroe, La. Bakersfield, Cal. Bellingham, Wash. Stockton, Cal. Bangor, Maine New Orleans, La. Arkansas City, Kas. Huntsville, Ala. Rapid City, S. D. Burlington, Vt. Janesville, Wis. Harrisburg, Pa. Worcester, Mass. South Bend, Ind. Knoxville, Tenn. Cincinnati. Ohio	Voice of South Dakota Beehler Elec. Equipment Co. City of Fort Morgan Ben S. McGlashan O. A. Cook St. Marten's College J. C. Liner Santa Maria Radio KVOS, Inc. Portable Wireless Tel. Co., Inc. Pine Tree Broadcasting Corp. Samuel D. Recks C. L. Carrell The Hutchens Co. State School of Mines Burlington Daily News WCLO Radio Corp. Keystone Broadcasting Corp. Alfred Frank Kleindienst South Bend Tribune First Baptist Church Post Publishing Co. St. John's Catholic Church St. Norbert's College
KGDY KGEK KGEW KGFJ KGHI KGY KMLB KSMR KVOS WABI WABIZ WBBZ WBBZ WBBZ WBBZ WBBZ WBBZ WBBZ W	100   100	9 9 10 10 10 2 2 3 7 8 10 +4 4S	Huron, S. D. Yuma, Colo. Fort Morgan, Colo. Los Angeles, Cal. Little Rock, Ark. Lacey, Wash. Monroe, La. Bakersfield, Cal. Bellingham, Wash. Stockton, Cal. Bangor, Maine New Orleans, La. Arkansas City, Kas. Huntsville, Ala. Rapid City, S. D. Burlington, Vt. Janesville, Wis. Harrisburg, Pa. Worcester, Mass. South Bend, Ind. Knoxville, Tenn. Cincinnati, Ohio Canton, Ohio Green Bay, Wis. Utica, N. Y.	Voice of South Dakota Beehler Elec. Equipment Co. City of Fort Morgan Ben S. McGlashan O. A. Cook St. Marten's College J. C. Liner Santa Maria Radio KVOS, Inc. Portable Wireless Tel. Co., Inc. Pine Tree Broadcasting Corp. Samuel D. Reeks C. L. Carrell The Hutchens Co. State School of Mines Burlington Daily News WCLO Radio Corp. Keystone Broadcasting Corp. Alfred Frank Kleindienst South Bend Tribune First Baptist Church Post Publishing Co. St. John's Catholic Church St. Norbert's College WIRX Inc.
KGDY KGEK KGEW KGFJ KGHI KGY KMLB KSMR KVOS WABI WABIZ WBBZ WBBZ WBBZ WBBZ WBBZ WBBZ WBBZ W	100	9 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Huron, S. D. Yuma, Colo. Fort Morgan, Colo. Los Angeles, Cal. Little Rock, Ark. Lacey, Wash. Monroe, La. Bakersfield, Cal. Bellingham, Wash. Stockton, Cal. Bangor, Maine New Orleans, La. Arkansas City, Kas. Huntsville, Ala. Rapid City, S. D. Burlington, Vt. Janesville, Wis. Harrisburg, Pa. Worcester, Mass. South Bend, Ind. Knoxville, Tenn. Cincinnati, Ohio Canton, Ohio Green Bay, Wis. Utica, N. Y. St. Louis, Mo. La Salle, Ill.	Voice of South Dakota Beehler Elec. Equipment Co. City of Fort Morgan Ben S. McGlashan O. A. Cook St. Marten's College J. C. Liner Santa Maria Radio KVOS, Inc. Portable Wireless Tel. Co., Inc. Pine Tree Broadcasting Corp. Samuel D. Reeks C. L. Carrell The Hutchens Co. State School of Mines Burlington Daily News WCLO Radio Corp. Keystone Broadcasting Corp. Alfred Frank Kleindienst South Bend Tribune First Baptist Church Post Publishing Co. St. John's Catholic Church St. Norbert's College WIBX, Inc. Missouri Broadcasting Corp. Kaskaskia Broadcasting Corp. Kaskaskia Broadcasting Corp. Kaskaskia Broadcasting Co.
KGDY KGEK KGEW KGFJ KGHI KGY KMLB KSMR KVOS WABI WABIZ WBBZ WBBZ WBBZ WBBZ WBBZ WBBZ WBBZ W	100   100	9 9 1 1 10CP 2 3 7 8 10 +4 4S -++ 6	Huron, S. D. Yuma, Colo. Fort Morgan, Colo. Los Angeles, Cal. Little Rock, Ark. Lacey, Wash. Monroe, La. Bakersfield, Cal. Bellingham, Wash. Stockton, Cal. Bangor, Maine New Orleans, La. Arkansas City, Kas. Huntsville, Ala. Rapid City, S. D. Burlington, Vt. Janesville, Wis. Harrisburg, Pa. Worcester, Mass. South Bend, Ind. Knoxville, Tenn. Cincinnati, Ohio Canton, Ohio Green Bay, Wis. Utica, N. Y. St. Louis, Mo. La Salle, Ill. Decatur, Ill.	Voice of South Dakota Beehler Elec. Equipment Co. City of Fort Morgan Ben S. McGlashan O. A. Cook St. Marten's College J. C. Liner Santa Maria Radio KVOS, Inc. Portable Wireless Tel. Co., Inc. Pine Tree Broadcasting Corp. Samuel D. Reeks C. L. Carrell The Hutchens Co. State School of Mines Burlington Daily News WCLO Radio Corp. Keystone Broadcasting Corp. Alfred Frank Kleindienst South Bend Tribune First Baptist Church Post Publishing Co. St. John's Catholic Church St. Norbert's College WIBX, Inc. Missouri Broadcasting Corp. Kaskaskia Broadcasting Co. Commodore Broadcasting Co.
KGDY KGEK KGEW KGFJI KGY KMLB KSMR KVOS WABI WABIZ WBBZ WBBZ WBBZ WBBZ WBBZ WBBZ WBBZ W	100   100	9 9 1 10CP 2 3 7 8 10 +4S -+ 5 6 6 1 3	Huron, S. D. Yuma, Colo. Fort Morgan, Colo. Los Angeles, Cal. Little Rock, Ark. Lacey, Wash. Monroe, La. Bakersfield, Cal. Bellingham, Wash. Stockton, Cal. Bangor, Maine New Orleans, La. Arkansas City, Kas. Huntsville, Ala. Rapid City, S. D. Burlington, Vt. Janesville, Wis. Harrisburg, Pa. Worcester, Mass. South Bend, Ind. Knoxville, Tenn. Cincinnati, Ohio Canton, Ohio Green Bay, Wis. Utica, N. Y. St. Louis, Mo. La Salle, Ill. Decatur, Ill. New Orleans, La. Lancaster, Pa.	Voice of South Dakota Beehler Elec. Equipment Co. City of Fort Morgan Ben S. McGlashan O. A. Cook St. Marten's College J. C. Liner Santa Maria Radio KVOS, Inc. Portable Wireless Tel. Co., Inc. Pine Tree Broadcasting Corp. Samuel D. Reeks C. L. Carrell The Hutchens Co. State School of Mines Burlington Daily News WCLO Radio Corp. Keystone Broadcasting Corp. Alfred Frank Kleindienst South Bend Tribune First Baptist Church Post Publishing Co. St. John's Catholic Church St. Norbert's College WIBX, Inc. Missouri Broadcasting Corp. Kaskaskia Broadcasting Co. Commodore Broadcasting, Inc. Charles C. Carlson, Jr. Lancaster Brdestg. Service Inc.
KGDY KGEK KGEW KGFJ KGHI KGY KSMR KSMR KVOS WABI WABZ WBBZ WBBZ WCAY WCAY WCAY WCAY WCAY WCAY WCAY WCAY	100	99 	Huron, S. D. Yuma, Colo. Fort Morgan, Colo. Los Angeles, Cal. Little Rock, Ark. Lacey, Wash. Monroe, La. Bakersfield, Cal. Bellingham, Wash. Stockton, Cal. Bangor, Maine New Orleans, La. Arkansas City, Kas. Huntsville, Ala. Rapid City, S. D. Burlington, Vt. Janesville, Wis. Harrisburg, Pa. Worcester, Mass. South Bend, Ind. Knoxville, Tenn. Cincinnati, Ohio Canton, Ohio Green Bay, Wis. Utica, N. Y. St. Louis, Mo. La Salle, Ill. Decatur, Ill. New Orleans, La. Lancaster, Pa. Petersburg, Va.	Voice of South Dakota Beehler Elec. Equipment Co. City of Fort Morgan Ben S. McGlashan O. A. Cook St. Marten's College J. C. Liner Santa Maria Radio KVOS. Inc. Portable Wireless Tel. Co., Inc. Pine Tree Broadcasting Corp. Samuel D. Reeks C. L. Carrell The Hutchens Co. State School of Mines Burlington Daily News WCLO Radio Corp. Keystone Broadcasting Corp. Alfred Frank Kleindienst South Bend Tribune First Baptist Church Post Publishing Co. St. John's Catholic Church St. Norbert's College WIBN, Inc. Missouri Broadcasting Corp. Kaskaskia Broadcasting Co. Commodore Broadcasting, Inc. Charles C. Carlson, Jr. Lancaster Brdestg. Service Inc. WLBG, Inc.
KGDY KGEK KGEW KGFJ KGY KML KGY KML KSMR KVOS WABI WABIZ WBBZ WBBZ WBBZ WBBZ WBBZ WBBZ WBBZ W	100   100	9 9 1 1 10CP 2 3 7 8 10 +4 48 5+ 6 6 1 3 44	Huron, S. D. Yuma, Colo. Fort Morgan, Colo. Los Angeles, Cal. Little Rock, Ark. Lacey, Wash. Monroe, La. Bakersfield, Cal. Bellingham, Wash. Stockton, Cal. Bangor, Maine New Orleans, La. Arkansas City, Kas. Huntsville, Ala. Rapid City, S. D. Burlington, Vt. Janesville, Wis. Harrisburg, Pa. Worcester, Mass. South Bend, Ind. Knoxville, Tenn. Cincinnati, Ohio Canton, Ohio Green Bay, Wis. Utica, N. Y. St. Louis, Mo. La Salle, Ill. Decatur, Ill. New Orleans, La. Lancaster, Pa. Petersburg, Va.	Voice of South Dakota Beehler Elec. Equipment Co. City of Fort Morgan Ben S. McGlashan O. A. Cook St. Marten's College J. C. Liner Santa Maria Radio KVOS, Inc. Portable Wireless Tel. Co., Inc. Pine Tree Broadcasting Corp. Samuel D. Reeks C. L. Carrell The Hutchens Co. State School of Mines Burlington Daily News WCLO Radio Corp. Keystone Broadcasting Corp. Alfred Frank Kleindienst South Bend Tribune First Baptist Church Post Publishing Co. St. John's Catholic Church St. Norbert's College WIBX, Inc. Missouri Broadcasting Corp. Kaskaskia Broadcasting Co. Commodore Broadcasting Co. Commodore Broadcasting, Inc. Charles C. Carlson, Jr. Lancaster Brdestg. Service Inc. WLBG, Inc. John Brownlee Spriggs Home Cut Glass & China Co.
KGDY KGEW KGFJ KGY KGHI KGY KGML KSMR KVOS WABI WABI WABI WABI WCAY WCAY WCAY WCAY WCOD WEPS WFAM WFBE WHBC WHBC WHBC WIBX WIBC WIBX WIBC WIBX WIBC WIBS WIBC WIBS WIBC WIBS WIBC WIBS WIBC WIBS	100	99 	Huron, S. D. Yuma, Colo. Fort Morgan, Colo. Los Angeles, Cal. Little Rock, Ark. Lacey, Wash. Monroe, La. Balkersfield, Cal. Bellingham, Wash. Stockton, Cal. Bangor, Maine New Orleans, La. Arkansas City, Kas. Huntsville, Ala. Rapid City, S. D. Burlington, Vt. Janesville, Wis. Harrisburg, Pa. Worcester, Mass. South Bend, Ind. Knoxville, Tenn. Cincinnati, Ohio Canton, Ohio Green Bay, Wis. Utica, N. Y. St. Louis, Mo. La Salle, Ill. Decatur, Ill. New Orleans, La. Lancaster, Pa. Petersburg, Va. Washington, Pa. Carbondale, Pa.	Voice of South Dakota Beehler Elec. Equipment Co. City of Fort Morgan Ben S. McGlashan O. A. Cook St. Marten's College J. C. Liner Santa Maria Radio KVOS, Inc. Portable Wireless Tel. Co., Inc. Pine Tree Broadcasting Corp. Samuel D. Reeks C. L. Carrell The Hutchens Co. State School of Mines Burlington Daily News WCLO Radio Corp. Keystone Broadcasting Corp. Alfred Frank Kleindienst South Bend Tribune First Baptist Church Post Publishing Co. St. John's Catholic Church St. Norbert's College WIBX, Inc. Missouri Broadcasting Corp. Kaskaskia Broadcasting Corp. Kaskaskia Broadcasting, Inc. Charles C. Carlson, Jr. Lancaster Brdcstg. Service Inc. WLBG, Inc. John Brownlee Spriggs Home Cut Glass & China Co. First Congregational Church
KGDY KGEW KGFJ KGY KGHI KGY KSMR KSMR KSMR KVWG WABI WABI WABI WABI WABI WABI WEAT WCALO WCOD WEAM WFBE WHBC WHBC WHBC WHBC WHBC WHBC WHBC WHBC	100	99 	Huron, S. D. Yuma, Colo. Fort Morgan, Colo. Los Angeles, Cal. Little Rock, Ark. Lacey, Wash. Monroe, La. Bakersfield, Cal. Bellingham, Wash. Stockton, Cal. Bangor, Maine New Orleans, La. Arkansas City, Kas. Huntsville, Ala. Rapid City, S. D. Burlington, Vt. Janesville, Wis. Harrisburg, Pa. Worcester, Mass. South Bend, Ind. Knoxville, Tenn. Cincinnati, Ohio Canton, Ohio Green Bay, Wis. Utica, N. Y. St. Louis, Mo. La Salle, Ill. Decatur, Ill. New Orleans, La. Lancaster, Pa. Petersburg, Va. Washington, Pa. Carbondale, Pa. Springfield, Vt. Worcester, Mass.	Voice of South Dakota Beehler Elec. Equipment Co. City of Fort Morgan Ben S. McGlashan O. A. Cook St. Marten's College J. C. Liner Santa Maria Radio KVOS, Inc. Portable Wireless Tel. Co., Inc. Pine Tree Broadcasting Corp. Samuel D. Reeks C. L. Carrell The Hutchens Co. State School of Mines Burlington Daily News WCLO Radio Corp. Keystone Broadcasting Corp. Alfred Frank Kleindienst South Bend Tribune First Baptist Church Post Publishing Co. St. John's Catholic Church St. Norbert's College WIBX, Inc. Missouri Broadcasting Corp. Kaskaskia Broadcasting Corp. Kaskaskia Broadcasting Co. Commodore Broadcasting, Inc. Charles C. Carlson, Jr. Lancaster Brdestg. Service Inc. WLBG, Inc. John Brownlee Spriggs Home Cut Glass & China Co. First Congregational Church Alfred Frank Kleindienst
KGDY KGEW KGFJ KGEW KGFJ KGY KMLB KSMR KVOS WABI WABI WABI WABI WABI WABI WABI WABI	100   100	9 9 1 10CP 2 3 7 8 10 10 + 4 4 5 7 7 7 8	Huron, S. D. Yuma, Colo. Fort Morgan, Colo. Los Angeles, Cal. Little Rock, Ark. Lacey, Wash. Monroe, La. Bakersfield, Cal. Bellingham, Wash. Stockton, Cal. Bangor, Maine New Orleans, La. Arkansas City, Kas. Huntsville, Ala. Rapid City, S. D. Burlington, Vt. Janesville, Wis. Harrisburg, Pa. Worcester, Mass. South Bend, Ind. Knoxville, Tenn. Cincinnati, Ohio Canton, Ohio Green Bay, Wis. Utica, N. Y. St. Louis, Mo. La Salle, Ill. Decatur, Ill. New Orleans, La. Lancaster, Pa. Petersburg, Va. Washington, Pa. Carbondale, Pa. Springfield, Vt. Worcester, Mass. Columbus, Ga. Hammond, Ind.	Voice of South Dakota Beehler Elec. Equipment Co. City of Fort Morgan Ben S. McGlashan O. A. Cook St. Marten's College J. C. Liner Santa Maria Radio KVOS, Inc. Portable Wireless Tel. Co., Inc. Pine Tree Broadcasting Corp. Samuel D. Reeks C. L. Carrell The Hutchens Co. State School of Mines Burlington Daily News WCLO Radio Corp. Keystone Broadcasting Corp. Alfred Frank Kleindienst South Bend Tribune First Baptist Church Post Publishing Co. St. John's Catholic Church St. Norbert's College WIBX, Inc. Missouri Broadcasting Corp. Kaskaskia Broadcasting, Inc. Charles C. Carlson, Jr. Lancaster Brdestg. Service Inc. WLBG, Inc. John Brownlee Spriggs Home Cut Glass & China Co. First Congregational Church Alfred Frank Kleindienst WRBL Radio Station, Inc.
KGDY KGEW KGFJ KGEW KGFJ KGY KGMLB KSMR KSMR KVMG WABI WABI WABZ WBBZ WBBZ WBAT WCAO WCODS WFAM WFBE WHBC WHBC WHBC WIBX WIBX WIBX WIBX WIBC WIBS WNBO WNBO WNBC WNBBU WNBC WNBBU WNBC WNBBU WNBC WNBBU WNBC WNBBU WNBC	100	99 	Huron, S. D. Yuma, Colo. Fort Morgan, Colo. Los Angeles, Cal. Little Rock, Ark. Lacey, Wash. Monroe, La. Bakersfield, Cal. Bellingham, Wash. Stockton, Cal. Bangor, Maine New Orleans, La. Arkansas City, Kas. Huntsville, Ala. Rapid City, S. D. Burlington, Vt. Janesville, Wis. Harrisburg, Pa. Worcester, Mass. South Bend, Ind. Knoxville, Tenn. Cincinnati, Ohio Canton, Ohio Green Bay, Wis. Utica, N. Y. St. Louis, Mo. La Salle, Ill. Decatur, Ill. New Orleans, La. Lancaster, Pa. Petersburg, Va. Washington, Pa. Carbondale, Pa. Springfield, Vt. Worcester, Mass.	Voice of South Dakota Beehler Elec. Equipment Co. City of Fort Morgan Ben S. McGlashan O. A. Cook St. Marten's College J. C. Liner Santa Maria Radio KVOS, Inc. Portable Wireless Tel. Co., Inc. Pine Tree Broadcasting Corp. Samuel D. Reeks C. L. Carrell The Hutchens Co. State School of Mines Burlington Daily News WCLO Radio Corp. Keystone Broadcasting Corp. Alfred Frank Kleindienst South Bend Tribune First Baptist Church Post Publishing Co. St. John's Catholic Church St. Norbert's College WIBX, Inc. Missouri Broadcasting Corp. Kaskaskia Broadcasting Corp. Kaskaskia Broadcasting Co. Commodore Broadcasting, Inc. Charles C. Carlson, Jr. Lancaster Brdestg. Service Inc. WLBG, Inc. John Brownlee Spriggs Home Cut Glass & China Co. First Congregational Church Alfred Frank Kleindienst

ксуs. 1200

MTRS. 249.9 DIAL

1210	1-:1	00**0	100	247 0	
1210 CFCO	KII	100	8	247.8 meters	
CFNB	*	100	0	Chatham, Ont. Fredericton, N. B.	Western Ontario "Better Radio" Club James S. Neill & Sons, Ltd.
CJOR CKMC	*	500		Vancouver, B. C.	G. C. Chandler
KDFN	Ť-	100	8	Cobalt, Ont.	R. L. MacAdam
KDLR	+	100 100		Cobalt, Ont. Casper, Wyo. Devil's Lake, N. D.	Donald Lewis Hathaway
KFOR KFVS	† *	100	+	Lincoln, Nebr.	KDLR, Inc. Howard A. Shuman
KFVS K <b>F</b> XM	*	100	6	Cape Girardeau, Mo	Hirsch Battery & Radio Co.
KGCR	† † *	100 100	9	San Bernardino, Cal. Watertown, S. D. Dodge City, Kansas	J. C. & E. W. Lee
KGNO		100		Dodge City, Kansas	Greater Kampeska Radio Corp. Dodge City Broadcasting Co. James McClatchy Co.
KMJ KPPC	*	100	9	rresno, Cal.	James McClatchy Co.
KWEA	<b>§</b>	50 100	. 9	Pasadena, Cal.	
WALR	*	100		Shreveport, La. Zanesville, Ohio	Roy W. Waller
WBAX WBBL	*	100	i	Wilkes-Barre, Pa.	Hello World Broadcasting Corp. Roy W. Waller John H. Stenger, Jr. Grace Covenant Press, Church
WCBS	† *	$\frac{100}{100}$	7S	Richmond, Va.	Grace Covenant Pres. Church
WCBS WCOH WCRW	*	100	3	Springfield, III. Yonkers, N. Y. Chicago, III.	H. L. Dewing & Chas. Messter Westchester Broadcasting Corp.
WEBQ	*	100	4	Chicago, III.	Clinton R. White
WEDC		100 100	6 4	Harrisburg, III. Chicago, III.	First Trust & Savings Bank Emil Denemark, Inc.
WEDC WGBB	*	100	3	Freeport, N. Y.	Harry H. Carman
WGCM	*	100		Gulfport, Miss. Rock Island, Ill.	Great Southern Land Co., Inc.
WHBF WHBU	†	100 100	77.	Rock Island, III.	Beardsley Specialty Co. Anderson Broadcasting Corp.
WIBU	*	100		Anderson, Ind. Poynette, Wis.	Wm. C. Forrest
WJBI WJBU	*	100	3	Red Bank, N. J.	Monmouth Broadcasting Co.
WIRY	*	100 100	3	Lewisburg, Pa. Gadsen, Ala.	Bucknell University
WJBY WJW WLCI	*	100		Mansfield, Ohio	Gadsen Broadcasting Co., Inc. Mansfield Broadcasting Assn.
WLCI	*	50	7	Ithaca, N. Y.	Lutheran Assn. of Ithaca
WMBG WMRJ	*	100 100	3	Richmond, Va. Jamaica, N. Y.	Havens & Martin, Inc. Peter J. Prinz A. E. Newton
WOCL	*	50		lamestown N Y	A. F. Newton
WOMT	*	100		Manitowoc, Wis.	Francis M. Kadow
WPAW WPRO	*	100 100	5	Pawtucket, R. I.	Shartenburg & Robinson Co.
WQDX	*	100		Providence, R. I. Thomasville, Ga.	Cherry & Webb Broadcasting Co.
WRBQ	†	100	Ŧ.	Greenville, Miss.	Stevens Luke J. Pat. Scully World Battery Co., Inc.
WSBC WSEN	*	100 100	4	Chicago, III,	World Battery Co., Inc.
WSIX	*	100		Columbus, Ohio Springfield, Tenn. Gastonia, N. C.	638 Tire & Vulcanizing Co.
WSOC	†	100		Gastonia, N. C.	WSOC, Inc. WTAX, Inc.
WTAX XEX	†	100 500	2	Springfiëld, III. Mexico City	WTAX, Inc.
	• • •			•	Excelsior, Cia Editorial S. A.
1220	kilc	ocycl	es	245.8 meters	
CMBY CMCA		350	1225	Havana, Cuba	Callejas-Cosculluela Manuel Cruz
KFKU	*	150 500	1225	Havana, Cuba	Manuel Cruz
KTW	*	1000		Lawrence, Kansas Seattle, Wash. Pullman, Wash.	University of Kansas First Presbyterian Church
KWSC WCAD	*	1000	+	Pullman, Wash.	State College of Washington
WCAE	*	500 1000	D N	Canton, N. Y. Pittsburgh, Pa.	St. Lawrence University
WDAE	*	1000	С	Tampa, Fla.	WCAE, Inc. Tampa Publishing Co.
WREN	*	1000	iN	Lawrence, Kansas	Jenny Wren Co.
1230 1	kilo	cvc1	es	243.8 meters	
KFQD KGGM		100		Anchorage, Alaska	Anchorage Radio Club
KGGM	ţ.	250	+	Albuquerque, N. Mex.	New Mexico Broadcasting Co.
KYA WBIS	*	1000 1000	2	San Francisco, Cal.	Pacific Broadcasting Corp
WFBM	*	1000	ĩC	Boston, Mass. Indianapolis, Ind.	Shepard Broadcasting Service, Inc. Indianapolis Power & Light Co. Shepard Broadcasting Service, Inc.
WNAC	*	1000	2C	Boston, Mass.	Shepard Broadcasting Service, Inc.
WPSC WSBT	Ť	500 500	D 1	State College, Pa.	remisylvania State College
XETQ		100		South Bend, Ind. Mexico, Mex.	South Bend Tribune Carlos G. Caballero
1240 1	kilo	cvc1	es	241.8 meters	
CMAB		20	1249		Francisco Martino-
KGCU		250	3	Pinar del Rio, Cuba Mandan, N. D. Minot, N. D. Ft. Worth, Texas	Francisco Martinez Mandan Radio Assn.
KLPM	†	250	3	Minot, N. D.	Mandan Radio Assn. John B. Cooley S. A. T. Broadcast Co.
KTAT WACO	† † †	1000 1000	1 1C	rt. Worth, Texas	S. A. T. Broadcast Co.
WXYZ	Ť	1000	Ċ	Waco, Texas Detroit, Mich.	Central Texas Broadcasting Co., Inc. Kunsky-Trendle Broadcasting Corp.
					Lionale Dioducasting Corp.

1250 kilocycles	239.9 meters	
KFMX † 1000 2 KFOX * 1000 1+7 WAAM * 1000 1+7 WCAL * 1000 C WDSU † 1000 C WGCP _ 250 1 WLB † 1000 2 WODA _ 1000 1 WRHM * 1000 2 XEFA _ 250	Northfield, Minn. Long Beach, Cal. ( Newark, N. J. Northfield, Minn. New Orleans, La. Newark, N. J. St. Paul, Minn. Paterson, N. J. Minneapolis, Minn. Mexico City	Carleton College Nichols & Warinner, Inc. WAAM, Inc. St. Olaf College Jos. H. Uhalt May Radio Broadcast Corp. University of Minnesota Richard E. O'Dea Minnesota Broadcasting Corp. Manuel F. Murguia
1260 kilocycles	238.0 meters	
KOIL * 1000 N KRGV * 500 1 KVOA † 500 D KWWG * 500 I WLBW * 500 C+ WTOC * 500 C	Council Bluffs, Iowa Harlingen, Texas Tucson, Arizona Brownsville, Texas Oil City, Pa. Savannah, Ga.	Mona Motor Oil Co. KRGV, Inc. Robert M. Riculfi Herald Pub. Co. Radio-Wire Program Corp. Savannah Broadcasting Co.
1270 kilocycles	236.1 meters [	
KGCA † 50 2D KOL † 1000 C KVOR * 1000 C KWLC * 100 2D WASH * 500 I WEAI * 1000 D WFBR - 500 N WJDX * 1000 N WOOD † 500 I NEFB - 50	Decorah, Iowa Seattle, Wash. Colorado Springs, Colo. Decorah, Iowa Grand Rapids, Mich. Ithaca, N. Y. Baltimore, Md. Jackson, Miss. Grand Rapids, Mich. Monterrey, N. L.	Charles W. Greenley Seattle Broadcasting Co., Inc. Reynolds Radio Co., Inc. Luther College WASH Broadcasting Corp. Cornell University Baltimore Radio Show, Inc. Lumar Life Insurance Co. Kunsky-Trendle Broadcasting Corp. Quintanilla y Stevenson
1280 kilocycles	234.2 meters [	
CMCU - 150 1285 CMCW - 150 1285 KFBB * 1000 + WCAM * 500 1 WCAM * 500 1 WDOD * 1000 + C WIBA * 500 + N WOAX - 500 C	5 Havana, Cuba Great Falls, Mont. Camden, N. J. Asbury Park, N. I.	Jorge Garcia Serra Jose Lorenzo Buttrey Broadcast, Inc. City of Camden Radio Industries Broadcast Co. WDOD Broadcasting Corp. Badger Broadcasting Co. WOAX, Inc. City of Dallas
1290 kilocycles	232.4 meters	KCYS.
KDYL † 1000 C KFUL - 500 1 KLCN * 50 D KTSA † 1000 1++ WEBC * 1000 +N WJAS * 1000 C WNBZ - 50 D	Salt Lake City Galveston, Texas Blytheville, Ark. C San Antonio, Texas Superior, Wis. Pittsburgh, Pa. Saranac Lake, N. Y.	Intermountain Broadcasting Corp. News Publishing Co. C. L. Lintzenich Lone Star Broadcast Co. Head of Lake Broadcasting Co. Pittsburgh Radio Supply House Smith & Mace  1310 MTRS. 228.9 DIAL
1300 kilocycles	230.6 meters	
KFAC * 1000 4 KFH * 1000 2C KFJR * 500 3 KTBR - 500 3 WBBR * 1000 1 WEVD * 500 1 WHAP * 1000 1 WHAP * 500 1 WHAZ * 500 1 WOOD * 1000 N WOO * 1000 N WOO * 250	Los Angeles, Cal. Wichita, Kansas Portland, Ore. Portland, Ore. Brooklyn, N. Y. New York City New York City Troy, N. Y. Miami, Fla. Kansas City, Mo. Tampico, Tams.	Los Angeles Broadcasting Co. Radio Station KFH Co. Ashley C. Dixon—KFJR, Inc. M. E. Brown People's Pulpit Association Debs Memorial Radio Fund, Inc. Defenders of Truth Society, Inc. Rensselaer Polytechnic Institute Isle of Dreams Broadcasting Corp. Unity School of Christianity Maria T. de Gutirrez
1310 kilocycles	228.9 meters	
KCRJ † 100 D KFBK † 100 KFGQ † 100 7 KFJY * 100 7 KFPL † 100 KFPM * 15	Jerome, Arizona Sacramento, Cal. Boone, Iowa Ft. Dodge, Iowa Dublin, Texas Greenville, Texas	Chas, C. Robinson Jas, McClatchy Co. Boone Biblical College Cedar Rapids Broadcast Co. C. C. Baxter The New Furniture Co.

		100	o	D C-1-	Ti. 1
KFUP KFX I	†	100 100	8 8	Denver, Colo. Grand Junction, Colo	Fitzsimmons General Hospital
KFXJ KFXR	+	100	+	Oklahoma City	. Western Slope Broadcasting Co. Exchange Ave. Baptist Church
KGBX KGCX	<b>†</b>	100		St. Joseph, Mo.	KGBX, Inc.
KGCX	†	100	+	St. Joseph, Mo. Wolf Point, Mont. Kalispell, Mont.	First State Bank of Vida
KGEZ		100		Kalispell, Mont.	Treloar-Church Broadcasting Co.
KGFW KIT	Ţ	100		Kearney, Nebr. Yakima, Wash.	Central Nebraska Broadcasting Com-
KMED		100 100		Medford, Ore.	Carl E. Haymond Mrs. W. J. Virgin Robert M. Dean
KRMD	) <del> </del>	50	9	Shreveport, La.	Robert M. Dean
KTLC	*	100		Shreveport, La. Houston, Texas El Paso, Texas	Houston Broadcasting Co.
KTSM	†	100	2 7	El Paso, Texas	Houston Broadcasting Co. W. S. Bledsoe & W. T. Blackwell
KWCR KXRO	†	100 100		Cedar Rapids, Iowa	Cedar Rapids Broadcast Co.
WBEO		100		Aberdeen, Wash. Marquette, Mich.	KXRO, Inc.
WBOW	7 *	100		Terre Haute, Ind.	Lake Superior Broadcasting Co. Banks of Wahash, Inc.
WBRE	<del>-</del> -	100		Wilkes-Barre, Pa.	Banks of Wabash, Inc. Louis G. Baltimore
WCLS	*	100	1	Joliet, Ill.	WCLS, Inc.
WDAH WEBR	† *	100 100	2	El Paso, Texas Buffalo, N. Y.	Bledsoe & Blackwell
WEXL		50	丁	Royal Oak, Mich.	Howell Broadcasting Co., Inc.
WFBG	<b>†</b>	100	3X	Altoona, Pa.	Royal Oak Broadcasting Co.
WFDF	*	100		Flint, Mich.	Wm. F. Gable Co. Frank D. Fallain
WFDV	† *	100	Ď	Rome, Ga.	Rome Broadcasting Corp.
WGAL WGH	*	100 100	5	Lancaster, Pa. Newport News, Va. Philadelphia, Pa.	WGAL, Inc.
WHAT		100	4	Philadelphia Pa	Hampton Roads Broadcasting Corp
WJAC	† *	100	3	Johnstown Pa	Independence Broadcasting Co. Johnstown Automobile Co.
WJAK WKAV	*	50	6	Elkhart, Ind.	Truth Publishing Co., Inc.
WKAV WKBB	*	100		Laconia, N. H.	Laconia Radio Club
WKBC	*	100 100	1	Joliet, Ill. Birmingham, Ala.	Sanders Bros. Radio Station
WKBS	*	100		Galesburg, Ill.	R. B. Broyles Furniture Co Permil N. Nelson
WLBC	†	50	6	Muncie, Ind.	Donald A. Burton
WMBO	†	100		Auburn, N. Y.	WMBO, Inc.
WNBH WOL	*	100		New Bedford, Mass. Washington, D. C.	New Bedford Broadcasting Co.
WRAW		100 100	δX	Washington, D. C.	American Broadcasting Co.
WROL.		100	3/4	Reading, Pa. Knoxville, Tenn.	Reading Broadcasting Co. Stewart Broadcasting Co.
WSAJ WSJS WTEL	‡	100		Grove City, Pa.	Grove City College
wsjs	*	100		Grove City, Pa. Winston-Salem, N. C.	Grove City College Winston-Salem Journal Co.
WIEL	*	100	4	Philadelphia, Pa. Jackson, Tenn.	Foulkrod Radio Engineering Co.
WTJS WTSL	†	100 100	+	Jackson, Tenn. Laurel, Miss.	Sun Publishing Co.
				Eadlei, Miss.	G. A. Houseman
1320	kil	ocycl	es	227.1 meters	
KGHF	t	250	+	Pueblo, Colo.	C. P. Ritchie & J. E. Finch
KGMB	Ť	250		Honolulu, Hawaii	Honolulu Broadcasting Co., Ltd.
KID	†	250	1+	Idaho Falls, Idaho Twin Falls, Idaho	KID Broadcasting Co.
KTFI WADC	ž -	250	1+	Twin Falls, Idaho	Radio Broadcasting Corp.
WSMB	1	1000 500	C	Akron, Ohio New Orleans, La.	Allen T. Simmons WSMB, Inc.
					WSIVIB, Inc.
1330	kile	ocycl	es	225.4 meters	
KGB	*	500	C	San Diego, Cal.	Don Lee, Inc.
KSCJ	*	1000	Ĩ+C C	Sioux City, Iowa Hartford, Conn.	Perkins Bros Co
			C	Hartford, Conn.	WDRC Inc
WDRC	*	500	NT I		
WSAI	*	1000	N+	Cincinnati, Ohio	Crosley Radio Corp., Lessee
	*		N+ 1C		WDRC, Inc. Crosley Radio Corp., Lessee Gillette Rubber Co.
WSAI WTAQ	: kile	1000 1000	N+ 1C	Cincinnati, Ohio Eau Claire, Wis.	Crosley Radio Corp., Lessee Gillette Rubber Co.
WSAI WTAQ 1340		1000 1000 ocycl	es es	Cincinnati, Ohio Eau Claire, Wis. 223.7 meters	Shette Russer Co.
WSAI WTAQ 1340	kild	1000 1000 cycl	N+ 1C es 1345 1345	Cincinnati, Ohio Eau Claire, Wis. 223.7 meters	Jose Justo Moran
WSAI WTAQ 1340 CMCG CMCR CMCY	440	1000 1000 Deyel	N+ 1C es 1345 1345 1345	Cincinnati, Ohio Eau Claire, Wis. 223.7 meters Havana, Cuba Havana, Cuba Havana, Cuba	Jose Justo Moran Aurelio Hernandez
WSAI WTAQ 1340 CMCG CMCR CMCY KFPW	440	1000 1000 Deyel	N+ 1C es 1345 1345 1345 D	Cincinnati, Ohio Eau Claire, Wis.  223.7 meters  Havana, Cuba Havana, Cuba Havana, Cuba Fort Smith, Ark.	Jose Justo Moran Aurelio Hernandez M. D. Autran Southwestern Hotels Co.
WSAI WTAQ 1340 CMCG CMCR CMCY KFPW		1000 1000 0cycl 30 150 100 50 1000	N+ 1C es 1345 1345 1345 D C	Cincinnati, Ohio Eau Claire, Wis.  223.7 meters  Havana, Cuba Havana, Cuba Havana, Cuba Fort Smith, Ark. Spokane, Wash.	Jose Justo Moran Aurelio Hernandez M. D. Autran Southwestern Hotels Co. Symons Broadcasting Co.
WSAI WTAQ 1340 CMCG CMCR CMCY	<u> </u>	1000 1000 Deyel	N+ 1C es 1345 1345 1345 D	Cincinnati, Ohio Eau Claire, Wis.  223.7 meters  Havana, Cuba Havana, Cuba Havana, Cuba Fort Smith, Ark.	Jose Justo Moran Aurelio Hernandez M. D. Autran Southwestern Hotels Co. Symons Broadcasting Co. City of Pensacola
WSAI WTAQ 1340 CMCG CMCY KFPW KFPY WCOA WSPD	† * *	1000 1000 DCycl 30 150 100 50 1000 500 1000	N+ 1C <b>es</b> 1345 1345 1345 D C	Cincinnati, Ohio Eau Claire, Wis.  223.7 meters  Havana, Cuba Havana, Cuba Havana, Cuba Fort Smith, Ark. Spokane, Wash. Pensacola, Fla. Toiedo, Ohio	Jose Justo Moran Aurelio Hernandez M. D. Autran Southwestern Hotels Co. Symons Broadcasting Co.
WSAI WTAQ 1340 CMCG CMCR CMCY KFPW KFPW WCOA WSPD 1350	‡ kilo	1000 1000 ocycl 30 150 1000 500 1000 1000 ocycl	N+ 1C <b>es</b> 1345 1345 1345 D C	Cincinnati, Ohio Eau Claire, Wis.  223.7 meters  Havana, Cuba Havana, Cuba Havana, Cuba Fort Smith, Ark. Spokane, Wash. Pensacola, Fla. Toiedo, Ohio  222.1 meters	Jose Justo Moran Aurelio Hernandez M. D. Autran Southwestern Hotels Co. Symons Broadcasting Co. City of Pensacola Toledo Broadcasting Co.
WSAI WTAQ 1340 CMCG CMCR CMCY KFPW WCOA WSPD 1350 KIDO	‡ kilo	1000 1000 Deyel 30 150 100 50 1000 1000 Deyel	N+ 1C es 1345 1345 1345 D C C	Cincinnati, Ohio Eau Claire, Wis.  223.7 meters  Havana, Cuba Havana, Cuba Havana, Cuba Fort Smith, Ark. Spokane, Wash. Pensacola, Fla. Toiedo, Ohio  222.1 meters  Boise, Idaho	Jose Justo Moran Aurelio Hernandez M. D. Autran Southwestern Hotels Co. Symons Broadcasting Co. City of Pensacola Toledo Broadcasting Co.
WSAI WTAQ 1340 CMCG CMCR CMCY KFPY WCOA WSPD 1350 KIDO KWK WAWZ	† * *	1000 1000 Deyel 30 150 1000 500 1000 Deyel	N+ 1C es 1345 1345 1345 0 C C	Cincinnati, Ohio Eau Claire, Wis.  223.7 meters  Havana, Cuba Havana, Cuba Havana, Cuba Fort Smith, Ark. Spokane, Wash. Pensacola, Fla. Toiedo, Ohio  222.1 meters  Boise, Idaho St. Louis Mo.	Jose Justo Moran Aurelio Hernandez M. D. Autran Southwestern Hotels Co. Symons Broadcasting Co. City of Pensacola Toledo Broadcasting Co. Boise Broadcasting Station Thomas Patrick, Inc.
WSAI WTAQ 1340 CMCG CMCR CMCY KFPW KFPY WCOA WSPD 1350 KIDO KWK WAWZ WBNX	kilo	1000 1000 Deyel 30 150 1000 500 1000 Deyel	N+ 1C es 1345 1345 D C C	Cincinnati, Ohio Eau Claire, Wis.  223.7 meters  Havana, Cuba Havana, Cuba Havana, Cuba Fort Smith, Ark. Spokane, Wash. Pensacola, Fla. Toiedo, Ohio  222.1 meters  Boise, Idaho St. Louis Mo.	Jose Justo Moran Aurelio Hernandez M. D. Autran Southwestern Hotels Co. Symons Broadcasting Co. City of Pensacola Toledo Broadcasting Co.  Boise Broadcasting Station Thomas Patrick, Inc. Pillar of Fire
WSAI WTAQ 1340 CMCG CMCY KFPW WCOA WSPD 1350 KIDO KWK WAWZ WBNX WCDA	kilo	1000 1000 Deyel 30 150 1000 500 1000 1000 Deyel 1000 250 250 250	N+ 1C es 1345 1345 1345 D C C	Cincinnati, Ohio Eau Claire, Wis.  223.7 meters  Havana, Cuba Havana, Cuba Havana, Cuba Fort Smith, Ark. Spokane, Wash. Pensacola, Fla. Toiedo, Ohio  222.1 meters  Boise, Idaho St. Louis, Mo. Zarephath, N. J. New York City New York City New York City	Jose Justo Moran Aurelio Hernandez M. D. Autran Southwestern Hotels Co. Symons Broadcasting Co. City of Pensacola Toledo Broadcasting Co.  Boise Broadcasting Station Thomas Patrick, Inc. Pillar of Fire Standard Cahill Co., Inc. Italian Educ. Broadcasting Co., Inc.
WSAI WTAQ 1340 CMCG CMCR CMCY KFPW KFPY WCOA WSPD 1350 KIDO KWK WAWZ WBNX	kilo	1000 1000 Deyel 30 150 1000 500 1000 Deyel	N+ 1C es 1345 1345 D C C	Cincinnati, Ohio Eau Claire, Wis.  223.7 meters  Havana, Cuba Havana, Cuba Havana, Cuba Fort Smith, Ark. Spokane, Wash. Pensacola, Fla. Toiedo, Ohio  222.1 meters  Boise, Idaho	Jose Justo Moran Aurelio Hernandez M. D. Autran Southwestern Hotels Co. Symons Broadcasting Co. City of Pensacola Toledo Broadcasting Co.  Boise Broadcasting Station Thomas Patrick, Inc. Pillar of Fire Standard Cahill Co., Inc.

				I TREQUERCIES .		
1360	kile	ocycl	es	220.4 meters		
KGER	*	1000	Ň	Long Beach, Cal.	Consolidated Broadcasting Corp.	
KGIR WCSC	† *	500 500		Butte, Montana Charleston, S. C.	KGIR, Inc. Lewis Burk	
WFBL	*	1000	CX	Charleston, S. C. Syracuse, N. Y. Chicago, Ill.	Onondaga Radio Broadcasting Corp. Oak Leaves Broadcasting Station, Inc.	
WGES	*	500 1000	1 + 1 +	Chicago, 111. Garv. Ind.	Johnson-Kennedy Radio Corp.	
WJKS WQBC	Ť	500	1+ D	Gary, Ind. Vicksburg, Miss.	Delta Broadcasting Co., Inc.	
XEG		100		Mexico, Mex.	Miguel Yarza	
1370	kil	ocycl	es	218.7 meters		
		30	1375 1375	Pinar del Rio, Cuba	Oscar S. Mechoso	
CMAC CMGE		30		Cardenas, Cuba Matanzas, Cuba	Genaro Sebater Alberto Alvarez	
CMGH HRB		150 2300		Tegucigalpa, Hond.	United Fruit Co.	
KCRC	†	100	2+	Tegucigalpa, Hond. Enid, Okla.	Enid Radiophone Co.	
KFBL KFII	*	50 100	3 YZ	Everett, Wash. Astoria, Ore. Grand Forks, N. D.	Leese Bros. KFJI Broadcasters, Inc.	
KFJI KFJM	†	100	12	Grand Forks, N. D.	University of North Dakota Estate of H. C. Meachem George Roy Clough	
KFJM KFJZ KFLX	*	100		Ft. Worth, Texas Galveston, Texas	Estate of H. U. Meachein	
KFLX KGAR	*-	100 100	+	Tucson, Arizona	Tucson Motor Service Co.	
KGDA		100		Tucson, Arizona Mitchell, S. D.	Mitchell Broadcasting Corp. Oklahoma Broadcasting Co., Inc.	
KGFG	† † †	100 50	2	Oklahoma City	Oklahoma proadcasting co., KGFL Inc.	
KGFL KGKL	†	100		Raton, N. M. San Angelo, Texas	KGFL, Inc. KGKL, Inc.	
KMAC	Ť	100	5	San Antonio, Texas San Antonio, Texas	W. W. McAllister Mission Broadcasting Co.	
KONO KOOS	† † *	100 100		Marshfield, Ore.	H H Hanseth, Inc.	
KOOS KRE KUJ		100	6	Berkeley, Cal. Walla Walla, Wash.	First Congregational Church	
ĶŲJ	Ť	100 100	3	Seatrle Wash	First Congregational Church KUJ, Inc. KVL, Inc.	
KVL KWKC		100	3	Kansas City, Mo. Glens Falls, N. Y.	Wilson Duncan Broadcasting Co.	
WBGF	† † *	50	7	Glens Falls, N. Y. Danville, Va.	W. N. Parker and H. H. Metcalfe Clarke Electric Co.	
WBTM WCBM		100 100	+z	Baltimore, Md.	Bultimore Broadcasting Corn	
WELK	¢ *	100	ċ	Philadelphia, Pa.	WELK Broadcasting Station, inc.	
WGL WHBD		100 100		Fort Wayne, Ind. Mount Orab, Ohio	WELK Broadcasting Station, Inc. Fred Z. Zieg F. P. Moler	
WHBQ	† † †	100		Mount Orab, Onlo Memphis, Tenn. Calumet, Mich. Jackson, Mich. Detroit, Mich.		
WHDF		100 100	1	Calumet, Mich.	Upper Michigan Broadcasting Co. WIBM, Inc. James F. Hopkins, Inc.	
WIBK	*	50	1	Detroit, Mich.	James F. Hopkins, Inc.	
WJTL WLEY		100 100		Lexington, Mass.	Lexington Air Stations	
WLVA	Ť	100	+ 7	Lynchburg, Va.	Lynchburg Broadcasting Corp.	
WMBR	† † †   *	100	1.11		F. J. Reynolds Nassau Broadcasting Corp.	
WPOE WODM	*	100 100	D	Patchogue, N. Y. St. Albans, Vt.	Nassau Broadcasting Corp. A. J. St. Antoine C. R. Cummins	
WQDM WRAK	*	100		Williamsport, Pa. Wilmington, N. C.	C. R. Cummins	
WRAM WRBJ	*	100 10	X		Wilmington Radio Association Hattiesburg Broadcasting Co.	
WRDO	§ §	100	ĈP	Augusta, Maine Racine, Wis.	WRDO, Inc.	
WRJN WSVS	*	100 50		Racine, Wis. Buffalo, N. Y.	Racine Broadcasting Corp. Seneca Vocational School	
			1			
	KII	ocycl	1382	217.3 meters Camaguey, Cuba		1400
CMJC KOH	Ť	500	С	Reno, Nevada	The Bec, Inc.	
KOH KQV KSO	<del>\</del>	500	2	Pittsburgh, Pa.	lowa Broadcasting Co.	MTRS
WKBH	*	500 1000	1 1C	Clarinda, Iowa La Crosse, Wis.	WKBH. Inc.	214.
WSMK		200	2	Dayton, Ohio	Stanley M. Krohn, Jr.	
XETB		125		Torreon, Coah.	Jose A. Berumen	DIAL
	kil	locycl		215.7 meters	B descripe Co	
KLRA KOY	*	1000 500	1C	Little Rock, Ark. Phoenix, Arizona	Arkansas Broadcasting Co. Nielson Radio & Sporting Goods Co.	
KUOA	†	1000	1	Fayetteville, Ark.	University of Arknasas	
WHK	*	1000	С	Cleveland, Ohio	Radio Air Service Corp.	
1400	kil	locycl	les	214.2 meters		
CMBI		30	1405	Havana, Cuba	Francisco Mayorquim	
CMBN CMCH		30 15	1405 1405	Havana, Cuba Havana, Cuba	Armado Romeu Hernani Torralbas	
	44.198		A	114,4		

				- III QUEINGIEG	THE DITE NONDERS
CMCM		15	1405	Havana, Cuba	Martinez-Madicu
KLO	*	500		Havana, Cuba Ogden, Utah	Peery Building Co.
KOCW	*	250	+	Chickasha, Okla.	College for Women
WBAA	† *	500	1+	Lafayette, Ind.	Purdue University
WBBC	*	500	2 '	Brooklyn, N. Y	Brooklyn Broadcasting Corp.
WCGU	*	500	2	Brooklyn, N. Y. Brooklyn, N. Y.	II S Broadenating Corp.
WCMA	†	500	ī	Culver, Ind.	U. S. Broadcasting Corp.
WFOX		500	2	Brooklyn, N. Y.	General Broadcasting Corp.
WKBF	Ť	500	ĩ	Indianapolis Ind	Paramount Broadcasting Co.
WLTH	*	500	ż	Indianapolis, Ind. Brooklyn, N. Y.	Indianapolis Broadcasting, Inc. The Voice of Brooklyn, Inc.
XEP		200	-	Laredo, Mexico	The voice of Brooklyn, Inc.
		200		Laredo, Mexico	La Voz Latino
1410	kil	ocyc1	es	212.6 meters	
KFLV	† *	500	4	Rockford, III. Amarillo, Texas	Rockford Broadcasters, Inc.
KGRS		1000	1	Amarillo, Texas	Gish Radio Service
WAAB	*	500	C C 1	Boston, Mass.	Bay State Broadcasting Corp. James E. Davidson
WBCM	*	500	Ç	Bay City, Mich. Amarillo, Texas	James E. Davidson
WDAG	*	1000	1	Amarillo, Texas	National Radio & Broadcasting Corp
WHBL	*	500	4	Sheboygan, Wis.	Press Pub. Co.
WHIS	. †	250	4 2 3 2	Sheboygan, Wis. Bluefield, W. Va.	Daily Telegraph
WODX		500	3	Mobile, Ala.	Mobile Broadcasting Corp.
WRBX	*	250	2	Roanoke, Va.	Richmond Development Corp.
WSFA	†	500	3	Montgomery, Ala.	Montgomery Broadcasting Co., Inc.
1 400					
1420	K1l	ocycl	es	211.1 meters	
KABC	†	100		San Antonio, Texas	Alama Broadansting Co
KBPS	1	100	4	Portland Ore	Alamo Broadcasting Co.
KFIZ	*	100		Portland, Ore. Fond du Lac, Wis.	Benson Polytechnic Institute
KFOU	*	100	5	Holy City, Cal.	Reporter Printing Co. W. E. Riker
KFQU KFXD		100		Nampa, Idaho	W. E. RIKET
KFXY		100		Flagstoff Asisone	Frank E. Hurt
KFYO	+	100	+	Flagstaff, Arizona Abilene, Texas	Albert H. Scherman
KGFF	† † † † † †	100		Shawnaa Okla	T. E. Kirksey
KCCC	4	100	5	Shawnee, Okla.	KGFF Broadcasting Co.
KGGC KGIW	4	100		San Francisco, Cal.	Golden Gate Broadcasting Co.
KĞİX	1			Trinidad, Colo.	Leonard E. Wilson
KCKY	4	100 100		Las Vegas, Nevada Sand Point, Idaho	Las Vegas, Nevada, Radio Corp. C. E. Twiss and F. H. McCann
KGKX KGVO	1	100	D	Sand Foint, Idano	C. E. Iwiss and F. H. McCann
KICK	1			Missoula, Montana	wiosby's incorporated
	*	100		Red Oak, Iowa Eugene, Ore.	Red Oak Radio Corp.
KORE	*	100	4	Eugene, Ore.	Eugene Broadcasting Station
KXL KXYZ		100	4	Portland, Ore. Houston, Texas Presque Isle, Maine Waterbury, Vt	KXL Broadcasters, Inc.
NA IZ		100	O.D.	Houston, Texas	Harris County Broadcast Co.
WAGM		100	ČP	Presque Isle, Maine	Aroostook Broadcasting Corp. Harry C. Whitehill
WDEV	*	50	D	" accidary, vc.	Harry C. Whitehill
WEDH		100	2 X	Erie, Pa.	Erie Dispatch-Herald WEHS, Inc.
WEHS	<u>†</u>	100	2	Cicero, Ill.	WEHS, Inc.
WELL	Ţ	50	X	Battle Creek, Mich.	Enquirer-News Co. Raymond G. Hammett WHFC, Inc.
WFDW	*	100		Anniston, Ala.	Raymond G. Hammett
WHFC		100	2	Cicero, Ill.	WHFC. Inc.
WIAS	† *	100		Ottumwa, Iowa	Iowa Broadcasting Co.
WILM	*	100		Wilmington, Del.	Delaware Broadcasting Co., Inc.
WJBO	*	100		New Orleans, La.	Valdemar Janean
WJBO WJMS		100	CPD	Ironwood, Mich.	Marine Johnson
WKBI	*	100	2	Cicero, Ill.	Valdemar Jensen Marius Johnson WKBI, Inc.
WLBF	+	100		Kansas City Kansas	WIRE Broadcasting Co
WMBC	† *	100	+	Kansas City, Kansas Detroit, Mich.	WLDI Droadcasting Co.
WMBH		100	1	Ionlin Mo	Edwin Dodles Ale
WPAD	+	100	-	Joplin, Mo.	Edwin Dudley Aber
WSPA	Ī	100		Paducah, Ky.	WLBF Broadcasting Co. Michigan Broadcasting Co., Inc. Edwin Dudley Aber Paducah Broadcasting Co.
WTBO	*	100	+ + +	Spartanburg, S. C.	voice of South Carolina
" I BO		100	+	Cumberland, Md.	Associated Broadcasting Corp.
1420	1 . 1		,	300 7	

### 1430 kilocycles 209.7 meters

KECA	İ	1000	N	Los Angeles, Cal.
KGNF	ŧ	500	D	North Platte, Nebr.
WBAK	Ť	500	1+	Harrisburg, Pa.
WCAH	*	500	C	Columbus, Ohio
WFEA		500	CP	Manchester, N. H.
WGBC	*	500	2S	Memphis, Tenn.
WHEC	*	500	C 🗆	Rochester, N. Y.
WHP	*	500	1C+[	Harrisburg, Pa.
WNBR	*	500	2	Memphis, Tenn.
woko	†	500	C	Albany, N. Y.

## 1440 kilocycles 208.2 meters

KLS	*	250	n	Oakland, Cal.
WBIG	*	500	č	Greensboro, N. C.

Earle C. Anthony, Inc.
Great Plains Broadcasting Co.
Penna. State Police
Commercial Radio Service Co.
New Hampshire Broadcasting Co.
Memphis Broadcasting Co.
Hickson Electric & adio Corp.
WHP, The Harrisburg Telegraph
Memphis Broadcasting Co.
WOKO, Inc.

Warner Bros. North Carolina Broadcasting Co.

	INDEX B	I FREQUENCIES A	ND DIAL NUMBERS	
WCBA * WMBD * WSAN * WTAD †	250 1 500 3+ 250 1 500 3	Allentown. Pa. Peoria Heights, III. Allentown, Pa. Quincy, III.	B. B. Musselman Peoria Broadcasting Co. Allentown Call Publishing Co., Inc. Illinois Broadcasting Corp.	
1450 kil	locycles	206.8 meters		
WBMS * WGAR † WHOM * WKBO * WNJ * WSAR * WTFI	1000 250 1 500 N 500 1 250 1 250 1 250 500	Shreveport, La. Hackensack, N. J. Cleveland, Ohio Jersey City, N. J. Jersey City, N. J. Newark, N. J. Fall River, Mass. Athens, Ga.	Tri-State Broadcasting System, Inc. WBMS Broadcasting Corp. WGAR Broadcasting Co. New Jersey Broadcasting Corp. Camith Corp. Radio Investment Co. Doughty & Welch Electric Co., Inc. Toccoa Falls Broadcasting Co.	
1460 kil	ocycles	205.4 meters		
KSTP * WJSV *	10000 N 10000	St. Paul, Minn. Alexandria, Va.	National Battery Broadcasting Co. Independent Publishing Co.	
1470 kil	ocycles	204.0 meters [		
KGA † WLAC *	5000 N 5000 C	Spokane, Wash. Nashville, Tenn.	Northwest Broadcasting System, Inc. Life & Casualty Insurance Co.	
1480 kil	ocycles	202.6 meters		
KFJF * WKBW *	5000 C 5000 C	Oklahoma City Buffalo, N. Y.	National Radio Mfg. Co. Buffalo Broadcasting Co., Lessees	
1490 kil	ocycles	201.2 meters		
TJW WCHI * WCKY *	7.5 5000 1 5000 1N	Hamilton, Bermuda Chicago, III. Covington, Ky.	Midland Broadcasting Company L. B. Wilson, Inc.	
1500 kil	ocycles	199.9 meters	2	
CMBL CMBQ CMBR CMBR KGRI KGFI KGFI KGKB KGFY KGKY KPQ KREG KVT KXO WKBV WKBV WKBV WKBV WKBV WKBV WKBV WKBV	20	Havana, Cuba Havana, Cuba Havana, Cuba Santa Barbara, Cal. Corpus Christi, Texas Moorhead, Minn. Grant City, Mo. Tyler, Texas Scottsbluff, Nebr. Prescott, Arizona Wenatchee, Wash. Santa Ana, Cal. Austin, Texas El Centro, Cal. Tupelo, Miss. Connersville, Ind. Ludington, Mich. Long Island City, N. Y. Boston, Mass. Newport, R. I. Brooklyn, N. Y. Brooklyn, N. Y. Brooklyn, N. Y. Bristol, Tenn. Philadelphia, Pa. Augusta, Ga. Rutland, Vt. Woodside, N. Y. Pittsburgh, Pa. Coyoacan, D. F.	Julio C. Hidalgo Gali-Sardinas Tomas Basail Santa Barbara Broadcasters, Ltd. Eagle Broadcasting Co., Inc. Red River Broadcasting Co., Inc. Grant City Park Corp. Eagle Publishing Co. Hilliard Co., Inc. A. P. Miller Wescoast Broadcasting Co. J. S. Edwards KUT Broadcasting Co. E. R. Irey and F. M. Bowles North Mississippi Broadcasting Corp. Knox Battery & Electric Co. K. L. Ashbacker John N. Brahy Boston Broadcasting Co. LeRoy Joseph Beebe Paul J. Gollhofer Arthur Faske First M. P. Church Howitt, Wood Radio Co., Inc. Radiophone Brdestg. Station, Inc. Wm. Penn Broadcasting Co. Musicove, Inc. Philip Weiss Music Co. Long Island Broadcasting Corp. William S. Walker Manuel Zetina	KCYS. 1500 MTRS. 199.9 DIAL
		[ 53 ]		DIAL

ALABAMA Watts Kcys.  Anniston O-22 100 WFDW 1420 Birmingham O-21 5000 WAPI 1140 500 WAPI 1140 500 WKBC 930 100 WKBC 1310 Gadsden O-21 100 WJBY 1210 Huntsville N-21 50 WBHS 1200 Mobile Q-20 500 WODX 1410 Montgomery P-21 500 WSFA 1410  ALASKA  Anchorage 100 KFQD 1230 Ketchikan 500 KGBU 900  ARIZONA  Flagstaff M-7 100 KFXY 1420 Jerome M-6 100 KCRJ 1310 Phoenix N-6 500 KOY 1390 Prescott M-6 100 KPJM 1500 Tucson O-7 100 KFAR 620 Prescott M-6 100 KCRJ 1370 Tucson O-7 100 KFAR 620 ARKANSAS  Blytheville M-19 50 KLCN 1290 Fayetteville M-16 Fort Smith N-16 50 KFAW 1300 Fort Morgan J-11 100 KGEW Yuma J-12 100 KGEK  CONNECTICUT  Banta Ana M-3 100 KREG Santa Barbara M-2 100 KDB Sockton J-2 250 KGDM COLORADO  COLORADO  Colorado Springs K-11 1000 KVOR Denver K-11 500 KFAP 1000 KLZ 12500 KOA 1260 Fort Morgan J-11 100 KGEW Yuma J-12 100 KGEK Yuma J-12 100 KGEK  CONNECTICUT  Bridgeport H-27 250 WICC Fort Morgan J-12 500 WDRC Storrs H-28 250 WCAC  Storrs H-28 250 WCAC	1500 11 J0 1200 1270 920 1310 920 560 830 1200 1310 1420 1420 1200
Santa Ana M-3   100   KPE	1500 1500 1200 1200 1270 920 1310 920 560 830 1200 1310 1420 1420 1200
Santa Barbara M-2	11 JO 1200 1270 920 1310 920 56° 830 880 1200 1310 880 1320 1420 1200
Gadsden O-21	1270 920 1310 920 56° 830 830 1200 1310 880 1200 1420 1420 1600 1330
COLORADO	1270 920 1310 920 560 830 880 1310 880 1320 1420 1200
Mobile Q-20	920 1310 920 560 830 1200 1310 880 1320 1420 1200
ALASKA  Anchorage	920 1310 920 560 830 1200 1310 880 1320 1420 1200
ALASKA  Anchorage	1310 920 560 830 830 1200 1310 880 1320 1420 1200
ALASKA  Anchorage	920 560 830 880 1200 1310 880 1320 1420 1200
Anchorage Ketchikan 500 KGBU 900 Fort Morgan J-11 500 KOA FOP 100 KGBU 900 Fort Morgan J-11 100 KGEW 100 KFXJ 100 KFXJ 1310 Phoenix N-6 500 KOY 1390 Fort Morgan J-11 100 KGBW 100 KGBW 1310 Prescott M-6 100 KCRJ 1310 Prescott M-6 100 KGAR 1370 500 KVOA 1260 Fort Morgan J-11 100 KGBW 100 KFXJ 100 KGBW 1390 Fort Morgan J-11 100 KGBW 100 KFXJ 1310 Phoenix N-6 500 KOY 1390 Fort Morgan J-11 100 KGBW 100 KFXJ 1310 Phoenix N-6 500 KOY 1390 Fort Morgan J-11 100 KGBW 100 KFXJ 1310 Phoenix N-6 500 KOY 1390 Fort Morgan J-11 100 KGBW 100 KFXJ 1310 Phoenix N-6 500 KOY 1390 Fort Morgan J-11 100 KGBW 100 KFXJ 1310 Phoenix N-6 500 KFXA 620 Fort Morgan J-11 100 KGBW 100 KFXJ 1310 Phoenix N-6 500 KFXA 620 Fort Morgan J-11 100 KGBW 100 KFXJ 1310 Phoenix N-6 500 KFXA 620 Fort Morgan J-11 100 KGBW 100 KFXJ 1310 Phoenix N-6 500 KFXA 620 Fort Morgan J-11 100 KGBW 100 KFXJ 1310 Phoenix N-6 500 KFXA 620 Fort Morgan J-11 100 KGBW 100 KFXJ 1310 Phoenix N-6 500 KFXA 620 Fort Morgan J-11 100 KGBW 100 KFXJ 1310 Phoenix N-6 500 KFXA 620 Fort Morgan J-11 100 KGBW 100 KFXJ 1310 Phoenix N-6 500 KFXA 620 Fort Morgan J-11 100 KGBW 100 KFXJ 1310 Phoenix N-6 500 KFXA 620 Fort Morgan J-11 100 KGBW 100 KFXJ 1310 Phoenix N-6 500 KFXA 620 Fort Morgan J-11 100 KGBW 100 KFXJ 1310 Phoenix N-6 500 KFXA 1310 Phoenix N-6 500 KPOF 100 KFXJ 1310 Phoenix N-6 500 KPOF 100 KFXJ 1310 Phoenix N-9 100 KFXJ 1310 Phoenix N-9 100 KGBW 1310 Phoenix N-6 500 KPOF 100 KFXJ 1310 Phoenix N-9 100 KGBW 1310 Phoenix N-6 500 KPOF 100 KFXJ 1310 Phoenix N-9 100 KGBW 1310	830 880 1200 1310 880 1320 1420 1200
Retchikan   Soo KGBU   900   Fort Morgan J-11   100 KGEW   Soo KFKA   Soo KGHF   Soo K	880 1200 1310 880 1320 1420 1200
ARIZONA  Flagstaff M-7 Jerome M-6 Phoenix N-6 Tucson O-7  Blytheville M-19 Fayetteville M-19 Fayetteville M-16 Fort Smith N-16 Flagstaff M-7 Jerome M-6 J00 KFXY J20 H20 Freeley J-11 Pueblo L-11 Trinidad L-11 Trin	1310 880 1320 1420 1200
ARIZONA Flagstaff M-7 Jerome M-6 Phoenix N-6 Prescott M-6 Tucson O-7  ARKANSAS Blytheville M-19 Fayetteville M-16 Fort Smith N-16 Fort Smith N-16 Flagstaff M-7 100 KFXY 1420 Levelol L-11 250 KGHF Trinidad L-11 100 KGIW Trinidad L-11 100 KGIW Trinidad L-11 100 KGIW Trinidad L-11 100 KGIW Trinidad L-11 100 KGEK  CONNECTICUT Bridgeport H-27 500 WDRC 50000 WTIC 660  DELAWARE Wilmington J-26  WDEL	880 1320 1420 1200 600 1330
Flagstaff M-7	1420 1200 600 1330
Jerome M-6	600 1330
Prescott M-6 100 KPJM 1500 Tucson O-7 100 KGAR 1370 500 KVOA 1260	600 1330
Prescott M-6	1330
100 KGAR   1370	1330
ARKANSAS  Blytheville M-19 Fayetteville M-16 Fort Smith N-16 Fort Smith N-16 Fort Smith N-16 Fort Smith N-16  Blytheville M-19 Fort Smith N-16	
ARKANSAS  Blytheville M-19 Fayetteville M-16 Fort Smith N-16 Fort Smith N-16  Storrs H-28  250 WCAC  DELAWARE Wilmington J-26  Wilmington J-26  WOAC	1060
ARKANSAS  Blytheville M-19	600
Fayetteville M-16 1000 KUOA 1390 Wilmington J-26 250 WDEL	
Fort Smith N-16 50 KFPW 1340 Wilmington J-26 250 WDEL	
	1120
Hot Springs N-17 10000 KTHS 1040 100 100 WILM	1420
Little Rock N-17 250 KARK 890 DISTRICT OF COLUMBIA	
1000 KLRA 1390 H W 1	
Paragould M-18 100 KBTM 1200 Washington J-26 250 WMAL 500 WRC	630 950
100 WOL	1310
CALIFORNIA Bakersfield L-3 100 KSMR 1200 FLORIDA	
Dunkalan 1.2	
Beverly Hills M-3 500 KMPC 710   Gainesville O-24 5000 WPITE	620 830
DUIDANK IVI-3 500 KELW 780 H Taakcomulla O 24 1000 WILAW	900
	1300 560
Fresno K-2 100 KMJ 1210   Orlando R-24 500 WDBO	1120
FOO VINCOA	1340
5000 KNX 1050 Tampa R-74 1000 WDAF	620 1220
	1370
Long Beach M-3 1000 KFOX 1250 GFORGIA	
1000 KGER 1360	1450
1000 KFAC 1300   Atlanta O-22 250 WGST	890
50000 KFI 640 [] 100 W.J.L.	1370
100 KGFI 1200    Augusta O-23 100 WRDW	740 1500
1000 KHJ 900   Columbus O-22 50 WRBL	1200
500 KTM 780   Macon O-23 500 WMAZ Oakland J-1 250 KLS 1440   Rome N-22 100 WFDV	1180 1310
500 KLX 880   Savannah O-24 500 WTOC	260
	210
Sacramento I-2 100 KFBK 1310 HAWAII	
San Bernardino M-3 100 KFXM 1210 Hopolulu 250 KCMP	320
San Diego N-3 500 KFSD 600 1000 KGU 250 KGMB 1000 KGU	940
San Francisco J-1 1000 KFRC 610   IDALIO	
	350
7500 KGO 790   Idaho Falls G-7 250 KID	350 320
_100 KJBS 1070    Nampa G-5 100 KFXD 1	420
1000 ICTAD	900
1000 I/VA 1220 II m + m + v +	
	420 320

ILLINOIS	Watts		Kcys.	Shenandoah J-16	500	KFNF	890
Carthage J-18 Chicago 1-20	50 10000 10000	WCAZ KFKX KYW	1070 1020 1020	Sioux City I-15 Waterloo I-17	500 1000 500	KMA KSCJ WMT	930 1330 600
	500 25000	WAAF WBBM	920 770	KANSAS			
	1500	WCFL	970 1490	Arkansas City M-15	100	WBBZ	1200
	5000 100	WCHI WCRW	1210	Dodge City L-13   Kansas City K-16	100 100	KGNO WLBF	1210 1420
	100 <b>50000</b>	WEDC WENR	1210   870	Lawrence K-16	500 1000	KFKU WREN	1220 1220
	500 25000	WGES WGN	1360 720	Manhattan K-15	500	KSAC	580
	1000	WIBO	560	Milford K-14 Topeka K-16	5000 1000	KFBI WIBW	1050 580
	25000 50000	WJBT WLS	770   870	Wichita L-15	1000	KFH	1300
	5000 5000	WMAQ WMBI	670 1080	KENTUCKY			
	500	WPCC	560	Covington K-22 Hopkinsville M-20	5000 1000	WCKY WFIW	1490 940
Cicero I-20	100 100	WSBC WEHS	1210 1420	Louisville L-21	10000	WHAS	820
	100 100	WHFC WKBI	1420 1420	Paducah M-19	250 100	WLAP WPAD	1010 1420
Decatur K-19 Galesburg J-18	100 100	WJBL WKBS	1200 1310	LOUISIANA			
Harrisburg L-19 Joliet I-19	100 100	WEBQ WCLS	1210 1310	Monroe P-18 New Orleans R-19	100 100	KMLB WABZ	1200 1200
La Salle J-19	100 100	WKBB	1310 1200	New Orleans K-19	1000	WDSU	1250
Mooseheart I-19	20000	WJBC WJJD	1130		$\frac{100}{190}$	WJBO WJBW WSMB	1420 12 <b>0</b> 0
Peoria Heights J-19 Quincy K-18	500 500	WMBD WTAD	1440 1440		$\frac{500}{10000}$	WSMB WWL	1320 850
Rockford I-19 Rock Island I-18	500 100	KFLV WHBF	1410 1210	Shreveport P-17	50	KRMD	1310
Springfield K-19	100	WCBS	1210 1210		1000 100	KTBS KWEA	1450 1210
Tuscola K-20	100 100	WTAX WDZ WILL	1070	MAINE	10000	KWKH	850
Urbana J-20 Zion I-20	250 5000	WILL	890 1080	MAINE Augusta F-28	100	WRDO	1370
210 2 #0	4000			Bangor F-29	100	WABI	1200
INDIANA				Portland F-28	500 1000	WLBZ WCSH	620 940
Anderson J-21	100	WHBU	1210	Presque Isle D-29	100	WAGM	1420
Connersville K-21 Culver I-20	100 500	WKBV WCMA	1500 1400	MAR YLAND			
Elkhart I-21	50 500	WJAK WGBF	1310 630	Baltimore J-26	10000 250	WBAL 2 WCAO	760-1060 600
Evansville L-20 Fort Wayne J-21	100	WGL	1370		100	WCBM	1370
Gary I-20	10000 1000	WOWO WJKS	1160 1360	Cumberland J-25	500 100	WFBR WTBO	1270 1420
Hammond I-20 Indianapolis J-21	100 1000	WWAE WFBM	1200 1230	MASSACHUSE	rrs		
	500	WKBF	1400 1400	Boston G-28	500	WAAB	1410
Lafayette J-20 Muncie J-21	500 50	WBAA WLBC	1310		1000 25000	WBIS WBZA	1230 990
South Bend I-20	100 500	WFAM WSBT	1200 1230		1000	WEEI	590
Terre Haute K-20	100	WBOW	1310		1000 100	WHDH WLOE	830 1500
				Fall River H-28	1000 250	WNAC WSAR	1230 1450
IOWA				Lexington G-28	100	WLEY	1370
Ames I-17 Boone I-17	5000 100	WOI KFGQ	640 1310	Needham G-28 New Bedford H-28	500 100	WBSO WNBH	920 1310
Cedar Rapids I-18	100	KWCR KSO	1310	Springfield H-27 Worcester G-28	25000 100	WBZ WEPS	990 1200
Clarinda J-16 Council Bluffs J-16	500 1000	KOIL	1380 1260	Worcester G-20	100	WORC WTAG	1200 580
Davenport I-18 Decorah H-18	5000 50	WOC KGCA	1000 1270	MICHICAN	250	WIAG	380
	100	KWLC	1270	MICHIGAN	50	WELL	1420
Des Moines I-17 Fort Dodge I-16	5000 100	WHO KFJY WSUI	1000 1310	Battle Creek I-21 Bay City H-22	500	WBCM	1410
Iowa City I-18 Marshalltown I-17	500 100	WSUI KFJB	880 1200	Calumet E-19 Detroit H-22	100 <b>50</b>	WHDF WJBK	1370 1370 750
Ottumwa J-17	100	WIAS KICK	1420 1420		5000 100	WJBK WJR WMBC	750 1420
Red Oak J-16	100	KICK	1420		100	.,,,,,,,,,	1420

Detroit H-22 East Lansing H-21 Flint H-22 Grand Rapids H-21 Ironwood F-18 Jackson I-21 Kalamazoo I-21	1000 WWJ 1000 WXYZ 1000 WKAR 100 WFDF 500 WASH 500 WOOD	920 1240 1040 1310	NEVADA Las Vegas L-5	Watts 100 KGIX	Kcys.
Flint H-22 Grand Rapids H-21 Ironwood F-18 Jackson I-21	1000 WKAR 100 WFDF 500 WASH 500 WOOD	1040	Las Vegas L-5		-
Flint H-22 Grand Rapids H-21 Ironwood F-18 Jackson I-21	100 WFDF 500 WASH 500 WOOD		II To a T a		1420
Ironwood F-18 Jackson I-21	500 WOOD		Reno I-3	500 KOH	1380
Jackson I-21		1270 1270	NEW HAMPSH	IRE	
Kalamazoo I-21	100 WJMS 100 WIBM	1420	Laconia G-28	100 WKAV	1310
Transmitted T-WI	1000 WKZO	1370 590	Manchester G-28	500 WFEA	1430
Lapeer H-22 Ludington H-20	100 WMPC	1500	NEW JERSEY		
Marquette F-19	100 WBEO	1500 1310	Asbury Park I-27	500 WCAP	1280
Royal Oak H-22	50 WEXL	1310	Atlantic City J-27	5000 WPG	1100
MINNESOTA			Camden I-26   Hackensack I-27	500 WCAM 250 WBMS	1280 1450
Fergus Falls F-15	100 KGDE	1200	Jersey City I-27	300 WAAT	940
Minneapolis G-17	5000 WCCO 1000 WDGY	810	II.	500 WHOM 250 WKBO	1450 1450
	1000 WRHM	1180 1250	Newark I-27	1000 WAAM	1250
Moorhead F-15 Northfield G-17	50 KGFK 1000 KFMX	1500	l J	250 WGCP 250 WNJ	1250 1450
	1000 KFMX 1000 WCAL	1250 1250		5000 WOŘ	710
St. Paul G-17	1000 WLB	1250	Paterson I-27 Red Bank I-27	1000 WODA 100 WJBI	1250 1210
	10000 KSTP	1460	Trenton I-26	500 WOAX	1210
MISSISSIPPI			Zarephath I-27	250 WAWZ	1350
Greenville O-18 Gulfport Q-19	100 WRBQ	1210	NEW MEXICO		
Hattiesburg O-19	100 WGCM 10 WRBJ	1210 1370	Albuquerque N-7	250 KGGM	1230
Jackson P-19	1000 W J D X	1370 1270	1	20000 KOB	1180
Laurel P-20 Meridian P-20	100 WTSL 500 WCOC	1310 880	Raton M-11	50 KGFL	1370
Tupelo N-20	100 WDIX	1500	NEW YORK		
Vicksburg P-18	500 WQBC	1360	Albany H-27	500 WOKO	1430
MISSOURI			Auburn H-25 Binghamton H-26	100 WMBO 100 WNBF	1310 1500
Cp. Girardeau L-19	100 KFVS	1210	Brooklyn I-27	500 WBBC	1400
Columbia K-17 Grant City J-16	500 KFRU 100 KGIZ	630 1500		1000 WBBR 500 WCGU	1300
Jenerson City L-1/	500 WOS	630		500 WFOX	1400 1400
Joplin M-16 Kansas City K-16	100 WMBH 1000 KMBC	1420 950	ĺ	500 WLTH	1400
-	100 KWKC	1370	9	100 WMBQ 100 WMIL	1500 1500
	1000 WDAF 500 WHB	610 860	Buffalo H-24	1000 WBEN	900
Ca. T 17, 17	1000 WOO	1300		100 WEBR 1000 WGR	1310 550
St. Joseph K-16	2500 KFEQ 100 KGBX	680 1310		2000 WKBW	1480
St. Louis L-18	500 KFUO	550		1000 WMAK _50 WSVS	1040 1370
	100 KFWF 50000 KMOX	1200 1090	Canton F-26	500 WCAD	1220
	500 KSD	550	Freeport I-27 Glens Falls G-27	100 WGBB 50 WBGF	1210 1370
	1000 KWK 1000 WEW	1350 760	Ithaca H-25	1000 WEAI	1270
	100 WIL	1200	Jamaica H-27	50 WLCI 100 WMRJ	1210 1210
MONTANA		- 1	Jamestown H-24	50 WOCĽ	1210
Billings F-9 Butte F-7	1000 KGHL	950	Long Island City I-27 New York City I-27	100 WLBX 50000 WABC	1500 860
Great Falls E-8	500 KGIR 1000 KFBB	1360 1280	1	250 WBNX	1350
Kalispell D-7	100 KGEZ	1310		50000 WBOQ 250 WCDA	860 1350
Missoula E-7 Wolf Point E-11	100 KGVO 100 KGCX	1420 1310		50000 WEAF	660
	100 110011	1010		500 WEVD 500 WGBS	1300
NEBRASKA	1000 11111			1000 WHAP	1180 1300
Clay Center J-14 Kearney J-14	1000 KMMJ 100 KGFW	740    1310		250 WHN	1010
Kearney J-14 Lincoln J-15	5000 KFAB	770 [		5000 WLWL	760 1100
	100 KFOR 500 WCAJ	1210 590		500 WMCA	<b>57</b> 0
Norfolk I-15	1000 WJAG	1060		250 WMSG 500 WNYC	1350 570
North Platte J-13 Omaha J-15	500 KĞNF 500 WAAW	1430		1000 WOV	1130
	1000 WOW	590		250 WPAP 500 WPCH	1010 810
Scottsbluff I-11 York J-15	100 KGKY 500 KGBZ	1500 930		250 WQAO	1010
J	- TODE	930		250 WRNY	1010

Patchogue I-27	100	WPOE	1370	Portland E-3	5000	KEX	1180
Rochester G-25	5000	WHAM	1150		100	KBPS	1420
	500	WHEC	1430		500	KFJR	1300
Saranac Lake F-26	50	WNBZ WGY	1290 790	}	1000 1000	KGW KOIN	620 940
Schenectady G-27	50000 1000	WFBL	1360		500	KTBR	1300
Syracuse G-25	250	WMAC	570	1	500	KTBR KWJJ	1060
	250	WSYR	570		100	KXL	1420
Troy G-27	500	WHAZ	1300				
Utica G-26	100	WIBX	1200	PENNSYLVANI.	A		
Woodside I-27	100 100	WWRL WCOH	1500 1210	7.26	350	WCDA	1440
Yonkers I-27	100	WCOH	1210	Allentown I-26	250 250	WCBA WSAN	1440
			- 1	Altoona I-25	100	WFBG	1310
NORTH CAROL	INA		- 1	Carbondale H-26	10	WNBW	1200
Asheville M-23	1000	WWNC	570	Elkins Park I-26	25	WIBG	930
Charlotte M-24	5000	WBT	1080	Erie H-24	100	WEDH	1420
Gastonia M-24	100	WSOC	1210	Grove City I-24	100	WSAJ	1310 1430
Greensboro M-24	500	WBIG	1440	Harrisburg I-25	500 100	WBAK WCOD	1200
Raleigh M-25 Wilmington N-26	1000	WPTF WRAM	680 1370	1	500	WHP	1430
Winston-Salem M-24	100	WSJS	1310	Johnstown J-24	100	WJAC .	1310
Whiston-Salem MI-24	100	,,,,,,,	1010	Lancaster I-26	100	WJAC WGAL	1310
					100	WKJC	1200
NORTH DAKOT	ГΑ			Lewisburg I-26	100	WJBU	1210
Bismarck F-13	1000	KFYR	550	Oil City 1-24 Philadelphia I-26	500 10000	WĽBW WCAU	1260 1170
Devils Lake E-14	100	KDLR	1210	Philadelphia 1-20	100	WELK	1370
Fargo F-15	1000	WDAY	940		500	WFAN	610
Grand Forks E-15	100	KFIM	1370	1	500	WFI	560
Mandan F-13	100	KGCU	1240	1	100	WHAT	1310
Minot E-13	100	KLPM	1240	1	500	WIP	610
			- 1	1	500 100	WLIT WPEN	560 1500
OHIO			- 1	1	250	WRAX	1020
Akron 1-23	1000	WADC	1320	1	100	WTEL	1310
Canton 1-23	10	WHBC	1200	Pittsburgh J-24	50000	KDKA	980
Cincinnati K-22	100	WFBE	1200		500	KQV WCAE	1380
	1000	WKRC	550	ì	1000	WLAE	1220 1290
	50000	WLW	700   1330	1	1000 100	WJAS WWSW	1500
Cleveland I-23	1000 500	WSAI WGAR	1450	Reading I-26	1000	WEEU	830
Creveland 1-23	1000	WHK	1390	1	100	WRAW	1310
	500	WIAY	610	Scranton H-26	250	WGBI	880
	50000	WTAM	1070		250	WQAN WPSC	880 1230
Columbus J-22	500	WAIU	640	State College I-25	500 100	WNBO	1200
	500	WCAH WEAO	1430 570	Washington J-24 Wilkes-Barre I-26	100	WBAX	1210
	750 100	WSEN	1210	Winkes-Daile 1-20	100	WBRE	1310
Dayton J-22	200	WSMK	1380	Williamsport I-25	100	WRAK	1370
Mansfield J-22	100	WJW WHBD	1210	York J-26	1000	WGEO	1000
Mount Orab K-22	100	WHBD	1370	1			
Toledo I-22	1000	WSPD	1340	DITTI IDDINES			
Youngstown I-23 Zanesville J-23	500 100	WKBN WALR	570 1210	PHILIPPINES			
Zanesvine J-23	100	WALK	1210	Cebu	500	KZRC KZKA	937.5
				Manila	1000	KZKA KZRM	1110 618.5
OKLAHOMA				1	50000	INZ POINT	010.3
	250	KOCW	1400	PORTO RICO			
Chickasha N-14 Enid M-14	100	KCRC	1370		250	1277.4.0	000
Norman N-15	500	KCRC WNAD	1010	San Juan W-34	250	WKAQ	890
Oklahoma N-15	5000	KFJF	1480	1			
	100	KFXR	1310	I	_		
	100	KGFG	1370	RHODE ISLAN	υ		
C. C. C. W. 17	1000	WKY	900	Newport H-28	100	WMBA	1500
S. Coffeyville M-15 Shawnee N-15	500 100	KGGF KGFF	1010 1420	Pawtucket H-28	100	WPAW	1210
Tulsa M-15	5000	KVOO	1140	Providence H-28	250	WEAN	780
1 0130 111-10	0000	11.00			250	WJAR WPRO	890
				1	100	WPRO	1210
OREGON							
Astoria D-2	100	KFJI	1370	COLUMN CAROL	TNIA		
Corvallis E-2	1000	KOAC	550	SOUTH CAROL			
	100	KORE	1420	Charleston O-25	500	WCSC	1360
Eugene F-2							
	100 100	KOOS KMED	1370 1310	Columbia N-24 Spartanburg N-23	500 100	WIS WSPA	1010 1420

SOUTH DAKO	TA Wat	ts	Kcys.	VIRGINIA	Wates		Kcys
Brookings H-15	500	KFDY	550	Alexandria K-26	10000		1460
Huron H-14	100	KGDY	1200	Arlington J-25	1000	NAA	690
Mitchell H-14	100	KGDA	1370	Danville L-25	100	WBTM	1370
Pierre G-13	200	KGFX	580	Emory L-23	500	WEHC	1350
Rapid City H-12	100		1200	Lynchburg L-25	100	WLVA	1370
Sioux Falls H-15 Vermillion I-15	2500 500	KSOO KUSD	1110	Newport News L-26	100	WGH	1310
Watertown G-15	100	KGCR	890 1210	Norfolk L-26	500	WPOR	780
Yankton I-15	1000		570	Dotambura 1 26	500	WTAR	780
I difficult 1-10	1000	******	370	Petersburg L-26 Richmond K-26	100 100	WLBG WBBL	1200 1210
TENNESSEE				Attenniona R-20	100	WMBG	1210
				} [	5000	WRVA	1110
Bristol L-23	100	WOPI	1500	Roanoke L-24	250	WDBJ	930
Chattanooga N-21	1000	WDOD	1280		250	WRBX	1410
Jackson N-20	100	WTJS WFBC	1310	WASHINGTON			
Knoxville M-22	50 1000	WNOX	1200 560	WASHINGTON			
	100	WROL	1310	Aberdeen D-2	100	KXRO	1310
Memphis N-19	500	WGBC	1430	Bellingham C-3	100	KVOS	1200
	100	WHBO	1370	Everett C-3	50	KFBL	1370
•	500	WMC WNBR	780	Lacey D-3 Pullman E-5	1000	KG <b>Y</b> KW <b>S</b> C	1200 1220
	500	WNBR	1430	Seattle C-3	5000	K TO	970
	500	WREC	600	Geattle C-3	1000	KJR KOL	1270
Nashville M-21	5000	WLAC	1470	li .	1000	KOMO	920
Springfield M-20	5000 100	WSM WSIX	650	III.	100	KPCB	650
Springheid M-20	100	WSIA	1210		50	KRSC	1120
TOPO STAC					1000	KTW	1220
TEXAS					100	KVL	1370
Abilene P-13	100	KFYO	1420	2.1 . 2.1	500	KXA	570
Amarillo N-12	1000	KGRS	1420	Spokane D-5	100 1000	KFIO	1120
	1000	WDAG	1410		5000	KFPY K <b>G</b> A	1340 1470
Austin Q-14	100	KUT	1500		1000	KHQ	590
Beaumont R-17	500	KFDM	560	Tacoma D-3	500	KMO	860
Brownsville U-15	500 500	KWWG WTAW	1260 1120		1000	KVI	760
College Sta. Q-15 Corpus Christi S-14	100	KGFI	1500	Walla Walla E-5	100	KUJ	1370
Dallas P-15	10000	KRLD	1040	Wenatchee D-4	50	KPO	1500
Builds 1 -10	50000	WFAA	800	Yakima D-4	100	KIT	1310
	500	WRR	1280	WEST WEST			
Dublin P-14	100	KFPL	1310	WEST VIRGINI	A		
El Paso P-9	100	KTSM	1310	Bluefield L-24	250	WHIS	1410
D . W D	100	WDAH	1310	Charleston K-23	250	WOBU	580
Fort Worth P-15	100	KFJZ	1370	Fairmont J-24	250	WMMN	890
	1000 10000	KTAT WBAP	1240 800	Huntington K-23	250	WSAZ	580
Galveston R-16	100	KFLX	1370	Wheeling J-24	5000	WWVA	1160
Galveston K-10	500	KFUL	1290	MICCONCINI			
Greenville O-15	15	KFPM	1310	WISCONSIN			
Harlingen T-14	500	KRGV	1260	Eau Claire G-18	1000	WTAQ	1330
Houston R-16	1000	KPRC	920	Ellis G-19	2000	WLBL	900
	100	KTLC	1310	Fond du Lac H-19	100	KFIZ	1420
	500	KTRH	1120	Green Bay G-19 Janesville I-19	100	WHBY	1200
6 4 1 6 13	100	KXYZ	1420	Janesville 1-19	100	WCLO WKBH	1200
San Angelo Q-13 San Antonio R-14	100	KXYZ KGKL KABC	1370	La Crosse H-18 Madison H-19	1000 750	WHA	1380 940
San Antonio R-14	100 100	KABC	1420 1370	Madison H-19	500	WIBA	1280
	100	KONO	1370	Manitowoc H-20	100	WOMT	1210
	1000	KTSA	1290	Milwaukee H-19	250	WHAD	1120
	50000	WOAI	1190		250	WISN	1120
Tyler P-16	100	KGKB	1500		1000	WTMJ	620
Waco O-15	1000	WACO	1240	Poynette H-19	100	WIBU	1210
Wichita Falls O-14	250	KGKO	570	Racine I-20	100	WRJN	1370
			- 1	Sheboygan H-20	500	WHBL	1410
UTAH				Superior F-17	1000	WEBC	1290
	500	I/I O	1400	WYOMING			
Ogden I-7 Salt Lake City I-7	500 1000	KLO KD <b>Y</b> L	1400 1290	WYOMING			
Sait Lake City 1-7	5000	KSL	1130	Casper H-10	100	KDFN	1210
	3000	NGL	1130				
VERMONT			1	CAN	JADA		
Burlington F-27	100	WCAX WSYB	1200	ALBERTA			
Rutland G-27	100	WSYB	1500		F00	OF 4 C	
St. Albans F-27	100	WQDM	1370	Calgary B-7	500	CFAC	690
Springfield G-27	10	WNBX WDEV	1200	!	10000 500	CFCN CJCJ	985 690
Waterbury F-27	50	WDEV	1420		300	رادار	090

Edmonton A-8	250	CHMA	580	QUEBEC	Watt		Kcys.
	500 500	CJCA CKU <b>a</b>	930 580	Montreal E-26	500	CFCF	1030
Lethbridge C-8	100	CKLC	1120	ł	5000	CHYC	730
Red Deer A-8	1000	CKLC	840		5000 5000	CKAC	730 730
	1000	CNRD	840	Quebec D-27	100	CNRM CHRC	645
BRITISH COLU	IMBLA				100	CKCI	645
Chilliwack B-3	100	CHWK	665		50 50	CKCV CNRQ	880 880
Kamloops B-5	100	CFIC	1120	CACKATCHEW		CIVICQ	000
Kelowna C-5	100	CFJC CKOV	1200	SASKATCHEWA			
Vancouver B-3	50	CHLS	730	Fleming C-13	500	CJRW	665 665
	500 50	C JOR CKCD	1155 730	Moose Jaw C-11	500 25	CJRM 10-AB	1200
	50	CKFC	730	Regina C-12	500	CHWC	960
	100	CKMO	730		500	CJBR CKCK CNRR	960
	100	CKWX	730		500	CKCK	960 <b>96</b> 0
Victoria C-3	500 50	CNRV CFCT	1030 630	Saskatoon B-11	500 500	CFQC	910
Victoria C-3	30	Cror	050		500	CNRS	910
MANITOBA				Yorkton B-13	500	CJGX	630
Brandon D-14 Winnipeg D-15	500 5000	CKX CKY	540 780	CENTRAL	AM	ERICA	
Willingeg D-10	5000	CNRW	780	COSTA RICA			
NEW BRUNSW	ICK			Heredia FF-23	75	T14NRH	948
Fredericton D-29	100	CFNB	1210	San Jose FF-23	50	TIC	900
Moncton D-30	500	CNRA	630	GUATAMALA			
St. John D-30	500	CFBO	890	Guatamala CC-19	50	TGW	570
NEWFOUNDLA	ND			HONDURAS			
St. Johns A-35	500	VOWR	675	Tegucigalpa CC-21	2300	HRB	1370
St. Johns A-33	300	,0,,,,	0/3				
NOVA SCOTIA				SALVADOR	<b>500</b>	DATE	664
Glace Bay C-32	10000	VAS	685	Salvador CC-19	500	RUS	664
Glace Bay C-32 Halifax E-31	500	CHNS	910	ME	XICC	)	
Sydney C-32	500 50	CNRH CICB	910 880	1		,	
Wolfville D-31	50	CKIC	1010	AGUASCALIEN			
				Aguascalientes W-10	350	XFC	805
ONTARIO				BAJA CALIFOR	RNIA		
Chatham H-22	100	CFCO	1210	Tiajuana N-3	30	XEFD	1020
Cobalt E-23	100	CKMC	1210				
Hamilton H-24	500 50	CHCS	630 880	CHIHUAHUA			
	1000	CHML CKOC	635	Chihuahua R-9	100	XEFI XEF	1000
Kingston G-25	50	CFRC	930	Juarez P-9	250 101	XEJ	875 1000
London H-23	5000 5000	CJGC CNRL	910 910	Juanez 1 - 7	5000	XEQ	750
North Bay E-23	100	CFCH	930	COAHUILA		-	
Ottawa F-25	100	CKCO CNRO	890		10	XEL	1000
Port Arthur E-19	500 50	CKPR	600 890	Saltillo, Coah. U-12 Torreon U-11	125	XETB	1380
Prescott F-25	50	CFLC	915		100	XETG	1000
Preston H-23	50	CKPC	880	Villa Acuna R-12	75000	XER	735
St. Catherines H-24	1000	CKTB	635	D. F.			
Toronto G-24	500 500	CFCA CFCL	1120 960	Coyoacan Y-13	100	XETZ	1500
	5000	CFRB	690	Mexico City Y-13	1000	XEB	1030
	500	CKCL	580		250	XEFA	1250
	5000 500	CKGW CKNC	840 960		100 101	XEG XEK	1360 990
	500	CNRT	1120		1000	XEN	711
	5000	CNRX	690		5000	XEO	940
W . 1 C 22	5000	CPRY	840		500	XETA	1140 1230
Waterloo G-23	50 15	CKCR 10-BP	645 1200		100 5000	XETQ XEW	910
	13	IU-DI	1200		500	XEX	1210
Wingham G-23				1	500	XEZ	780
Wingham G-23	ARD I	SLAND				VEC	
Wingham G-23 PRINCE EDWA			580		2000	XFG XFI	
Wingham G-23	ARD IS 500 100	SLAND CFCY CHCK	580 960	Toluca. Y-12		XFG XFI XFX XEC	638 818 860 1000

CFAC 690	CKAC 730	1	CMBZ 1010	II CNRD 840	1
Calgary, Alta.	Montreal, Que.		Havana, Cuba	Red Deer, Alta.	
CFBO 890 St. John, N. B. CFCA 1120	CKCD 730		CMC 842	CNRH 910	
CFCA 1120	Vancouver, B. C. CKCI 645		Havana, Cuba CMCA 1225	Halifax, N. S. CNRL 910	
Toronto, Ont.	Quebec, Que.	1 1	Havana, Cuba	London, Ont.	
CFCF 1030	CKCK 000		CMCB 1070	CNRM 730	-
Montreal, Que.	Regina, Sask.		Hayana, Cuba	Montreal, Que.	
CFCH 930	UKCL 580		CMCD 925	CNRO 600	
North Bay, Ont. CFCL 960	Toronto, Ont. CKCO 890		Havana, Cuba	Ottawa, Ont.	
Toronto, Ont.	Ottawa, Ont.		CMCF 890 Havana, Cuba	CNRQ 880	]
CFCN 985	CKCR 645		CMCG 1345	Quebec, Que. CNRR 960	
Calgary, Alta.	Waterloo, Ont.	l	Hayana, Cuba	Regina, Sask.	
CFCO 1210	CKCV 880		CMCH 1405 Havana, Cuba	II CNRS 910	
Chatham, Ont.	Quebec, Que.		Havana, Cuba	Saskatoon, Sask.	
CFCT 630 Victoria, B. C.	CKFC 730 Vancouver, B. C.	1 1	CMCJ 620 Havana, Cuba	CNRT 1120	
CFCY 580	CKGW 840		CMCM 1405	Toronto, Ont. CNRV 1030	
Ch'lottet'n, P.E.I.	Toronto, Ont.	J ]	Havana, Cuba	Vancouver, B. C.	
CFJC 1120	CKIC 1010		CMCN 925	CNRW 780	
Kamloops, B. C.	Wolfville, N. S.		Havana, Cuba	Winnipeg, Man.	
CFLC 915	H CKLC 840	+ 1	CMCO 660	II CNRX 690	
Prescott, Ont. CFNB 1210	Red Deer, Alta. CKMC 1210		Havana, Cuba CMCQ 1150	Toronto, Ont. CPRY 840	
Fredericton, N.B.	Cobalt, Int.		CMCQ 1150 Havana, Cuba	Toronto, Ont.	
CFQC 910	CKMO 730		CMCR 1345	HHK 920	
Saskatoon, Sask.	Vancouver, B. C.		Havana, Cuba	Port au Prince,H.	
CFRB 690	CKNC 960		CMCU 1285	HIX 669	
Toronto, Ont. CFRC 930	Toronto, Ont.		Havana, Cuba CMCW 1285	_ Santo Domingo	
Kingston, Ont.	CKOC 635 Hamilton, Ont.		CMCW 1285 Havana, Cuba	HRB 1370 Tequcigalpa	
CHCK 960	CKOV 1200		CMCY 1345	KABC 1420	
Ch'lottet'n, P.E.I.	Kelowna, B. C.		Havana, Cuba	San Antonio, Tex.	
CHCS 630	H CKPC 880		CMDC 660	KARK 890	
Hamilton, Ont. CHGS 1120	Preston, Ont.		Havana, Cuba	Lit. Rock, Ark.	
CHGS 1120 Sum'rside, P.E.I.	CKPR 890 Port Arthur, Ont.	! !	CMGA 834 Colon, Cuba	KBPS   1420	
CHLS 730	CKTB 635		CMGB 1205	Portland, Ore. KBTM 1200	
Vancouver, B.C.	St. Cath., Ont.		Matanzas, Cuba	Paragould, Ark.	
CHMA 580	CKUA 580		CMGE 1375	KCRC 1370	
Edmonton, Alta.	Edmonton, Alta.		Cardenas, Cuba	Enid, Okla. KCRJ 1310	
CHML 880 Hamilton, Ont.	CKWX 730		CMGF 977	KCRJ 1310	
CHNS 910	Vancouver, B. C. CKX 540		Matanzas, Cuba CMGH 1370	Jerome, Ariz. KDB 1500	
Halifax, N. S.	Brandon, Man.	1 0	Matanzas, Cuba	S. Barbara, Cal.	
CHRC 645	CKY 780		CMHC 790	KDFN 1210	
Quebec, Que.	Winnipeg, Man		Tuinucu, Cuba	Casper, Wyo.	
CHWC 960	CMAB 1249		CMHD 950	KDKA 980	
Regina, Sask. CHWK 665	Pinar del Rio, Cu CMAC 1375		Caibarien, Cuba CMHI 1110	Pittsburgh, Pa.	
Chilliwack, B. C.	Pinar del Rio, Cu		Santa Clara, Cu	KDLR 1210 Devils Lake, N.D.	
CHVC 720	CMBC 965		CMHJ 645	KDYL 1290	
Montreal, Que.	Havana, Cuba		Cienfuegos, Cuba	_ Salt Lake City	
CJBR 960 Regina, Sask.	CMBD 965		CMJC 1382	KECA 1430	
CJCA 930	Havana, Cuba CMBG 1070		Camaguey, Cuba CMJE 856	Los Angeles, Cal. KELW 780	
Edmonton, Alta.	CMBG 1070 Havana, Cuba		Camaguey, Cuba	Burbank, Cal.	
CJCB 880	B CMBI 1405		CMJF 930	KEX 1180	
Sydney, N. S.	Havana, Cuba		Camaguey, Cuba	Portland, Ore.	
CJCJ 690	CMBL   1500	11	CMJG 1200	KFAB 770	
Calgary, Alta.	Havana, Cuba CMBN 1405		Camaguey, Cuba CMJH 1017	Lincoln, Nebr.	
London, Ont.	CMBN 1405 Havana, Cuba		Ciego de Avila, C.	KFAC 1300	
CJGX 630	CMBQ 1500		CMK 730	Los Angeles, Cal. KFBB 1280	
Yorkton, Sask.	Havana, Cuba		Havana, Cuba	Great Fls., Mont.	
CJOC 1120	II CMRR 1500		CMKC 1034	H PLDI IA9A	
Lethbridge, Alta. CJOR 1155	Havana, Cuba		Santiago, Cuba	Milford, Kans.	
Vancouver, B. C.	CMBS 790 Havana, Cuba		CMQ 1150 Havana, Cuba	KFBK 1310	
CJRM 665	CMBT 970		CMW 588	Sacramento, Cal. KFBL 1370	
Moose Jaw, Sask	Havana, Cuba		Havana, Cuba	Everett, Wash.	
CJRW 665	CMBW 1010		CM Y 885		
Fleming, Sask.	Havana, Cuba		Havana, Cuba	Beaumont, Tex. KFDY 550	
	CMBY 1225		CNRA 630 Moncton, N. B.	KFDY 550	
	Havana, Cuba		MADRICIOII, IV. D.	Brookings, S. D.	
				1	
	and the second second second	- 11		11	

KFEL		A COMI DETE	11 (12)	DI CHEE BE		- 1/1	10
KFEL 920	1	KFWB 950	- 1	KGGF 1010	- 1	KMA 930	
Denver, Colo.		Hollywood, Cal.		Coffey ville, Okla.		Shenandoah, Ia. KMAC 1370	_
KFEQ 680	- 1	KFWF 1200	- 11	KGGM 1230		KMAC 1370	
St. Joseph, Mo.		St. Louis, Mo.		Albuq'rque, N.M. KGHF 1320		San Antonio, Tex. KMBC 950	
KFGQ 1310	- 1	KFWI 930	- 11		- 11	Kan. City, Mo.	
Boone, Iowa		San F'ncisco, Cal. KFXD 1420		Pueblo, Colo. KGHI 1200		KMCS 1120	
KFH 1300	1	Names Idobo	<u> </u>	Little Rock, Ark.		Inglewood, Cal.	
Wichita, Kansas KFI 640		Nampa, Idaho KFXF 920		KGHL 950		KMED 1310	
Los Angeles, Cal.		Denver, Colo.		Billings, Mont.	- 11	Medford, Ore.	
KFIO 1120		KFXJ 1310		KGIR 1360		KMJ 1210	
Spokane, Wash.		Grand June., Col.	1	Butte, Mont.		Fresno, Cal.	
KF1Z 1420		KFXM 1210		Butte, Mont. KGIW 1420		KMLB 1200	
ond du Lac, Wis.		San Ber'd no Cal.		Trinidad, Colo.		Monroe, La.	
KFJB 1200		KFXR 1310		KGIX 1420		KMMJ 740	
larshalltown, Ia.		Oklahoma City	l li	Las Vegas, Nev.	- 1	Clay Ctr., Nebr.	
(FJF 1480		KFXY 1420		KGIZ: 1500		KMO 860	
klahoma City		Flagstaff, Ariz.		Grant City, Mo	1 []	Tacoma, Wash.	
KFJI 1370		KFYO 1420		KCKR   1500		LIMON 1000	
storia, Ore.	- 1	Abilene, Texas		Tyler, Texas	1	St. Louis, Mo.	
FJM 1370		KFYR 550		KGKL 1370		KMPC 710	
rd. Forks, N.D.	- 1	Bismarck, N. D.		San Angelo, Tex.		Beverly Hills, Cal	
FJR 1300		KGA 1470		San Angelo, Tex. KGKO 570		KMTR 570	
ortland, Ore.		Spokane, Wash.		Wichita Flls., Tex.		Hollywood, Cal.	
FJY 1310		KGAR 1370		KGKX 1420		KNX 1050	
ort Dodge Ia.		Tucson, Arizona		Sand Point, Idaho		Hollywood, Cal.	
FJZ 1370		KGB 1330		KGKY 1500		KOA 830	
t. Worth, Tex.		San Diego, Cal.		Scottsbluff, Nebr.		Denver, Colo.	
FKA 880		KGBU 900		KGMB 1320		I KOAC 550 I	
reeley, Colo.		Ketchikan, Al'ka		Honolulu, T. H.		Corvallis, Ore.	
FKU 1220		KGBX 1310		KGNF 1430		KOB 1180	
awrence, Kans.		St. Joseph, Mo.		No. Platte, Nebr.		Albquer., N. M.	
FKX 1020		KCB7 930		No. Platte, Nebr. KGNO 1210		KOB 1180 Albquer., N. M. KOCW 1400	
hicago, Ill.		York, Nebr.		Dodge City, Kas. KGO 790		Unickasha, Ukia.	
FLV 1410		KGCA 1270		KGO 790		KOH 1380	
ockford, Ill.	1	Decorah, Iowa		San F'ncisco, Cal.		Reno, Nevada	
FLX 1370		KGCR 1210		KGRS 1410		KOIL 1260	
alveston, Tex.		Watertown, S. D.		Amarillo, Texas		Council Bluffs, Ia.	
TEM Y 1950		KGCU 1240		KGU 940		KOIN 940	
l'thfield, Minn.		Mandan, N. D.		Honolulu, Hawaii		Portland, Ore.	
LENE 890		KGCX 1310		KGVO 1420		KOL 1270	
henandoah, Ia.		Wolf P't, Mont.		Missoula, Mont.		Seattle, Wash.	-
(FOR 1210		KGDA 1370		KGW 620		KOMO 920	
incoln, Nebr.		Mitchell, S. D.		Portland, Ore.		Seattle, Wash. KONO 1370	
KFOX 1250		KGDE 1200		KGY 1200		RUNO 1370	
ong Beach, Cal.		Fergus Falls, Minn		Lacey, Wash. KHJ 900		San Antonio, Tex. KOOS 1370	-
KFPL 1310		KGDM 1100	1 1			Marshfield, Ore.	}
Oublin, Texas		Stockton, Cal.		Los Angeles, Cal. KHQ 590		KORE 1420	-
FPM 1310		KGDY 1200		KHQ 590 Spokane, Wash.		Eugene, Ore.	1
reenville, Texas		Huron, S. D.		KICK 1420		KOY 1390	-
FPW 1340		KGEK 1200 Yuma, Colo.		Red Oak, Iowa		Phoenix, Arizona	
t. Smith, Ark. FPY 1340		KGER 1360		KID 1320		KPCB 650	
nokana Wash		Long Reach Cal		Idaho Fails, 'da.		Seattle, Wash.	
pokane, Wash. FQD 1230		KGEW 1 10		KIDO 1350		KPJM 1500	_
nchorage, Alas.		Et Morgan Com		Boise, Idaho		Prescott, Ariz.	
FQU 1420		Long Beach, Cal. KGEW 1 00 Ft. Morgan, Colo KGEZ 1310		KIT 1310		KPO 680	
Ioly City, Cal.		Kalispell, Mont.		Yakima, Wash.		San F'ncisco, Cal.	
FRC 610		KGFF 1420		KJBS 1070		KPOF 880	
an F'ncisco, Cal.		Shawnee, Okla.		San F'ncisco, Cal.		Denver, Colo.	
FRU 630		KGFG 1370		K 1R 970		KPPC 1210	
olumbia, Mo.		Oklahoma City		Seattle, Wash.		Pasadena, Cal.	
FSD 600		KGFI 1500		I KLCN 1290		KPQ 1500	
an Diego, Cal.		Corp's Ch'sti, Tex		Blytheville, Ark.		Wenatchee, Wash	
FSG 1120		KGFJ 1200		l KLO 1400		1 KPRC 920	
os Angeles, Cal.		Los Angeles, Cal.		Ogden, Utah		Houston, Texas	
FUL 1290		KGFK 1500		I KLPM 1240		1 KAV 1380	
alveston, Texas		Moorhead, Minn.		Minot, N. Dak.		Pittsburgh, Pa.	
TFUO 550		KGFL 1370		I KLRA 1390		KQW 1010	
t. Louis, Mo.		Raton, N. M. KGFW 1310		Little Rock, Ark.		San Jose, Cal.	
TRUP 1310		KGFW 1310		KLS 1440		KRE 1370	
Denver, Colo.		Kearney, Nehr.		Oakland, Cal.		Berkeley, Cal.	-
		KGFX 580		KLX 880		KREG 1500	1
Culver City, Cal.		Pierre, S. D.		Oakland, Cal.		Santa Ana, Cal.	-
FVS 1210		KGGC 1420		KLZ 560		KRGV 1260	
Cape Gir'rd'u, Mo		San F'ncisco, Cal.		Denver, Colo.		Harlingen, Texas	
					1		
							-
		17					,

KRLD 1040	KWG 1200	WASH 1270	WCAP 1280 Asbury Pk., N. J.
Dallas, Texas	Stockton, Cal.	Gr. Rapids, Mich.	Asbury Pk., N. J.
KRMD 1310 Shroveport Le	KWJJ 1060 Portland, Ore.	WAWZ 1350	WCAT 1200 Rapid City, S. D.
Shreveport, La. KROW 930		Zarephath, N. J. WBAA 1400	WCAU 1170
Oakland, Cal.	St. Louis, Mo.	Lafayette, Ind.	Philadelphia, Pa.
KRSC 1120 Seattle, Wash.	II KWKC 1370	WBAK 1430	■ WCAX 1200
Seattle, Wash.	Kansas City, Mo. KWKH 850	Harrisburg, Pa.	Burlington, Vt. WCAZ 1070
KSAC 580 Manh'tt'n, Kans. KSCJ 1330	Shreveport, La.	WBAL 760-1060 Baltimore, Md.	Carthage, Ill.
KSCJ 1330	KWLC 1270	II WRAP 800	WCBA 1440
Sioux City, Ia.	Decorah, Iowa	Fort Worth, Tex.	Allentown, Pa.
KSD 550 St. Louis, Mo.	KWSC 1220	Fort Worth, Tex.  WBAX 1210  Wilkes-Barre, Pa.	WCBD 1080
KSEI 900	Puliman, Wash. KWWG 1260	WBBC 1400	Zion, Ill. WCBM 1370
Pocatello, Idaho	Brownsville, Tex.	Brooklyn, N. Y	Raltimore Md
KSL 1130	KXA 570	Brooklyn, N. Y. WBBL 1210	Baltimore, Md. WCBS 1210
Salt Lake City KSMR 1200	Seattle, Wash.	Richmond, Va.	Springfield, Ill.
Bakersfield, Cal.	KXL 1420 Portland, Ore.	WBBM 770 Chicago, Ill.	WCCO 810
KSO 1380	KXO 1500	WBBR 1300	Minneap., Minn. WCDA 1350
Clarinda, Iowa	_  El Centro, Cal.	Brooklyn N. Y.	II New York City
KSOO 1110 Sioux Falls, S. D.	KXRO 1310	WBBZ 1200 Ark. City, Kan.	WCFL 970
KSTP 1460	Aberdeen, Wash. KXYZ 1420	WBCM 1410	Chicago, Ill.
St. Paul, Minn.	Houston, Texas	Bay City Mich	WCGU 1400 Brooklyn, N. Y.
KTAB 560	KYA 1230	WBEN 900	II WCHI 1490
San F'ncisco, Cal.	KYA 1230 San F'ncisco, Cal. KYW 1020	Buffalo, N. Y.	Chicago, Ill.
KTAR 620 Phoenix, Ariz.	II Chiango III	WBEO 1310	WCKY 1490
KTAT 1240	Chicago, Ill. KZRC 937.5 Cebu, P. I. KZRM 618.5	Marquette, Mich. WBGF 1370	Covington, Ky. WCLO 1200
Ft. Worth, Tex. KTBR 1300	Cebu, P. I.	Giens Falls, N. Y.	Janesville, Wis.
KTBR 1300	KZRM 618.5	WBHS 1200	WCLS 1310
Portland, Ore. KTBS 1450	Wianna, P. I.	Huntsville, Ala.	Joliet, Ill.
Shreveport, La.	NAA 690 Arlington, Va.	WBIG 1440 Greensboro, N.C.	WCMA 1400 Culver, Ind.
KTFI 1320	RUS 664	WBIS 1230	WCOA 1340
KTFI 1320 Twin Falls, Ida.	Salvador	Boston, Mass. WBMS 1450	II Pensacola, Fla.
KTHS 1040	TGW 570	WBMS 1450	WCOC 880 Meridian, Miss.
KTLC 1310	Guatamala 900	Hackensack, N.J. WBNX 1350	WCOD 1200
Hot Spgs., Ark. KTLC 1310 Houston, Texas KTM 780	TIC 900 San Jose, C. R.	New York City	Harrisburg, Pa.
KTM 780	11411111 340	WBOQ 860	WCOH 1210
Los Angeles, Cal.	Heredia, C. R.	New York City	Yonkers, N. Y. WCRW 1210
KTRH 1120 Houston, Texas	VAS 585 Glace Bay, N. S.	WBOW 1310 Terre Haute, Ind.	Chiange III
KTSA 1290	VOWR 675 St. Johns, N. F. WAAB 1410 Boston, Mass.	WBRC 930	Chicago, Ill. WCSC 1360
San Antonio, Tex.	St. Johns, N. F.	Birmingham, Ala.	Charleston, S. C.
KTSM 1310 El Paso, Texas	WAAB 1410	II WBRE 1310	WCSH 940
KTW 1220	WAAF 920	Wilkes-Barre, Pa. WBSO 920	Portland, Maine WDAE 1220
Seattle, Wash.	Chicago, Ill.	Needham, Mass.	Tampa, Fla.
Seattle, Wash. KUJ 1370 Walla Wal., Wash.	WAAM 1250 Newark, N. J.	WBT 1080	II WUAE 610
Walla Wal., Wash.		Charlotte, N. C.	Kansas City, Mo.
KUOA 1390 Fayetteville, Ark.	WAAT 940 Jersey City, N. J.	WBTM 1370 Danville, Va.	WDAG   1410
KUSD 890 Vermillion, S. D.	WAAW 660	H WBZ 990	Amarillo, Texas UDAH 1310
Vermillion, S. D.	Omaha, Nebr.	Springfield, Mass.	WDAH 1310 El Paso, Texas
KUT 1500 Austin, Texas	WAAW 660 Omaha, Nebr. WABC 860 New York City	H WBZA 990	WDAY 940 Fargo, N. D. WDBJ 930
KVI 760	WABI 1200	Boston, Mass.	Fargo, N. D. 930
KVI 760 Tacoma, Wash.	Bangor, Maine	WCAC 600 Storrs, Conn. WCAD 1220 Canton, N. Y.	II Roanoke, Va.
KVL 1370	II WABZ 1200	WCAD 1220	WDBO 1120
Seattle, Wash.	New Orleans, La.	Canton, N. Y.	Orlando, Fla.
KVOA 1260 Tueson, Arizona	WACO 1240 Waco, Texas	WCAE 1220 Pittsburgh, Pa.	WDEL 1120
KVOO 1140	WADC 1320	WCAH 1430	Wilmington, Del. WDEV 1420
Tulsa, Okla. KVOR 1270	WADC 1320 Akron, Ohio WAGM 1420	Columbus, Ohio	Waterbury, Vt.
KVOR 1270	WAGM 1420	II WCAJ 590	WDGY 1180
Col. Sp'gs, Colo. KVOS 1200	Presque Isle, Me. WAIU 640	Lincoln, Nebr. WCAL 1250	Minneap., Minn. WDIX 1500
Bellingh'm, Wash.	Columbus, Ohio	Northfield, Minn.	WDIX 1500 Tupelo, Miss.
KWCR 1310	WALR 1210	WCAM 1280	WDOD 1280
Cedar Rapids, Ia.	Zanesville, Ohio	Camden, N. J.	Chattan'ga, Tenn
KWEA 1210 Shreveport, La.	WAPI 1140 Birmingham, Ala.	WCAO 600	WDRC 1330
Direct port, Da.	Di minguam, Aid.	Baltimore, Md.	Hartford, Conn.
	-11		.]
/	-11		-
			H

			LANTIN
WDSU 1250	WFOX 1400	WHK 1390	WJJD 1130
New Orleans, La VDZ 1070	Brooklyn, N. Y. WGAL 1310	Cleveland, Ohio WHN 1010	Mooseheart, Ill. WJKS 1360
Puseele III	WGAL 1310 Lancaster, Pa.	New York City	Gary, Ind.
Tuscola, Ill. WEAF 660	WGAR 1450	WHO 1000	Gary, Ind. WJMS 1420 Ironwood, Mich.
New York City	Cleveland, Ohio	Des Moines, Ia.	Ironwood, Mich.
WEAT 1270	WGBB 1210	WHOM 1450	I W.IR 750
thaca, N. Y. WEAN 780	Freeport, N. Y.	Jersey City, N. J WHP 1430	Detroit, Mich.
WEAN 780	H WCRC 1430	WHP 1430	I W ISV 1460
Providence, R. I. WEAO 570	Memphis, Tenn.	Harrisburg, Pa.	Alexandria, Va. WJTL 1370
WEAO 570	II WGBF 630	WIAS 1420	Atlanta, Ga.
Columbus, Ohio	Evansville, Ind.	Ottumwa, Iowa WIBA 1280	WJW 1210
WEBC 1290	WGBI 880 Scranton, Pa.	Madison, Wis.	Mansfield, Ohio
Superior, Wis. WEBQ 1210	WGBS 1180	WIBG 930	WJZ 760
Harrisburg, Ill.	New York City	Elkins Park, Pa.	WJZ 760 New York City
WEBR 1310	WGCM 1210	II WIBM 1370	WKAO 800
Buffalo, N. Y.	WGCM 1210 Gulfport, Miss.	Jackson, Mich.	San Juan, P. R.
WEDC 1210	WGCP 1250	WIBO 560	WKAK 1040
Chicago, Ill.	WGCP 1250 Newark, N. J.	Chicago, Ill.	E. Lansing, Mich.
WEDH 1420	11 W GEO 1000	WIBU 1210	WKAV 1310 Laconia, N. H.
Erie, Pa.	York, Pa. WGES 1360	Poynette, Wis.	WKBB 1310
WEEL 590	WGES 1360	WIBW 580	Joliet, Ill.
Boston, Mass. WEEU 830	Chicago, Ill. WGH 1310	Topeka, Kansas WIBX 1200	WKBC 1310
WEEU 830	Newp't News, Va.	Utica N. Y	Birmingham, Ala.
Reading, Pa.	WGL 1370	Utica, N. Y. WICC 600	WKBF 1400
Emory, Va.	Ft. Wayne, Ind.	Bridgeport, Conn	Indianapolis, Ind.
WEHC 1350 Emory, Va. WEHS 1420	H WGN 720	WIL 1200	WKRH 1380
Cicero, Ill.	Chicago III	Bridgeport, Conn WIL 1200 St. Louis, Mo.	La Crosse, Wis. WKBI 1420 Cicero, Ill. WKBN 570
WELK 1370	WGR 550 Buffalo, N. Y. WGST 890 Atlanta, Ga.	B WILL 890	WKBI 1420
Philadelphia, Pa.	Buffalo, N. Y.	Urbana, Ill.	Cicero, III.
WELL 1420 Sattle C'k, Mich.	WGST 890	WILM 1420 Wilmington, Del.	Youngstown, O.
WENR 870	WGY 790	WIOD 1300	WKRO 1450
Thiogra III	Schenec'dy, N. Y.	WIOD 1300 Miami, Fla.	Jersey City, N. J. WKBS 1310
WEPS 1200	Schenec'dy, N. Y. WHA 940	II WIF DIO	WKBS 1310
Worcester, Mass.	Madison, Wis. WHAD 1120	Philadelphia, Pa.	Galesburg, Ill.
WEPS 1200 Worcester, Mass. WEVD 1300	WHAD 1120	WIS 1010	WKBV 1500
New York City	Milwaukee, Wis.	Columbia, S. C. WISN 1120	Connersville, Ind.
WEW 760	WHAM 1150	Milwayless Wis	WKBW 1480 Buffalo, N. Y.
St. Louis, Mo.	Rochester, N. Y. WHAP 1300	Milwaukee, Wis. WJAC 1310	WKBZ 1500
WEXL 1310 Royal Oak, Mich.	New York City	Johnstown, Pa.	Ludington, Mich
WFAA 800	WHAS 820	WJAG 1960	WKJC 1200
WFAA 800 Dallas, Texas WFAM 1200	Louisville, Ky.	Norfolk, Nebr.	Lancaster, Pa.
WFAM 1200	WHAT 1310	WJAK 1310	WKRC 550
o. Bend, Ind.	Philadelphia, Pa.	Elkhart, Ind.	Cincinnati, Ohio WKY 900
WFAN 610	WHAZ 1300 Troy, N. Y.	WJAR 890 Providence, R. I.	Oklahoma City
Philadelphia, Pa. WFBC 1200	WHB 860	WJAS 1290	WKZO 590
Cnovville Tenn	Kansas City Mo	Pittsburgh, Pa.	Kalamazoo, Mich.
Knoxville, Tenn WFBE 1200	Kansas City, Mo. WHBC 1200	WJAX 900	WLAC 1470
Cincinnati, Ohio	Canton, Ohio	Jacksonville, Fia.	Nashville, Tenn.
VFBG 1310	WHBD 1370	WJAY 610	WLAP 1010 Louisville, Ky.
lltoona, Pa.	Mt. Orab, Ohio	Cleveland, Ohio	Louisville, Ky.
VFBL 1360	WHBF 1210	WJBC 1200 La Salle, Ill.	WLB 1250 St. Paul, Minn.
yracuse, N. Y. VFBM 1230	Rock Island, Ill.	WJBI 1210	WLBC 1310
VFBM 1230 ndianapolis, Ind.	WHBL 1410 Sheboygan, Wis.	Red Bank, N. J.	Muncie, Ind.
VFBR 1270	WHBO 1370	11 WJBK 1370	WLBF 1420
Baltimore, Md.	WHBQ 1370 Memphis, Tenn.	Detroit, Mich.	Kansas City, Ks
VFDF 1310	WHBU 1210	WJBL 1200	WLBG 1200
lint, Mich.	Anderson, Ind.	Decatur, Ill.	Ettrick, Va.
WFDV 1310	II WHBY 1200	WJBO 1420	WLBL 900 Ellis, Wis. WLBW 1260
Rome, Ga. VFDW 1420	Green Bay, Wis. WHDF 1370	New Orleans, La WJBT 770	WLRW 1260
npieton Ale		Chicago, Ill.	Oil City, Pa.
nniston, Ala. VFEA 1430	Calumet, Mich. WHDH 830	WJBU 1210	Oil City, Pa. WLBX 1500 L. I. City, N. Y.
Aanchester, N.H.	WHDH 830 Boston, Mass WHEC 1430	Lewisburg, Pa.	L. I. City, N. Y
WFI 560	WHEC 1430	WJBW 1200	WLBZ 620
Philadelphia, Pa. 📖	Rochester, N. Y.	New Orleans, La.	Bangor, Maine
WF1W 940	WHFC 1420	WJBY 1210	WLCI 1210
Hopkinsville, Ky	Cicero, Ill.	Gadsden, Ala.	Ithaca, N. Y.
WFLA 620	WHIS 1410	WJDX 1270	WLEY 1370
Clearwater, Fla.	Bluefield, W. Va.	Jackson, Miss.	Lexington, Mass.
		11	
	II	II .	H <sub>2</sub> · g

WLIT 560 Philadelphia, Pa.	WNJ 1450 Newark, N. J.	WQDM 1370 St. Albans, Vt.	WSPD 1340
WLOE 1500	WNOX 560	WQDX 1210	Toledo, Ohio WSUI 880
Boston, Mass. WLS 870	Knoxville, Tenn. WNYC 570	Thomasville, Ga. WRAK 1370	Iowa City, Iowa WSUN 620
Chicago, Ill.	New York City	Williamsport, Pa.	St. Petersb'g, Fla.
WLTH 1400 Brooklyn, N. Y.	WOAI 1190	WRAM 1370	WSVS 1370
WLVA 1370	San Antonio, Tex. WOAX 1280	Wilmington, N.C. WRAW 1310	Buffalo, N. Y. WSYB 1500
Lynchburg, Va. WLW 700	Trenton, N. J. WOBU 580	Reading, Pa. WRAX 1020	Rutland, Vt.
Cincinnati, Ohio	Charlest'n, W.Va.	Philadelphia, Pa.	WSYR 570 Syracuse, N. Y.
WLWL 1100 New York City	WOC 1000	WRBJ 1370	WTAD   1440
WMAC 570	Davenport, Iowa WOCL 1210	Hattiesburg, Miss WRBL 1200	Quincy, Ill. WTAG 580
Syracuse, N. Y. WMAK 1040	Jamestown, N. Y.	Columbus, Ga.	Worcester, Mass.
Buffaio, N. Y.	WODA 1250 Paterson, N. J.	WRBQ 1210 Greenville, Miss.	WTAM 1070 Cleveland, Ohio
WMAL 630	WODX 1410	WRBX 1410	H WTAQ 1330
Washington, D.C. WMAQ 670	Mobile, Ala. WOI 640	Roanoke, Va. WRC 950	Eau Claire, Wis. WTAR 780
Chicago, Ill.	Ames, Iowa	Washington, D.C.	Norfolk, Va.
WMAZ 1180 Macon, Ga.	WOKO 1430 Albany, N. Y.	WRDO 1370 Augusta, Maine	WTAW 1120
WMBA 1500	WOL   1310	WRDW 1500	College Sta., Tex. WTAX 1210
Newport, R. I. WMBC 1420	Washington, D.C. WOMT 1210	Augusta, Ga. WREC 600	Springfield, Ill.
Detroit, Mich.	Manitowoc, Wis.	Memphis, Tenn.	Cumberland, Md.
WMBD 1440 Peoria Hghts,,Ill.	WOOD 1270	WREN 1220	WTEL 1310
WMBG 1210	Gr. Rapids, Mich WOPI 1500	Lawrence, Kans. WRHM 1250	Philadelphia, Pa. WTFI 1450
Richmond, Va. WMBH 1420	Bristol, Tenn.	Minneap., Minn.	Toccoa, Ga.
Joplin, Mo.	WOQ 1300 Kansas City. Mo.	WRJN 1370 Racine, Wis.	WTIC 660-1060 Hartford, Conn.
WMBI 1080	WOR   710	WRNY 1010	WTJS 1310
Chicago, Ill. WMBO 1310	Newark, N. J. WORC 1200	New York City WROL 1310	Jackson, Tenn. WTMJ 620
Auburn, N. Y.	Worcester, Mass.	Knoxville, Tenn.	Milwaukee, Wis.
WMBQ 1500 Brooklyn, N. Y.	WOS 630 Jeff's'n City, Mo.	WRR 1280	WTOC 1260 Savannah, Ga.
Brooklyn, N. Y. WMBR 1370	WOV 1130 New York City	Dallas, Texas WRUF 830	WTSL 1310
Fampa, Fla. WMC 780	New York City WOW 590	Gainesville, Fla. WRVA 1110	Laurel, Miss. WWAE 1200
Memphis, Tenn.	Omaha, Nebr.	Richmond, Va.	Hammond, Ind.
WMCA 570 New York City	WOWO 1160	WSAI 1330 Cincinnati, Ohio	WWJ 920 Detroit, Mich.
WMIL 1500	Ft. Wayne, Ind. WPAD 1420	WSA I 1310	WWL 850
Brooklyn, N. Y. WMMN 890	Paducah, Ky. WPAP 1010	Grove City, Pa. WSAN 1440	New Orleans, La WWNC 570
Fairmont, W. Va.	New York City	Allentown, Pa.	WWNC 570 Asheville, N. C.
WMPC 1500 Lapeer, Mich.	WPAW 1210	WSAR 1450	II WWRL 1500
WMRJ 1210	Pawtucket, R. I. WPCC 560	Fall River, Mass. WSAZ 580	Woodside, N. Y. WWSW 1500
Jamaica, N. Y. WMSG 1350	Chicago, Ill. WPCH 810	Hunt'gton, W. Va.	Pittsburgh, Pa.
New York City	WPCH 810 New York City	WSB 740 Atlanta, Ga.	WWVA 1160 Wheeling, W. Va.
WMT 600	WPEN 1500	H WSBC 1210	WXYZ 1240
Waterloo, Iowa WNAC 1230	Philadelphia, Pa WPG 1100	Chicago, Ill. WSBT 1230	Detroit, Mich. XEA 1000
Boston, Mass.	Atl'ntic City, N.J.	South Bend, Ind.	Guad'l'jara, Mex.
WNAD 1010 Norman, Okla.	WPOE 1370 Patchogue, N. Y.	WSEN 1210 Columbus, Ohio	XEB 1030 Mexico City
WNAX 570	WPOR 780	WSFA 1410	XEC 1000
Yankton, S. D. WNBF 1500	Norfolk, Va. WPRO 1210	Montgomery, Ala. WSIX 1210	Toluca, Mexico XED 965
Bingh'mt'n, N.Y.	Providence, R. I.	Springfield, Tenn.	Reynosa, Mexico
WNBH 1310 New B'df'd, Mass.	WPSC 1230 State College, Pa.	WSJS 1310 WinstSal., N. C.	XEE 1000
WNBO 1200	WPTF 680	WSM 650	Oaxaco, Mexico XEFA 1250
Washington, Pa. WNBR 1430	Raleigh, N. C.	Nashville, Tenn.	Mexico City
Memphis, Tenn.	WQAM 560 Miami, Fia.	WSMB 1320 New Orleans, La.	XEFB 1270 Monterrey, Mex.
WNBW 1200	WQAN 880	WSMK 1380	XEFC 1050
Carbondale, Pa. WNBX 1200	Scranton, Pa. WOAO 1010	Dayton, Ohio WSOC 1210	Merida, Mex. XEFD 1020
Springfield, Vt.	WQAO 1010 New York City	Gastonia, N. C.	Tijuana, Mex.
WNBZ 1290 Sar'n'c L'ke,N.Y.	WQBC 1360 Vicksburg, Miss.	WSPA 1420 Spartanburg, S.C.	XEFE 1000
**** ** * ** D.C. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	I TICABUUIE, MISS.	II SUBTIBIDUTY, S.V.	Laredo, Mexico

XEK         990 Mexico City         XET         690 Monterrey, Mex. XEL         XEV         1000 Mexico City         XEX         860 Mexico City           XEL         1000         XETA         1140         XEW         910         10-AB         1200	Mexico City XEL 1000 Saltillo, Mexico XEM 1300	Monterrey, Mex. XETA 1140 Mexico City XETB 1380	Puebla, Mexico XEW 910 Mexico City XEX 1210	Mexico City 10-AB 1200 Moose Jaw, Sask. 10-BP 1200
--	--	---	---	---

(Continued from page 59)

JALISCO	Watts		Kcys.	Ciego de Avila W-26 Cienfuegos W-25	15 CMJH 40 CMHJ	1017 645
Guadalajara, Jal. X-10	101	XEA	1000	Colon W-24	100 CMGA	834
MICHOACAN				Havana W-23	150 CMBC 150 CMBD	965 965
		****	1.000		150 CMBG	1070
Morelia, Mich. Y-12	101	XEI	1000		30 CMBI	1405
NEUVO LEON					20 CMBL 30 CMBN	1500 1405
	<b>5</b> 0	vern	1250	Havana W-23	50 CMBQ	1500
Monterrey, N. L. U-13	50 1000	XEFB XEH	1270 1132		15 CMBR	1500
	500	XET	690		150 CMBS 500 CMBT	790 970
OAXACA				l	150 CMBW	1010
Oaxaça, Oak. AA-14	105	XEE	1000		350 CMBY	1225
	100		1000	l .	150 CMBZ 500 CMC	1010 842
PUEBLA					150 CMCA	1225
Puebla Z-13	101	XEV	1000	l	150 CMCB	1070
QUERETARO					250 CMCD 250 CMCF	925 890
•					30 CMCG	1345
Queretaro X-12	40	XEFS	1000		15 CMCH	1405
TAMAULIPAS					250 CMCJ 15 CMCM	620 1405
		MESS	****		250 CMCN	925
N. Laredo S-13	101 200	XEFE XEP	1000 1400		225 CMCO	660
Reynosa, Tams. T-14	10000	XED	965		600 CMCQ 150 CMCR	1150 1345
Tampico, Tams. W-14	500	XEM	730		150 CMCR 150 CMCU	1285
	500	XES	890		150 CMCW	1285
VERA CRUZ					100 CMCY	1345
Jalapa Y-14	100	XETC	1000		500 CMDC 3150 CMK	660 <b>730</b>
Veracruz, Ver. Z-14	500	XETF	630	ļ.	250 CMQ	1150
	101	XEU	1000		1400 CMW	588
YUCATAN				Matanzas W-24	1000 CMX 7.5 CMGB	885 1205
Merida, Yuc. X-19	105	XEY	1000	I Wataribas Was	50 CMGF	977
WECT	TAIL	TEC.		n	150 CMGH	1373
WEST	IND.	IE2		Pinar del Rio W-22	20 CMAB 30 CMAC	1249 1375
BERMUDA				Santa Clara W-25	15 CMHI	1110
Hamilton M-35	7.	5 TJW	1490	Santiago X-28	150 CMKC	1034
CUBA				Tuinucu	100 CMHC	790
Caibarien W-25	250	CMHD	950	DOMINICAN R	EPUBLIC	
Cardenas W-24	30	CMGE	1375	Santo Domingo X-31	1000 HIX	669
Camaguey W-26	150	CMJC	1382	1		
	20 50	CMJE CMJF	856 930	HAITI		
	30	CMJG	1200	Port au Prince X-30	1000 HHK	920

### SHORT WAVE STATIONS OF NORTH AMERICA

	L'av-	Call	Location	1 Kana	Call	Location	Kcys.	Call	Location
	Keys.	W2XDA		3184	KQX	Los Angeles	9570	WIXAZ	Springfield, Mass.
	1544 1584	WIOXAL	New York New York	3104	KQT	Los Angeles	9580	W3XAU	Byberry, Pa.
	1001	WIOXAO	New York	3244	KFR	Seattle	9700	WMI	Deal, N. J.
	1598-	-WCF	New York		WJE	Seattle	9750	WNC	Deal, N. J.
		WKDT	Detroit	3256		Chicago	9830	T14NRH	Costa Rica
		KGKM KGPA	Beaumont, Tex. Seattle	4105 4116	NAA WOO	Arlington, Va. Deal, N. J.	9930 10000	W2XU CM2LA	Long Island City Havana
	1604	W2XCU	Ampere, N. J.	4610	HIX	Santa Domingo	10410	KEZ	Bolinas, Calif.
		W2XCD	Passaic, N. J.	4700	W1XAB	Portland, Me.	10540	WLO	Lawrence, N. J.
		WIXAU	Boston Wheaton, Md.	4750	WOO WXD <b>Q</b>	Deal, N. J. Ocean Gate, N. J.	10710 11530	TGW CGA	Guatemala Drummondville, Que.
	•	W3XJ W2XAD W2XAF	Schenectady	4795	W9XAM	Elgin, Ill.	11720	CJRX	Middle Church, Man.
		W2XAF	Schenectady		W3XZ	Washington, D. C.	11760	XDA	Mexico City
		W9XX	Cartersville, Mo.	1000	W9XL	Chicago	11780	VE9DR	Drummondville, Que.
	1608	W5XN W9XAL	Dallas Chicago	4800 4975	W2XV W2XAV	Long Island City Long Island City	11800	W2XAL W9XF	New York Chicago
	1000	W2XY	Newark	5500	W2XBH	Brooklyn		VE9GW	Bowmanville, Ont.
		-WMP	Framingham, Mass.	5550	W8XJ	Columbus	11840	W2XE	Jamaica, N. Y.
	1684	WKDX	New York	5710 5770	VE9CL HIX	Winnipeg Santa Domingo	11000	W9XAA VE9CA	Chicago Calgary
	1712	KOX KGKM	Honolulu Beaumont, Tex.	5860	XDA	Mexico City	11860 11880	W8XK	Pittsburgh
	1112	WKDT	Detroit	6000	-HRB	Honduras		W9XF	Chicago
		WEY	Boston		≠W9XF	Chicago	10045	W2XAL	New York
		WPDB WPDC	Chicago Chicago	6030	V W2XBR VE9CA	New York Calgary	12045	NAA NSS	Arlington Annapolis
		WPDD	Chicago	6040	W9XAQ	Chicago	12850	W2XO	Schenectady
		-WKDU	Cincinnati		W2XAL	New York		W2XCU	Ampere, N. J. Deal, N. J.
		KSW	Berkeley, Cal.		₩8XAL	Cincinnati Byberry, <b>P</b> a.		WOO W2XDQ	Deal, N. J. Ocean Gate, N. J.
		KUP WMDZ	Dallas Indianapolis	6070	VE9CS	Vancouver		W9XL	Anoka, Minn.
		KGPC	St. Louis	6080	W2XCX	Newark	13400	WND	Deal Beach, N. J.
		KGOY	San Antonio	-6095	−W9XAA VE9GW	Chicago Bowmanville, Ont. 22	14150	KKZ	Bolinas, Calif.
	1715	KGJX Woxan	Pasadena Elgin, Ill.	6100	W3XAL	Bound Brook, N. J.	14480	W8XK WNC	E. Pittsburgh Deal. N. J.
		W9XAN W6XK	Los Angeles		VE9CF	Halifax	14620	WMI	Deal. N. J.
3	2392	W10XAL	Portable	6110	$\begin{array}{c} VE9CG\\ W2XE \end{array}$	Calgary	15000	XDA	Mexico City
		W10XAO W2XCZ	Portable Portable	6140	W8XK	New York E. Pittsburgh	15000 15210	CM6XJ W8XX	Tuinucu, Cuba Pittsburgh
	2398	W2XCU	Ampere, N. J.	6155	W9XAL	Chicago	15250	W8XK W2XAL	New York
		W2XCU W2XAD W2XAF	Schenectady		VE9CL	Winnipeg	15280	W2XE	Jamaica, N. Y.
		W2XAF WPDT	Schenectady Kokomo, Ind.	6170	W2XDE HRB	New York Honduras	15340 16060	W2XAD NAA	Schenectady Arlington
	2410	WCK	Belle Isle, Mich.	6280	WWV	Washington	16300	WLO	Lawrence, N. J.
	-	₩RDR	Grosse Pt., Mich.	6335	VE9AP	Drummondville, Que.	17110	WOO	Deal. N. J.
		-WMO -₩PDW	Highland Pk., Mich. Washington, D. C.	6425	W3XAL W2XCU	Bound Brook, N. J. Ampere, N. J.	17300	W2XDO W2XK	Ocean Gate, N. J. Schenectady
MIP	FA	KGPD	San Francisco		W9XL	Anoka, Minn.	17000	WXXL	Dayton
15/1	LU	KGPG	Vallejo, Calif.	6515	WOO	Deal, N. J.		W6XAJ W7XA W7XC W2XCU	Oakland
1X/P	Desc	W3XAG	Baltimore	6675	W4XG TGW	Miami Guatemala		W7XA	Portland, Ore. Seattle
•	2410	WPD1 WPDE	Columbus Louisville	6753	WND	Deal, N. J.		W2XCU	Ampere, N. J.
		KGPB	Minneapolis		XFD	Mexico City		W9XL	Anoka, Minn.
		WPDJ	Passaic, N. J.	6840 6860	CFA KEL	Drummondville, Que. Bolinas, Calif.	17780	W8XK	Pittsburgh
		WPDS	St. Paul Tulare, Cal.	7060	XFA	Mexico City	17850 18120	W2XAO W9XAA	New Brunswick, N. J. Chicago
:	2422 -	–₩MJ	Buffalo	7370	X26A	N. Laredo, Mex.	18170	CGA	Drummondville. Que.
,	0440	KGPE	Kansas City	7520 8400	CGE VBS	Calgary Glace Bay, N. S.	18350	WND	Deal Beach, N. J.
2	2440	WPDF WNDA	Flint. Mich. Miami	8630	WOO	Deal, N. J.	19220 19340	WNC W2XAC	Deal. N. J. New York
		WPDP	Philadelphia		W2XDO	Ocean Gate, N. J.	19850	WMI	Deal, N. J.
		W3XB	Portable	8650	W3XE W2XV	Baltimore Long Island City	20500	W9XF W2XAO	Chicago
2	2402	WRBH KGPP	Cleveland Portland, Ore.		W8XAG	Dayton	21130 21400	WLO	New Brunswick, N. J. Lawrence, N. J.
	-	WPDK	Milwaukee		W6XN W4XG	Oakland	21420	WOYDI	Deal. N. J.
_		KGPH	Oklahoma City		W4XG W3XX	Miami	21429	XFA	Mexico City
		WPDG	Youngstown, O.		W2XCU	Washington Ampere, N. J.	21469 21540	XFA W2XAL W8XK	New York Pittsburgh
2	2410	KGOZ WRDQ	Cedar Rapids Toledo	_	W9XL	Chicago	23000	W2XAW	Schenectady
9	2538	W6XAF	Sacramento	8690 8872	W2XAC	Schenectady	21000	W6XAQ	San Mateo, Calif.
		VE9C1	London, Ont.	9091	NAA XFD	Arlington Mexico City	<b>2570</b> 0	W2XBC W3XA W6XD	New Brunswick, N. J. Philadelphia
	2833	W6XAN	Los Angeles	9330	CGA	Drummondville, Que.	27800	W6XD	Palo Alto, Calif.
		W7XAB	Spokane	9350	CM2MK		31000	W8XI	Pittsburgh
		W2XAO	New York	9375	WSXAO	Detroit	34600	W2XBC	New Brunswick, N. J.
9	2855	VE9AK W1XY	Red Deer, Alta. Hilton, N. H.	9530	TGX W2XAF	Guatemala Schenectady	41000 43500	W8XI W1XG	E. Pittsburgh Boston
		W9XL	Chicago	9000	W2XAF W9XA	Denver	10000	W2XBT	New York
		₩00	Deal, N. J.	9560	NAA	Arlington	51400	W2XBC	New Brunswick, N. J.
						-			,

### THE CUBAN EXPERIMENTALS

	1112	ODINI DAN DININ	LLIVEILLO			
Call	Owner	$Add\tau ess$	Location	Keys. A	¶ete⊤s	Watts
CM-1FM	Julian Machado	Aramburu numero 5	Guar ajay	13950	21.5	100
CM-2AR	Alfredo Rosell	Campanario numero 145	Habana	14347	20.9	7.5 7.5
CM-2AY	Cesar Fernandez	Real 101	Marianao	7220	41.5	7.5
CM-2CF	Victor Coullard	Camp, Columbia 30-B	Marianao	7257	41.2	7.5
CM-2FC	Fernando Capestany	Godinez "E" Buena Vista	Marianao	7152	41.9	7.5
CM-2GR		19 numero 494. Vedado	Habana	7220	41.5	7.5 7.5
	Gustavo Rodriguez			7135	42	20
CM-2GU	Luis Guyon	Santa Emilia 112, Santos Suarez			41	7.5
CM-2GZ	Jorge L. Gonzalez	Maximo Gomez 49, altos	Habana	7300		7.5
CM-2IQ	Jose Fernandez	Real 89	Marianao	7257	41.2	7.5
CM-2JM	Justo Mahia	Sitios numero 65	Habana	7152	41.9	7.5
CM-2JT	Jose A. Terry	B entre 18 y Fuentes	Marianao	14277	21	75
CM-2KW	Carlos Alburquergue	Goicuria numero 24, Vibora	Habana	7152	41.9	7.5
CM-2LA	Enrique Lasanta (C.L.R.)	8 entre 21 y 23, Vedado	Habana	7000	42.8	250
CM-2MD	Marino Diaz Quinones	Padre Varela numero 120	Habana	7300	41	20
CM-2MK	R. V. Watters	Avenida de Italia 29	Habana	7170	41.8	100
CM-2MM	Antonio Sarasola	Emilio Sola 5, Pogolotti	Marianao	7135	42	30
CM-2QY	Alberto Giro	3a entre 14 v 16	Marianao	7220	41.5	15
CM-2RA	Rigoberto Alvarez	San Jose numero 216	Habana	14277	21	7.5
CM-2RC	Radio Club de Cuba	Genios 23 altos	Habana	7220	41.5	15
CM-2RZ	Nestor Rodriguez	Cardenas numero 55	Habana	7152	41.9	7.5
CM-2SC	Jose del Salto	General Suarez numero 126	Habana	13950	21.5	250
CM-2SF	Eusebio Solis	Artes 93, Casa Blanca	Habana	7207	41.6	7.5
CM-2SH	Silvio Hernandez	H numero 184. Vedado	Habana	7170	41.8	7.5
CM-2SV		Aguiar numero 19-A	Habana	7135	42	10
CM-25V CM-2VM	Sergio Valdes Rodriguez		Habana	7220	41.5	7.5
	Eliecer Valdes Mayo	Factoria numero 27, altos		14140	21.2	7.5
	Ezequiel Santos	Cristina numero 12	Habana		42	
	Pedro Madiedo	Santa Rosa A	Marianao	7135		10
	Amadeo Sacnz de Calaborra	Marina numero 2	Habana	7120	42.1	50
	Alfredo Rosell	Campanario numero 145	Habana	7292	41.1	150
CM-2XC	Alexander Strang	M. F. de Castro s-n	Habana	7220	41.5	5
	Raul Karman	Rayo 67	Habana	7135	42	15
CM-5AZ	Ernesto V. Figueroz	Independencia 130	Matanzas	7257	41.2	7.5
CM-5CX	Jose Alfonso	Diago numero 73	Colon	14277	21	50
CM-5EA	Eleazar A. Togorce	Domingo Mu ica numero 61	Matanzas	7220	41.5	7.5
CM-5EN	Escuela Normal	Tello Lamar 41	Matanzas	7257	41.2	7.5
CM-5FC	Felix U. Casas	Emilio Blanchet numero 19	Matanzas	7207	41.6	7.5
CM-5FL	Francisco Diaz Agramonte	Santa Catalina 16	Pedro Betancourt	7170	41.8	7.5
CM-51M	Felix U. Casas	Tello Lamar 60	Matanzas	7257	41.2	7.5
CM-5NI	Julio C. Oyarzabal	Marti numero 52	Pedro Betancourt	7300	41	15
CM-5PM	Pastor Morejon	Macco numero 101	Matanzas	7135	42	10 -
CM-5RY	Bernabe R. de la Torre	General Betancourt numero 105	Matanzas	14277	21	7.5
CM-6BX	Luis D. Elizondo	Hourruitiner numero 23	Cienfuegos	7292	41.1	10
CM-6CP	Carlos M. Carbonell	Gacell numero 41	Cienfuegos	7135	42	20
CM-6DW	Eduardo Terry	San Carlos 197	Cienfuegos	7300	41	10
CM-6SG	Remberto Sanchez	Candelaria numero 16	Santa Clara	7220	41.5	7.5
CM-7CX	Leonard B. Fox	Central Florida	Florida	7220	41.5	15
	M. L. de Quintana	Central Tacajo	Tacajo	7207	41.6	10
CM-7JQ	Leonard B. Fox	Central Florida	Florida	14277	21	5
CM-7SH	Domingo Caymares	Augusto Arango 31	Nuevitas	7257	41.2	15
CM-8AZ	James Connor Blume	Estacion Naval	Guantanamo	7135	42	150
CM-8BY	Alberto Ravelo	Ave. Manduley ent. 1 y 3	Santiago de Cuba	7300	41	30
CM-8HS	Guillermo Polanco	M. Corona, Baja 16	Santiago de Cuba	7000	42.8	100
	Melchor Aguero	General Escario numero 111	Santiago de Cuba	7135	42	50
CM-8OL	Luis C. Greco	San Bartolme 32	Santiago de Cuba	7300	41	50
CM-8UF	Earle D. Byer	Estacion Naval	Guantanamo	14277	21	300
	B. V. Greer	Estacion Naval	Guantanamo	7300	41	100
C.141-01 D	D. T. SILUI	ASSESSMENT TOTAL	o agricultura	.000		

### CANADIAN HIGH FREQUENCY BROADCASTING

Call.	Owner	Location	Kycl.	Meters
VEGAK	Alberta Pacific Grain Company	Red Deer, Alta.	2830	105.9
VESBA	Candian National Railways	Montreal, Que.	6130-11705	48.9-25.6
VE9BJ	C. A. Munro, Ltd.	St. John, N. B.	6090	49.23
VE9CA	Western Broadcasting Co., Ltd.	Calgary, Alta.	6030-11860	49.75-25.3
VE9CF	Borrett for CHNS	Halifax, N. S.	6050	49.50
VE9CG	Calgary Herald, Limited	Calgary, Alta.	6110	49.10
VE9CL	James Richardson & Sons	Middlechurch, Manitoba	6150	48.8
VE9CS	United Church of Canada	Vancouver, B. C.	6070	49.42
VEQDN	Canadian Marconi Co.	Montreal, Que.	6005-9580	49.9-31.3
VE9DR	Canadian Marconi Co.	Drummondville, Quebec	11780	25.47
VE9OW	Gooderham & Worts, Limited	Bowmanville, Ontario	6 <b>0</b> 9 <b>5</b>	49.22

#### CANADIAN STATIONS TELEVISION

	OT YT AT YTS TO TO A	OTTALION OF LDD	LVIOIOIV	
Call	Owner	Location	Kycl.	Meters
VESAF	Jas. A. Ogilby's, Ltd.	Montreal, Que.	2850-2950	105.3-101.7
VE9AR	A. R. MacKenzie	Saskatoon, Sask.	2850- <b>295</b> 0	105.3-101.7
VE9BZ	Radio Service Engineers	Vancouver, B. C.	2750-2850	109.1-105 3
VEODS	Canadian Marconi Co.	Montreal, Que.	2100-2200	142.9-136.3
VE9EC	LaPresse Publishing Co., Ltd.	Montreal, Que.	2004-2100	149.7-142.9
VE9ED	Dr. Jos. L. P. Landry	Mont Joli, Que.	2850-29 <b>5</b> 0	105.3-101.7
VE9RM	Rogers Majestic Corp., Limited	Toronto, Ont.	2004-2100	149.7-142.9

**FAVORITE PROGRAMS** 

Time Station	Dials Feature	Time Station Dials	Feature		
	DAILY	WEDNESDAY			
Mark	8:00-8:15				
	SUNDAY	THURSDA	Y		
	MONDAY	FRIDAY			
	TUESDAY	SATURDA	Y		

## HOW TO TUNE A SET CORRECTLY

### Read This Page Carefully and You Can Set Your Dials Accurately for Any Station in America

INDEX BY FREQUENCIES AND DIAL NUMBERS

590 kilocycles 508.2 meters

600 kilocycles 499.7 meters

610 kilocycles 491.5 meters

620 kilocycles 483.6 meters

640 kilocycles 468.5 meters

650 kilocycles 461.3 meters

660 kilocycles 454.3 meters

670 kilocycles 447.5 meters

680 kilocycles 440.9 meters

5000 Sen Francisce, Cat. 5000 Bateigh, N. C.

A000 Chicago, Ill.

WAAW 500 Dmehe, Nabr.

5000 Nashville, Tenn

5000 Los Angeles, Galif. 5000 Columbus, Oblo

475.9 meters

630 kilocycles

CIGX

WMAG

J56 Iroquois Faile, Out. Laramie, Wyo. 500 San Diego, Calif 159 Baltimore, Md. 150 Lawrenteburg, Tenn Memphil, Tenn, 150 Hactord, Com.

A LL stations in America are listed in RADEX in three tables:

1st by Frequencies. 2nd by Call Letters 3rd by States and Cities.

The Index by Frequencies is the one to be used, the other two are merely

supplementary.

Let us assume you have just bought your first RADEX. Proceed as

Tune in some station any station that comes in. Tune it sharply, turning down your rheostats (Volume control) until we and the marks on your dials at which it comes in most clearly and with

greatest volume.

Let us assume that the station we are hearing is WEAF in New York. First we must ascertain the frequency for this station. Look it up under WEAF in the Index by Call Letters or under New York in the Index by States and Cities. In States either of these indexes we find that the frequency of WEAF is 660. Now we turn to 660 kilocycles in the Index by Frequencies and Dial Numbers. Here we find that WEAF is one of the two stations which have been assigned the 660 kcys. frequency the Federal Radio Commission. We also find that it has a power of 50,000 watts, that it is located in New York City and is owned by the National Broadcasting Co., Inc.

In the blanks for dial numbers opposite 660 kilocycles (which is the wave length of 454.3 meters) enter the dial readings of your set. It is immaterial whether your set has one, two or three dials. Use as many of three spaces provided as you need. The set used in the illustration had two dials. In this case we entered the dial readings for 660 kilocycles BS 69-67.

Let us now tune in some other station. We repeat the same procedure in tuning and find that we are hearing, let us say, WOS at Jefferson City. Proceed as before in ascertaining the frequency of WOS. This we find to be 630 kcys. We turn to 630 in the Index by Frequencies and enter our dial readings for this band which on the set we are using was 72-70.

We now have found that the dial numbers for 630 kcys. are 72-70 and the dial numbers for 660 kcys. are 69-67. If we now will set our dials for 70-68 it is obvious we will have our set tuned for 650 kcys. We listen carefully and if they are on the air and within range of our set we will tune in WSM of Nashville at this point. We then enter the dial readings for WSM opposite 650 kcys. Now it is clear that if we reset our dials at 71-69 our set will be tuned to 640 kcys. and at that point KFI of Los Angeles will be heard, always assuming, of course, that it is on the air and within range of our particular set.

Abitibl Power & Paper Co.
Bishop N. S. Thomas
Alfrian Radio Cosp.
Monoumental Na-illo Co. Jac.
Voughen Lege
Voughen Lege
WRLC, Inc.
Travelers Insurance Co. Lee, Inc.
us City Star Co.
tone Broadcasting Co., Inc.
bel Bros., Inc.
s School of Christianity 73 17/ 72 | 70 Victoria Roadinaving An'a.
Winnipeg Grain Exchange
Canadian Narional Railways
Carrillo Liames
Garpino Liames
Stephens Goliege
Fyanaville on the Ale, Inc.
M. A. Leese Co.
Scate, Marketing Bureau Carle C. Anchony, Inc. American Insurance Union 70 | 68 | 69 67

68 166 1

67 65

Now we tune in some other station, proceeding as before until after an evening or two, we have blanks filled on every page. We are now able to set our dials for any frequency we desire and consequently any station we may want whether we have ever received it before or not.

Our index now becomes of great value to us in identifying programs. Let us say that we hear music at 67-65 on our dials. We refer to our Index by Frequencies and Dial Numbers and we find that we are in tune to 680 kilocycles. On this wave there are two stations: KPO at San Francisco and WPTF at Raleigh, N. C. Both of these stations have 5000 watts in power. But knowing which is the closer to our set, we can tell almost invariably which station we are hearing. The we are hearing. The Radio Commission has had to give the same frequency in most cases to several stations but they have distributed them geographically so they should not interfere. When two stations in the same locality have the

became its insurance case, of course, it is not possible to tell which one of the two stations is broadcasting at the particular moment we hear it, but we do know it is one or the other of them.

The second column in the Index by Frequencies, as we have seen, gives the power of the station as measured in watts. This power also aids us in identifying stations as we will not ordinarily hear those stations with 500 watts or less unless they are close to our home city.

The Index by Cail Letters also has spaces providing for logging dial numbers, but these are provided merely for the convenience of those who want to be able to turn instantly to some favorite station. They may or may not be used as you desire. Remember that it is the Index by Frequencies that we must use to get the most value and pleasure out of our radios.

The Index by Frequencies is now printed with marginal tabs. If you will fill in under the word "dial" your reading for this particular frequency, you can then turn instantly to any frequency desired. Take a pair of shears and cut along the dotted line, as shown.



Sometimes I think there ought to be a law to make everyone do a little studying every week. I didn't think that a year ago hecause it looked like all the cards were stacked against me. But I am certainly rolling in the money now. Maybe my story will show you the way to larger earnings also

# IThought Radio Was a Plaything

But Now My Eyes Are Opened, and I'm Making Over \$100 a Week!

\$50 a week! Man alive, a year ago I thought anyone making that much was just plain lucky.

Twelve months ago I was just barely getting by. It was the same old story—a little job; a salary as small as the job.

If you had told me that twelve months later I would he making \$100 a week in my own Radio business—I'd thought you were crazy.

But I am getting ahead of my story—let me tell you how it all started. I was hard up a year ago because I had been kidding myself—that's all—not because I had to be. I thought a fellow either had to be lucky or have a string of college degrees a half a mile long to make good money.

One day I picked up a magazine and the headline of an ad attracted me because it seemed to fit my case. It said, "I will show you how to start a spare time or full time Radio business of your own WITHOUT CAPITAL."

"They're trying to kid somebody," I thought, "but I'll find out what it is all about anyway."

I wrote in and within a few days received a 64-page book telling about the opportunities in Radio, how I could prepare right at home in my spare time, and how they would ahow me how to start making money in my neighborhood selling and repairing Radio sets and doing other jobs. It would probably have sounded too good to be true if the promises had not been backed up by 100 letters from fellows who had taken their course and were very enthusiastic about it.

What has happened since seems almost like a dream to me now. I took their course and in about a month I was ready to start making money in my neighborhood—as much as \$20 and \$30 a week. It wasn't long until I had saved enough money to start a little business of my own.

That business has since grown to the point where I am clearing an average of \$100 a week. All this took place under the watchful guidance of my friends at the National Radio Institute. They also offered to train me for other lines—in case I wasn't interested in having my own business. Broadcasting stations, Radio Manufacturers, Operating on Board Ship Servicing sets, Aircraft Radio, Tele-

vision and Talking Movies are other fields their training covers. And to think, until the day I wrote for that book, I'd been wailing, "I have never had a chance—will never have one because I have no pull and have never had the advantage of a good education!"

Friend—you may not be as bad off as I was—but think it over—are you satisfied? Are you making as much money as you need? Would you sign a contract to stay where you are for the next ten years, at the same salary? Those are the things you have to think about—because no one is going to make it his business to push you ahead—you must make it your own business.

Take my tip—write for their book. It won't cost you anything—only a two-cent stamp. It shows you a lot of things which I don't believe you know now—a lot of facts and figures on the opportunities in this new fast-growing field. Where the jobs are, what they pay, how to get ready for one. Beginners as well as experienced men are making as much as \$1,000 to \$2,000 a year more as a result of N. R. I. training. You place yourself under no obligation because the book is free and is gladly sent to anyone who is ambitious and wants to get ahead. Just address J. E. Smith, President National Radio Institute, Dept. 2AO, Washington, D. C.

	J. E. SMITH, President, National Radio Institute.
	Dept. 2AO, Washington, D. C.
	Dear Mr. Smith:
	Send me your 64-page free book, which gives information on the opportunities in Radio—Operating on
I	Board Ship, in Broadcasting Stations, Commercial
	Land Stations, Set Servicing, Radio Manufacturing, Aircraft Radio, Television and Talking Movies, Lunder-
	stand this request places me under no obligation and no salesman will call on me.
	Name
I	Address
ļ	City State