THE MARCH 1938

RADEX

The All-wave Radio Log



How to Hear Foreign Stations

Don Ameche and the
Stroud Twins

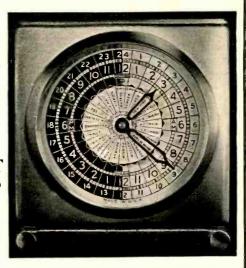
Collecting Postage Stamps

Important Changes in Station Data



NOW IT'S ELECTRIC!

THE CLOCK THAT CAN BE SET AT ANY OF THE WORLD'S 24 TIME ZONES



Modernistic Design of Brushed Brass

Tells time like an ordinary clock and automatically shows authentic time in every other zone around the world.

Actual size is 5¼ inches high by 4¾ inches wide.

Has A. M. and P. M. divided dial and 24-hour dial. Indicates minutes and quarter hours.

Just plug it in and set it for the correct time. No further adjustment nor calculation is required.

For AC 110-120 volts, 60 cycles
What DXers Have Always Wished For!
THE ELECTRIC WORLD-TIME CLOCK

\$5.95

Also available in same style case in springdriven model at \$4.95. We pay the postage.

THE RADEX PRESS

14717 Detroit Ave.,

Cleveland, Ohio

MARCH 1, 1938



RADEX Reg II S Patent Office

Reg. U. S. Patent Office ELIZABETH S. BUTLER Publisher



PAGE TAYLOR Editor

ASSOCIATE EDITORS

B. FRANCIS DASHIELL, Technical
CARLETON LORD, Broadcast

FOURTEENTH YEAR

NUMBER 117

CONTENTS

Cover Girls—The Bailey Sisters, Sylvia and Juen, on the "Double Everything" Program

	PA	GE
Leaves From a DXer's Scrapbook, by Count De Veries		2
Scanning the Amateur Bands, by B. L. Ahman, Jr.		6
The SWL Trading Post		8
A Radio Tour With Zenith, by B. Francis Dashiell		9
With the Station Hunters, by Carleton Lord		12
Don Ameche		20
Help for Our Puzzled Readers, by the Technical Editor		22
The International DXers Aliance		28
Figyelem Magyar DX-erek		29
For the Shortwave Fans		30
Amateur Calls Heard		34
Station News		35
The Stamp Corner, by David Brockton Browne		36
Across the Editor's Desk		40
The Month's Changes in Station Data		46
The Columbia Broadcasting System		47
When to Get the Day's News		48

\$1.75 Per Year

25c Per Copy

See Subscription Blank on Page 96 Published Monthly Excepting July and August

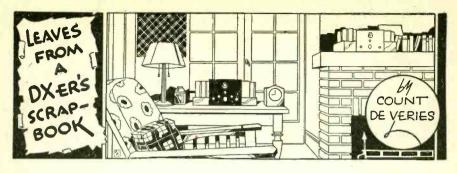
THE RADEX PRESS

14717 Detroit Avenue

Cleveland, Ohio

Entered as second-class matter April 23, 1931, at the postoffice at Cleveland, Ohio, under the act of March 3, 1879.

Printed in U.S. A.



CCASIONALLY you hear some pretty funny things on the radio. A continuity writer may slip up on his word slinging, a speaker stammer over his script or an ad-libbing announcer talk too fast for his train of thought—and everyone will get a little chuckle over the misfortune of the offender.

Of course, there is the classic example of the time Lou Gehrig was being interviewed on a *Huskies* program. As on all such broadcasts, the announcer came to the all-important question of what breakfast food Lou liked best. Instead of the logical answer of *Huskies*, the Yankee first-baseman flabbergasted the entire studio with a cheerful endorsement of *Wheaties*.

The script writer of the December 5th Magic Key program must have had an off moment when he dished out the commercial plug for the 2:53 p.m. spot. Asked why he liked the new and complicated electric tuning device on the 1938 RCA line, a purchaser was supposed to reply: "Because it changes a mechanical apparatus into a true musical instrument." (It isn't so much the point of the story as the way he said it, smirked Esmeralda.)

A few station breaks later on the same afternoon, a Mutual announcer was broadcasting the pro football game between the New York Giants and the Washington Redskins. At a very crucial moment in the game, a

Giants player was knocked cold and time was called. So, in came the announcer to bellow, "And this is the *time* to go to your dealer's to see the new money-saving American Beauty Dodge!" (While that halfback holds up the game, huh?)

But, in my opinion, the chuckle of the year was at the expense of our old friend Doctor Brinkley. Of course most of us have happened across his cheerful little talks in the early ayems, and wondered when the good doctor ever found time for a bit of shut-eye. However, John T. Crabtree, of Santa Fe, N. M., discloses the gruesome secret. It appears that those friendly chats with his neighbors are in reality transcriptions, recorded at his leisure and played back when most of us should be asleep. The proof of the pudding, mates, is that one morning the record cracked, and the doctor got stuck on one phrase, repeating it over and over again.

Can't help but wonder if it might have been the old Siamese chant, which goes: "Owah Tagoo Siam!" Start slowly, boys, and speed it up gradually! You'll get the point.

The Memory Page

A lot can happen in a few years, particularly in the world of radio. Changes are so fast and so permanent, that few people realize that they are taking place. But look back a few years, consider what was happening then, and you'll realize

that we've come quite a distance.

Just five years ago, for example, the cover of the March 1933 RADEX featured Jeannie Lang, who, at that time, was considered some punkins as a singer of pop songs. After a bit with Paul Whiteman in a picture and a short time as soloist for Jack Benny's orchestra, Jeannie had landed in the middle of a juicy commercial with Colonel Stoopnagle and Budd. But where in Jeannie now?

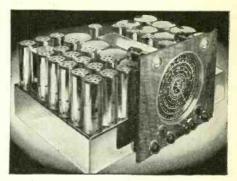
That issue of RADEX wrote finis to one of the earliest cases of the wolves howling about a DXer's record of reception. George Lilley of West Chester, Pa., had reported reception of TA's and TP's on a twotube set of his own construction, and how the protests did come in! One of the most vehement critics, a Mr. X, wrote in the following vein. "Preposterous claims." "I wonder if there is anyone who is ignorant enough to believe it." "These fellows are crooks and their verifications fraudulent." Never has one of these fakers brought one of these miracle stations in in the presence "Why not apof other DXers." point several subscribers in their vicinity to call upon them any day and any time. I'm sure you'll find they have their first foreigner to get."

And that March 1933 RADEX went on to report that this same Mr. X had proceeded to call on George Lilley and, after an all-night session with the little two-tuber, acknowledged that Mr. Lilley had been able to bring in 4BH, 4QG and 2BL. At the time, 4BH was rated at but 200 watts, so it would be excellent reception even today with a powerful receiver. Five years ago, with a small set and before a skeptical witness, it was indeed remarkable.

The same issue of RADEX announced the appointment of Page Taylor, of Detroit, as Short Wave Editor, and brought the first of a

Hear the SCOTT

Philharmonic



FOR THE GUARANTEED FINEST IN RADIO

A scientific, precision instrument, custom built BY HAND, from the finest materials, in one of the world's foremost radio research laboratories. It represents the results of 14 years constant developing, perfecting, inventing . . . years of intense specialization in producing the finest radio receivers in the world! Sold with a moneyback guarantee to outperform mass-produced radios. Yet, these amazing instruments cost no more than many production type receivers.

30 DAYS FREE HOME TRIAL...

and a Budget Plan, anywhere in U. S. A. NOT SOLD THROUGH STORES. Laboratory built on order, only. Mail

on order, only. Mail the coupon for special offer during next 30 days.

E. H. SCOTT RADIO LABS.

4424 Ravenswood Ave.
Dept. 1508, Chicago, III.
Send all the facts,
orderblank, and
Special Offer. No



STUDIOS: NEW YORK,	CHICAGO, LOS ANGELES,	LONDO
City	State	
Address	***************************************	<mark></mark>
Name		
obligation.		

series of articles on high frequency reception. Seems as if I've heard

that name someplace!

March 1933 saw the continuation of an argument about a game of cricket, and on overwhelming evidence from listeners it appeared that American DXers had been successful in the first "mass reception" of a trans-Atlantic BCB station. Poste Parisien was the broadcaster heard and included among the listeners who reported it were Bill Vornkahl, Robert Hough, R. R. Rawstron, E. F. Goss, and Earl Roberts, all of whom are more or less active DXers today.

Other pertinent patter from the March 1933 RADEX included:

Confirmation by L. F. Stetson, of Chicago, and P. O. Seiser, Bridgeport, Conn., that KZRM actually will verify, as witnessed by their own cards.



Julie Gibson, warbler on Joe Penner's program, was widely known in Hollywood before coming to the Columbia network. She sang many times from Hollywood radio stations, but the Penner show is her first major radio engagement. She replaced Joy Hodges, whose stage commitments in the new musical comedy, "I'd Rather Be Right," forced her to leave radio for a time.

Ridicule by the editor of the theory that two low-powered Cubans could cause a bad heterodyne on WTAM.

Advise from Richard D. Caddell, Vancouver, B. C., that a wire strung into the ocean made the best aerial he ever tried.

Richard M. Carter, Ann Arbor, Mich., reported the same EQ7 and EW7 which were mentioned in this column several issues back, and great was the conjecture about their identity.

Court battles to keep from being forced off the air by the old FRC were being fought by KFH, KGEF, KGMP, WBAK, WHP, WIBO, WJKS, WLOE, WMCA, WNJ, WNYC, WOQ, WPCH and WERE.

Reception of two outlaw stations was reported—DNTX, Denton, Tex., by Burney McClurkan, that city, and WJM, Massillon, Ohio, by Miss Lilian M. Bethel, also of Massillon.

Further reception of European BCB stations was reported by Robert Hough, New Rochelle, N. Y., who heard the German stations at Dresden and Frankfurt-am-Main, and by Earl Roberts, Cambridge, Ohio, who logged Heilsburg.

Reception of 14 Japanese stations in one night was reported by H. N. Delmonico, Vancouver, B. C., and he classified them as "nuisances."

Reception of TA's by members of the Atlantic Radio Club was reported by Henry P. Allen, Philadelphia, and schedules given for Praha, Langenburg, Stuttgart, Barcelona, Hamburg, Gleiwitz, Heilsburg, Horby, Leipzig, Trieste and Nuremburg.

Bill Vornkahl, Westport, Conn., reported a verification from the Trieste, Italy, station on 1311 kcys.

The month's changes in station data advised of the deletion of TGW, WKBS and WCMA; a change in call of WTSL to WAML; increases in power for KFDY, WEAO, WFBC and WJBK; re-instatement of WERE and

WNJ; and one new station, WKEU, LaGrange, Ga.

And such was the world of radio, as reported in the March 1933 issue of RADEX. Seems only yesterday, doesn't it?

Reception Picking Up

For the past couple of years, we've heard a lot about sunspots. We've been told that there is an 11-year cycle of these hickies and that reception is supposed to be hampered when the cycle approaches its maximum. According to the scientists, the next maxima is due next year and reception on the broadcast band should hit a new low.

For a time, it looked as though this theory was the real McCoy. The 1935-36 and 1936-37 seasons were nothing to brag about. Static seemed to be heavier than in previous seasons, while signals appeared to have lost carrying power. All in all, DXers were rather glum when they considered the prospects for the next few years.

But it seems to me that much of the wailing that reception isn't like the good old days, is due in part to the psychological reaction to all these predictions of DX disaster. Listeners were led to believe that they couldn't hear stations more than a thousand or so miles away, and so they lapped up this pessimistic propaganda and quit trying. A lot of them wouldn't have been able to hear a trans-oceanic catch if it had been pushed down their They simply decided that lead-in. there wasn't going to be any good reception for a few years stopped trying.

However, experience during the past couple of months has failed to bear out the glum predictions. During November, when tests were being made on that swell Super Skyrider, a number of Europeans were

heard with fairly decent results. West Coast stations showed up in Philadelphia with really excellent strength, and even the little 100-watters crossed the continent with something to spare.

December found reception picking up at a very satisfactory rate. One morning in particular, no less than 13 Europeans were logged between 2:30 and 3:15 and it was an oddson bet that others would have been heard had there been time. The French stations at Fecamp, Rennes and Bordeaux showed particularly strong signals, the best that I ever heard from across the big ditch, while the fanfare from Poste Parisien was a sound for sore ears.

During the sleet and snow storms the latter part of December, reception reached a peak which was at least the equal of any other period during the past decade. Home in Akron, Ohio, for a couple of weeks of vacation, it was possible to compare reception with that of other years. And you can bet your bottom dollar that it didn't suffer by comparison.

Exceptionally strong were the Pacific Coast stations. For the first time in three or four years, it was possible to tune in stations like KFI, KNX, KPO and KGO and really enjoy the programs. Signals were a good R7-8, fading wasn't noticed at all, and a person had reason to believe that he was tuned to semilocals a few hundred miles away.

Even the little 100-watters showed good R5 signals. KGFJ pushed its way into the clear on the 1200 channel, KERN made a monkey out of WABY on 1370, and even WJBK had a losing battle with KVOE and KDB on 1500. Little CJAT made one of its rare appearances in those parts, while CKOV showed a healthy signal on 630.

From the South, stations really did themselves proud. LS2 was

heard pushing WOAI off the 1190 channel on many occasions during the early evening, and LR5 gave KOA plenty of competition. Little TIPG stuck its nose out between the domestic stations on 620 and 630, and really went to town. The usual mumble on 1120 frequently was just a background noise for YV1RF down in Venezuela. Of course, the Cubans and Mexicans could be heard all over the dial.

Plenty of good DX was heard during those two weeks in Ohio, as well as during the balance of December and January. The new CHLN, at Three Rivers, Que., showed an excellent signal on December 24th. while CJBR, Rimouski, Que., came in very well on December 30th. Among the newer United States stations to be heard were KVOX. WGRM, WOLS, WRNL and WSAL. The new KWNO, Winona, Minn., was heard several times testing on 1200 and poor, old WIL didn't have a chance. WLAW, Lawrence, Mass., showed a healthy wallop during its final test on December 18th.

Everything considered, the current season has proved to be as good as any during the past seven years. Perhaps the static is a bit heavier on occasions, but the increased power of many stations more than compensates for that. And the frequent appearance of the so-called "ideal DX mornings" finds reception good enough for the average listener to go out and log many distance catches.

In the light of my own experience during the past couple of months, it seems likely that a lot of listeners have been paying too much attention to prognostications and too little attention to actual dial twisting. If the DXer will forget about the sunspots and give his fingers a little exercise, the chances are that he'll hear a lot of new stations.

Scanning the AMATEUR BANDS

• • By B. L. Ahman, Jr.

Did someone ask "What are they hearing in other countries?" In response to this question comes a very interesting letter from T. E. Plewman, who writes all the way from West China. The place is Chengtu, near the Tibetan border, and Mr. Plewman gives us the latest dope on what the DXer in West China hears, to wit:

"In the October issue of RADEX you asked if any amateurs are getting any stations in Paraguay. I am located away up on the border of Tibet, in western China, and have been surprised at the number of Chilean, Argentine and other South American stations that can be picked up. For instance, last winter I heard CE1AH, Mrs. Ida Fish, Chuquicamata, Chile, night after night talking to Australian amateurs. CE1AO was also heard frequently. LU6KE, Tucuman, Argentina, comes through about R9, fairly deafening. On Sept. 24th, at 5:15 p.m. local time, I heard ZP2AC (Pennsylvania, two, America, Canada) calling CQ twenty meter band. and located, he said, in Asuncion, Paraguay. If I can get him on the Tibetan border, surely he ought to be audible at some time in the USA. On Sept. 28th, at 5:10 p.m., I heard CX3BL, Montevideo, Uruguay, talking to an Australian. Neither of these countries had I heard before. I have written to a couple of Argentine amateurs and two in Chile. but none of them have deigned to answer my report, so do not intend to waste more postage. I thought that because of my unusual location they might reply, and I would like to have a few South American veries, but thus far have got only

HK1Z, Colombia.

"Being from Canada, I was particularly anxious to get Canadian amateurs, but have heard only three or four and have received only one card, that being from a Lethbridge ham, VE4EO.

"It seems to me as if long range is more easily attained on a diagonal across the earth's surface, for I can produce a dozen South American

loggings for one Canadian.

"Owing to the fighting in Shanghai, and the hurried evacuation of many women and children to Hong Kong and Manila, hundreds of husbands, etc. tried to contact Manila through the agency of Shanghai and Manila amateurs, and we heard XU8MC, Shanghai, on the air every night for some time. But he seems to have exhausted himself, for he has not been heard lately. KA1ME and KA1BH, both in Manila. helped out in this refugee problem, and sent lots of messages from the evacuated womenfolks to their men still holding the fort in Shanghai. XU8JR is another Shanghai amateur who was on often. Once or twice I heard this latter deftly parrying some too-curious amateurs who were trying to get a scoop for American newspapers by pumping him in respect to the war news. He referred them to the regular news broadcasts from Shanghai and declined to comment further.

"A frequently-heard amateur is KA1YL, which is located on the yacht "Latitude," with headquarters at Manila. On October 10th at 5:50 a.m. EST, I heard him calling CQ, and he said he was on the China

Sea, bound for Manila."

Many, many thanks, Mr. Plewman, for that very interesting report. We wish that many more foreign correspondents would write us their experiences.

"My favorite (and only) band is 20-meter 'phone. I cannot read code fast enough yet so I am in

the dark as far as CW goes, but I have heard 86 countries on 'phone on my Emerson U6A," boasts John Quinterell, Jr., 445 Carmody Road, Seat Pleasant, Md. cards which I have already received are from PAOUN, SM7YA, CN8AM, K4SA. YV5AA, PAOMQ. K6NZQ, CN8MU (only 4 watts input!), I1TKO, NY2AE. K5AB. SV1NK, K4ENY. VP9R, F3JD. XE1LK, OQ5AA, ZK1AA, HH2LD, HR5C, VP3THE, VO6D, VO1Y and ZB1E.

"I received the ZK1AA card on January 10, and Mr. Fahey, the operator, said that it was the first report on his 'phone signals that he had received from North America. He has never worked a W- ham, although he has worked K6- and HC1FG. I prize this very wuch (no pun intended). The ZB1E card arrived the next day. He is on the LF end of the band with only 30 watts input, enough to cross the Atlantic.

"I understand that HH5PA never QSL's, neither to hams or SWL's.

"Some of the calls I have heard are given below:

1AI, 1AO, 3CO, CN: 8AJ, 8MB, CT: 1AY, 1QZ, 1QP, 2AB, CX: 2AR, 2 CY, EA9AH, EI2J, ES5B, ES5D, FB8AB, FISAC, FMSAD. FRSUX, FYSE, F3OO, F8QD, F8XT, GI2CC, GM5W, G: 2PU, 5ML, 6JF, HA: 4A, 8N, HH5PA, HI: 1C, 2K, 3N, HK3JA, HP1A, I1IT, J2MI, J2NG, K: 4FAY, 6BHL, 6CNC, 7PQ, LA: 1G, 5N, LU: 1QA, 4CZ, 9BV, OA4C, OQ5AE, OX2QY, PAOGN PY2AC, SP1DC, SP1HH, SU1CH, SU1SG. VO1J, VO2Z, VP: 2AT, 2DA, 6TR, VQ1AJ, VQ4CRE, VS: 2AK, 7GJ, VU2CQ, XU2HL, YL2BB, YN2LG, YR5AP, YR5DY, YT7CI, YT7VN, YU7XX, ZE1JR and ZS1B."

A Labrador QSL

A prized QSL was received by us recently, from VO6D, "The Voice of Six Ducks." This is our first Labrador ham, and, needless to say, we didn't write to Labrador for it. The address is Thomas C. Cunningham, VE2JK, 5528 Ponsard Ave., N. D. G., Montreal, P. Q. Mr. M. E. Smith of Cleveland tells us that verifications of this station can be received from Dorothy T. Hall, 186-18 Williamson Ave., Springfield, N. Y. Mr. Smith also asks for information on ZP2AC, so he's not the only one trying to get Paraguay; we know now that Paraguay is heard in West China so that ought to be some help to us.

We understand that Dual Diversity Communications receivers are going to be available about the first of June. Who is going to put it on the market? We'll have to wait to

find that out.

Well, so long until next month. Let us have more ham data, please. And how about something from a DXer on the Sahara desert?

Addresses

We list below the call letters, the frequency and the address when known of every amateur station mentioned in these columns. Addresses will not be repeated, however, so readers are urged to keep these columns for future reference.

(The letters LF, MF and HF in parentheses following the call letters of stations mentioned in this column indicate the Low Frequency, Middle Frequency and High Frequency portions of the 20 meter amateur band. Low Frequency stations are those on frequencies between 14.000 and 14.100. Middle Frequencies are from 14.100. High Frequencies are from 14.300. High 14.400. No attempt is made to show exact frequencies as they vary so greatly).

CE1AH, Mrs. Ida Fish, Chuquicamata, Chile.

CE1AO, Harry Brunelle, Poblacion Chile Exploration, Tocophila, Chile.

CN8AM, Andre Peres, Casablanca, Morocco.

CX3BL, Roberto Musso Ambroni, Cerro Largo 1344, Montevideo, Uraguay.

F3JD, Lucien Champonnois, Soulignonnes (Char-Inf), France.

HK1Z, Antonio J. Restrepo, Box 200, Cali, Colombia.

KA1BH, Mrs. Joseph Reich, 2 Escolastica, Pasay, Rizal, P. I.

K4ENY, Lt. W. A. Smith, VO Squadron 9m, Fleet Marine Base, Charlotte Amalie, V. I.

LU6KE, Eduardo E. Idigoras, Buenos Aires 133, Tucuman, Argentina.

OQ5AA, Dr. G. Westcott, Tondo, via Irebu, Belgian Congo.

SM7YA, R. Christiansson, Fredsgatan 11, Vaxjo, Sweden. (LF).

VE2JK, Tommy Cunningham, 5228 Ponsard Ave., Montreal, P. Q.

VE4EO, W. R. Savage, 514—12th St., C. North, Lethbridge, Alta.

VO6D, Tommy Cunningham, address reports to VE2JK. (MF).

XE1LK, Aurora de Franco, Av. de la Paz, 1125, Guadalajara, Jal.

ZK1AA, J. D. S. Fahey, Radio Station ZKR, Raratonga, Cook Islands.

The SWL Trading Post

Baker Young of Parma, Idaho, wishes to trade SWL cards and photos.

William Anderman, Jr., 5913 N. Camac St., Philadelphia, Pa. Exchange SWL cards.

Merton M. Hiatt, Box 7, Dryden, Wash. Exchange SWL cards.

John Quintrell, Jr., 445 Carmody Road, Seat Pleasant, Md. Exc. correspondence and SWL cards.

Charles Genan, 205 Barrett St., Jamestown, N. Y. Exc. correspondence.

Virgil Oliver, 620 N. 20th St., Mattoon, Ill., a radio and television student. Exc. correspondence.

A Radio Tour with ZENITH

• • By B. FRANCIS DASHIELL

LARGE and popular line of radio receivers is being offered for 1938 by the Zenith Radio Corporation, one of America's oldest and best known manufacturers. Recent production and sales have pushed this concern up toward the top so that now it is one of the very few leaders in the industry. Their new receivers for 1938 are outstanding examples of the radio engineer's and cabinet maker's skill.

Zenith's radio receivers for this year are assembled in an unusually large total of 63 different models. This array provides radio sets to meet all requirements and budgets. Sixteen chassis utilize 4, 5, 6, 7, 9, 12, 15 and 25 tubes, all in superheterodyne circuits. Zenith also manufactures its own "Metaglas" tubes and these are used throughout the Zenith line. While these tubes have counterparts in glass and metal tubes, the latter are not recommended or used.

Electric Tuning

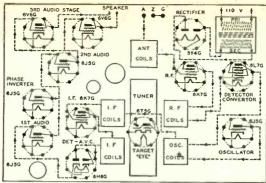
One of the outstanding features that has attracted most radio critics to the new Zenith is its robot dial or electric automatic tuner. simply pressing the self-starter an electric motor is made to spin the needle across the dial to any station in just a second or two. There is no sound between stations, yet instant response is obtained as soon as the motor stops at the station selected. A between-station silencer eliminates objectional noise when tuning the The final, or fine tuning, adjustment is almost instantly accomplished by a slow-motion knob as soon as the robot motor knob is released. The motor itself requires no attention except oil twice a year.

One of the most popular models of the 1938 series is known as chassis 1204. This is a twelve-tube circuit which is furnished in seven cabinet models, including console, armchair and table types. Model 12S265, illustrated and described in this article, was given a severe test over a period of three months. In every way the results were very gratifying.

A Popular Set

Our diagram shows the layout of the chassis, as we look down from the top. The tubes shown are connected by the heavy dotted lines which indicate the direction of "flow" of the incoming radio signal during its swift passage to the loud speaker. At the rear of the chassis is the antenna connector strip. Any ordinary wire antenna, of from 30 to 60 feet in length, is connected at "A". When the Zenith special doublet is used, as recommended, the jumper strip that connects "Z" and "G" is removed, and the antenna leadin connected to "A" and "Z". During our tests a single-wire antenna as well as the Zenith doublet, with and without grounds in both cases, were used. The Zenith doublet, without ground, gave best results, and eliminated practically all static from the heavy automobile traffic about 100 feet away.

We see how the incoming signal passes from the connection "A" into the antenna tuning system. It enters the radio-frequency tube, a type 6K7G, and then flows through the radio-frequency transformer and amplifying circuit into the first-detector or converter tube, a type 6L7G. The signal mixes with a locally generated current created by the type



ZENITH 12 TUBE 1938 RECEIVER - LAYOUT OF CHASSIS NO. 1204

6J5G oscillator tube. This converted signal, now changed to the intermediate frequency of this set, or 456 kilocycles, enters the first i-f transformer. Here it is tuned and further amplified, and then passed on to the 6K7G i-f tube.

Three Audio Stages

After the second i-f transformer and tuning circuit is passed the signal reaches the second detector or 6H6G tube. It acts also as the automatic volume control tube. The demodulated signal, now vibrating at audio frequencies, is passed from the detector to the powerful audio amplifying circuit of three stages. The first audio tube is a type 6J5G. Similar tubes are used in the second audio stages and as a phase changer or inverter. This latter tube is quite necessary, although all receivers do not have them, in order to supply a push-pull action to the final or third audio stage, since there is no pushpull audio transformer in this circuit. The Zenith arrangement of resistance-coupled amplification gives tremendous power but always with excellent tone and absence of any distortion. Two type 6V6G tubes are used in the output stage, and provide 15 watts of smooth power. The rectifier is a type 5Y4G, and the current consumption of the receiver is 110 watts.

An electric target tuning device, a type 6T5 tube, enables one accurately and quickly to tune in on any station. When no signal is tuned in only a thin ring of green light is seen encircling the target eye. Then, as a station is tuned in, this ring widens and contracts toward the center, with the degree of movement depending upon the intensity of the signal. Greatest resonance to the signal is indicated by the greatest amount of contraction toward the center.

Three Wave Bands

Tuning is divided into three bands in this receiver. Three separate dials automatically jump into place, one at a time, when the band switch is pressed with the finger. dials are full size and are easily read by the indirect lighting system. They are marked (1) Standard Broadcast; (2) Foreign; (3) Police. The first covers a range from 540 to 1753 kilocycles; the third from 5.5 to 18.4 megacycles; and the second from 1.8 to 5.9 megacycles. Foreign, or middle dial, the most used except the broadcast or first dial, brings in domestic and foreign short-wave stations. Police, the third band, gives police, amateur, aviation and ship calls. All bands are marked to indicate the portions of the scale where short-wave entertainment may be

heard. The intermediate portions, where International Morse (wireless) code is heard, but which we cannot avoid in the radio spectrum, are of interest only to those who can read the code.

The twelve inch speaker provides a tremendous amount of sound, all of which can seldom be used. The manual control is smooth working and absolutely noiseless. Tone is changed through five positions of a knob and indicators that point to-Voice, Normal, Hi Fidelity, Bass and Foreign. The Foreign setting is excellent on short-wave and distant reception. An interesting and valuable device is the acoustic adapter that provides personal adjustment of the speaker. This bell-like cover can be moved in or out over the speaker so as to counteract unusual acoustic conditions that may be present in different sized rooms.

Local And Distance

There is little to be said of the oneration of this set on the standard broadcast band. It does everything that can be expected, but the mellowness and faithful reproduction of tone is something that can be appreciated by music lovers. Local stations are heard without interfering noises and distant stations, tuned in by switching on the distance switch, can be heard from all parts of the country, and other American lands, with very little tube and amplification noises. Of course, when we realize that about 700 broadcast stations are operating in a band that has room for less than 100, it is normal to hear more than one station at a time on many sections of the dial. On the 20 clear channels, however. the stations came in as loud and clear as a local-often with the "local" switch turned on.

On the Foreign or short-wave band, which ranges from 15 to 50 meters, or 5,5 to 18.4 megacycles, many stations were easily and clearly tuned in. To the south, where many Latins operate, the more or less familiar stations were heard, such as the countries of: Eucador, Colombia, Mexico, Brazil, Peru, Venezuela, Guiana, Argentina, Costa Rica and Guatemala. These were heard, together with many of their calls, as well as a number of unknown stations. Unfortunately for DXing, the Latin peoples have a bad habit of speaking very rapidly, and those of us who barely understand some Spanish fail to get many of the announcements.

Many From Europe

The Europeans do better—at least most of them talk slowly. The English stations of the "GS" series, at Daventry, in the 15, 11 and 9 megacycles groups, all come in with such volume that it was never turned more than half-way up. The broadcasts in the 9 megacycles portion of the band, however, is heard easily at any time it is on the air. The "RO" stations at Rome, Italy, come in almost equally as well as London, and reception of them is consistent with other foreign reception. On several occasions the League of Nations station, at Geneva, was heard with remarkable clearness. Those delightful programs and talks from Huizen, Holland,—the "PC" transmissions frequently delayed the search of others. Prague, in Czechoslovakia, was picked up nicely whenever it was on the air. Then came Moscow on several occasions, Paris and Pontoise, France, Budapest, Warsaw (once), and several others, but not with much volume or understandable language. Berlin and Zeesen. Germany, provided much entertainment and consistent reception at great volume. The "DJ" stations are found on a number of points on the dial.

No attempt was made at Oceanic reception—the "Aussies". Such ear-

(Please turn to page 95)

With the Station Hunters

● ● By CARLETON LORD

UCH in the manner of Rudyard Kipling's Recessional, the hullabaloo of the monitored verie question appears to be on the decline. The tumult and the shouting have died to mere whispers, while the critics and their followers have departed from the public eye.

Still standing is the ideal of service for listeners which was decried, but it remains just an ideal for which a few sacrificed their time and efforts. Still unsettled is the entire question, yet there remains not a single follower of either side to bear one standard or the other.

Last month it was reported in these columns that the verification of the Daventry, short wave stations had been discontinued by Carroll Weyrich and Barney Ahman. In announcing this decision, they felt that their service had caused enough commotion and, rather than further antagonize DXers, they decided to drop the whole matter.

More recently, there comes word from Stanley B. LaRue that, in view of the fact that ZBW had once more commenced to verify, his monitoring of that station would be discontinued. It is reported that ZBW's decision resulted from a rapid decline of reports.

Although discontinued for entirely different reasons, the cessation of the two monitoring services brings a rather abrupt end to the criticism aimed in their direction. To the best of our knowledge, there exists no other similar service in the world of radio. Thus, the discussion must eventually come to a logical conclusion.

However, even though the monitored veries have stopped for the present, it must not be construed that opponents of the practice can claim a decisive victory. The Daventry cards were discontinued in order to eliminate cause for further friction, although Messrs. Weyrich and Ahman still favored the idea and were supported by many DXers throughout the country. The Bevertly Hills ZBW veries ceased simply because there was no further need for them.

Judging by the letters of comment which have been received, listeners appear to be divided into three groups. At both extremes are small groups, one condemning the practice in theory, the other as actively supporting it. In between is by far the largest group, which feels that the matter is one for the individual listener to decide.

It is true that the latter group is divided in its opinion as to whether its individual members would care to collect monitored veries. Perhaps a small majority would prefer to stick to veries which come direct from the stations, but they do not attempt to condemn the practice so long as it pleases some listeners. Neither, in fact, do they see any resulting from particular harm monitoring services, so long as no dishonesty or flagrant abuses exist. And to date there has been absolutely no evidence against either of the two services in question.

Looking back over a long list of charges and counter-charges, we remember one claim to the effect that if DXers shoulder the responsibility of issuing veries, then other stations will ask to be relieved of the task of verifying. If any such result has come about to date, we haven't heard of it. We have, how-



Charlie McCarthey's girl friend, Dorothy Lamour, once ran an elevator in a Chicago department store for a living. A native of New Orleans, she caught the eye and ear of Herbie Kay, band leader. Miss Lamour is now considered one of the most glamorous of Hollywood's glamor girls.

ever, heard of one station which is supposed to have resumed verifying when reports fell off.

And so that about winds up the question of monitored veries. With the two services in question no longer in existence and no further releases from the GHQ's of the opposing forces, perhaps it would be just as well to devote further space to other matters.

An Extra Special Program

The first DX program ever attempted by XEDF of Nuevo Laredo has been arranged by A. J. Parfitt, president of the National Radio Club. This hundred watter on 810 kcs. will broadcast from 2 to 4 am, EST, on the morning of March 12, which happens to be a Saturday, and will dedicate the program to RADEX, the National Radio Club, the Universal DX Club and Radio News. XEDF is owned and man-

aged by 18-year old Ruperto Villareal, who also acts as Chief Announcer. Reports will be verified for an Internation! Reply Coupon.

Reports and Tips

With the mid-winter months already at hand, reports seem to show that DX is staging a great comeback. While there is no indication of the superlative reception of 1931-34, it appears that many listeners are reaching out farther and more often than during the past couple of seasons.

"DX is swell on the broadcast band," gloats Bernard L. Ahman, Jr., 3313 Westerwald Ave., Baltimore, Md. So far this season I have YV5RA, YV5RQ, heard YV1RF. CMCB, CMCQ, CMCK. CMBY. CMW, CMBC, CMCM, LS2, LR5 TILS, TIPG, CMBG, CMK, CMCW, TGW, XEW, XERA, XEPN, XEAW, XELO, CMCY, CMCD, and what I think is LR4. The latter fades very badly at times. Several other Spanish-speaking stations have been heard on various frequencies, but are not yet identified. My receiver is still the 1936 12-tube Zenith."

This looks like mutiny on the amateurs, Barney!

"I am a new reader of RADEX," admits Maurice Burleigh, Lyon Ave., Oakland, Calif., "and I hardly believed what I read about listeners getting foreign reception on the broadcast band. Anyhow, I decided to give it a try and was amazed to find that carriers could be heard on nearly every channel. I've heard the Australian 2NR start coming in at 1:00 a.m., PST, and get better and better until WLW pushes it off the channel at 2:45. Also have heard pretty fair signals from what I took to be a Russian station on 540 keys, as well as what appeared to be a Hungarian transmitter on 546 kcys. Do you have any idea what stations these were?"

The Russian on 540 probably is RW54 at Khabarovsk, while the one on 546 sounds as though it might be Budapest No. 1. Eastern listeners frequently report the latter, although we seldom hear of it reaching as far West as California.

"It has been a long time since I have done any DXing," admits H. H. Searles, 159 Spruce Ave., Rochester, N. Y. "It was March 1936 when I stopped activity. Just lately, however, I have gotten back into harness. Once the DX bug bites you, I guess you just have to stay bitten.

"At present my log stands at 651 heard and 542 verified. Some of my best catches are LR1, LR4, LR5, LS2, CPX, CP4, KWG, Poste Parisienne, Radio Normandie, TGW, HHK, XEFJ, VONF, CT1GL, YV1RC and YV3BC, all verified."

With a list of foreigners like that, a lot of DXers we know would be glad to feel the bite of the old bug. Nice going, Mr. Searles, glad to

hear from you again!

Latest additions to the log of Martin J. Olthoff, 212 N. 16th St., Independence, Kans., include a new station on 1370 at Villa Acuna, Coah., XEDH, heard on December 13th at 3 a.m.; KRE, Berkeley, Calif.; KROY, Sacramento, Calif., on a frequency check at 6:10 on December 13th; KSRO, Santa Rosa, Calif., also on a frequency check at 6:30 the same morning; WMAS, KOOS and WCAX. These additions bring Martin's total on the broadcast band up to 682.

Changes and Reports

"I have noticed a lot of changeamong the Cubans," observes Clifford Drain, 617 Camden St., Parkersburg, W. Va. "CMCB is on 1230, not 640; CMK on 720, not 730; CMBL on 750, not on 710 as they were some time ago; CMCW is on 1140, not 750; CMJW (a new one?) is on 1340 and gave their address as Box 92, Camaguey, Cuba. CMKG, Santiago, Cuba, is on 1135 and request reports be sent to Box 157, that city. Have noticed that TGW is on 1240-45, not the 1210 which they still list.

Additional news from Cuba indicates that a new Havana station, CMBQ, will begin operation shortly on 680 kcys, with 5 KW power. CMBF, 770 kcys, 10 KW, is another new Havana broadcaster. CMCB, heretofore listed on 640 kcys, is broadcasting on 1230 keys. CMCF, 810 kcys, 5 KW, is no longer relayed by COCO on short waves, and is now tied up with COCH on 9.428 megs. COCO, 6.010 megs, now relays CMCK on 1030. As the result of the recent radio conference in Havana, many new Cuban changes are expected in the near future.

"Have been hearing XEXM, Mexico City, 1280 kcys, in early mornings, despite heavy interference from KLS. A weak signal on 810 makes me wonder if I am hearing XEDF. Another unidentified Spanish-speaking station has been heard on 580 kcys. Could this be XEMU?

"On Christmas morning, I heard TIX, San Jose, Costa Rica, from 2 to 5:30 a.m., EST. This may be the mystery station about which a reader inquired in the January issue. (John T. Crabtree asking about weak station on 650 kcys.) They sure put in a strong signal and quite frequently announced in English. Another Costa Rican station heard the same morning was TILS, San Jose, on about 882. They also announced in English quite often.

"Otherwise, DXing has been none too good. The only TP's heard have been 1YA and 4YA. So far no Europeans have come in, although there is still a little time for them. KHBC, Hilo, Hawaii, has been coming in better than KGU and KGMB. Still hear LR1, LR5 and LR6 once in a while. ZNS, the Nassau, Bahamas, station, comes in here R7 with swell signals.

"And now for a couple of queries of my own. Can anyone identify Spanish-speaking stations on 775 and 875 keys? Would surely appreciate a tip on who they are!"

Another solution to John T. Crabtree's request for help in identifying his station on 650 keys, comes from Harry Knight, 114 Ross St., Duquesne, Pa. "The station on 650 is WWSW of Pittsburgh," he writes. "I had the same trouble until I changed the alignment of my receiver. Never hear them now!"

Quite a novelty, this getting two answers for a question! Looks like you pays your money (a quarter for RADEX) and takes your choice!

And More Changes

"Station XGZ, Nanking, China, is listed on 660 kcys, with 10 KW along with XGOA, 75 KW," advises Alan I. Breen, 68 Pine Hill Terrace, Dunedin, NE 1, N. Z., "but no schedules have been released. Perhaps they both are off the air now."

A couple of other Eastern targets for Western listeners are noted by Mr. Breen. KZIB is a 1000-watt station at Manila, P. I., on 900 kcys, and ZHL at Singapore operates on 1332 kcys, with 2000 watts. Both stations are reported to have short wave relays.

"KGHF, Pueblo, Colo., has a different schedule from the one listed in RADEX," corrects A. J. Tait, Jr., 225 Jackson St., that city. "They come on the air at 9 a.m., EST, and do not sign off until 1 a.m. the next morning."

"In your November issue," reminds Morton Raff, 245 Cedar Ave., Highland Park, Ill., "you stated that CKY had changed frequency from 910 to 760 kcys, and have so listed it ever since. On December 25th I heard them on 910, so wrote the station. They replied that they had not received authority to move from 910."

"Here are a couple of frequency

check schedules which you did not include in the January issue," offers Baker Young, Parma, Idaho. "KSRO, Santa Rosa, Calif., tests from 6:20 to 6:40 a.m., EST, on the second Monday, while KHUB, Watsonville, Calif., tests from 6:00 to 6:20 a.m., EST, the same day."

"Of the stations which are listed with a 'z' in your December indices," informs A. W. Field, Box 91, Hillcrest Sta., San Diego, Calif., "the following have verified for me three-cents return postage: KYOS on 1040, KVCV on KSUN KSUB on 1200. on 1310. WEOA on 1370, WSAU on 1370. KRLH on 1420, and KNET on 1420. Incidentally, KIT at Yakima, Wash., which you have been listing on 1310, has been on 1250 since November 6th, according to a verie just received."

"KWKH, Shreveport, La., verifies if the report is sent to P. O. Box 17 and is accompanied by threecents return postage," postcards C. Roman, 1907 N. Kedzie Blvd., Chicago, Ill. "KOCA, Kilgore, Texas, also verified for return postage."

"Our new KELA in Centralia is now on daily on 1440," states Anthony C. Tarr, 909 W. Lee St., Seattle, Wash., "but they have not answered my report. A new Canadian, CFGP, announcing their location as Grand Prairie (presumably in Alberta), was heard on 1200 working duplex with CJCA, Edmonton, on 730. This is something I have never heard before on the broadcast band."

Our thanks again to readers who continue to send in tips and reports which enable us to keep our indices up to date. Without the assistance of listeners, it would indeed be difficult, if not impossible, to keep pace with the ever-changing broadcast spectrum.

As the season progresses, increasing reports indicate that stations to the South are being heard regular-

New flea-power transmitters ly. in Costa Rica and other Central American countries are constantly appearing. South Americans frequently break through the domestic barrage, while the Cubans Mexicans are daily visitors. since most listeners have difficulty in identifying Spanish-speaking stations, may we ask readers to make a point to forward all information which they may possess about call, location and frequency? It will help us do a better job keeping other readers informed of just what is what in radio land.

RADEX Dedications

Raymond W. Sahlbach, 4708 A S. Compton St., St. Louis, Mo., advises of further special and frequency check dedications which he has arranged for RADEXers:

March 1st 4:00-4:30 WPAY 1370 Portsmouth, Ohio March 3rd 1:00-2:00 WAGA 1450 Atlanta, Ga. March 5th 4:10-4:30 WTNJ 1280 Trenton, N. J.

March 8th 5:20-5:40 KFJI 1210 Klamath Falls, Ore. 5:30-5:50 KIDW 1420 Lamar, Colo. 5:50-6:10 KORE 1420 Eugene, Ore.

March 10th 3:30-3:50 WSAJ 1310 Grove City, Pa. 5:10-5:30 WWAE 1200 Hammond, Ind.

March 11th 4:20-4:40 WMFG 1210 Hibbing, Minn. 5:00-5:20 WEBQ 1210 Harrisburg, Ill.

5:00-5:20 WEBQ 1210 Harrisburg, III.

March 12th

3:10-3:30 KWYO 1370 Sheridan, Wyo.

3:20-3:40 WNEL 1290 San Juan. P. R.

3:40-4:00 WFOR 1370 Hattiesburg, Miss.

4:30-4:50 KUJ 1370 Walla Walla, Wash.

4:40-5:00 WGTM 1310 Wilson, N. C.

5:00-5:20 KIT 1250 Yakima, Wash.

March 14th 4:00-4:20 WAGF 1370 Dothan, Ala. 4:50-5:10 WLAK 1310 Lakeland, Fla. 5:40-6:00 KGMB 1320 Honolulu, T. H.

March 26th 3:00 on KWSC 1220 Pullman, Wash. All times are a.m., Eastern Standard.

Too late for inclusion in the issue came word proper WAYX, Waycross, Ga., dedicated its frequency check of January 12th to RADEXers. It is trusted that readers will make a point of listening to these dedicatory programs and sending in the customary thank-you card or letter.

Experimental Calls

"One of these days," says E. M. Vickers, Box 121, Coral Gables, Fla., "I'd like to hear a special program from little WBZA when WBZ is silent. That would be a nice one to log and verify. Another would be WBOQ. Understand that WABC used to test with that call, as did KDKA with W8XAR, and would like a chance to log them."

There's a tip for you CPCers! "Thank goodness," applauds Paul Sampson, 1820 College Ave., Regina, Sask., "that the CPC's of the various clubs have come to realize that the average DXer is sick and tired of all the quantity stuff, and not enough quality. It is really too bad that this wasn't done before, so the stations would be more ready to DX. It has been said that DXers should write to the stations which dedicate programs to their club, but the way it was going a person would have to spend quite a sum on postage alone."

"Since using all the tips given in November RADEX," writes Harold E. Pound, 418 Walnut St., Lawrenceburg, Ind., "by Arthur J. Parfitt in his article 'Verification Insurance,' my brother and I have received many veries. In fact, the German stations sent cards to both of us, as we usually listen in together. From our experience, we think the most important thing in writing for veries is to get the reports as accurate as possible."

We second that motion, Harold. If every DXer was as conscientious in making up his reports as he is in crying foul when a station doesn't verify, we are sure that his batting average would go up many, many points.

DXing for Two Months

"I am 15 years old," admits Lewis Hill, 2138 S. 16th Ave., Maywood, Ill., "and have been DXing about two months. My log shows a little

over 100 BCB stations and some of the better catches are KFWB, KFVD, KVOR, KGHF, WDAE, KNX and KPO. My receiver is a 7-tube Steinite. If anyone heard a South American on 1220 on December 21st, I would like to hear from them."

"As I write this," reports Robert Handforth, 117 Emerson Ave., Toronto, Ont., "my log stands at exactly 300 stations. I have received about 50 new ones since last Seotember. My best catches are CMBC, CBR, KFKA, KFPY, KFSD, KFWB, KHJ KMMJ, KROC, WEXL, WLAP, KVOD, WMBR, CHNS and WJBW. I have completed the District of Columbia, West Virginia, Rhode Island and Illinois, and need but one more in Ohio and two in Indiana. However, there are still six states which I haven't heard. Try as hard as I can, I can't seem to get KOB. although I've heard KEX."

"I have been DXing actively for about three years," writes Donald C. Truax, 539 Woodlawn Ave., Aurora, Ill., "and the best veries include LS2 LR1, TGW, KHBC, WPRP and WNEL. The log at present contains 526 active stations, all of which have been logged since March 1935 when I purchased my present receiver, a 9-tube Lafayette super.

"Why are there so few foreign specials nowadays? I was checking over the DX calendar of two seasons ago, and found that 50 per cent of them were real DX stuff. Iso, why not get specials from stations other than those on the FCC frequency checks?"

This is another problem which must be referred to the CPC boys. In fairness to these hard-working chaps, however, it must be noted that foreign stations are exceptionally difficult to line up for special programs. The Foreign Affairs Department of the IDA spends a

great deal of time trying for transoceanic specials, but uncertain reception conditions make it difficult to secure the proper co-operation.

Wants Old Receiver

"How I long for my old radio!" bemoans C. E. Sleichter, Rt. 6, Box 6355, Sacramento, Calif. "I fell for one of the new sets, and it is a failure on DX work. My old Kolster used to bring in a new station every 10 kilocycles along the dial, but no more. The two words, sensitivity and selectivity, are not used by manufacturers any more. Instead, they stress trick names for gadgets which don't mean a thing to the DXer."

Regusted With BCB DXing

"Up to my last report to you," writes George Nahas, 147 Seeley St., Brooklyn, N. Y., "my DXing had been confined to short wave reception. So last week I decided



Out in front of the array of talent in Horace Heidt's Brigadiers program is Lysbeth Hughes, soprano soloist. This program is broadcast over the Blue Network on Tuesdays from 9 to 9:30 pm

to give the broadcast band a whirl and prepared myself for a trip around the world, expecting to hear France, Germany, Argentina, Brazil, Hawaii, Alaska, Australia and, perhaps, Japan. Well, after about 30 hours of dial twisting. I found myself holding the bag with the following colossal, stupendous, rarely-heard catches: WQAM, KARK. KWNO. WTAW. WOLS. WDAE. WNEL, WLAK. KTEM. WFOR, WPAR. KFBK. KPAC. WOMI, KXYZ, XEFO, CMBY, KNX, KFI and KFVD.

"Holy Mackeral! If I only knew in the beginning that all I was going to hear was the above, plus twice as much static, I wouldn't have wasted all those sleepless nights. Static was so bad that turning the volume control on more than one-third would have started an Indian War, with the rest of the household coming down after my scalp.

"Yesterday afternoon I gave Mr. Grunow a chance to redeem himself. Between 1 and 3:30 p.m., EST, he proved that he had plenty of sensitivity and selectivity. Starting at the lower frequency end of the dial, I was able to log WGR, WFIL, WTAG, WICC, WIP, WHJB, WMAL, WTAR, WGY, WEEU, WGBI. WPEN, WRC, WBZ, KYW, WTIC, WTAM, WDEL, WHAM, WCAU. WEST, WIBX, WNAC, WFBR. WCAM, WDRC, WDAS, WJSV and WBRY, in addition to all the stations in and around New York.

"After I put earphones on the receiver, I expect much better results during the evening and early morning hours."

Completes First Year

"I commenced DXing just after midnight on January 1, 1937," recalls Richard Wright, 5762 Harper Ave., Chicago, Ill., "and completed my first year of this hobby on December 31st last. During that time, I logged 506 stations, with five in Canada, 13 in Cuba, 5 in Mexico, three in Puerto Rico, and 24 in Canada. All of the states but Nevada have been heard, as well as all provinces but Nova Scotia, New Brunswick and Prince Edward Island. I have verified 174 stations, with 23 of these in foreign countries. I am interested in collecting a list of transmitter locations and would be glad to receive any information from other readers."

"In eight or nine years of DXing," offers Clarence Wakefield, Wiarton, Ont., "I have logged 760 stations on the broadcast band. So far this season I have added about 35 new ones, mostly on the FCC tests. There are 53 Canadian stations on my log, most of them verified. Not many stations in the United States and Canada refuse to verify, although quite a few Cubans and Mexicans fail to reply to reports.

"Incidentally, I get a lot of cards from U. S. stations which have been returned for postage or which come through with one cent due. I guess a few people don't know that the regular penny card, which goes anywhere in the United States, must have an additional cent of postage before it comes into Canada."

"Veries from KELA and KGU have brought my total of stations heard to over the thousand mark," reports Alfred Razzando, RFD 1, Fayette City, Pa. "To date I have 37 in California, six in Oregon, 14 in Washington, one in Nevada, four in British Columbia and eight in Baja California—making a total of 71 veries from the Pacific Coast. Some of my best veries are 10BL 10AK, 10BP, 10BQ, CKCK, VAS, CJLS, KGU, LXL, KFIO, KUJ, KVI. KXA, KWSC, KERN, KPMC, KGFJ. KRKO, KYOS, KLX, KWG, KQW, KFXM, HJB, CMC, XEN and XED. Have been hearing strangers on 800 or 810 and on 1100 kcys, in the early morning hours, and would appreciate information as to their

identities. Also would like tips on the best time to hear stations in Alaska and Newfoundland."

We rather imagine that a lot of listeners throughout the United States would welcome tips on how to log those stations in Alaska and Newfoundland. Perhaps RADEXers may have some ideas.

Experimental DX Party

"I'd like to DX with a DXer from Virginia, Texas, Minnesota and Kansas from local midnight to 6 a.m. on Saturday, April 23rd," states Warren E. Winkley, Hughson, Calif. "The purpose of this would be to study DX conditions in the early Spring. Next season I want to try this every three months. The first DXer from those states to write me, will be chosen to take part in the experiment."

This is something new in the way of DX parties and we are sure that it should appeal to listeners in the states mentioned. While information concerning the exact procedure to be followed was not given, interested DXers may obtain this by writing to Mr. Winkley. Listeners in other parts of the country, who may wish to listen in on the morning of April 23rd, are invited to send their reports to us.

"I have just received a verifica-KATE," contributes from Leonard Woodall, Route 2, Plano, Texas, 'which gives some information about their station. They use a 250-watt Western Electric transmitter, microphones and speech equipment, and have a 242-foot Blaw Knox vertical radiator. Their regular schedule is from 7:30 a.m., EST, until local sunset. Their FCC frequency check is scheduled between 3 and 3:20 a.m., EST, on the second Friday of each month. According to the station, all correct accompanied by return reports postage will be verified."

Word from Washington indicates that the FCC is revising its fre-

quency check schedule and listeners may expect quite a radical change. As soon as a copy of the schedule is released, it will be published in RADEX.

Reception Helps

Judging from recent reports, stations to the South continue to break through the broadcast spectrum with considerable strength, and many DXers are finding it increasingly difficult to identify the Spanish-speaking broadcasters. The following list of stations more frequently heard was compiled by Carroll Weyrich and Earl Roberts of the Newark News Radio Club, and appeared in the January 10th NNRC bulletin:

NNRC bulletin:

570 CMCY Havana, Cuba
600 CMQ Havana, Cuba
625 TIPG San Jose, Costa Rica
630 CMCD Havana, Cuba
650 TIX San Jose, Costa Rica
720 CMK Havana, Cuba
755 CMBL Havana, Cuba
760 CMHX Cienfuegos, Cuba
810 CMCF Havana, Cuba
830 LR5 Buenos Aires, Arg.
850 CMCM Havana, Cuba
854 OAX4A Lima, Peru
880 CMW Havana, Cuba
882 YV5RQ Caracas, Venezuela
955 CMBC Havana, Cuba
960 YV5RA Caracas, Venezuela
970 CMBY Havana, Cuba
1000 CMBY Havana, Cuba
1000 CMBZ Havana, Cuba
1005 YV5RG Caracas, Venezuela
1030 CMCK Havana, Cuba
1105 HJ3ABD Bogota, Colombia
1110 CMCJ Havana Cuba
1120 YV1RF Maracaibo, Venez.
1190 LS2 Buenos Aires, Arg.
1200 CMCO Havana, Cuba
1220 HJ3ABE Bogota, Colombia
1230 CMCB Havana, Cuba
1245 TGW Guatamala, City
1260 CMC Havana, Cuba
1275 CMCA Havana, Cuba
1276 CMC Havana, Cuba
1277 CMC Guatamala, City
1278 CMCQ Havana, Cuba
1410 CMCQ Havana, Cuba
1410 CMCQ Havana, Cuba
1410 CMCQ Havana, Cuba
1410 CMCQ Havana, Cuba

It is likely that Radexers will be able to make additions to this list. If such information is forwarded from time to time, we will keep the list up to date and run it every month.

Another way to increase a log with new stations is to get up early in the morning and catch the stations as they sign on for the day. From the Universal DX Club bul-

letin of January 1st, the following list of sign-on times was computed by Isaac T. Davis. The first column gives the frequency, the second column the call, and the third the sign-on time as a.m., Eastern Standard. Four stars (****) indicate an all-night station.

550-WKRC	6:30	1070. WTAM	6:00
560-WQAM	6:00	1080 WBT	6:30
560 KWTO	6:00	1090 KMOX	6:30
570 WNAX	6:45	1120 KRSC	***
580 WIBW	6:00	1130 WJJD	6:45
590 WEEI	6:45	1140_KVOO	6:55
600 WICC	6:00	1150 WHAM	6:30
610 WCLE	6:45	1160 WWVA	6:00
630-WMAL	6:30	1170 WCAU	6:00
640 WHKC	6:30	1180 WMAZ	6:45
680 WPTF	6:30	1190 WSAZ	6:00
700 WLW	5:45	1200 WJBW	****
730 XEPN	5:45	1230 WNAC	6:00
740 KMMJ	6:00	1240 WKAQ	6:00
750-WJR	5:45	1250 WNEW	***
760 XEOK	水水水水	1260 KOIL	6:00
780. WEAN	6:00	1260 WHIO	6:00
800 WBAP	6:45	1270 WASH	6:30
820 WHAS	6:45	1290-WNEL	5:45
840-XERA	***	1300 KFAC	
850-WWL	6:30	1310 WFDF	6:00
870 WLS	6:30	1320 KRNT	6:00
890 KFNF	6:30	1340-WSPD	6:30
920 WWJ	6:00	1350 WAWZ	6:00
930 KMA	6:00	1370 WBLK	6:00
940 WDAY	6:00	1370 KRE	
950 WRC	6:00	1380 WSMK	6:00
960 XEAW	5:45	1390 WHK 1410 WAAB	6:30
990 WBZ	6:00		5:00
1000 WHO		1410 WHIS 1420 WMBS	6:00
1010-KNOX	6:30		****
1030-CKLW	6:00	1420 KAL 1430 WBNS	6:30
1040 KWJJ		2 200	6:30
1040 WTIC	6:00		6:30
1060-WBAL	6:00	7 100 11 (1111	****
1070 KJBS	-a- rin nin nin	1500 WJBK	

CMHJ DX Special

"Due to absence from this city," writes Enrique Hidalgo, Prado 210, Cienfuegos, Cuba, "I have been unable to give another winter series of DX programs from CMHJ. I am now coaching the Cuban Olympic Track and Field Team, which will participate in the Central American Games at Panama from February 4th to 24th. However, CMHJ will broadcast on 1160 keys, from 2 to 3 a.m., EST, on February 13th, and I will try to catch the program from Panama City. I am returning to Cienfuegos on March 1st and will direct another DX program over CMHJ from 2 to 6 a.m., EST, on Thursday morning, March 10th.

Don Ameche



The career of Dominic Felix Ameche convinces us that boredom can be a good thing once in a while. For Mr. Ameche, it appears, was bored with the study of law, and gave it up to be an actor. Today, his acting has made him a star in the movies and on the air. Currently he is a co-worker of Charlie McCarthy and others on the Chase and Sanborn Hour on NBC.

There was a long period of academic wanderlust in Don's youth, and it carried him through a whole catalogue of educational institutions. First, he went through the public schools of his native Kenosha, Wisc., and then matriculated at St. Berchman's Seminary, at Cedar Rapids, Ia., where he met Honore Prendergast, the girl he later married. Then came courses at Marquette University, Georgetown University, Wisconsin University

sity—none of which felt called upon to confer a degree on the roving scholar. All the while he was studying law, and liking it less and less with each course and lecture. Finally, for relief from the ennui of his textbooks, he turned to campus dramatics. Turned with a vengeance, too.

Answers An SOS

Well, one fine summer noon, the leading actor of the Jackson stock company in Madison broke his leg in an altercation with an automobile. A new Adonis was needed to replace the battered one by 3 that afternoon, and the impresario of the stock company was frantic. He sounded an SOS, and a dozen applicants rushed to the scene, but they were uniformly hammy. The impresario was on the verge of calling the show off when he remembered about that Ameche fellow who did such a good job in the university productions.

A messenger boy was sent to get Ameche, and the law student responded by cutting classes, rushing to the rehearsal hall, rolling up his sleeves and cramming on the part. He learned the role in two hours, made his debut, clicked, and was awarded a 20-weeks contract after the first performance.

Five months of dignified poverty followed a year's tour with this company, before he joined Fisk O'Hara in a play named Jerry, For Short. Then stock in Greenwich, Conn., vaudeville with Texas Guinan, an eight weeks' run in Illegal Practice. Then unemployed again.

Jobless Don went to Chicago, heard about a radio audition for an air program called Empire Builders, entered the competition, and won. Six years of bending over microphones, during which he starred in NBC's popular Grand Hotel and First Nighter dramatic series, made him a personality on the air. And

it was during his work on the networks that Darryl F. Zanuck, production chief at 20th Century-Fox, heard him, liked him, decided to watch his career, watched it, brought him to Hollywood, gave him a featured role in Sins of Man five hours after the boy arrived in Hollywood, and told the press that he considered the Kenoshan one of the most important screen discoveries in recent years.

Gets Lead Role

This was no mere chatter on the part of Mr. Zanuck, who demonstrated his confidence in Ameche by assigning him the lead role in Ramona, opposite Loretta Young. On the basis of his performance in this picture, Ameche was awarded important roles in subsequent pictures.

Don is in his middle twenties, he stands six feet one, weighs 190 pounds, has dark hair, large brown eyes and a wide smile that displays a handsome set of teeth. His speaking voice is a soft baritone, his singing voice a light tenor. A son of pious Italian parents, he is deeply religious himself.

Ameche preferences and The aversions are many and interesting. He prefers poker to bridge, a pipe to cigarettes and he always eats a second slab of apple pie. He dislettuce, tight collars likes chicken a la king, and although he doesn't consider a cocktail a devil's potion, he likes grapefruit and Dago red much better. When he gets up in the morning he acts bewildered and cross, but once he's awake he's affability itself. He works out every day of the year-either tennis, swimming or riding, and he is in fine trim.

It is estimated that there are more than 57,000,000 radio sets in use by English-speaking families throughout the world.

HELP for Our Puzzled Readers

• • By the TECHNICAL EDITOR

DX on 6 Tubes

I purchased a RCA Victor 6 tube set in 1937 but have had very poor reception. I would like to pull in a few DX programs but am wondering whether this set is too weak for short-wave reception. Is there some attachment that will clear up the air and eliminate interference that I get from a local station? This station comes in at several places on the dial. Other set owners say they get good reception nearby. Either end of the dial is also just a blur of stations. What can be done to improve this set?

Since other set owners do not experience this same trouble it is likely that your receiver is at fault. While it is true that only 6 tubes are used, the set is modern and is capable of giving DX and shortwave reception most of the time. While DXing with this set cannot be expected consistently, it will, however, be possible at frequent intervals when all the conditions are favorable. Also, DX on short waves with a set that has so few tubes is a question of careful tuning and much patience; it is quite practicable. Just how far and how much DX is possible with this set we cannot predict, but at least European and South American stations ought to be heard.

The local interference is due to some combination of harmonics within the set. This causes the interfering local to repeat itself at two or more points on the dial. If it is caused by an unfortunate combination of the station frequency and the receiver's intermediate frequency, it is likely that a good service man can readjust the i.f. of the set a small fraction, but this opera-

tion is not always to be recommended. Perhaps a wave trap will solve the problem, and we suggest that you discuss this with your serviceman, as he can build such a trap quickly and at little expense.

However, we believe that a complete examination of the set with a view of realigning the trimmers might correct the trouble. Since you have failed to furnish us with the model of this set it is impossible for us to go into the details of adjusting these parts. Your serviceman is capable of doing this quickly.

Ultra Short Waves Weak

I have a Zenith 12U 158 which I think should do better. A nearby local station covers about 30 points to either side of its assigned frequency. But I have not been able to hear anything on the ultra short waves unless I turn the volume up as far as it will go, and then all I get is a couple of amateur stations. My service man claims it is corrected and nothing is wrong. But one man says it needed new i.f. coils and a padder condenser. Are these coils alike, and what is the rating of the padder? Are they expensive?

You are the owner of a very good receiver. It should be sensitive and selective if in a proper operating The fact that it brings condition. in a local station over a wide part of the dial indicates that your antenna may be too long; that the station is quite nearby; or that the set is in need of readjusting. It may be necessary, although it is unusual, for some adjusting and aligning of the "A" broadcast band. Your local serviceman can do this. He must set his generator to 1400 kilocycles and then 600 kcs., adjusting both times the broadcast oscillator trimmer placed in front of the chassis. Then the r.f. and detector trimmers must be adjusted. On 600 kcs. the broadcast padder must be adjusted for greatest signal output. The four i.f. trimmers are adjusted with the generator set to 456 kilocycles. The "B" and "D" bands should not be touched unless they too are not properly lined up on the dial.

Band "C" for the ultra short waves has no adjustments. Great care must be exercised to see that the leads or their positions as well as the coils for the short waves are not moved or changed in any way, as this will affect the tuning of the band. Therefore, there is no adjusting to be done on this band.

Your short-wave troubles quite common. Read the article in the January issue of RADEX on short, short waves. Reception on this band is neither consistent nor reliable. The same thing often applies to the 20-meter and 16-meter bands on 3-band sets. Remember that this seldom is the fault of the set. But it is true that lack of sensitivity on this band may be due to an open oscillator coil, open or shorted .0012 mfd. condenser, a shorted 50 mmfd. condenser across the high frequency coil, or grounded trimmer on the detector section of the tuning gang condenser. The first detector tube, a type 6L7G, often gives trouble; also, the second detector, a type 6H6G. The first tube, or the r.f., may also be failing on the high frequency band. We suggest that you first try replacing these tubes, or make a test substitution if they should appear to test up satisfactorily.

The two i.f. coils or transformers are slightly different in this set. They are relatively inexpensive, costing about \$1.25 each at the factory. The small padder condenser

has a capacity range between 200 and 550 mmfds., and costs about fifty cents. We have our doubts whether these parts are defective, yet, of course, it is possible. This fact cannot be determined without a careful check.

DX Signals Fade

A set which I now own is called the "Admiral." It has 19 tubes and two 12 inch speakers. Who makes this set? But on foreign reception the signals often come in with a wavy sound. Can you suggest the possible cause of this trouble? In addition to this, the set often cuts off suddenly and then comes in again with full volume. This trouble occurs mostly after dark between 5 and 9 in the evening. What type of antenna do you recommend?

"The Admiral" receiver is manufactured by the Continental Radio and Television Corporation. As there are over 30 models listed it is difficult to determine just which one is yours. All have an intermediate frequency of 465 kilocycles.

The wavy sound heard on the distant short waves is natural. Fading occurs in the upper atmosphere, and this causes the signals to diminish in intensity at irregular intervals. All DXers are familiar with this strange happening. It sounds as if the wind were blowing the signals along in waves. Fading is a natural thing—man cannot change it. But we do, however, control it to a great extent through the action of the automatic volume control in our receivers. As the signal begins to fade below the level of volume set for it by the hand operated volume control, the automatic volume control begins to feed it more and more current which boosts the audio amplification of the fading signal. This tends to maintain the signal at the constant level originally fixed by the volume control knob. However, as the fading signal goes down and the automatic volume control goes up, there is apt to be some distortion and increase in noise level. All this action, together with severe fading that the volume control cannot bring up to the predetermined strength, causes a wavy movement or the swishing or blowing sounds so often noticed. There is nothing that can be done about it except maintain the automatic volume control in good shape by replacing that particular tube from time to time if required.

Cutting off of signals is usually caused by some mechanical or electrical defect within the set. heat created as the set warms up often expands some poorly made joint or contact and this suddenly opens the circuit and kills the set. Then, as the set cools, contraction sets in, the open circuit closes and the set commences again to operate. Such failure is perhaps more often observed in one of the resistor or condenser units as they are easily affected by heat, particularly the former. A tube can also cause similar trouble, but may not show it on formal checking. The tube must be operated for some time so it will become good and hot. Your serviceman should be able to locate the trouble, but first must run the set some time so it will heat up normally. The fact that this trouble comes on between 5 and 9 p.m. more than at any other time causes us to believe that there must be some increase or surge in the power line that creates voltage fluctuations, and these in turn throw a higher potential into the receiver and cause momentary strains on the defective parts. However, a simple thing like defective antenna wires or ground wires, worn lighting cords, etc., may also cause this cutting-off effect.

Your antenna is very good, and as long as the set tunes sharply it is not necessary to reduce its length to less than 80 feet. However, 40 feet is usually a good total length for a large and powerful set. The doublet antenna need not be used unless you are bothered with too much man-made interference, because it appears you are deriving excellent foreign reception when the set works.

Automobile Noises

I have a very good set that utilizes twelve tubes of the most modern types. This receiver has four bands, one being for the very short waves. Automobiles bother me considerably on this one band, but they are heard correspondingly less as the wave bands progress toward the broadcast band. Can this automobile noise be eliminated entirely on all these bands?

The ignition system of an automobile consists of a number of spark plugs, at least six, and a distributor and circuit breaker contacts. All of these, when working, give off sparks and, as a result, tiny electro-magnetic waves. In the old days of wireless most transmitters were spark operated. Their signal waves carried thousands of miles. So it is not at all surprising that automobile spark systems should carry at least several hundred feet as they pass by our homes and antennas. Naturally all this causes interference in a radio setparticularly one that may be built into the car. In order to prevent ignition-system interference reception in automobiles the car manufacturers have devised means of suppressing the tiny radio waves that are sent out every time the circuit-breaker contact in the distributor fires a plug. When a car that is so built, with a built-in radio set, passes your home, you will not be bothered with noise from the firing plugs in its motor. It will be a happy day for everyone when all cars are so built. But there are many

old cars and trucks on the roads, and some of them really can create a weird disturbance. There is nothing we can do about them.

What we can do, however, is to shield our radios and antennas as much as possible from this form of interference. A noise-reducing antenna with special twisted or shielded leadin wire is necessary. every make of noise-eliminating antenna system on the market today will cut out much of this motor But. unfortunately, noises give more trouble on the very short waves, since the auto wave is quite short in itself. That is why auto interfernce is often heard on the very short waves but not on the broadcast waves when a special doublet antenna is used. Other than the use of such an antenna; the distant location of the antenna; pointing toward the street; and a long leadin, there is little else we can do to prevent auto noises on the short waves.

Silvertone Short Waves

Please tell me what is wrong with my Silvertone 8-tube set. For the past several weeks the 9.0 to 18.0 megacycle band has been dead. I have been unable to get anything on this band, and if I can get stations on all three of the other bands I do not understand why I cannot get some stations on the fourth band, especially England and Germany which are supposed to be easy to get.

There are a number of short-wave stations in the fourth band between 9 and 18 megacycles that you should get easily on this set. These include London and Berlin. The fact that this band is dead while the remaining three bands are normally active indicates that there is trouble on this short-wave band.

We suggest that the switch operating this band be examined carefully. It should make good con-

And all wires leading to it tact. and the associated coils must be well soldered. The coils must be perfect and not be broken or loose. condensers in this particular band, trimming the short wave transformer, may be open or shorted. There are a number of things in the circuit that must be examined carefully by your service man. A poor tube, too, can cut out the short wave portion if it is not oscillating properly at the high frequencies. The second detector as well as the first might need replacing. Substitution of these tubes, even if they test satisfactory, sometimes is essential. Care must be taken not to move or change the position of any of the wires or parts of this circuit while making the examinations. wave tuning, too, is tedious. reception is not always consistent; some nights are better than others. We think that a careful check will quickly locate your difficulty and renew the good qualities of this receiver which are built into it.

10-Meter Band

My receiver seems to be dead on 10 meters, and not very sensitive on 20 meters. Amateurs on the Pacific Coast can be heard fairly well on the 20-meter band, but have not been able to get stations that far off on the 10-meter band. Their carrier wave is louder than the voice. This set is a Zenith 1938 with 15 tubes. The rest of the set works fine. Can I use a pre-selector to improve this set? What about the antenna?

Of course, you have a very good receiver. But radio reception on the very short waves is far from being consistent. There are times when the 10-meter band just simply closes up and the most expensive set in the world cannot penetrate it. Then, when the band opens up, almost any receiver capable of tuning to 10 meters can pick up signals. This

question of short, short-wave reception is of considerable importance. In fact, it seems to us that sometimes the addition of these wave bands by standard all-wave receivers is still in the experimental stage. The most that can be said in favor of this ultra short wave band is that it is interesting and purely experimental. The builders and designers of your receiver have created the best that radio engineers can produce, but nature still has failed entirely to cooperate.

While you receive stations on the 20 meters as far as 2,000 miles distant, you might not be able to hear the same distance on 10 meters because of the skip-distance effect of the shorter waves. Also, we must not overlook that fact that 10-meter tuning is tedious and difficult—and the number of stations within range of your receiver, allowing for skip distance, might be very small. If there is an amateur radio station in vour vicinity, it might prove to be an interesting experiment if you will communicate with him to find out how the two bands are working, and if good, see whether your set also is working on these bands. Your attention is invited to the short-wave article in the January RADEX, as mentioned in a previous query. As long as the remaining three bands work well, particularly the foreign 6,000 to 10,000 kilocycles band, it indicates that the set is functioning perfectly. However. trouble in the fourth or short-wave band is possible when that portion of the band switch is dirty or working poorly. In some cases the firstdetector or converter tube, a type 6L7G, may seem to be good, but cannot function well on the high frequencies. Substituting a new tube for this, as well as for the type 6J5G oscillator or the second detector 6H6, might make the fourth band more sensitive. Frequently

this experiment has proved the full answer to similar troubles. Your service and instruction booklet should also give some details for short-wave reception.

The 60-foot doublet furnished with this receiver should be used whenever possible. However, we have experienced cases when a single wire with good ground—an aerial about 30 feet long or less—has given the best short-wave reception. The doublet is recommended in every case, however, for all-round reception.

The use of a pre-selector with this or similar sets is not recommended. Your receiver is sufficiently sensitive, and more r.f. amplification will only add to the noise level and your tuning difficulties.

Reading DX Dial

I have a 10 tube Silver Marshall model 726S receiver. Can you please tell me the best type of antenna to use for all bands? I now have a G. E. V doublet type, and while it seems to work well on the 49 meter band, it does not do so well on the other bands. And how do I find short-wave stations when the readings, for example, is-6.050 GSA GB 20? This set has two dials and the standard dial has to be turned below 55 kcs. or I get standard broadcasts even when I have the band switch turned to short waves. What causes this?

The doublet antenna you are using is one that has been quite satisfactory, but it might not be matched to your set. Sometimes a single wire, from 30 to 60 feet in length, with a good ground contact, is sufficient provided you do not have an excess of local noises and automobile traffic. In the latter case the doublet will reduce the static interference. You might write to the manufacturer and find out which antenna they recommend as being perfectly matched to the input im-

pedances of their sets. In addition to your present type, there are several very efficient makes.

The listing of short-wave stations is given in all issues of RADEX. This, as given in your example, means: 6.050 indicates the dial setting or the frequency of the broadcast signals. It really means that this signal has a frequency of 6,050 kilocycles, or 6.05(0) megacycles. One megacycle is 1,000 kilocycles, or 1,000,000 cycles. It is a more convenient method of referring to the high frequencies which run into Your reading of large numbers. 6.050 mcs., represents 6,050,000 cycles or a wave length of 49.59 meters (300,000 divided by 6,050). So, when you see a reading like this in megacycles or kilocycles, it means that you should set your dial to a similar position in order to locate the station. Careful tuning is then necessary as the station may be a bit to one side of the setting.

The letters GSA, etc., after the frequency setting refer to the call letters of the station that operates on that particular frequency. Following the letters usually comes the location of the station—the city and country. The next figure, which, in your case is 20, refers to the power of the station in kilowatts. This station has a power of 20,000 watts, or 20 kilowatts. This is sufficient power, in normal times, to carry from England, where GSA is located, to most parts of America.

Now, if your dial is not subdivided into kilocycles on the shortwave band, some difficulty will be experienced in locating stations. On the standard broadcast band kilocycle readings will be given, usually ranging from 550 to about 1,500 kcs. These numbers correspond to those given in the tables in RADEX. But on the short-wave dial, reading from 1 to 100, several stations will have to be located first and their read-

ings then indicated. Then you can estimate the spacing between these known points, by interpolation, and fix the tuning spot of any other short-wave station given in RADEX' lists.

If it is necessary to turn the standard broadcast dial down to 55, even when the short-wave switch is thrown to SW, in order to prevent broadcast stations from being heard on the short-wave band, there is something wrong with the switch. Have the parts carefully examined and replaced if found defective. Turning the broadcast dial below 55 cuts out any stations that may be heard, and leaves the short-wave dial free of interference. This trouble, too, will tend to weaken the short-wave reception. We suggest that this defect be looked into by a good serviceman, and he will be able to make correction quickly and at little expense for labor.

Aligning Crosley 915

I have a Crosley 915 of 1936 which I have tried for long to adjust. It has 5 transformers and each has 5 set screws, and two other transformers with 2 and 3 screws each. I do not know which screws to set for the 5 different bands. Please tell me how to adjust this set and how to get at the parts to be fixed.

We do not recommend that your attempt any adjustments on this To be done correctly it is a job that must be tackled by a good serviceman. First, you ought to have a signal generator or oscillator so as to tune the long wave and broadcast bands. And when you get into the short wave bands, especially the 5th band, a signal generator is an absolute necessity. There are many trimmers to be set, but there is no way of knowing when they are set properly and to proper frequency unless you have the generator and its associated output meters. In all

(Please turn to page 38)

The International DXers Alliance

HE International DXers Alliance, organized to promote and foster the hobby of DXing, is a little more than five years old, having been founded on November 1, 1932. The following January, the I.D.A. distributed to its less than 50 members the first monthly issue of the Globe Circler, a fourpage mimeographed bulletin.

By February of 1934, the bulletin had grown to 10 pages, about the maximum size practical for mimeograph production, so in March of that year the first 8-page printed Globe Circler put in an appearance. The Globe Circler has shown a steady growth and now includes from 16 to 20 printed pages of DX facts and photographs each month.

The growth of the I.D.A. has kept pace with that of its official organ, and today it is the world's largest honorary all-wave DX listeners organization, and numbers members and representatives in 45 states of the United States and in over 60 foreign countries. Besides the Globe Circler, the I.D.A. publishes monthly Ama-Touring, the only publication dealing exclusively with reception on the amateur bands. At irregular intervals, the I.D.A. also issues the Forum, an informal bulletin dealing with the activities of members.

Charles A. Morrison, Short Wave Editor of Radio Guide and a contributor to many radio publications, is the founder and president of the International DXers Alliance, and Editor of the Globe Circler. Cosharing with him in the responsibility of directing the wide-spread activities of the organization are three vice-presidents, a board of seven directors, an official secretary, and a staff of foreign representa-



Walt Disney's famous characters, Mickey and Minnie Mouse and all the rest of the gang, are heard on the new Red network show on Sunday afternoons at 5:30 pm.

tives and state managers.

The first local branch chapter of the I.D.A. was formed in Toledo. Ohio, in March, 1934. Since that date, local chapters have been organized in Phoenix, Ariz.; Los Angeles and San Francisco, Calif.; Revelstoke, B. C.; Regina, Sask.; Calgary, Alta.; Halifax, N. S.; Lansing, Kalamazoo and Detroit, Mich.: New York City, and in England, Malta and Australia. Each chapter is a focal point of I.D.A. activities and radio interest, with from 10 to 50 members. The Foreign Affairs Department of the I.D.A. is a special staff of correspondents set up for the purpose of maintaining contact with foreign countries and arranging special broadcasts from stations in those countries. During the past five years, this department has been responsible for planning programs from every part of the world, including the first DX broadcasts ever to originate in several different countries.

The I.D.A. has sponsored three international DX contests, in each case giving valuable awards and trophies to the winners.

Special certificates of merit are available for outstanding accomplishments in the broadcast field. The hard to obtain, but eagerly-sought-for, "Doctor of Short Waves" degree is conferred upon members who have achieved outstanding merit in the short wave field.

Each week special tip periods are sponsored by the I.D.A. over various radio stations. Outstanding is the weekly "Mail Bag" program broadcast over the international short wave stations W2XAF and W2XAD at Schenectady, N. Y., on Tuesdays at 6:35 p.m., EST.

The I.D.A. is essentially a non-profit organization and is, therefore, financially dependent upon the small annual individual membership fees of \$1.25 for its continued existence.

Last but not least, the International DXers Alliance believes that, despite the apparent unrest in the world today, radio has been responsible for real progress towards a better spirit of co-operation between nations, and it is doing everything within its limited scope to aid in bringing about better conditions of friendship between nations and individuals.

The headquarters of the International DXers Alliance are at Bloomington, Ill., and full information about the club and a sample copy of the *Globe Circler* will be sent to anyone interested.

Figyelem Magyar DX-erek!

A NEW radio club is being organized by the Hungarian DXers in America. A large fraternal and insurance organization has promised space in its weekly publication and a number of DXers have already offered their support of the plan.

The club, to be known as the "Veshovey Short Wave Club," was conceived by Albert Steinmetz of Bayonne, N. J. Some of the well-known DXers who will support the plan are Julius Orosz of Cleveland, F. E. Bartholy of Pittsburgh, Joseph A. Markovits and Albert Farkas, Jr.

All DXers who will agree to report regularly to club headquarters will receive the official magazine, "Verhovayak Lapja" free for one year.

Hungarian radio fans from all over the world are invited to write to Albert Steinmetz, 125 West 27th St., Bayonne, N. J., for further details.

Walter Winchell prefers the role of Jergens Journal radio editor and daily newspaper columnist to that of film star. With two successful films to his credit, the NBC commentator claims he has had enough of Hollywood. His Sunday night program on NBC and his six newspaper columns a week are enough, he says, to keep him busy.

Parks Johnson, co-conductor of the NBC Vox Pop program and the new NBC Radio Newsreel program, is beginning to wonder if New York is doing things to him. Born in Alabama, a resident for many years of Texas, he speaks with a slight Southern drawl. Yet he has just received a letter from a fan who refers to his "typical Brooklyn accent."

For the SHORTWAVE Fans

Australia

The call sign VLR is now used by the Melbourne station formerly known as VK3LR. VLR transmits on 9580 kcs. from 1 until 9:45 a.m., EST. (RX72 II1).

Brazil

PSH, 10220 kcs., located in Rio de Janeiro, broadcasts daily from 7 to 9 p.m., EST. Announcements are in English and Portuguese, and they sign off with the Brazilian National Anthem. The address is Caixa Postal 709. (RX25 N. Y. RX27 N. Y., RX51 Mass., RX52 N. Y., RX76 Nebr., RX77 D. C., RX78 Minn., RX103 Conn.).

British Guiana

VP3THE has ceased transmitting and at this time the equipment is probably on the way to Georgetown, according to announcements from the station before it closed down. (RX34 Kans.).

British West Indies

Station VP2LO in Saint Kitts will be on the air on 12765 kcs. from 3 to 10 p.m., EST. (RX51 Mass.).

Canary Islands

EAJ43 on 10370 kcs. is best received between 3 and 4 p.m., EST. (RX27 N. Y.).

Colombia

HJ1ABE in Cartagena is now on 4860 kcs., asking for reports, which are to be addressed to Box 31, Cartagena. This station signs off with an organ playing "Aloha Oe." (RX79 Ohio, RX90 N. Y.).

HJ2ABC in Santa Marta, 6025 kcs., is heard at 7:30 p.m. . . . HJ3ABH Bogota on 4900 kcs. have moved from 6012 kcs., and is heard near 9:30 p.m. broadcasting waltzes and announcing in English. . . . HJ1ABE in Cartagena is now on 4860 kcs. between 9:30 and 10 p.m. (RX34 Kans.).

HJ6ABC on 4740 kcs., Ibague, is heard from 6 to 11 p.m. This was formerly HJ4ABC. HJ2ABJ, 4660 kcs., Santa Marta, is heard from 5:30 to 10:30 p.m. . . . HJ4ABP on 4880, Medellin, is heard near 11 p.m. (RX51 Mass., RX79 Ohio).

Costa Rica

TI4NRH, "The Voice of Costa Rica," at Heredia, one of the oldest shortwave stations in the world, has returned to the air. This, "the most friendly station," employs 500 watts power now, and wishes reports by airmail. Schedules are maintained on Tuesdays, Thursdays and Saturdays from 9 to 10 p.m., and on Sundays from 7 to 9 a.m., EST., on 9670 kcs. The owner-operator-announcer is Amando Cespedes Marin. Apartado 40, Heredia. This station always acknowledges correct reports promptly. (RX23 Minn.).

TI4NRH was heard several times broadcasting test programs between 11:45 p.m. and 12:15 a.m. (RX25 N. Y., RX51 Mass.).

Station TIX in San Jose announces the call letters TIX in Spanish instead of the former call, TIXGP3. (RX34 Kans.).

TIPG on 6410, San Jose, was heard broadcasting the "Costa Rican Hour" and giving station announcements in Spanish and English. Verifications were promised in return for correct reports which are accompanied by the usual Reply Coupon. (RX25 N. Y.).

Ecuador

HCJB in Quito on 8830 kcs. transmits from 8:30 to 10:30 p.m. EST., daily except Mondays, and is heard best near 9 p.m. (RX51 Mass.).

The Ecuadorian on 9300 kcs. has been identified as HC2CW, "Ondas del Pacifico," situated at Guayaquil. Station "Radio Paris," also in Guaya-



Barbara Luddy, known to the nationwide NBC audience as the co-star of Campana's First Nighter broadcasts, is also the star of a day-time program, "Margot of Castlewood." She plays the title role in this new serial which is broadcast Mondays through Fridays at 10 am, EST, on the Blue network.

quil, HC2RA, is working on about 9480 kcs., next to HC0DA, "La Voz del Alma." (RX52 N. Y.).

Great Britain

Transmissions from Daventry in the Arabic language were inaugurated on January 3. This new service is broadcast daily on GSC, 9580 kcs., from 5:17 to 6:15 p.m. GMT.

Guatemala

Very attractive cards are sent out by TGWA in Guatemala City. The frequencies employed by this station, "The Voice of Guatemala," are 9685, 11760, 15170 and 17800 kcs. (RX30 Ky.).

Haiti

HH2S in Port-au-Prince, 5885 kcs., was heard on this new frequency broadcasting orchestra music at 9:45 p.m. Announcements are made on the even hour in French, Spanish and English. They sign off at 10:10 p.m. (RX34 Kans.).

Hong Kong

ZBW in Hong Kong is now heard well in the east. RX27 (N. Y.) heard it on 9525 kcs. between 5:30 and 6 a.m., EST.

Iceland

TFJ in Reykjavik, 12230 kcs., is heard with an R6 signal at 2 p.m. on Sundays. News in English is broadcast at this time. (RX23 Minn., RX27 N. Y.).

Italy

IRF, Rome, on 9830 kcs., broadcasts the American Hour from 7:30 to 9 p.m., EST. (RX23 Minn., RX51 Mass.).

Japan

JZJ on 9535 kcs. is on the air from 4:30 to 5:30 p.m., and heard at about R6. (RX51 Mass., RX72 Ill.).

JVH on 14600 kcs. is heard at 7 p.m. with talks in Japanese, and after 11 p.m. with musical programs. (RX23 Minn., RX27 N.Y.).

Kwang Tung

JDY at Dairen is heard on 9920 kcs. at about 6:40 a.m. (RX23 Minn.).

Note: Kwang Tung is a former Russian province in N. E. China; leased to Russia in 1898 but ceded to Japan by Treaty of Portsmouth in 1905; capital, Dairen.

Kwangtung is a province in S. E. China; capital, Canton.

(Funk and Wagnalls)

Martinique

"Radio Martinique" announced that they are on the air at 12:30 p.m. daily, in addition to their regular program from 6:45 to 7:45 p.m., EST. This station has also been heard several times on late night broadcasts, once near 11:55 p.m. and again at 12:50 a.m. (RX51 Mass.).

Mexico

A station known as "Radiodifusora del Pueblo," located at Guadalajara, Jalisco, Mexico, is on the air from 9 to 11 p.m. on 7090 kcs. No call letters are announced. It is owned by the National Revolutionary Party, and the address is Madero 210, Guadalajara. (RX51 Mass.).

XETW in Tampico, on 6045 kcs., is heard through heavy interference, relaying the programs on XEFW. (RX34 Kans.).

XEWW, Mexico City, 9500 kcs., broadcasts world news near 8:30 p.m. (RX51 Mass.)

Netherland Antilles

PJC1, Willemstad, Curacao, in the Netherland Antilles (formerly the Netherland West Indies) was heard broadcasting orchestral music at 8:15 p.m. on 5940 kcs. Announcements were exclusively in Dutch, and they signed off at 8:36 p.m. (RX34 Kans.).

Panama

The Panama City station HP5B on 6030 kcs. is best heard at 6 p.m., although interference is heavy. (RX34 Kans.).

Peru

"Radio Nacional del Peru" at Lima has been testing with the BBC on 15170 and 19780 kcs. between 6 and 8:45 GMT. (RX30 Ky.).

Philippine Islands

Station KZIB, Cebu, on 900 kcs., has advised a member of the New Zealand DX Radio Association that they have a shortwave station under construction, but no frequency or other details were given.

Spain

EAR in Madrid is broadcasting now from 7.30 to 8 p.m., EST, and again at 9:30 p.m. on Mondays, Tuesdays and Thursdays. Talks are given by various foreigners in Madrid. The signal strength varies greatly, from R1 to R8 or more.

Straits Settlements

Alan I. Breen of Dunedin, New Zealand, reports that a shortwave transmitter is in operation relaying the programs of ZHL Singapore. At 7:55 a.m., EST. on a Saturday, a program of native music was in progress, and it was stated that this was an experimental transmission on 6085 kcs., scheduled to last until 11 a.m. The next experimental broad-

cast was announced for 5 a.m. the following Friday morning, on 9595 kcs. The call signs were understood to be ZHO and ZHP but it is not known which is which. The Singapore station on 6085 was heard with a much better signal than Rangoon, which has been well heard in New Zealand. Both stations should be heard in the United States.

Tahiti

FOSAA in Papeete, Tahiti, transmits from 11 p.m. until midnight on Tuesdays and Fridays. (RX27 N. Y.).

Union of South Africa

The official schedule and call signs of the South African stations, as received direct from Johannesburg, are given below:

There are four stations as follows: ZRD, Durban, 10 watts, broadcasts on 6150 kcs.

ZRH, Roberts Heights, near Pretoria, employs 5000 watts power on 6007 and 9523 kcs.

ZRJ, Maraisburg, near Johannesburg, using 200 watts, transmits on 6097.5 kcs.

ZRK, Klipheuvel, near Cape Town, 5000 watts power, transmits on 6097.5 kcs. and 9606 kcs.

The best time for reception of these stations in the United States is from 11:45 p.m. until 12:45 a.m., EST. The following frequencies are employed at that time: ZRD 6150, ZRH 9523, ZRJ 6097.5, ZRK 9606. The complete schedules of all the stations are given in our s.w. index. (RX23 Minn., RX88 U. S. Africa).

The South African Broadcasting Corp. is now issuing verification cards. Instead of call letters, the initials of the company are printed in large green letters. (RX75 Kans.).

Roberts Heights and Klipheuvel are naturally the most easily received of the South Africans. Roberts Heights is slightly the better of these two. Reported by RX51 Mass.,

RX76 Nebr., RX80 Ont., and RX88, Union of So. Africa.

United States

W8XK on 15210 kcs. is on the air with a new antenna and new transmitting equipment, and is now heard with a much-improved signal. Reports are requested. (RX51 Mass.).

A complete list of the Police Stations of North America was printed in the September issue of RADEX, and changes and additions to this list are shown in this column every month. Alterations which have taken place since our February issue are shown below:

New

		MEM
1.674 1.706	KSPH	Hillsborough, Calif. 25 w. Ten Portable-Mobile sta-
2.100		tions in Oregon, each 10 watts, as follows: KOHF-
		H-I-I-O-V-W-V-7

2.382 WASP Selma, Ala. 100 w. 2.442 WBNC New Castle, Ind. 40 w. 2.442 WBPD Bloomington, Ind. 40 w.



Oliver Wakefield, young English comedian whose sentence-twisting monologues have been heard on several major network programs and in New York's most exclusive night clubs, is the master-of-ceremonies on the new Paul Whiteman program. He is heard at 8:30 and 11:30 pm on Fridays over the CBS.

Uruguay

The Montivideo station CXA8 can be heard daily from 7 p.m. until midnight. (RX27 N. Y.).

Vatican State

HVJ, Vatican City, was heard on 11750 kcs. at 9:55 a.m., EST, with a good R8 signal. They were also on 15120 kcs. at the same time. (RX61 Ariz.).

Venezuela

YV3RB in Barquisimeto is now working on the announced frequency of 6465 kcs. (RX81 Tex.). This station is heard with its best signal between 10:05 and 10:30 p.m. Announcements are in Spanish, Italian, French and English. (RX25 N. Y.).

YV1RH has a very loud signal, on 6365 kcs. Its programs feature Spanish and American "swing" music, played by a studio orchestra. (RX25 N. Y.).

YV1RL Maracaibo on 5930 kcs. is best near 9 p.m.; YV3RA in Barquisimeto reaches maximum strength near 9:15 p.m. on 5895 kcs. (RX34 Kans.).

Phones

INB, Belgium, on 10630 kcs., phones and broadcasts to the Belgian Congo from 2 to 3:30 p.m., EST. HSP in Bangkok, Siam on 17740 kcs., works from 9 to 10 a.m. OPL in the Belgian Congo, 20040 kcs., phones Belgium from 8 to 9 a.m. (RX27 N. Y.).

SUZ in Cairo, Egypt, can be heard testing frequently near 3 a.m., EST. (RX72 Ill.).

Apex

W2XDR, owned by Radio Pictures, Inc., 3104 Northern Blvd., Long Island City, N. Y., transmits near 9 p.m. on about 43 megs. (RX27 N. Y.).

W8XWJ, "little brother" of WWJ, Detroit, now broadcasts regularly scheduled programs independently of any other station. It is on the air fourteen hours daily with its own programs, arranged under the direc-

tion of Wellington Granzow, former program man of WWJ. W8XWJ employs a new 500 watt Western Electric transmitter, installed on the top of the Penobscot Building. The frequency is 41 megacycles.

The Reporters

RX23, Carl and Ann Eder, Pouch A, Willmar, Minn.

RX25, George Nahas, 147 Seeley St., Brooklyn, N. Y.

RX27, Raphael Geller, 1652 Radcliff Ave., Bronx, N. Y.

RX30, R. J. Naber, 417 S. Western Parkway, Louisville, Ky.

RX34, Martin Olthoff, Independence, Kans.

RX51, G. L. Harris, 60 N. Holden St., N. Adams, Mass.

RX52, Samuel A. Meyer, Jr., 83 Canterbury Road, Rochester, N. Y.

RX61, Francis McDonald, 215 E. 34th St., Tuscon, Ariz.

RX72, Gail Beyer, 3226 Sunnyside Ave., Chicago, Ill.

RX75, Billy Richardson, Rich's Cafe, Halstead, Kans.

RX76, Edward Danielson, Jr., Pawnee City, Nebr.

RX77, Chas. S. Greenwood, 115 Second St., N. E., Washington, D. C.

RX79, Theodore Johnson, 821 W. Woodland Ave., Youngstown, Ohio.

RX80, George Wood, Komoka, Ont., Canada.

RX81, M. W. Oliver, Houston, Texas. RX88, Mrs. R. S. Roche, 77 Durban St., Aliwal N., Union of So. Africa.

RX90, Charles Genan, 205 Barrett Ave., Jamestown, N. Y.

RX103, Edwin D. Eaton, 35 Center St., Wethersfield, Conn.

In Bulletin No. 195 of the Chicago Short Wave Radio Club, 345 shortwave stations are listed. A running head on one of the pages reads, "And to think, eight years ago there were less than 25 s.w. stations!"

Amateur

CALLS HEARD

The names and addresses of persons reporting stations shown in this list are indicated by small letters following the call signs. Key to the small letters is given at the end of the column.

Canadian and United States calls heard are listed here only when reported by listeners not resident in North America. Cuban calls are not listed when heard by listeners in United States or Cuba.

C-E

CE-: 1AH (i); 1AO (gi); \$AA (f); 5CM (g); CX3BL (i); EA9AH (e); EI2L (ac).

FA3HC (k); FB8AD (k); FB8AH (k); FI8AC (k); F8KQ (h); G5ML (d).

HC: 1FG (g); 2HP (f); HH: 2B (a); 2G (h); 2LD (e); 5PA (ad); HI: 1P (g); 2W (h); 3N (dfh); 5X (ad); 7G (a); 7I (f); HK: 1JN (de); 1JO (f); 1Z (i); 3JA (ah); 4AG (e); HP1A (g); HS1BJ (k).

KA-: 1BH (i); 1ME (i); 1YL (i); K4-: EAY (f); ENT (a); ENY (a); FAY (a); GJF (f); K6-: BAZ (g); BHL (ji); CMC (j); LKN (g); MTE (j); MZK (g); NZQ (gj); OQE (e); VCK (g); K7FBE (j).

LU: 1DA (f); 1DJ (afg); 1QA (af); 4BH (a); 4CZ (f); 4BH (f); 5CZ (agh); 6KE (i); 7AC (h); 7CA (d).

NY2AE (1); OA-: 4AL (a); 4R (a); OX2QY (ae); PK6HR (k); PY1MK (f); PY7AI (a).

TG1AX (f); TI-: 2AV (j); 2FG (a); 2FI (f); 2RC (ag).

V-W
VE-: 1EI (g); 4EO (i); VK-: 2HS (j);
2IJU (g); 2OB (g); 2VA (j); 3BZ (g);
3TW (g); VO-: 6D (bfhk); 6J (ach);
VP3THE (agk); VP-: 5GM (a); 6MR
(af); 6TR (h); 9R (d); VQ1AB (k);
VR4DC (k); VR4RC (k); VU2CQ (a);
W1OXRA (k).

XE-: 1F (a); 1KY (g); 1LF (f); 2CY (g); 2EC (d); 2HB (g); 2HD (a); 2IY (g); 2JK (g); 2KM (l); XU8JR (i); XU8MC (i).

YI2BC (k); YV-: 1AP (e); 4AA (h); 4AB (eh); 4AF (c); 4AO (e); 5AA (ade); 5ABA (e); 5ABF (ae); 5ABG (a); 5ABG (e); 5ABY (a); 5AD (e); 5AE (de); 5AK (ae); 5AM (e); 5AZ (e).

ZL3BI (g); ZP2AC (ik); ZS3F (a); ZU6P (e); Z6AF (f).

The Reporters

(a) Gail Beyer, 3226 Sunnyside Ave.,

Chicago, Ill. Carl and Ann Eder, Pouch A, Will-(b) mar, Minn.

Charles Genan, 205 Barrett Ave., Jamestown, N. Y. (c) Jamestown, N.

Francis Gmeiner, 661 E. 109th, (d) Cleveland, Ohio. Ralph Hanford, Jr., 1433 Addison (e)

St., Chicago, Ill. (f)

Gilbert Harris, 60 N. Holden St., N. Adams, Mass. Francis McDonald, 215 E. 34th St., (g)Tucson, Ariz.

(h)

(i)

Tucson, Ariz.

Geo. Nahas, 147 Seeley St., Brooklyn, N. Y.

T. E. Plewman, Canadian Mission
Press, Chengtu, West China.

Dale Smith, Eugene, Oregon.

M. E. Smith, 2974 E. 67th St.,
Cleveland, Ohio.

Hadley Wilcox. 623 W. 40th Place,
Los Angeles, Calif. (k)

(l)

Richard W. Fales of the Globe Circlers DX Club, Roslyn Heights, N. Y., informs us that the membership fee in this club has been reduced from \$1.50 to \$1.25 per year. As before, this includes full contest and other privileges, as well as their bi-weekly ten-page bulletin.



"Hello, Stranger," hilarious trade-mark of Sam "Schlepperman" Hearn, comes over the NBC-Red Network on the Jack Benny show on Sunday nights.

Station News

CTATION CMBD has moved from 1170 to 1260 kcs, and now shares time with CMC, on the following schedule:

CMBD, Monday, Wednesday and Friday from noon to 6 pm; Tuesday, Thursday and Saturday, 6 am to noon and 6 pm, to 6 am.

CMC, Monday, Wednesday and Friday, 6 am, to noon and 6 pm, to am; Tuesday, Thursday and Saturday, noon to 6 pm.

The Magic Key of RCA, popular program broadcast at 2 o'clock on Sunday afternoons, is now radiated over four Cuban stations. CMQ on 600 and CMBZ on 1000 kcs, carry the program, as well as shortwave stations COCQ on 9770 and COBZ on $9030 \ kcs$.

A construction permit for the erection of a new station, held by the Telegraph Herald Co. of Dubuque, Iowa, has been suspended, in accordance with a mandate of the U. S. Court of Appeals, as the result of a Stay Order obtained by Sanders Brothers Radio Station. The construction permit for KDTH, 1340 kcs, 500 watts daytime, was granted on July 2, 1937. It will be held in abeyance pending determination of the appeal.

CMQ, which recently moved from 880 to 600 kcs, is expected to change frequency again soon. Our Cuban informant suspects the change will be to 1010 kcs.

Cuba became the first nation to the Pan-American treaty, when President Bru signed it on December 22. The signatures of the United States and Canada are required, and Mexico must signify its willingness to sign, before the treaty becomes effective.

The application of WRVA Wheeling for permission to use 50 kw, power has been favorably considered by an FCC examiner.

Two stations whose issues have been in the D. C. Court of Appeals have been granted permission by the court to proceed with construction. KUTA Salt Lake City and KXOK St. Louis are the stations which have been reinstated.

Examiners' Recommendations

Examiners have recommended that construction permits for new stations be granted the following applicants:

Petersburg Newspaper Corp., Petersburg, Va., to operate on 1210 kcs, 100 watts nights, 250 watts to LS, unlimited time except Sundays. Examiner recommended denial of the same facilities to Havens & Martin, Inc., and John Stewart Bryan of the same city.

Burl Vance Hedrick, Salisbury, N. C., to work on 1340 kcs, 1000 watts days.

Gerald A. Travis, La Porte, Ind., to operate on 1420 kcs, 250 watts daytime.

Sims Broadcasting Co., Globe, Ariz., to transmit on 1210 kcs, 100 watts nights, 250 to LS, unlimited time.

Gila Broadcasting Co., Safford, Ariz., to operate on 1420 kcs, 100 watts nights, 250 watts days.

Harwell V. Shepard, Denton, Texas, to work on 1420 kcs, with 100 watts days.

Frequency Changes Recommended

Grant of CP was recommended conditionally to KSLM, Salem, Ore., to change freq. to 1360 and power to 500 watts, unlimited time.

WELI, New Haven, Conn., authority to change freq. to 930 kcs, power to 500 watts days, 250 watts nights.

WMFJ, Daytona Beach, Fla., to change freq. to 1240 kcs, and power

from 100 to 1000 watts.

WGRC, New Albany, Ind., to change freq. to 880 kcs, and hours of operation from daytime to unlimited.

The Stamp Corner

• • By David Brockton Browne

The House of Representatives has passed a bill which will permit the reproduction of pictures of United States stamps. The bill requires only the President's signature.

"W HY collect postage stamps anyway?" Perhaps some of RADEX' large family of readers have been asking themselves that very question. If so, we shall attempt to answer it.

Practically every man, woman, and child collects something—either as a vocation or an avocation. The love to acquire is inborn and is a strong human urge. Stamp collecting helps fulfill that urge.

Many people long for something in which they can express their own individuality without the hampering bonds of conventionality, and the many other "thou shalt nots" that each one of us meets—consciously or unconsciously — every day of our lives.

In stamp collecting, the individual is his own master—he can collect what he chooses and when he chooses. If he wants to collect nothing but stamps with pictures of ships or castles—he may. And many wonderful collections have been built along specialized lines. If he wants a general collection with a little bit of everything—that again is his choice. He may do whatever fancy dictates—within reason.

Likewise, stamp collecting provides a means of traveling in foreign countries that may be enjoyed not once but many times. In these days of crowded events—when the names of many foreign places new to your acquaintance appear almost daily in your newspaper—or in short-wave broadcasts from foreign countries—stamp collecting comes to the rescue

like a trusted friend.

When we read-or hear over the radio-that the mighty Alcazar has been stormed, the splendid Madrid post office damaged by bombs, or that the Japanese are advancing on the Great Wall of China-we need but glimpse at the stamps which portray these fine examples of architecture-to visualize the events more clearly. Stamp collecting is a great aid in keeping up with the geography of these changing times; just as radio is a great aid in keeping accurately posted on the everchanging currents of human thoughts and emotions the world around.

Cover Collecting

Closely allied with postage stamps is cover collecting. There are many types of covers: First day of issue, first flight airmail, naval, merchant marine, historical cachets, etc. But first, what is a cover?

A cover is an envelope on which appears the correct amount of stamps, and postal markings to coincide with the event for which it was given postal service. For example, a first day cover of—let us say—the 3c Virgin Island stamp, would not be a first day of issue cover unless it had that particular stamp used for postage and was cancelled at Charlotte Amalie, Virgin Islands—the official first day city—on December 15th, 1937—the official day of issuance.

Likewise, airmail first flights must have the proper cancellations and inscriptions, and except in cases of certain emergency flights, must bear postage amounting to the current airmail rate. Naval covers are another case in point where the cancellation is all-important. These covers must be cancelled aboard a United States or foreign warship—or authentic naval shore station—to be naval covers.

Merchant marine covers are those envelopes which have been carried by commercial passenger or freight vessels on their various cruises and bear ship markings to attest that fact.

Many of these covers will have cachets—an illustration placed on an envelope to record or commemorate an important or significant event—past or present. The cover may have a cachet that is a work of art—but remember this—if the cancellation is not accurate—the cover has little value except as a curiosity.

Covers bearing the cancellation of the U. S. S. Panay, recently sunk in the Yangtze river, near Nanking, China, by Japanese airplanes, are now eagerly sought after by collectors. Until this event focused attention on American naval ships in the Orient, it is doubtful if a large percentage of citizens realized that the United States has an Asiatic Fleet of more than twenty naval vessels constantly guarding American lives and property in the Far East. Likewise, our navy's European Squadron of three vessels patrols the coasts of Spain and nearby shores in the interests of peace. Covers from naval ships abroad are of true historical worth—they are living reminders of the prominent events in the life of our era.

Stamp and cover collecting also affords one an opportunity to correspond with other collectors having kindred interests. The short wave amateur band and correspondence with foreign collectors are two of the greatest safeguards for better international understanding.

The question naturally arises—how can reliable correspondence be contacted? One way to contact them is through an international hobby club. One of the most outstanding is the Guiana Hobby Club of British Guiana. With over 2000 members in 100 different countries—interested in nearly fifty different. hobbies—it is not difficult to find a member in the country of your choice who is interested in the same

things you are—whether it be radio, stamps, or china elephants.

For accurate information on naval and merchant marine covers, the most reliable source is the Universal Ship Cancellation Society, an organization of more than 1000 collectors, principally in the United States. A long-established society, it has done much to accurately publicize the excellence and fine character of the navies of the world, particularly the American fleet, both at home and abroad.

Each of these organizations publishes interesting magazines. Should any of our readers desire further information, we shall be glad to forward complete details on both societies—without charge or obligation—if you will write to The Stamp Editor in care of RADEX. Please enclose a large-sized stamped, addressed envelope for reply. Your courtesy in this regard will be sincerely appreciated.

Stamp Digest

During 1937 the *United States* issued eighteen different stamps. Army—2c, 3c, 4c, 5c; They are: Navy-2c, 3c, 4c, 5c; Northwest Territory—3c; Virginia Dare—5c; Souvenir sheet for the Society of Phila-Americans convention—10c; telic Constitution Sesquicentennial — 3c; Hawaii—3c; Alaska—3c; Puerto Rico 3c: Virgin Islands—3c: and Trans-Pacific air mail—20c and 50c. Many of these stamps are still on sale at most U. S. post offices. How many of them do you have?

No definite announcement of the *United States* stamp program for 1938 has been made at this writing. However, we know that the present regular issue is due for replacement, and at least three more Constitution commemoratives, a Delaware Terentenary, and probably another Northwest Territory stamp are planned. It is also possible that a ten value "Heroes of Peace" series

will appear during the early fall of 1938 as well.

Siam will shortly issue a new set of twelve stamps for regular postage. Designs will feature the young King Ananda, landscapes, and ruins and monuments of the kingdom.

Greece commemorated the marriage of Crown Price Paul with a special series of three stamps; 1, 2, and 80 leptas.

1938 will see the replacement of the King George V regular series throughout the *British Empire* by the King George VI stamps. Some of George V stamps have not had a particularly long life—so should become good property for the future.

Your Stamp Editor appreciates the fine messages of encouragement and the suggestions that RADEX' readers have kindly sent in during the past month. They are all very welcome. Have you written yet? Cheerio!

Help for Readers

(Continued from page 27)

cases like this we strongly suggest that a serviceman be called. Complete alignment can be accomplished quickly and at very little cost since no new parts are involved unless one or more tubes are weak or inoperative.

23-Tube Scott

Nearly two years ago I purchased a 23-tube Scott receiver. Of late it changes its calibration. On the broadcast band it is off 10 kcs. On the red and green band it also is off. The set was sent to the factory, but it is again off and will not stay put. What causes this set to act so, and can it really be fixed so it will retain its adjustment?

The Scott receivers are as well made as it is humanly possible to assemble and adjust any radio receiver. Even after careful examination and specification of parts, resistors or by-pass condensers will become defective because of the high voltage strains placed upon them. Heat also has its detrimental effects.

Drifting-off of dial readings may be due to some defect as mentioned above, a weak tube, or moisture in some of the coils. Since you have returned the set to the factory it is safe to assume it was carefully realigned and appeared to be as good as new when sent back to you. It is likely, however, that a weakness in some resistor or condenser has changed the calibration again after the set operated for a certain length of time. These defects are difficult to locate, and perhaps the Scott Laboratories should have held the set for a longer time so as to watch its actions over a longer period. There is little to be done except to carefully check these parts, and realign the set by again adjusting the trimmers. Your local man can do this and save the cost of shipment to the factory, but we suggest that before doing so, you write the Scott people, mentioning RADEX. know these sets can be fixed, and they will remain that way indefinitely.

TIME CONVERTER

The RADEX Map of the World with Time Converting Dial is the most useful accessory any radio fan could have around. Just a twirl of the dial shows the correct time at any location in the world. No calculation is necessary; the dial does all the work.

You Can't Get Along Without It.

The price is only

25c (26c in Ohio)



Walter O'Keele, the "Broadway Hillbilly," is now on the Mardi Gras program with Lanny Ross, Charles Butterworth, Jane Rhodes and Raymond Paige's Orchestra. Hollywood Mardi Gras is broadcast on Tuesdays from 9:30 to 10:30 on the Red network.

Sidelights on the career of Walter O'Keefe, who on January 4 joined the Hollywood Mardi Gras program starring Lanny Ross and Charles Butterworth: Attended school in his native Hartford, Conn. . . . Went to Notre Dame where he lived at home of the late Knute Rockne . . . Classmate was Charles Butterworth. . . . After graduation worked for Fort Wayne, Ind., Sentinel . . . First seen on Broadway in "Third Little Show" starring Beatrice Lillie and Ernest Truex. . . Starred later on radio, his latest assignment being master of during Fred Allen's absence.

All the shortwave stations of the world will be listed in the April issue of RADEX. This will be the most comprehensive list of shortwave stations ever published.

Across the EDITOR'S Desk

NE of the many things that makes an editor's job a pleasant one is the correspondence that he receives from his readers. From many different lands these letters come from people in every walk of life . . . sailors, housewives, executives. rachmen. ambassadors. missionaries movie stars, and each of them has something important to tell us, covering every conceivable subject from abalones to Zulus. We enjoy so much this daily pastime of reading the mail that this month we are passing some of the pleasure along to our readers. Glance over our shoulder as we open the morning's mail.

The most bulky package this morning comes from the Federal Communications Commission. It is an alphabetical list of all the broadcasting stations of the United States, 92 mimeographed pages giving the call letters, locations, frequencies, day and night power and time designation of the stations. All this data will be checked against our indices before this day is over, so readers can be assured that all the information given on the back pages of this book is accurate down to the smallest detail.

From Arthur La Motte of 1105 Nottingham Road, Wilmington, Del., we find a letter requesting information about station NAA. This station, situated at Arlington, Va., used to broadcast time signals on 690 kcs, but this transmission was discontinued in 1936. Several long and short wavelengths are used now, but the best way to get the time signals is from the NBC Red Network stations at 12 o'clock noon.

The Nassau Station

The Secretary of the Nassau station ZNS, Mr. K. P. Brown, informs



Tyrone Power, NBC dramatic star, owes his present success as a movie and radio star, in some measure, to radio. Long before the young Hollywood star entered movies, he had a featured role in Grand Hotel, where he struck up a friendship with Don Ameche. Power is heard in Hollywood Playhouse every Sunday at 9 pm on the Blue.

us that they are pleased to verify reports of reception from their listeners, and that there is no need for return postage to be included as all their correspondence is officially paid. ZNS is occupying temporary studios at the present time, but expects to move into new studios located in the new telephone building, when construction of the building is completed. Their verification form gives the following information: Call sign pronounced "Zed En Ess;" position of station, Nassau, Island of New Providence; Power, 400 watts; frequency, 540 kcs; present hours of working, 1:30 to 1:45 pm and 8 to 9 pm, EST. The following items may be used for identification purposes: opening signal, St. Margaret's Chimes, London; relay of Big Ben and Westminster Chimes, London, when available, at 8 and 9 o'clock; signature tune, "God Save the King." Programs from Daventry are frequently relayed. The address is Office of the Superintendent of Telegraphs, Central Bay St. (P. O. Box 48), Nassau, Bahamas.

Gilbert L. Harris of North Adams, Mass., informs us that SPW on 13635 and SPD on 11530 kcs, at Warsaw, Poland, are using a new identification tune. It consists of a few bars from a song entitled "The Haunted Castle."

A note from Dr. Staads of Los Angeles gives the name of a German stamp collector, Herr H. Holst, Ulzener Strasse 22, Luneburg, Germany. Mr. Holst wishes to exchange cancelled United States and Canadian stamps, and those of Central and South America, for stamps of equal value from European countries.

From Georgetown, British Guiana, Mr. Bert Humphrey, founder of the Guiana Hobby Club, sends the schedule of his local station VP3MR. This station, known as "The Voice of Guiana," transmitting on 6070 kcs, broadcasts from 5 to 8:30 pm local time, or 3:45 to 7:15 pm, EST. The "Weekly Mail Bag" program is featured on Saturdays at 7:15 pm EST.

About Aerials

There are two letters about aerials, both of them rather long, but the ideas may be helpful and we'll pass them along in condensed form, so our readers may benefit from the experiences of these DXers.

George Nahas, "The Demon DX-er" of Brooklyn, N. Y., says that radio reception in his locality is extremely difficult, and that reception of even the local stations is nearly impossible, with the exception of WOR. To overcome this difficulty, he erected an aerial consist-

ing only of a three-foot piece of wire and with it has brought in amateur stations on the 20 meter band from many foreign countries. With his three-foot antenna he gave most of the stations an R8-9 report. while with any other type of areial the best he could give them was R5-6. "So, don't rush out and buy the same set your fellow DXers are using just because they are pulling in lots of stations," he advises. "Instead, consider your location, and if the location is bad, the best receiver cannot better it. Just get up on the roof and do a little experimenting with different antennas, and put in a good ground. It seems to me that nearly every location requires a different type aerial, so it is a good idea to try many different installations until the right combination is found."

The other aerial experimenter is Edwin Worthington of 7203 Short St., Vancouver, B. C. "After reading about vertical aerials in RA-DEX, I decided to see what I could do with one," his letter reads. "A search through a junk box in the basement revealed a piece of No. 10 copper wire, weather proof insulation, about 5 feet long. I hammered the end of this out flat, drilled a No. 8 hole and filed it out to make a spade tip suitable to fit on the antenna binding post of the set. The doublet aerial and the short inverted L aerial were disconnected and this single wire attached, straight up at the back of The results were perthe set. fect; signal strength as good as with the inverted L; quality and selectivity equally as good; distance reached—well, that's a story in itself!

"I tried out the broadcast band first, from 8:30 until 11 pm PST, and, among others, got the following stations, all over 2200 miles away: WSB, WWL, WBT; over 1500 miles, WENR, XEP, and a host of other stations over 1000 miles away. Considering the fact that Pacific coast stations are in full swing at this time, I think this long distance reception was quite remarkable.

"After giving the shortwaves a whirl, I decided my new aerial was just as good as the ones I had formerly used. Then I decided to try to increase its length. Since the wire in use reached to within three inches of the ceiling it was not, possible to add to that end, but I attached another length of No. 10 wire to the antenna post and pointed it toward the floor. A definite increase in volume was noted, and VK3LR (now VLR) was heard much louder than ever before."

Oceanic Changes

From A. I. Breen, on vacation in Wellington, New Zealand, comes a "letter card" informing us that 2ZB, Wellington, changed frequency on January 9th from 1120 to 1130 kcs. The move was made to avoid interference from 4BC in Brisbane, which is particularly well heard in New Zealand.

Mr. Breen's not also states that 4 PM at Port Moresby, Papua, is broadcasting simultaneously on its broadcast frequency of 1360 kcs, and a shortwave frequency of 7300 kcs. He believes the latter transmitter is that of VIG. The regular schedule of 4 PM is weekdays only, 10 to 11 pm and 3 to 5 am, EST.

Around Europe

The Italian shortwave stations inform us that the popular "American Hour" is now being broadcast over IRF on 9830 kcs, as well as 2RO-3 on 9630, thus giving the shortwave listener a chance to tune to the other station should one be received badly. IRF has already been reported by many listeners.

The shortwave stations at Belgrade, Jugoslavia, send fortnightly program sheets printed in Serbian, French, German, Turkish, Albanian and Hungarian. We believe they will be sent post free to anyone who requests them. The current program folio includes ten pages of articles about Jugoslavian people, places and industries, and the words and music of a popular Jugoslavian song, in addition to details. The broadcast Belgrade station is YUA, "Radio Beograd," on 6100 kcs.



Anne Seymour and Bob Griffin, stars of the popular NBC serial, the Story of Mary Marlin, pose for the first picture ever taken of them together.

Digging deeper into the mail, we find a five-page letter from D. H. Dussek, Morland Hall, Alton, Hants, Gt. Britain. It is long enough, and interesting enough, to merit a column by itself . . . in fact, we believe we will give it a head and byline.

Radio in England By D. H. Dussek

The greatest excitement here this month has been the inauguration of Arabic transmissions from GSC,

Daventry. Western music has been practically eliminated from the broadcasts, and from all accounts, reception in the Near East is better than that from Rome. Since GSC and Rome operate on neighboring frequencies with Arabic programs at the same time, the stations are often confused; GSC should announce its identity more frequently.

All the broadcasting organizations in South America have been asked to publicize the coming news transmissions in Spanish and Portuguese from Daventry.

The Vatician City has a second active frequency of 5969 kcs, and power of 15 kilowatts, according to World Radio. Programs start at 2 pm on weekdays and 5 am on Sundays, and conclude when they have said all they want to say.

Motala, Sweden on 6062 kcs employs the call letters SBO, and on 11698 the call sign SBP is used.

Vienna, Austria transmits regularly on 6072 kcs with a power of 1.5 kilowatts. This station, call letters OER2, broadcasts on weekdays only, from 9 am to 5 pm EST.

The Norwegian station at Jeloy works on two frequencies, LKJ on 6130 and LKC on 9530 kcs. LKC transmits on the schedule shown in RADEX, and LKJ broadcasts from 11:30 am to 5:30 pm EST.

No further details on the station in the Channel Islands are available, but it has been reported that Radio Luxembourg is supplying the necessary capital.

It has been reported in the press that Italy has decided to close the station at Bologna, and to strengthen the stations at Rome, Bari and Trieste. Bologna operates on 986 kcs with a power of 50000 watts.

The new Hilversum station (Lopikerkapel) on 722 kcs with 17 kilowatts, now operates on a full schedule from 2:40 am to 6:40 pm, EST,

relaying the programs of Hilversum No. 1.

It has been reported that the British Government has requested the French Government to put a ban on advertising in English from French stations. This will concern stations Poste-Parisien on 959, Lyons on 1393, Toulouse on 913 and Radio Normandie on 1113 kcs. A law may be introduced which will reduce the power of these stations.

South African Reception

"I have been doing very well with Cuban stations lately," writes Mrs. R. S. Roche of 77 Durban St., Aliwal North, Union of South Africa. "I do no night DXing, but usually rise at 5 am and get the American stations. I have heard COBZ and fourteen others from Cuba, 41 broadcast band stations in the United States and 34 shortwave stations there; one Canadian BCB and 3 shortwavers; five broadcast three shortwave stations from Mexico; fourteen broadcast and seven shortwaves from the Argentine, and nineteen stations from the rest of South America. Iceland comes in nicely, and Europe well.

"Laurenco Marques on 6137 kcs, CR7AA, and CR7BH on 11718, are our best local stations. They are on the air daily except Sundays from midnight to 1 am, and from 4:30 to 6:30 am, EST.

"I thoroughly enjoy the Magic Key programs on Sundays, and I hope the stations keep up their present strength so I can continue to hear them."

Mrs. Roche also sent complete information on the shortwave and broadcasting stations of South Africa, which information is included in another part of this issue.

Visitors Too

While perusing a letter from Warren Winkley of Hughson, Calif., in which he tells us, among other

things, that nothing can beat a 150. foot inverted L for broadcast band. and a 60-foot inverted L for shortwaves, we are interrupted by a visit from a Lakewood lad (whose name we do not know) who wants to know if it is really possible to hear Guatemala on the broadcast band. Well, what could we do but tell him to try for TG1 on 1510, the best Guatemalan station in these parts, and we also told him that while he was at it, he might as well tune for LR1, Buenos Aires, Both of them are pretty on 1070. good stations. Before we had a chance to finish Warren's letter. though, Jack Siringer dropped in and gave us the latest dope on LR1. He is hearing it from R7 to R9 between 2 and 3 in the mornings, testing for Brussels and Washington. Jack also told us that TG1 has only 250 watts, but it is better than TGW; and he said that TGW is really on 1230 kcs, despite the fact they still show 1210 on their cards.

The morning is now fairly well spent, and we have to hurry through the rest of the letters. Mr. Winkley's letter included a note for Kenneth Pierce of Worcester, Mass., answering a question asked in RADEX. He says, "Regarding CFAC on 1-22-38 at 4:05 am EST they signed off 930 kcs with 1 kw and announced they would return at 9:30 EST that morning."

A card from CMQ 600 kcs, Havana, indicates that their programs are relayed by COCQ on 9740 kcs, and their slogan seems to be "Del Jabon Candado." The owners are Cambo y Gabriel, S. A.

Sr. Barbarrosa of *Radiomania*, Havana, announces that Cuba became the first nation to sign the treaty drawn up by the Telecommunications Conference in Havana last December, when the President of Cuba affixed his signature on December 22, seven days after the conference closed.

The Stroud Twins

Coming into radio when listeners were just about fed up with overemphasis of comedy punch-lines, the almost lackadaisical comedy attack of the Stroud Twins has caught on—but definitely.

Clarence and Claude are their names, and they are regularly heard on the Chase and Sanborn Hour with Nelson Eddy, Edgar Bergen and Charlie McCarthy, and Dorothy Lamour.

The Strouds were born in Kaufman, Texas, which is near Dallas. Identical twins they were the cause of much confusion from the very start.

When they were boys in Texas, a friend of the family used to take Clarence out driving in a buggy. This woman, who was rather elderly, didn't like Claude at all, thought he was a very stupid boy. She was one of the few townspeople who claimed she could always tell them apart.

Mistaken Identity

One day the twins' mother reversed the ribbons they had been wearing around their wrists, one pink and one blue. Claude went for the next buggy ride. Afterwards the elderly lady told Claude's mother how much smarter Clarence was getting every day.

"Growing up in the show-business" is a well-worn phrase but it fits the Stroud boys to perfection. When they were just youngsters, their uncle took them to a vaude-ville show in Dallas which featured acrobats. The pair practiced what they had seen in the back yard of their home for months.

Satisfied that they had perfected an act, they tried it out before an agent for John Robinson's Circus. That was in 1922 and they were 12 years old. They stayed with the outfit for two years during which time they saved practically nothing.

When the Strouds decided to part company with the big top, they returned to their original idea of appearing in vaudeville. hopped a freight-train for St. Louis which was a big booking center in the then prosperous days of They started out in vaudeville. small-time vaudeville where they met up with "a hard-shoe family" a dancing act. The two acts traded lessons, the Stroud Twins adding a new phase to their pantomime.

Become Articulate

They finally reached the mecca of vaudeville artists—the Palace Theater, New York—in 1927. Oddly enough, it was here they first added talk to their act. The audience was so enthused, they kept calling them back for more and more. Finally, in desperation, they resorted to an old vaudeville trick to get off-stage. They made a curtain speech.

Clarence, in, his nervousness, talked on and on. Claude looked bored. Claude finally got an unenthusiastic word in and the audience roared. It was the birth of their comic style, for they continued to talk some in all their skits.

The bottom fell out of the vaudeville market a little sooner than the stock-market. The Strouds did the same as Edgar Bergen when this happened and left the country. They toured for a year in Australia in 1928.

Returning to the United States, they managed to work in vaudeville with night-clubs filling in when the going was thin. For three years, from 1933 to 1936, the team was split up while Claude was writing for one of the picture companies in Hollywood.

Never Thought of Radio

Last year, they returned to activity in the night-clubs, but never



Opal Craven, known to millions of radio listeners from coast to coast as the Lullaby Lady on the Contented program, has been busy every minute of her life. At the time when other little girls her age were busy with their dolls, she was spending long hours studying the clarinet, saxophone, trumpet, piano, and playing in Chatauqua auditorium from Nome to New Orleans.

even thought of radio. Their act was still two-thirds "silent." Until they were on Rudy Vallee's Royal Variety Hour, they had never seen the inside of a broadcasting studio.

Now that radio looks like their big chance for fame, they have decided that it's pretty interesting work but they do regret the fact that all those acrobatic stunts they've worked on for years must wait for television. Some of their tricks are "exclusives," too. That is, they can't be done by any other act.

A scout for Rudy Vallee's program caught their act in the Rainbow Room, made a note to audition them. They got a hurry call one day to report for the audition as there was an open spot in the next broadcast.

The pair turned in two smash appearances on the Vallee stanza and were rushed to Hollywood for regular appearances on the Chase and Sanborn Hour. As they left New York one turned to the other and said, "Say, Stroud, if we're going to be on there with Bergen, we've got to be funny." And they have been.

We are advised by Stanley B. La-Rue, president of the Before Breakfast DX Club, that dues in his organization are \$1.50 per year, which entitles members to bi-weekly bulletins and free membership in the Quixote Radio Club. A sample bulletin will be sent for five cents on request to Mr. La Rue at 309 S. Bedford Drive, Beverly Hills, Calif.

The MONTH'S CHANGES in STATION DATA

This information is compiled just before we go to press, after the forms for most of the other pages are closed. Some very recent changes, received too late to index in this issue, are included here, and will be incorporated next month in our main indices.

	NORTH	AMERICAN BROADCAST	810	CMCF	Havana, Cuba, to 5000
		NEW	850	WWL	New Orleans, La., to 50000
960	CMKS	Guantanamo, Cuba	880	CMW	Havana, Cuba, to 5000
1280	XEXM	Mexico City, D. F.	880	WCOC	Meridian, Miss., to 1000
1310	WGAU	Athens, Ga. J. K. Patrick & Co.	900	KGBU	Ketchikan, Alaska, to 1000
1500	KWEW	Hobbs, N. Mex. W. E. Whitmore	920	CMX	Havana, Cuba, to 10000
		REINSTATED	950	WRC	Washington, D. C., to 1000 (5)
780	XEN	Mexico City, D. F.	1000	CMBZ	Havana, Cuba, to 5000
1250	KXOK	St. Louis, Mo. Star-Times Pub. Co.	1110	CMCJ	Havana, Cuba, to 5000
1380	CMCR	Havana, Cuba	1170	CMBS	Havana, Cuba, to 5000
1500	KUTA	Salt Lake City, Utah	1190	WATR	Waterbury, Conn., to 250
1000	110171		1240	KLPM	Minot, N. Dak., to 500 (1)
200	arran.	FREQUENCY	1250	WCAL	Northfield, Minn., to 5000
630	CMCD	Havana, Cuba, from 950	1250	WLB_	Minneapolis, Minn., to 5000
950	CMBC	Havana, Cuba, from 630 Mexico City, D. F., from 780	1260	CMBD	Havana, Cuba, to 5000
1100	XEL	Mexico City, D. F., from 180 Mexico City, D. F., from 1130	1300	KALE	Portland, Ore., to 1000
1120 1170	XEJP	Havana, Cuba, from 770	1310	KINY	Juneau, Alaska, to 250
	CMBS CMBD	Havana, Cuba, from 1170	1310	WOL	Washington, D. C., to 1000
1260 1290	CMCU	Havana, Cuba, from 1280	1340	WCOA	Pensacola, Fla., to 1000
1290	CMCO		1350	CMCA	Havana, Cuba, to 5000
		POWER	1420	KABR	Aberdeen, S. Dak., to 500 (1) Columbus, Ohio, to 1000 (5)
810	XEDF	Nuevo Laredo, Tams., 100 frem 75	1430	WBNS	Sacramento, Calif., to 10000
1410	CMCQ	Havana, Cuba, 5000 from 250	1490	KFBK	Sacramento, Cant., to 10007
		NETWORK		PERMI	IT TO CHANGE LOCATION
840	CBL	Toronto, Ont., new CBC	570	KGKO	Wichita Falls, Tex., to Fort Worth
1210	KROY	Sacramento, Calif., new CBS	0.0		
1210 1310	KARM	Sacramento, Calif., new CBS Fresno, Calif., new CBS	210		OREIGN BROADCAST
1210 1310 1310	KARM KTSM	Sacramento, Calif., new CBS Fresno, Calif., new CBS El Paso, Texas, new NBC		F	OREIGN BROADCAST
1210 1310 1310 1310	KARM KTSM WBRE	Sacramento, Calif., new CBS Fresno, Calif., new CBS El Paso, Texas, new NBC Wikes-Barre, Pa., new NBC	601	F	OREIGN BROADCAST NEW Athens, Greece. 15000 w.
1210 1310 1310 1310 1310	KARM KTSM WBRE WBRK	Sacramento, Calif., new CBS Fresno, Calif., new CBS El Paso, Texas, new NBC Wilkes-Barre, Pa., new NBC Pittsfield, Mass., new CBS	601 660	XGZ	OREIGN BROADCAST NEW Athens, Greece. 15000 w. Nanking, China. 10000 w.
1210 1310 1310 1310	KARM KTSM WBRE	Sacramento, Calif., new CBS Fresno, Calif., new CBS El Paso, Texas, new NBC Wikes-Barre, Pa., new NBC	601	F	OREIGN BROADCAST NEW Athens, Greece. 15000 w.
1210 1310 1310 1310 1310	KARM KTSM WBRE WBRK KGAR	Sacramento, Calif., new CBS Fresno, Calif., new CBS El Paso, Texas, new NBC Wilkes-Barre, Pa., new NBC Pittsfield, Mass., new CBS	601 660	XGZ	OREIGN BROADCAST NEW Athens, Greece. 15000 w. Nanking, China. 10000 w.
1210 1310 1310 1310 1310	KARM KTSM WBRE WBRK	Sacramento, Callf., new CBS Fresno, Callf., new CBS El Paso, Texas, new NBC Wilkes-Barre, Pa., new NBC Pittsfield, Mass., new CBS Tucson, Ariz., new CBS	601 660	XGZ	OREIGN BROADCAST NEW Athens, Greece. 15000 w. Nanking, China. 10000 w. Thessalonica, Greece.
1210 1310 1310 1310 1310 1370	KARM KTSM WBRE WBRK KGAR	Sacramento, Calif., new CBS Fresno, Calif., new CBS El Paso, Texas, new NBC Wilkes-Barre, Pa., new NBC Pittsfield, Mass., new CBS Tucson, Arlz., new CBS DELETE	601 660 1333	XGZ	OREIGN BROADCAST NEW Athens, Greece. 15000 w. Nanking, China. 10000 w. Thessalonica, Greece. FREQUENCY Shanghal, China. from 620 Shanghal, China. from 560
1210 1310 1310 1310 1310 1370	KARM KTSM WBRE WBRK KGAR	Sacramento, Callf., new CBS Fresno, Callf., new CBS El Paso, Texas, new NBC Wilkes-Barre, Pa., new NBC Pittsfield, Mass., new CBS Tucson, Arlz., new CBS DELETE Toronto, Ont.	601 660 1333	XGZ XHHK	OREIGN BROADCAST NEW Athens, Greece. 15000 w. Nanking, China. 10000 w. Thessaionica, Greece. FREQUENCY Shanghal, China. from 620 Shanghal, China. from 560 Shanghal, China. from 560 Shanghal, China. from 740
1210 1310 1310 1310 1310 1370 840 1110	KARM KTSM WBRE WBRK KGAR CRCT CMCH	Sacramento, Callf., new CBS Fresno, Callf., new CBS El Paso, Texas, new NBC Wilkes-Barre, Pa., new NBC Pittsfield, Mass., new CBS Tucson, Ariz., new CBS DELETE Toronto, Ont. Havana, Cuba	601 660 1333 560 620	XGZ XHHK XLHB	OREIGN BROADCAST NEW Athens, Greece. 15000 w. Nanking, China. 10000 w. Thessalonica, Greece. FREQUENCY Shanghal, China. from 620 Shanghal, China. from 560 Shanghal, China. from 740 Shanghal, China, from 740 Shanghal, China, from 740
1210 1310 1310 1310 1310 1370	KARM KTSM WBRE WBRK KGAR CRCT CMCH	Sacramento, Callf., new CBS Fresno, Callf., new CBS El Paso, Texas, new NBC Wilkes-Barre, Pa., new NBC Fittsfield, Mass., new CBS Tucson, Arlz., new CBS DELETE Toronto, Ont. Havana, Cuba OWNER Stratford, Ont., Frank M. Squires	601 660 1333 560 620 720 760 800	XGZ XHHK XLHB XHHB	OREIGN BROADCAST NEW Athens, Greece. 15000 w. Nanking, China. 10000 w. Thessalonica, Greece. FREQUENCY Shanghal, China. from 620 Shanghal, China. from 560 Shanghal, China, from 740 Shanghal, China, from 740 Shanghal, China, from 740
1210 1310 1310 1310 1310 1370 840 1110	KARM KTSM WBRE WBRK KGAR CRCT CMCH CJCS PERMIT	Sacramento, Callf., new CBS Fresno, Callf., new CBS El Paso, Texas, new NBC Wilkes-Barre, Pa., new NBC Pittsfield, Mass., new CBS Tucson, Ariz., new CBS DELETE Toronto, Ont. Havana, Cuba OWNER Stratford, Ont., Frank M. Squires TO CHANGE FREQUENCY	601 660 1333 560 620 720 760	XGZ XHHK XLHB XHHB XHHB XLHA XLHA	OREIGN BROADCAST NEW Athens, Greece. 15000 w. Nanking, China. 10000 w. Thessalonica, Greece. FREQUENCY Shanghal, China. from 620 Shanghal, China. from 560 Shanghal, China, from 540 Shanghal, China, from 840 Shanghal, China, from 840 Shanghal, China, from 840 Shanghal, China, from 840 Shanghal, China, from 640
1210 1310 1310 1310 1310 1370 840 1110 1210	KARM KTSM WBRE WBRK KGAR CRCT CMCH CJCS PERMIT WATR	Sacramento, Callf., new CBS Fresno, Callf., new CBS El Paso, Texas, new NBC Wilkes-Barre, Pa., new NBC Pittsfield, Mass., new CBS Tucson, Arlz., new CBS DELETE Toronto, Ont. Havana, Cuba OWNER Stratford, Ont., Frank M. Squires TO CHANGE FREQUENCY Waterbury, Conn., to 1290	601 660 1333 560 620 720 760 800	XGZ XHHK XLHB XHHB XMHD XLHA XLHG 2BH	OREIGN BROADCAST NEW Athens, Greece. 15000 w. Nanking, China. 10000 w. Thessalonica, Greece. FREQUENCY Shanghal, China. from 620 Shanghal, China. from 560 Shanghal, China. from 740 Shanghal, China, from 740 Shanghal, China, from 780 Shanghal, China, from 640 Branghal, China, from 640 Broken Hill, NSW, from 1060
1210 1310 1310 1310 1310 1370 840 1110 1210	KARM KTSM WBRE WBRK KGAR CRCT CMCH CJCS PERMIT WATR KLPM	Sacramento, Callf., new CBS Fresno. Callf., new CBS El Paso, Texas, new NBC Wilkes-Barré, Pa., new NBC Pittsfield, Mass., new CBS Tucson, Arlz., new CBS DELETE Toronto, Ont. Havana, Cuba OWNER Stratford, Ont., Frank M. Squires TO CHANGE FREQUENCY Waterbury, Conn., to 1290 Minot, N. Dak., to 1360	601 660 1333 560 620 720 760 800 860 860 880	XGZ XHHK XLHB XHHB XMHD XLHA XLHG 2BH 4WK	OREIGN BROADCAST NEW Athens, Greece. 15000 w. Nanking, China. 10000 w. Thessaionica, Greece. FREQUENCY Shanghal, China. from 620 Shanghal, China. from 560 Shanghal, China. from 740 Shanghal, China, from 740 Shanghal, China, from 780 Shanghal, China, from 640 Broken Hill, NSW, from 1060 Warwick, Qsid from 1340
1210 1310 1310 1310 1310 1370 840 1110 1210 1190 1240 1250	KARM KTSM WBRE WBRK KGAR CRCT CMCH CJCS PERMIT WATR KLPM WCAL	Sacramento, Callf., new CBS Fresno, Callf., new CBS El Paso, Texas, new NBC Wilkes-Barre, Pa., new NBC Pittsfield, Mass., new CBS Tucson, Ariz., new CBS DELETE Toronto, Ont. Havana, Cuba OWNER Stratford, Ont., Frank M. Squires TO CHANGE FREQUENCY Waterbury, Conn., to 1290 Minot, N. Das., to 1360 Northfield, Minn., to 760	601 660 1333 560 620 720 860 860 860 880 890	XGZ XHHK XLHB XHHB XMHD XLHA XLHG 2BH 4WK XHHV	OREIGN BROADCAST NEW Athens, Greece. 15000 w. Nanking, China. 10000 w. Thessalonica, Greece. FREQUENCY Shanghal, China. from 620 Shanghal, China. from 560 Shanghal, China. from 740 Shanghal, China. from 740 Shanghal, China. from 780 Shanghal, China. from 780 Shanghal, China. from 640 Broken Hill, NSW, from 1060 Warwick, Qsid. from 1340 Shanghal, China. from 1340 Shanghal, China. from 880
1210 1310 1310 1310 1310 1370 840 1110 1210 1190 1240 1250 1250	KARM KTSM WBRE WBRK KGAR CRCT CMCH CJCS PERMIT WATR KLPM WCAL WLB	Sacramento, Callf., new CBS Fresno, Callf., new CBS El Paso, Texas, new NBC Wilkes-Barre, Pa., new NBC Pittsfield, Mass., new CBS Tucson, Arlz., new CBS DELETE Toronto, Ont. Havana, Cuba OWNER Stratford, Ont., Frank M. Squires TO CHANGE FREQUENCY Waterbury, Conn., to 1290 Minot, N. Dak., to 1360 Northfield, Minn., to 760 Minneapolis, Minn., to 760	601 660 1333 560 620 720 760 800 860 860 880 890 970	XGZ XHHK XLHB XHHB XMHD XLHA XLHG 2BH 4WK XHHV XMHB	OREIGN BROADCAST NEW Athens, Greece. 15000 w. Nanking, China. 10000 w. Thessalonica, Greece. FREQUENCY Shanghal, China. from 500 Shanghal, China. from 560 Shanghal, China. from 740 Shanghal, China. from 740 Shanghal, China, from 780 Shanghal, China, from 780 Shanghal, China, from 640 Broken Hill, NSW, from 1060 Warwick, Qsid from 1340 Shanghal, China, from 880 Shanghal, China, from 880 Shanghal, China, from 880 Shanghal, China, from 980
1210 1310 1310 1310 1310 1370 840 1110 1210 1190 1240 1250 1250 1310	KARM KTSM WBRE WBRK KGAR CRCT CMCH CJCS PERMIT WATR KLPM WCAL WLB KINY	Sacramento, Callf., new CBS Fresno. Callf., new CBS El Paso, Texas, new NBC Wilkes-Barre, Pa., new NBC Pittsfield, Mass., new CBS Tucson, Arlz., new CBS DELETE Toronto, Ont. Havana, Cuba OWNER Stratford, Ont., Frank M. Squires TO CHANGE FREQUENCY Waterbury, Conn., to 1290 Minot, N. Dak., to 1360 Northfield, Minn., to 760 Minneapolls, Minn., to 760 Juneau, Alaska, to 1430	601 660 1333 560 620 720 800 860 860 880 890 970	XGZ XHHK XLHB XHHB XHHB XLHG 2BH 4WK XHHV XMHB	OREIGN BROADCAST NEW Athens, Greece. 15000 w. Nanking, China. 10000 w. Thessalonica, Greece. FREQUENCY Shanghal, China. from 620 Shanghal, China. from 560 Shanghal, China. from 540 Shanghal, China, from 840 Shanghal, China, from 840 Shanghal, China, from 780 Shanghal, China, from 640 Broken Hill, NSW, from 1060 Warwick, Qsid from 1340 Shanghal, China, from 880 Shanghal, China, from 880 Shanghal, China, from 980 Cairns, Qsid from 1390
1210 1310 1310 1310 1310 1370 840 1110 1210 1190 1240 1250 1310 1310	KARM KTSM WBRE WBRK KGAR CRCT CMCH CJCS PERMIT WATR KLPM WCAL WLB KINY WOL	Sacramento, Callf., new CBS Fresno, Callf., new CBS El Paso, Texas, new NBC Wilkes-Barre, Pa., new NBC Pittsfield, Mass., new CBS Tucson, Arlz., new CBS DELETE Toronto, Ont. Havana, Cuba OWNER Stratford, Ont., Frank M. Squires TO CHANGE FREQUENCY Waterbury, Conn., to 1290 Minot, N. Dak., to 1360 Northfield, Minn., to 760 Juneau, Alaska, to 1430 Washington, D. C., to 1230	601 660 1333 560 620 720 760 860 860 860 889 970 1000	XGZ XHHK XLHB XHHB XMHD XLHA XLHA XLHA XLHA XWK XMHB 4CA XHHG	OREIGN BROADCAST NEW Athens, Greece. 15000 w. Nanking, China. 10000 w. Thessalonica, Greece. FREQUENCY Shanghal, China, from 620 Shanghal, China, from 560 Shanghal, China, from 740 Shanghal, China, from 740 Shanghal, China, from 780 Shanghal, China, from 640 Broken Hill, NSW, from 1060 Warwick, Qsid from 1340 Shanghal, China, from 880 Shanghal, China, from 890 Cairns, Qsid from 1390 Cairns, Qsid from 1390 Shanghal, China, from 980 Cairns, Qsid from 1020
1210 1310 1310 1310 1310 1370 840 1110 1210 1190 1240 1250 1250 1310	KARM KTSM WBRE WBRK KGAR CRCT CMCH CJCS PERMIT KLPM WCAL WLB KINY WOL KABR	Sacramento, Callf., new CBS Fresno, Callf., new CBS El Paso, Texas, new NBC Wilkes-Barre, Pa., new NBC Pittsfield, Mass., new CBS Tucson, Arlz., new CBS DELETE Toronto, Ont. Havana, Cuba OWNER Stratford, Ont., Frank M. Squires TO CHANGE FREQUENCY Waterbury, Conn., to 1290 Minot, N. Dak., to 1360 Northfield, Minn., to 760 Minneapolis, Minn., to 760 Juneau, Alaska, to 1430 Washington, D. C., to 1230 Aberdeen, S. Dak., to 1390	601 660 1333 560 620 720 800 860 860 880 890 970	XGZ XHHK XLHB XHHB XHHB XLHG 2BH 4WK XHHV XMHB	OREIGN BROADCAST NEW Athens, Greece. 15000 w. Nanking, China. 10000 w. Thessalonica, Greece. FREQUENCY Shanghal, China. from 620 Shanghal, China. from 560 Shanghal, China. from 540 Shanghal, China, from 840 Shanghal, China, from 840 Shanghal, China, from 780 Shanghal, China, from 640 Broken Hill, NSW, from 1060 Warwick, Qsid from 1340 Shanghal, China, from 880 Shanghal, China, from 880 Shanghal, China, from 980 Cairns, Qsid from 1390
1210 1310 1310 1310 1310 1370 840 1110 1210 1220 1250 1310 1310 1420	KARM WBRE WBRK KGAR CRCT CMCH CJCS PERMIT WATR KLPM WCAL WLB KINY WOL KABR	Sacramento, Callf., new CBS Fresno. Callf., new CBS El Paso, Texas, new NBC Wilkes-Barre, Pa., new NBC Pittsfield, Mass., new CBS Tucson, Arlz., new CBS DELETE Toronto, Ont. Havana, Cuba OWNER Stratford, Ont., Frank M. Squires TO CHANGE FREQUENCY Waterbury, Conn., to 1290 Minot, N. Dak., to 1360 Northfield, Minn., to 760 Minneapolls, Minn., to 760 Juneau, Alaska, to 1430 Washington, D. C., to 1230 Aberdeen, S. Dak., to 1390	601 660 1333 560 620 720 760 860 860 860 889 970 1000	XGZ XHHK XLHB XHHB XMHD XLHA XLHA XLHA XLHA XWK XMHB 4CA XHHG	OREIGN BROADCAST NEW Athens, Greece. 15000 w. Nanking, China. 10000 w. Thessalonica, Greece. FREQUENCY Shanghal, China, from 620 Shanghal, China, from 740 Shanghal, China, from 740 Shanghal, China, from 780 Shanghal, China, from 780 Shanghal, China, from 640 Broken Hill, NSW, from 1060 Warwick, Qsid from 1340 Shanghal, China, from 880 Shanghal, China, from 880 Shanghal, China, from 980 Cairns, Qsid from 1390 Shanghal, China, from 1020 Birchip, Vic., from 1490
1210 1310 1310 1310 1310 1370 840 1110 1210 1240 1250 1310 1310 1420 570	KARM KTSM WBRE WBRE KGAR CRCT CMCH CJCS PERMIT WATR KLPM WCAL WLB KINY WOL KABR PERM CMCY	Sacramento, Callf., new CBS Fresno, Callf., new CBS El Paso, Texas, new NBC Wilkes-Barre, Pa., new NBC Pittsfield, Mass., new CBS Tucson, Arlz., new CBS DELETE Toronto, Ont. Havana, Cuba OWNER Stratford, Ont., Frank M. Squires TO CHANGE FREQUENCY Waterbury, Conn., to 1290 Minot, N. Dak., to 1360 Northfield, Minn., to 760 Minneapolis, Minn., to 760 Juneau, Alaska, to 1430 Washington, D. C., to 1230 Aberdeen, S. Dak., to 1300 IIT TO CHANGE POWER Havana, Cuba, to 10 kw.	601 660 1333 560 620 720 760 860 860 860 890 970 1080 1080	XGZ XHHK XLHB XHHB XMHD XLHA XLHA XLHA 4WK XHHV XMHB 4CA XHHG 3MB	OREIGN BROADCAST NEW Athens, Greece. 15000 w. Nanking, China. 10000 w. Thessalonica, Greece. FREQUENCY Shanghal, China. from 620 Shanghal, China. from 560 Shanghal, China, from 740 Shanghal, China, from 740 Shanghal, China, from 780 Shanghal, China, from 780 Shanghal, China, from 640 Broken Hill, NSW, from 1060 Warwick, Qsid from 1340 Shanghal, China, from 880 Shanghal, China, from 980 Cairns, Qsid from 1390 Shanghal, China, from 1900 OWNER
1210 1310 1310 1310 1310 1370 840 1110 1210 1190 1250 1250 1310 1420 570 570	KARM WBRE WBRK KGAR CRCT CMCH CJCS PERMIT WATR KLPM WCAL WLB KINY WOL KABR CMCY KGKO	Sacramento, Callf., new CBS Fresno. Callf., new CBS El Paso, Texas, new NBC Wilkes-Barré, Pa., new NBC Pittsfield, Mass., new CBS Tucson, Arlz., new CBS DELETE Toronto, Ont. Havana, Cuba OWNER Stratford, Ont., Frank M. Squires TO CHANGE FREQUENCY Waterbury, Conn., to 1290 Minot, N. Dak., to 1360 Northfield, Minn., to 760 Minneapolis, Minn., to 760 Juneau, Alaska, to 1430 Washington, D. C., to 1230 Aberdeen, S. Dak., to 1390 IIT TO CHANGE POWER Havana, Cuba, to 10 kw. Wichita Falis, Tex., to 1000 (5)	601 660 1333 560 620 720 760 860 860 860 889 970 1000	XGZ XHHK XLHB XHHB XMHD XLHA XLHA XLHA XLHA XWK XMHB 4CA XHHG	OREIGN BROADCAST NEW Athens, Greece. 15000 w. Nanking, China. 10000 w. Thessalonica, Greece. FREQUENCY Shanghal, China. from 620 Shanghal, China. from 560 Shanghal, China. from 540 Shanghal, China, from 840 Shanghal, China, from 840 Shanghal, China, from 640 Broken Hill, NSW, from 1060 Warwick, Qsid from 1340 Shanghal, China, from 880 Shanghal, China, from 980 Caliris, Qsid from 1390 Shanghal, China, from 1390 Shanghal, China, from 1390 Shanghal, China, from 1490 OWNER Canberra, FCT, Canberra Broad-
1210 1310 1310 1310 1310 1370 840 1110 1210 1240 1250 1310 1310 1420 570	KARM KTSM WBRE WBRE KGAR CRCT CMCH CJCS PERMIT WATR KLPM WCAL WLB KINY WOL KABR PERM CMCY	Sacramento, Callf., new CBS Fresno, Callf., new CBS El Paso, Texas, new NBC Wilkes-Barre, Pa., new NBC Pittsfield, Mass., new CBS Tucson, Arlz., new CBS DELETE Toronto, Ont. Havana, Cuba OWNER Stratford, Ont., Frank M. Squires TO CHANGE FREQUENCY Waterbury, Conn., to 1290 Minot, N. Dak., to 1360 Northfield, Minn., to 760 Minneapolis, Minn., to 760 Juneau, Alaska, to 1430 Washington, D. C., to 1230 Aberdeen, S. Dak., to 1300 IIT TO CHANGE POWER Havana, Cuba, to 10 kw.	601 660 1333 560 620 720 760 860 860 860 890 970 1080 1080	XGZ XHHK XLHB XHHB XMHD XLHA XLHA XLHA 4WK XHHV XMHB 4CA XHHG 3MB	OREIGN BROADCAST NEW Athens, Greece. 15000 w. Nanking, China. 10000 w. Thessalonica, Greece. FREQUENCY Shanghal, China. from 620 Shanghal, China. from 560 Shanghal, China, from 740 Shanghal, China, from 740 Shanghal, China, from 780 Shanghal, China, from 780 Shanghal, China, from 640 Broken Hill, NSW, from 1060 Warwick, Qsid from 1340 Shanghal, China, from 880 Shanghal, China, from 980 Cairns, Qsid from 1390 Shanghal, China, from 1900 OWNER

The Columbia Broadcasting System

The Columbia Broadcasting System is divided into the following groups:

North Round Robin (NRR); Dixie (D); Northwest (NW); Southwest (SW); Midwest (MW); Midwest and West (MWW); Southwest and West (SWW); and the Pacific Network (PN).

Akron, Ohio	(NRR)	WADC
Albany, N. Y.	(NRR)	WOKO
Anderson, S. C.	(D)	WAIM
Atlanta, Ga.	(D)	WGST
Atlantic City, N. J.	(-/	WPG
Augusta, Ga.	(D)	WRDW
Austin, Texas	(SW)	KNOW
Baltimore, Md.	(577)	WCAO
Bangor, Maine	(NRR)	WLBZ
Binghamton, N. Y.	(NRR)	WNBF
Birmingham, Ala.	(D)	WAPI
Boston, Mass.	(NRR)	WEEL
Buffalo, N. Y.	(NRR)	WGR
Buffelo N V	(NRR)	WKBW
Buffalo, N. Y. Charleston, W. Va.	(.(1111)	WCHS
Charlotte, N. C.	(D)	WBT
Chattanooga, Tenn.	(D)	WDOD
Chicago, Ill.	(NRR)	WBBM
Cincinnati, Ohio	(MILL)	WKRC
Cleveland, Ohio	(NRR)	WGAR
Colorado Springs, Colo.		
Columbus, Ohio	(MWW)	KVOR
Dallas, Texas	(SW)	WBNS
Davenport, Iowa	(NW)	KRLD
Dayton, Ohio	(14.44.)	WOC
Des Moines, Iowa	(NTHZ)	WHIO
Detroit, Mich.	(NW)	KRNT
Denver, Colo.	(NRR)	WJR
Dubuque, Iowa	(MWW)	KLZ
	(NW)	WKBB
Duluth, Minn.	(NW)	KDAL
Durham, N. C.	(D)	WDNC
Elmira, N. Y. Evansville, Ind.	(NRR)	WESG
Evansvine, Ind.		WEOA
Fairmont, W. Va.	473.373	WMMN
Fresno, Calif.	(PN)	KARM
Great Falls, Mont.	(PN)	KFBB
Green Bay, Wis. Greenboro, N. C.	(NW)	WTAQ
Harrisburg, Pa.	(D)	WBIG
	(NRR)	WHP
Hartford, Conn. Hibbing, Minn.		WDRC
Honolulu, Hawali	(NW)	WMFG
	(SW)	KGMB
Houston, Texas Indianapolis, Ind.	(SW)	KTRH
Jacksonville, Fla.	(T))	WFBM
Kansas City, Mo.	(D)	WMBR
	(NW)	KMBC
Knoxville, Tenn.	(D)	WNOX
La Crosse, Wis. Lincoln, Nebr.	(NW)	WKBH
	(NW)	KFAB
Little Rock, Ark.	(D)	KLRA

Los Angeles, Cailf.	(PN)	KNX
Louisville, Ky.	(No.)	WHAS
Macon, Ga.	(D)	WMAZ
Mason City, Iowa	(NW)	KGLO
Memphis, Tenn. Meridian, Miss.	(D)	WREC
Miami, Fla.	(D)	WCOC
Milmouleon Wite	(D)	WQAM
Milwaukee, Wis. Minneapolis, Minn.	(NW) (NW)	WISN
Missoula, Mont.	(PN)	KGVO
Mobile, Ala.	(D)	WALA
Montgomery, Ala.	(D)	WSFA
Montreal, P. Q.	(NRR)	CKAC
Montreal, P. Q. Nashville, Tenn.	(D)	WLAC
New Orleans, La.	(D)	WWL
New York, N. Y. New York, N. Y.		WABC
New York, N. Y.	(Shortwave)	W2XE
Oklahoma City, Okla.	(SW)	KOMA
Orlando, Fia.	(D)	WDBO
Parkersburg, W. Va.		WPAR
Pensacola, Fla.	(D) /	WCOA
Peoria, III.	(NW)	WMBD
Philadelphia, Pa.		WCAU
Philadelphia, Pa.	(Shortwave)	W3XAU
Phoenix, Ariz.	(PN)	KOY
Pittsburgh, Pa.		WJAS
Pittsfield, Mass. Portland, Ore.	(NRR)	WBRK
Portland, Ore.	(PN)	KOIN
Providence, R. I.	(NRR)	WPRO
Reno, Nev.	(PN)	KOH
Richmond, Va.	(D)	WRVA
Richmond, Va. Roanoke, Va. Rochester, N. Y.	(D)	WDBJ
Rochester, N. Y.	(NRR)	WHEC
Sacramento, Calif.	(PN)	KROY
St. Louis, Mo. Sait Lake City, Utah	(D. CHILLIA)	KMOX
	(MWW) (SW)	KSL
San Antonio, Texas San Francisco, Calif.	(PN)	KTSA
Savannah, Ga.	(D)	KSFO WTOC
Scranton, Pa.	(NRR)	WGBI
Seattle, Wash.	(PN)	KIRO
Shreveport, La.	(SW)	KWKH
Sieux City, Iowa	(NW)	KSCJ
Sloux City, Iowa South Bend, Ind.	(NRR)	WSBT
Spokane, Wash.	(PN)	KFPY
Springfield, Mass. Springfield, Vt.	(NRR)	WMAS
Springfield, Vt.	(NRR)	WNBX
Syracuse, N. Y.	(NRR)	WFBL
Syracuse, N. Y. Tacoma, Wash. Tampa, Fla.	(PN)	KVI
Tampa, Fla.	(D)	WDAE
Topena, Mans.	(SW)	WIBW
Toronto, Ont.	(NRR)	CFRB
Tucson, Ariz.	(PN)	KGAR
Tucson, Ariz. Tulsa, Okla. Utica, N. Y. Virginia, Minn.	(SW)	KTUL
Utica, N. Y.	(NRR)	WIBX
Virginia, Minn.	(NW)	WHLB
Waco, Texas	(SW)	WACO
Washington, D. C. West Palm Beach, Fla.	(T))	WJSV
Wheeling W Vo	(D)	WJNO
Wheeling, W. Va.	(0317)	WWVA
Wichita, Kans. Wichita Falls, Tex.	(SW) (SW)	KFH KGKO
Winston-Salem, N. C	(D)	WSJS
Worcester, Mass.	(NRR)	WORC
Yankton, S. Dak.	(NW)	WNAX
Youngstown, Ohio	(NRR)	WKBN
	·/	,, 111111

In response to demands of our readers, we will resume publication of the complete shortwave lists, in our April issue. Like our lists of four years ago, this new compilation will include frequencies, call letters, locations, power, addresses, indication signals and all other available information.

When to Get the DAY'S NEWS

• • Network News Flashes

E-Midn't., C-11:00 p.m., M-10:00, P-9:00

Don Lee System, Dally

KDB KDON KFRC KFXM KGB KGDM KHJ KPMC KQW KVOE KXO

E-1:00a.m.,C-Midn't., M-11:00 p.m., P-10:00

Don Lee System, Sunday only Same stations as at Midnight.

E-1:15 a.m., C-12:15, M-11:15 p.m., P-10:15 3 CBC—Dally

To CBC Pacific Network.

E-7:30 a.m., C-6:30, M-5:30, P-4:30 Michigan Radio Network, Daily. WXYZ

E-9:25 a.m., C-8:25, M-7:25, P-6:25 CBS—Press Radio, Monday through Friday

CKAC KLRA KMOX WABC WADC WAIM WALA WBIG WCHS WCOC WDAE WDBO WDRC WEEI WESG WFBL WHIO WHP WIBX WJAS WJNO WKBW WLBZ WMAS WMBR WMMN WNBF WOKO WORC WPAR WPG WPRO WQAM WREC WRVA WSBT WSJS

E-9:40 a.m., C-8:40, M-7:40, P-6:40 NBC Red, Press Radio, Weekdays To stations available

E-9:55 a.m., C-8:55, M-7:55, P-6:55
CBS—Press Radio, Sat. and Sunday
CKAC KLRA KMOX WABC WADC
WAIM WALA WCHS WCOC WDAE
WDBJ WDBO WEEI WESG WFBL
WFBM WHEC WHIO WIBX WJNO
WJR WJSV WLBZ WMAS WMBR
WMMN WNBF WOKO WORC WPAR
WQAM WREC WSVA WSFA WSJS
WTOC

Blue Daily except Sunday

To stations available

E-10:45 a.m., C-9:45, M-8:45, P-7:45 Don Lee System, Daily except Sunday Same stations as at Midnight

E-11:00 a.m., C-10:00, M-9:00, P-8:00 NBC-Blue—Press Radio, Sunday To stations available

NBC-Red—Press Radio, Sunday To stations available.

E-Noon, C-11:00 a.m., M-10:00, P-

9:00
Michigan Radio Network, Daily
WASH WBCM WELL WFDM WIBM
WJIM WKZO WOOD WXYZ

WJIM WKZO WOOD WXYZ E-12:15 p.m., C-11:15 a.m., M-10:15,

P-9:15 CBS—Edwin C. Hill, Monday

through Friday
KFAB KFH KGKO KLRA KMBC
KMOX KNOW KOMA KRLD KRNT
KSCJ KTRH KTSA KTUL KWKH
WABG WACO WADC WALA WBBM
WBIG WBNS WBRC WBT WCAO
WCAU WCCO WCHS WCOA WCOC
WDAE WDBJ WDBO WDNC WDOD
WDRC WEEI WFBL WGR WGST
WHAS WHEC WHIO WHP WIBX
WISN WJR WJSV WKBB WKBN
WKRC WLAC WLBZ WMAS WMAZ

WMBD WMBR WMMN WNAX WNBF WNOX WOC WOKO WORC WPG WPRO WQAM WREC WRVA WSFA WSJS WTOC WWL WWVA

E-2:00 p.m., C-1:00, M-12:00, P-11:00 CBS—Monday, Wednesday, Friday KFAB KFH KLRA KMOX KNOW KOMA KRLD KRNT KSCJ KTRH KTSA KTUL KWKH WABC WADC WBBM WBNS WBRC WBT WCAO WCAU WCO WDRC WEEI WFBL WFBM WGST WHAS WHEC WHO WISN WJAS WJR WJSV WKBB WKBW WKRC WLAC WLBZ WMBR WNBF WOKO WORC WPRO WQAM WREC WVA WWA

E-3:00 p.m., C-2:00, M-1:00, P-Noon Don Lee System, Saturday Same stations as at Midnight

E-3:15 p.m., C-2:15, M-1:15, P-12:15 Don Lee Sys., Mon. through Fri. Same stations as at Midnight

E-5:00 p.m., C-4:00, M-3:00, P-2:00 Michigan Network, Daily WASH WBCM WELL WFDM WIBM WJIM WKZO WOOD WXYZ

E-5:10 p.m., C-4:10, M-3:10, P-2:10 Blue, Monday through Friday To stations available

E-5:30 p.m., C-4:30, M-3:30, P-2:30 CBS—Monday, Wednesday, Friday KFBB KFPY KLZ KMBC KNX KOIN KOL KOY KSFO KSL KVI

E-6:25 p.m., C-5:25, M-4:25, P-3:25 CBS—Press Radlo, Saturday Available to entire Network

E-6:30 p.m., C-5:30, M-4:30, P-3:30 CBS—Press Radio, Mon., Tues., Thurs., Fri.

KFH KLRA KNOW KOMA KSCJ KSL KTRH KWKH WABC WACO WADC WAIM WALA WBIG WBRC WCCO WCOC WDAE WBBJ WDBO WDOD WHEC WISN WJAS WJNO WJR WKBB WKBW WLBZ WMAS WMBR WOC WORC WPAR WQAM WREC WSFA WSJS WTAQ WTOC

WWVA
NBC—Red, Press Radio, Weekdays
To all stations available

Blue Saturday only To all stations available

E-6:40 p.m., C-5:40, M-4:40, P-3:40 CBS—Wednesday only To all stations available

E-6:45 p.m., C-5:45, M-4:45, P-3:45 NBC-Blue—Lowell Thomas, Mon. through Fri.

CRCT KDKA WBAL WBZ WBZA WEAN WEBR WFLA WHAM WIOD WJAX WJZ WLW WMAL WOOD WRTD WSPD WSUN WSYR WTAM WXYZ

Don Lee Sys., Mon. through Fri. Same stations as at Midnight

E-7:30 p.m., C-6:30, M-5:30, P-4:30 CBC—Monday through Friday To CBC French Network Blue—Tuesday only
WBAL WBZ WBZA WENR WHAM
WJZ WSYR

E-7:45 p.m., C-6:45, M-5:45, P-4:45
CBS—Boake Carter, Mon., Wed., Fri.
KFAB KFH KLRA KMBC KMOX
KNOW KOMA KRLD KRNT KTRH
KTSA KTUL, WABC WADC WBBM
WBNS WBRC WBT WCAO WCAU
WCCO WDAE WDBO WDOD WDRG
WEEI WFAM WFBL WGR WGST
WHAS WHEC WHIO WISN WJAS
WJR WJSV WKRN WKRC WLAC
WLBZ WMBD WMBR WNOX WOKO
WORC WPRO WQAM WREC WRVA
WLL

E-8:30 p.m., C-7:30, M-6:30, P-5:30
Blue-March of Time, Thursday
KDKA KECA KERN KFBK KFEL
KFSD KGA KGO KJR KLO KM KOIL KSO KWG KWK KXYZ WABY
WBAL WBZ WBZA WCKY WCOL
WEBR WFIL WHAM WJZ WMAL
WMPS WMT WOWO WREN WSPD
WSYR WTCN WXYZ
CBS—Tuesday only

KNX KSFO

E-9:45 p.m., C-8:45, M-7:45, P-6:45 Don Lee System, Daily Same stations as at Midnight

Michigan Network, daily WASH WBCM WELL WFDM WIBM WJIM WKZO WOOD

E-10:00 p.m., C-9:00, M-8:00, P-7:00 Blue—Tuesday, Wednesday KDKA KOIL KSO KWK WBAL WBZ WBZA WCKY WEAN WEBR WFIL WHAM WHK WICC WJZ

WLS WMAL WMT WOWO WREN WSPD WSYR WTCN WXYZ E-10:15 p.m., C-9:15, M-8:15, P-7:15 Michigan Radio Network, Dally WXYZ

E-10:45 p.m., C-9:45, M-8:45, P-7:45 CBC—Daily except Saturday

To National and French Networks

Red—Friday only
KDYL KFI KGW KHQ KOA KOMO
KPO KSD KSTP KYW WBEN WCAE
WCSH WDAF WDEL WEAF WFBIR
WGY WIRE WJAR WLW WMAQ
WNAC WOW WRC WTAG WTAM
WTIC WJ

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

To National and French Networks Blue, Sunday. Press Radio

Available to Entire Network

E-11:15 p.m., C-10:15, M-9:15, P-8:15 CBS—Boake Carter, Mon., Wed., Fri. KFPY KLZ KNX KOIN KOL KSFO KSL KVI WFBM

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

To all stations available

CBC—Saturday
To National and French Networks

WHAT'S ON THE AIR TONIGHT

Fill in the calls and frequencies of the stations through which you best receive the network programs. You can then turn quickly to the one that has the feature you want.

Network	Stations
Canadian (CBC)	
Columbia (C)	
Mutual (M)	
National Red (R)	
National Blue (B)	

Time: E Eastern: C Central: M Mountain: P Pacific

While these programs are correct at the time of going to press, changes are made frequently.

MONDAY

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

CRCT KDKA WBAL WBZ WBZA WFLA WIOD WJAX WJZ WLW WMAL WOOD WRVA WSYR WTAM WXYZ

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

- Poetic Melodies; Jack Fulton WABC WADC WBT WCAO WCAU WDRC WEAN WEEL WFBL WGR WHEC WHE WIAS WIR WIST WKRC WOKO WSPD WTOC WWVA

- Amos 'n' Andy

KSD KSTP KYW WBEN WCAE WCSH WEAF WFBR WGY WHO WJAR WLW WNAC WRC WTAG WTAM WTIC WWJ

E-7:15 p.m., C-6:15, M-5:15, P-4:15 - Uncle Ezra's Radio Station KARK KFYR KGBX KGNC KPRC KSTP KTBS KTBS KVOO KYW WBAP WBEN WCAE WCKY WCOL WCSH WDAF WDAY WEAF WEBC WFAA WFBR WGBF WGY WHO WIBA WIRE WJAR WKY WMAQ WNAC WOAI WOOD WOW WRC WTAG WTAM WTIC WTMJ

E-7:30 p.m., C-6:30, M-5:30, P-4:30 B - Lum and Abner

WBZ WBZA WENR WJZ WLW WMC WSM WSYR

M — The Lone Ranger WFIL WNBF WSYR WOR WXYZ

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

KMBC KMOXKOMA KRLD WABC WBBM WBT WCAU WCCO WDRC WEAN WFBL WGR WHAS WHK WEAN WJAS WJR WJSV WKRC WNAC

E-8:00 p.m., C-7:00, M-6:00, P-6:00 R - Burns and Allen

CRCT KYW WBEN WCAE WCSC WCSH WEAF WFBR WFLA WGY WHO WIOD WIRE WIS WJAR WJAX WLW WMAQ WNAC WPTF WRC WRVA WSOC WTAG WTAM WTAR WTIC WWJ

- Melody Puzzles; Harry Salter KANS KDKA KECA KERN KFBK KFDM KFEL KFSD KGA KGHF KGHL KGIR KGO KGW KIDO KJR KLO KMJ KOB KOIL KRGV KRIS KSO KTAR KTMS KTSM KWG KWK KXYZ WABY WAGA WBAL WBOW WBRE WBZ WBZA WCKY WCOL WDSU WEAN WEBR WFEA WFIL WGL WHAM WHK WICC WJBO WJTN WJZ WLEU WLS WMAL WMPS WMT WORK WREN WROL WRTD WSAN WSGN WSPD WSYR WXYZ

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

KFAB KMBC WABC WADC WBBM WBT WCAO WCAU WDRC WEAN WFBL WGR WGST WHEC WHK WHP WICC WJAS WJR WJSV WKRC WLBZ WMAS WNAC WOKO WORC WSPD

Voice of Firestone

CFCF CRCT KFYR KPRC KSD KSTP KTBS KVOO KYW WAVE WBEN WCAE WCSC WCSH WDAF WDAY WEAF WEBC WEEI WFAA WFBC WFBR WFLA WGY WHO WIBA WIOD WIRE WIS WJAR WJAX WJDX WKY WMAQ WMC WOAI WOW WPTF WRC WRVA WSB WSM WSMB WSOC WTAG WTAM WTAR WTIC WTMJ WWJ WWNC

B — Campana's Grand Hotel KDKA KFEL KFI KFSD KGA KGO KGW KJR KLO KOIL KSO KWK WBAL WBZ WBZA WCKY WEAN WEBR WFIL WHAM WHK WICC WLS WMAL WMT WOWO WREN WSPD WSYR WXYZ

E-9:00 p.m., C-8:00, M-7:00, P-6:00 B - Philadelphia Symphony KEEL.

KGO KSO KVOD KWK KXYZ WBAL WBZ WBZA WEAN WEBR WENR WFIL WHAM WJTN WJZ WLS WMAL WREN WRTD WSPD WSYR WTCN WXYZ

C — Lux Radio Theater CFRB CKAC KFAB KFH KFPY KLRA KLZ KMBC KMOX KNOW KNX KOH KOIN KOL KOMA KRLD KRNT KSFO KSL KTRH KTSA KTUL KVI WABC WADC WBBM WBNS WBRC WBT WCAO WCCO WDAE WDBJ WDRC WEEL WFBL WFBM WGAR WGST WHAS WHEC WHIO WIBX WISN WJAS WJR WJSV WKBW WKRC WLAC WMAS WMBD WNAX WOKO WORC WPRO WQAM WREC WRVA WWL

Also on Canadian Network R - Fibber McGee and Molly KVOO KYW WAVE WBEN WCAE WCOL WCSH WDAF WDAY WEAF WEBC WFAA WFBR WFLA WGY WHO WIBA WIOD WIRE WIS WJAR WJAX WJDX WLW WMAQ WNAC WOAI WOOD WOW WMC WRC WSB WSM WSMB WSOC WSUN WTAG WTAM WTAR WTIC WTMJ WWJ WWNC

E-9:30 p.m., C-8:30, M-7:30, P-6:30 R-Phil Spitalny's Girl Orchestra CFCF CRCT KDYL KFI KGHL KGIR KGO KGW KHQ KOA KOMO KPRC KSD KSTP KVOO KYW WAVE WBEN WCAE WCSH WDAF WEAF WFAA WFBR WFLA WGY WHO WIBA WIOD WIRE WIS WJAR WJAX WKY WLW WMAQ WMC WNAC WOAI WOW WPTF WRC WRVA WSB WSM WSMB WTAG WTAM WTAR WTIC WTMJ WWJ

E-10:00 p.m., C-9:00, M-8:00, P-7:00 R — Contented Program

CFCF CRCT KDYL KFI KGW KHQ KOA KOMO KPO KPRC KSD KYW WBEN WCAE WCSH WDAF WEAF WEEI WFBR WFLA WGY WHO WIOD WIS WJAR WJAX WKY WMAQ WMC WOAI WOW WPTF WRC WRVA WSB WSM WTAG WTAM WTAR WTIC WWJ WWNC Also on Canadian Network

Warden Lewis E. Lawes

KDKA KECA KFSD KGA KGO KJR KLO KOIL KSO KVOD KWK WBAL WBZ WBZA WCKY WEAN WEBR WENR WFIL WHAM WHK WICC WJZ WMAL WMT WOWO WREN WSPD WSYR WTCN WXYZ

C - Wayne King and Orchestra KDB KERN KFAB KFBK KFPY KFRC KGB KHJ KLZ KMBC KMJ KMOX KOIN KOL KRNT KSL KVI KWG WAAB WABC WADC WBBM WBNS WBT WCAO WCAU WCCO WDRC WEAN WFBL WFBM WHAS WHK WIBW WJAS WJR WJSV WKBW WKRC WOKO WSPD WWL

E-10:30 p.m., C-9:30, M-8:30, P-7:30 C - Brave New World Available to entire network

Burns and Allen

KARK KDYL KFBK KFI KFYR KFBX KGHL KGIR KGNC KGO KFYR KPRC KSD KSTP KTBS KGW KHQ KMJ KOA KOMO KPO

MONDAY (Continued)

KPRC KSD KSTP KTAR KTBS KVOO KWG WAVE WDAF WDAY WEBC WFAA WIBA WJDX WKY WMC WOAI WOW WSB WSMB WTMJ

M — The Lone Ranger
KDB KDON KFRC KFXM KGB
KGDM KHJ KPMC KVOE KXO
Available also to West Coast Section

E-11:00 p.m., C-10:00, M-9:00, P-8:00
C — Poetic Melodies: Jack Fulton
KERN KFAB KFBK KFPY KFRC
KGB KHJ KLRA KLZ KMBC KMOX
KOIN KOL KOMA KRLD KRNT
KSL KTRH KTSA KVI WBBM
WBRC WCCO WFBM WGST WLAC
WREC WWI.

R - Amos 'n' Andy

KDYL KERN KFBK KFI KGW KHO KMJ KOA KOMO KPO KPRC KSD KWG WDAF WFAA WHO WURE WKY WMAQ WMC WOAI WOW WSB WSM WSMB

E-11:15 p.m., C-10:15, M-9:15, P-8:15 C — Boake Carter KFPY KLZ KNX KOIN KOL KSFO KSL KVI

B — Lum and Abner KECA KERN KEX KFBK KFSD KGA KGO KJR KMJ KWG

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

KFPY KGKO KLRA KLZ KMOX KNX KOIN KOL KOMA KRLD KRNT KSCJ KSFO KSL KTUL KVI KWKH WACO WBRC WCCO WFBM WHAS WLAC WREC

TUESDAY

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

E-7:00 p.m., C-6:00, M-5:00, P-4:00 C — Poetic Melodies, See Monday R — Amos 'n' Andy, See Monday B — Easy Aces

KDKA KDYL KFI KGW KHQ KOA KOIL KOMO KPO KSO KWK WBAL WBZ WBZA WCKY WENR WFIL WGAR WHAM WHIO WIRE WJZ WMAL WMT WSYR WXYZ

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

C-Geo, McCall, Hollywood Talk
KFAB KFH KLRA KMOX KNOW
KOMA KRLD KRNT KTRIH KTSA
KWKH WABC WADC WBBM WBNS
WBT WCAO WCAU WCCO WCHS
WPBL WGAR WGBI WGST WHAS
WHEC WHIO WHIW WISN WJAS
WJR WJSV WKRC WLAC WMAS
WMBR WOC WOKO WORC WPRO
WQAM WREC WRVA WWL

E-7:30 p.m., C-6:30, M-5:30, P-4:30 C — Helen Menken, Drama

KFAB KFPY KIRO KLZ KMBC KMOX KNX KOIN KRNT KSFO KSL KVI WABC WBBM WCAO WCAU WDRC WEEI WFBL WGAR WGR WHAS WHEC WHIO WJAS WJR WJSW WKRC WOKO WORC WPRO

B — Dorothy Thompson; News WBAL WBZ WBZA WENR WHAM WJZ WSYR E-8:00 p.m., C-7:00, M-6:00, P-5:00 R — Johnny with Russ Morgan

KFYR KPRC KSD KSTF KTBS
KTHS KVOO KYW WAVE WBAP
WBEN WCAE WCSH WDAF WDAY
WEAF WEBC WFFR WFLA WGY
WHO WIBA WIOD WIS WJAR
WJAX WJDX WKY WLW WMAQ
WMC WNAC WOW WPTF WRC
WRVA WSB WSM WSMB WSOC
WSUN WTAG WTAM WTAR WTIC
WTMJ WWJ WWNC

C—Edward Robinson; Claire Trevor
CBM CFRB KFAB KFH KFPY
KIRO KLRA KLZ KMBC KMOX
KNOW KNX KÖIN KOMA KRLD
KRNT KSFO KSL KTRH KTSA
KTUL KVI WABC WADC WBBM
WBNS WBRC WBT WCAO WCAU
WCCO WDAE WDBJ WDRC WEBI
WFBL WFBM WGAR WGR WGST
WHAS WHEC WHIO WIBX WISN
WJAS WJR WJSV WKRC WLAC
WMAS WMBD WNAX WOKO WORC
WPRO WQAM WREC WRVA WWL
Also on Canadian Network

B - Those We Love

KDKA KFEL KFI KFSD KGA KGO KJR KLO KOIL KSO KWK WABY WBAL WBZ WBZA WCKY WEAN WEBR WFIL WHAM WHK WICC WJZ WLS WMAL WMT WREN WSPD WSYR WXYZ

E-8:30 p.m., C-7:30, M-6:30, P-5:30 C — Al Joison; Parkyakarkus

CFRB CRCM KFAB KFH KLRA
KMBC KMOX KNOW KOMA KRLD
KRNT KTRH KTSA KTUL WABC
WADC WBBM WBNS WBRC WBT
WCAO WCAU WCCO WDAE WDBJ
WDRC WEEI WFBL WFBM WGAR
WGR WGST WHAS WHEC WHIO
WIEN WISN WJAS WJR WJSV
WKRC WLAC WMAS WMBD WNAX
WOKO WORC WPRO WQAM WREC
WRVA WWL

Also on Canadian Network

R—Wayne King and Orchestra
KFYR KPRC KSD KSTP KTBS
KVOO KYW WAVE WBAP WBEN
WCAE WCKY WCSH WDAF WDAY
WEAF WEBC WEEI WFBR WGY
WHO WHIO WIBA WIRE WJAR
WJDX WKY WMAQ WMC WOAI
WOW WRC WSB WSM WSMB
WTAG WTAM WTIC WTMJ WWJ

B — Edgar Guest, It Can Be Done KDKA KOIL KSO KWK WBAL WBZ WBZA WFIL WGAR WHAM WJZ WLS WLW WMAL WMT WREN WSYR WXYZ

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

C — Al Pearce and Gang CFRB CKAC KFAB KFH KGKO KLRA KMBC KMOX KOMA KRLD KRNT KSCJ KTRH KTSA KTUL KWKH WABC WACO WADC WALA WBBM WBIG WBNS WBRC WBT WCAO WCAU WCCO WDAE WDBJ WDBO WDNC WDOD WDRC WEAN WFBL WFBM WFEA WGST WHAS WHEC WHK WHP WIBW WIBX WICC WISN WJAS WJR WJSV WKBW WKRC WKBH WKBN WLAC WLBZ WMAS WMBD WMBG WMBR WMMN WNAC WNAX WNBF WNOX WOC WOKO WORC WOWO WPG WQAM WREC WSBT WSFA WSJS WSPD WTOC WWL

R-Vox Pop; Sidewalk Interviews
KSD KYW WBEN WCAE WCKY
WCSH WDAF WEAF WEEI WFBR
WGY WHO WIRE WJAR WMAQ
WOW WRC WTAG WTAM WTIC
WWJ

B - Horace Heidt Orchestra

KANS KDKA KFI KFSD KGA KGO
KGW KJR KLO KÓIL KPRC KSO
KTHS KVOD KWK WAVE WBAL
WBAP WBZ WBZA WEAN WEBR
WFIL WFLA WHAM WHK WICC
WIOD WIS WJAX WJZ WKY WLS
WLW WMAL WMC WMT WOAL
WPTF WREN WSB WSM WSMB
WSOC WSPD WSUN WSYR WTAR
WTCN WXYZ

E-9:30 p.m., C-8:30, M-7:30, P-6:30 R — Hollywood Mardi Gras

CFCF CRCT KDYL KFI KGHL
KGW KHQ KOA KOMO KPO KPRC
KSD KSTP KTAR KTBS KVOO
KYW WAVE WBAP WBEN WCAE
WCOL WCSC WCSH WDAF WDEL
WEAF WEBC WFBR WFLA WGY
WHO WIBA WIOD WIRE WIS
WJAR WJAX WKY WMAQ WMBG
WMC WNAC WOAI WOOD WOW
WRC WSB WSM WSMB WSOC
WTAG WTAM WTAR WTIC WTMJ
WJ

E-10:00 p.m., C-9:00, M-8:00, P-7:00 C — Benny Goodman's Orchestra

KFAB KFH KFPY KGKO KIRO
KLRA KLZ KMBC KMOX KNOW
KNX KOIN KOMA KOY KRLD
KRNT KSCJ KSFO KSL KTRH
KTSA KTUL KVI KVOR KWKH
WABC WACO WADC WALA WBBM
WBIG WBNS WBRC WBT WCAO
WCAU WCCO WCHS WDAE WDBJ
WDBO WDNC WDOD WDRC WEEI
WFBL WFBM WGAR WGST WHAS
WHFC WHIO WHP WIBW WIBX
WISN WJAS WJIR WJSV WKBB
WKBN WKBW WKRC WLAC WLBZ
WMAS WMID WMBR WNAX
WNBF WNOX WOC WOKO WORC
WPG WPRO WQAM WREC WKYA
WSBT WSFA WSJS WTOC WWL

B—Gen. Hugh Johnson KDKA KOIL KSO KWK WBAL WBZ WBZA WCKY WEAN WEBR WFIL WHAM WHK WICC WJZ WIS WMAL WMT WOWO WREN WSPD WSYR WTCN WXYZ

WSFL WSJL

M — Eddle Duchin Orchestra

CKLW KALE KDB KDON KELA
KFRC KFXM KGA KGB KGY KHJ
KIEM KIT KMO KOL KORE KPMC
KPQ KQW KRNR KSLM KVOE
KVOS KXO KXRO WGN WIP WLW
WNAC WOL WOR WRR

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

R — Jimmy Fidler Hollywood Gossip

KDYL KFI KGW KHQ KOA KOMO

KPO KSD KTAR KYW WBEN

WCAE WCSH WDAF WEAF WFBR

WGY WHO WJAR WLW WMAQ

WNAC WOOD WOW WRC WTAG

WTAM WTIC WWJ

E-10:45 p.m., C-9:45, M-8:45, P-7:45
R — Date Carnegie; Winning Friends
KDYL KFI KGW KHQ KOA KOMO
KPO KSD KSTP KYW WBEN WCAE
WCSH WDAF WDEL WEAF WFBR
WGY WHO WIRE WJAR WLW
WMAQ WNAC WOW WRC WTAG
WTAM WTIC WWJ

TUESDAY (Continued)
E-11:00 p.m., C-10:00, M-9:00, P-8:00
C — Poetic Melodies, See Monday
M — Amos 'n' Andy, See Monday

E-11:30 p.m., C-10:30, M-9:30, P-8:30 C — Al Joison; Parkyakarkus KFPY KLZ KNX KOIN KOL KSFO KSL KVI

Also on Canadian Network

E-Midn't; C-11:00, M-10:00, P-9:00

C — Al Pearce and Gang

KFBB KFPY KGVO KLZ KNX

KOH KOIN KOL KOY KSFO KSL

KVI KVOR

WEDNESDAY

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

E-7:00 p.m., C-6:00, M-5:00, P-4:00 C — Poetic Melodies, See Monday R — Amos 'n' Andy, See Monday B — Easy Aces, See Tuesday

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

KMBC WABC WADC WBIG WBNS
WBT WCAO WCAU WCHS WDAE
WDBJ WDBO WDRC WEEI WFBL
WGAR WGBI WGR WHEC WHIO
WIBX WJAS WJR WJSV WKBN
WKRC WLBZ WMAS WMBR WOKO
WORC WPRO WQAM WRVA WWVA
R — Uncle Exra, See Monday

E-7:30 p.m., C-6:30, M-5:30, P-4:30 B — Lum and Abner, See Monday M — Lone Ranger, see Mon.

E-7:45 p.m., C-6:45, M-5:45, P-4:45 C — Boake Carter. See Monday R — "Cheer Up"; Henry Burbig

R — "Cheer Up"; Henry Burblg KYW WEAF WENR WTAM

E-8:00 p.m., C-7:00, M-6:00, P-5:00
C — Cavalcade of America
KDB KERN KFAB KFBK KFPY
KFRC KGB KHJ KLZ KMBC KMJ
KMOX KOIN KOL KRLD KRNT
KSL KVI KWG WABC WBBM
WBNS WCAU WCCO WDRC WEAN
WFBL WFBM WGR WHAS WHEC
WHK WJAS WJR WJSV WKRC
WLAC WMBG WNAC WOKO WTOC

R - One Man's Family

WWI.

KDYL KFI KFYR KGW KHQ KOA KOMO KPO KPRC KSD KSTP KTAR KTBS KTHS KVOO KYW WAPI WAVE WBAP WBEN WCAE WCSH WDAF WDAY WEAF WBE WHO WIBA WIOD WIS WJAR WJAX WJDX WKY WLW WMAQ WMC WOAI WOW WPTF WRC WRVA WSB WSM WSMB WSOC WSUN WTAG WTAM WTAR WTIC WTMJ WWJ WWNC

Also on Canadian Network

E-8:30 p.m., C-7:30, M-6:30, P-5:30
C — Eddle Cantor; Deanna Durbin
CFRB CKAC KFAB KFH KLRA
KMBC KMOX KOMA KRLD KRNT
KSCJ KTRH KTSA KTUL KWKH
WABC WADC WBBM WBNS WBRC
WBT WCAO WCAU WCCO WDAE
WDBJ WDBO WDRC WEEI WFBL
WFBM WGR WGST WHAS WHEC
WHO WHK WHP WIBW WIBX
WJAS WJR WJSV WKRC WLAC
WLBZ WMAS WMBD WMBG

WMBR WNAX WNOX WOKO WORC WOWO WPG WPRO WQAM WREC WWL

B - Harriet Parsons

KDKA KECA KFEL KFSD KGA KGO KJR KLO KOIL KSO KWK WBAL WBZ WBZA WCKY WEAN WEBR WFIL WHAM WHK WICC WJZ WLS WMAL WMT WOWO WREN WSPD WSYR WXYZ

R—Tommy Dorsey Orchestra
KDYL KFI KGW KHQ KOA KOMO
KPO KPRC KSD KSTP KTBS KYW
WAVE WBEN WBRC WCAE WCSH
WDAF WDEL WEAF WFAA WFBY
WFLA WGY WHO WIOD WIRE
WIS WJAR WJAX WKY WLW
WMAQ WMBG WMC WNAC WOOD
WOW WPTF WRC WSB WSM

WSMB WSUN WTAG WTAM WTAR

WTIC WWJ WWNC

E-9:00 p.m., C-8:00, M-7:00, P-6:00
C—Chesterfield; Andre Kostelanetz
KDB KERN KFAB KFBK KFH
KFPY KFRC KGB KGKO KGMB
KHJ KLKA KLZ KMBC KMJ KMOX
KOH KOIN KOL KOMA KRLD
KRNT KSCJ KSL KTRH KTSA
KTUL KVI KVOR KWG KWKH
WABG WACO WADC WALA WBBM
WBIG WBNS WBRC WBT WCAO
WCAU WCCO WCOA WDAE WDBO
WDBO WDNC WDDO WDRG WEAN
WFBL WFBM WFEA WGST WHAS
WHEC WHK WHP WIBW WIBX
WICC WISN WJAS WJR WJSW
WKBH WKBW WKRC WLAC WLBZ
WMAS WMBD WMBG WMBR
WNAC WNAX WNBF WNOX
WOKO WORC WOWO WPG WQAM
WREC WSFA WSJS WSPD WTOC
WWL

R - Town Hall Tonight

KFYR KPRC KSD KSTP KTBS
KTHS KVOO KYW WAVE WBEN
WCAE WCSH WDAF WDAY WEAF
WEBC WEEI WFAA WFBR WFLA
WGY WHO WIBA WIOD WIS WJAR
WJAX WJDX WKY WLW WMAQ
WMC WOAI WOW WPTF WRC WSB
WSM WSMB WSOC WTAG WTAM
WTAR WTIC WTMJ WWJ WWNC

E-9:30 p.m., C-8:30, M-7:30, P-6:30 C — Ben Bernle; Lew Lehr

KDAL KFAB KFBB KFH KFPY
KGAR KGKO KGLO KIRO KIRO
KLAS
KALZ KMBC KMOX KNOW KNX
KOH KOIN KOMA KOY KRLD
KRNT KSCJ KSFO KSL KTRH
KTSA KTUL KVI KVOR KWKH
WABC WACO WALA WBBM WBIG
WENS WBT WCAO WCAU WCCO
WCHS WCOA WCOC WDAE WDBJ
WDBO WDNC WDOD WDRC WEDI
WEOA WFBL WFBM WGAR WGBI
WGST WHAS WHEC WHIO WH'B
WHP WIBW WIBX WISN WJAS
WJNO WJR WJSV WKBB WKBH
WKBW WKRC WLAC WLBZ WMAS
WMBD WMBR WMFG WMMN
WNAX WNFF WNBX WNOX WOC
WOKO WORC WPG WPRO WQAM
WREC WRVA WSBT WSFA WSJS
WTAQ WTOC WWL

E-10:00 p.m., C-9:00, M-8:00, P-7:00 C — Crime Crusade; Phil Lord

KDB KERN KFAB KFBK KFH KFPY KFRC KGB KHJ KLRA KLZ KMBC KMJ KMOX KOIN KOL KOMA KRLD KRNT KSL KTRH

KTSA KTUL KVI KWG KWKH
WABC WACO WBBM WBNS WBRC
WBT WCAO WCAU WCCO WDAE
WDBJ WDBO WDRC WEAN WFBL
WFBM WGST WHAS WHEC WHK
WICC WISN WJAS WJR WJSV
WKBW WKRC WLAC WLBZ WMBG
WMBR WNAC WOKO WORC WOWO
WOAM WREC WTOC WWL

R—Your Hollywood Parade
KDYL KERN KFBK KFI KFYR
KGBX KGHL KGIR KGNC KGU
KGW KHQ KIDO KMJ KOA KOB
KOMO KPO KPRC KSD KSTP
KTAR KTBS KTHS KWG KYW
WAPI WAVE WBEN WCAE WCSC
WCSH WDAF WDEL WEAF WEBC
WFAA WFBC WFBR WFEA WFLA
WGL WGY WHO WIBA WIOD WIRE
WIS WJAR WJAX WJDX WKY
WLW WMAQ WMBG WMC WNAC
WOAI WOOD WORK WOW WPTF
WRC WSB WSM WSMB WSOC
WSUN WTAG WTAM WTAR WTIC
WTMJ WWJ WWNC

B - Gen. Hugh Johnson, See Tues.

E-10:30 p.m., C-9:30, M-8:30, P-7:30
C — Hobby Lobby; Harry Salter
KDAL KFAB KFH KFPY KGKO
KIRO KLZ KMOX KNOW KNX
KOH KOIN KOMA KRLD KOY
KRNT KSFO KSL KTRH KTSA
KTUL KVI KWKH WALA WBBM
WBRC WCCO WCOC WTFM WGST
WHAS WIBW WISN WLAC WMBD
WNBF WNOX WOC WREC WSBT
WSFA WWL

M - Lone Ranger, see Mon.

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

E-11:15 p.m., C-10:15, M-9:15, P-8:15 C — Boake Carter, See Monday B — Lum and Abner, See Monday

E-11:30 p.m., C-10:30, M-9:30, P-8:30 C — Eddie Cantor; Deanna Durbin KFBB KFPY KGVO KLZ KNX KOH KOIN KOL KOY KSFO KSL KVI KVOR

THURSDAY

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

E-7:00 p.m., C-6:00, M-5:00, P-4:00 C — Poetic Metodies, See Monday R — Amos 'n' Andy, See Monday B — Easy Aces, See Tuesday

E-7:15 p.m., C-6:15, M-5:15, P-4:15 C — Geo. McCall, see Tues.

E-7:30 p.m., C-6:30, M-5:30, P-4:30 C — "We, The People."

KFAB KME KMOX KNOW KOMA KRLD KRNT KSCJ KTRH KTSA KTUL WABC WBBM WBNS WCAO WCAU WCCO WDAE WDBO WDRC WEEI WFBL WGAR WGR WHAS WHEC WHIO WHP WIBX WISN WJAS WJR WJSV WKRC WMBD WMBR WOC WOKO WPRO WQAM

E-8:00 p.m., C-7:00, M-6:00, P-5:00 C — Kate Smith; Jack Miller

C — Kate Smith; Jack Miller CFRB CRCM KDAL KFAB KFH KGKO KLRA KMBC KMOX KNOW KOMA KRLD KRNT KSCJ KTRH KTSA KTUL KWKH WABC WACO WADC WBBM WBNS WBRC WBT

THURSDAY (Continued)

WCAO WCAU WCCO WDAE WDBJ WDBO WDOD WDRC WEEI WEOA WFBL WFBM WGAR WGR WGST WHAS WHEC WHIO WHP WIBW WISN WJAS WJR WJSV WKBN WKRC WLAC WLBZ WMBD WMBR WNAX WNOX WOC WOKO WORC WPRO WQAM WRVA WREC WSFA WTAQ WWL

R — Rudy Vallee's Variety Hour

CFCF CRCT KDYL KFI KFYR KGW KHQ KOA KOMO KPO KSD KSTP KTAR KYW WBEN WCAE WCSH WDAF WDAY WEAF WEBC WEEI WFBR WGY WHO WJAR WLW WMAQ WOW WRC WTAM WTIC WTMJ WWJ

Also on Canadian Network

B — The March of Time

KDKA KECA KERN KFBK KFEL
KFSD KGA KGO KJR KLO KMJ
KOIL KSO KWG KWK KXYZ
WABY WAGA WBAL WBZ WBZA
WCKY WCOL WCSC WDSU WEAN
WEBR WFIL WHAM WHK WICC
WJZ WLS WMAL WMPS
WTEN WSPD WSYR WXYZ

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

C—Major Bowes' Amateurs
CFRB CKAC KDB KERN KFAB
KFBK KFH KFPY KFRC KGB
KGKO KLRA KLZ KMBC KMJ
KMOX KOIN KOL KOMA KRLD
KRNT KSCJ KSL KTRH KTSA
KTUL KVI KVOR KWG KWKH
WABC WACO WADC WALA WBBM
WBIG WBNS WBRC WBT WCAO
WCAU WCCO WCOA WDAE WDBJ
WDBO WDNC WDOD DVDRC WEAN
WFBL WFBM WFEA WGST WHAS
WHEC WHK WHP WIBW WIBX
WICC WISN WJAS WJR WJSV
WKBN WKBW WKRC WLAC WLBZ
WMAS WMBD WMBG WMBR
WMMN WNAC WNAX WOC WOKO
WORC WOWO WPG WQAM WREC
WSFA WSJS WSPD WTOC WWL

R - MGM Program

CRCT KDYL KERN KFBK KFI
KFYR KGHL KGIR KGNC KGW
KMJ KOA KOMO KPO KPRC KSD
KSTP KTBS KWG KYW WAPI
WAVE WBAP WBEN WCAE WCSH
WDAF WDAY WEBC WFBR WFLA
WJAX WJDX WKY WLW WMAQ
WMBG WMC WNAC WOAI WOOD
WOW WPTF WRC WSB WSM
WSMB WSOC WSUN WTAG WTAM
WTAR WTIC WTMJ WWJ WWNC

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

R-Bob Burns; Bing Crosby
CFCF CRCT KDYL KFI KFYR
KGW KHQ KOA KOMO KPO KPRC
KSD KSTP KTAR KTBS KTHS
KYOO KYW WAVE WBAP WBEN
WCAE WCSH WDAF WDAY WEAF
WEBC WEEI WFBR WFLA WGY
WHO WIBA WIOD WIS WJAR
WJAX WJDX WKY WLW WMAQ
WMC WOAI WOW WPTF WRC
WRVA WSB WSM WSMB WSOC
WTAG WTAM WTAR WTIC WTMJ
WWJ WWNC

Also on Canadian Network

E-11:00 p.m., C-10:00, M-9:00, P-8:00 C — Poetic Melodies, See Monday R — Amos 'n' Andy, See Monday E-11:15 p.m., C-10:15, M-9:15, P-8:15 C — Kate Smith; Jack Miller KFBB KFPY KGVO KIRO KLZ

KNX KOIN KOY KSFO KSL KVI KVOR

FRIDAY

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

E-7:00 p.m., C-6:00, M-5:00, P-4:00 C — Poetic Melodies, See Monday R — Amos 'n' Andy, See Monday

E-7:15 p.m., C-6:15, M-5:15, P-4:15 R—Uncle Ezra, See Monday

E-7:30 p.m., C-6:30, M-5:30, P-4:30 B — Lum and Abner, See Monday M — Lone Ranger, see Mon.

E-7:45 p.m., C-6:45, M-5:45, P-4:45 C — Boake Carter, See Monday

E-8:00 p.m., C-7:00, M-6:00, P-5:00 C — Hammerstein Music Hall

KDB KERN KFAB KFBK KFPY KFRC KGB KHJ KLZ KMBC KMJ KMOX KOIN KOL KOMA KRNT KSL KVI KWG WABC WBBM WBNS WBRC WBTW WCAO WCAU WCCO WDRC WEAN WFBL WFBM WFBR WGST WHAS WHK WJAS WJR WJSV WKRC WMAS WMBG WNAC WOKO WWL

R — Cities Service Concert

CRCT CFYR KOA KPRC KSD KSTP KTBS KTHS KVOO) KYW WBAP WBEN WCAE WCSH WDAF WDAY WEAF WEBC WEEI WFAA WFBR WGY WHO WIBA WIOD WJAR WKY WMAQ WOAI WOW WRC WRVA WSAI WTAG WTAM WTIC WTMJ WWJ

E-8:30 p.m., C-7:30, M-6:30, P-5:30 C - Paul Whiteman; Deems Taylor KFAB KFH KGKO KLRA KMBC KMOX KOMA KRLD KRNT KSCJ KTRH KTSA KTUL KWKH WABC WACO WADC WALA WBBM WBIG WALG WALG WALA WBDM WALG WBNS WBRC WBT WCAO WCAU WCCO WCOA WDAE WDBJ WDBO WDNC WDOD WDRC WEEI WFBL WFBM WFEA WGR WGST WHAS WHEC WHIO WHK WHP WIBW WIBX WISN WJAS WJR WJSV WKBN WKRC WLAC WLBZ WMAS WMBD WMBG WMBR WMMN WNAX WNBF WNOX WOC WOKO WORC WOWO WPG WPRO WQAM WREC WSFA WSJS WSPD WTOC WWI.

B — Death Valley Days

KDKA KDYL KFI KĞW KHQ KOIL KOMO KPO KSO KWK WBAL WBZ WBZA WFIL WGAR WHAM WJZ WLS WLW WMAL WMT WREN WSYR WYYZ

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

CFRB CKAC KDB KERN KFAB KFBK KFH KFPY KFRC KGB KHJ KLRA KLZ KMBC KMJ KMOX KOIN KOL KOMA KRLD KRNT KSCJ KSL KTRH KTSA KTUL KVI KVOR KWG KWKH WABC WADC WBBM WBNS WBRC WBT WCAO WCAU WCCO WDAE WDBJ WDBO WDRC WEAN WFBL WFBM WFEA WGST WHAS WHEC WHK WHP WIBW WIBX WICC WJAS WJR

WJSV WKBW WKRC WLAC WLBZ WMAS WMBD WMBG WMBR WNAC WNAX WNOX WOKO WORC WPG WQAM WREC WSPD WWL Also on Canadian Network

R — Frank Munn; Abe Lyman KSD KYW WBEN WCAE WCSH WDAF WEAF WEEI WFBR WGY WJAR WLW WMAQ WOW WRC WTAG WTAM WWJ

E-9:30 p.m., C-8:30, M-7:30, P-6:30 R — True Story Court

KSD KYW WBEN WCAE WCSH WEAF WEEI WFBR WGY WHO WHIO WJAR WMAQ WOW WRC WTAG WTAM WTIC WWJ

E-10:00 p.m., C-9:00, M-8:00, P-7:00
C — Frank Crumit; Reed Kennedy
KDAL KFAB KFBB KFH KFPY
KGKO KGLO KGVO KRLA KLZ
KMOX KNOW KNX KOH KOIN
KOL KOMA KOY KRLD KRNT
KSCJ KSFO KSL KTRH KTSA
KTUL KVI KVOR KWKH WABC
WACO WADC WALA WBBM WBIG
WBNS WBRC WBT WCAO WCAU
WCOO WCHS WCOA WCOC WDAE
WDBJ WDBO WDNC WDOD WDRC
WEEI WEOA WFBL WFBM WGAR
WGBI WGST WHAS WHEC WHO
WHP WIBW WIBX WISN WJAS
WJNO WJR WJSV WKBB WKBW
WKRC WLAC WLBZ WMAS WMBD
WMBR WMMN WNBF WNOX WOC
WOKO WORC WPAR WPG WPRO
WQAM WREC WLVAWSBT WSFA
WSJS WYOC WWSS

CBC — Canada 1938

CBF CBL CBM CBO CBR CBW
CFAC CFCF CFCH CFCN CFCO
CFCY CFJC CFMB CFFL CFQC
CHAB CHNS CHRC CHSJ CHWK
CJAT CJCA CJCB CJIC CJKL
CJOC CKBI CKCK CKCW CKGB
CKOV CKOC CKPR CKSO CKX
CKY

R — First Nighter; Drama

KDVL KFI KFYE KGW KHQ KOA KOMO KPO KPRC KSD KSTP KTBS KTHS KYW WAVE WBEN WCAE WCSH WDAF WDAY WEAF WEBC WEEI WFAA WFBE WFLA WGY WHO WIBA WIOD WIS WJAR WJAX WJDX WKY WLW WMAQ WMC WPTF WRC WRVA WSB WSM WSMB WSOC WTAG WTAM WTAR WTIC WTMJ WWN

E-10:30 p.m., C-9:30, M-8:30, P-7:30 M — Lone Ranger, see Mon.

R — Jimmy Fidler

KDYL KFİ KGW KHQ KOA KOMO KPO KSD KSTP KYW WBEN WCAE WCSH WDAF WDEL WEAF WFBR WGY WIBA WIRE WJAR WLW WMAQ WNAC WOW WRC WTAG WTAM WTIC WTMJ WWJ

E-10:45 p.m., C-9:45, M-8:45, P-7:45 R — Dorothy Thompson—News

KDYL KFI KGW KHQ KOA KOMO KPO KSD KSTP KYW WBEN WCAE WCSH WDAF WDEL WEAF WFBR WGY WIRE WJAR WLW WMAQ WNAC WOW WRC WTAG WTAM WTIC WWJ

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

FRIDAY (Continued)

E-11:15 p.m., C-10:15, M-9:15, P-8:15 C - Boake Carter, See Monday

- Lum and Abner, See Monday

E-11:30 p.m., C-10:30, M-9:30, P-8:30 C — Paul Whiteman; Deems Taylor KFBB KFPY KGAR KGMB KGVO KIRO KLZ KNX KOH KOIN KOY KSFO KSL KVI KVOR

E-12:00p.m., C-11:00, M-10:00, P-9:00 CBC — Northern Messenger To Mideast and Western Networks

SATURDAY

E-7:00 p.m., C-6:00, M-5:00, P-4:00 C - Saturday Night Swing Club Available to Columbia Network

E-7:30 p.m., C-6:30, M-5:30, P-4:30 Carborundum Band KFAB KMBC KMOX WABC WBBM WBT WCAO WCAU WCCO WEEI WFBL WGAR WGR WHAS WJAS WJR WKRC WPRO

B - Uncle Jim's Question Bee KDKA WBZ WBZA WGY WHK WJZ WMAQ

E-8:00 p.m., C-7:00, M-6:00, P-5:00 R - "Believe-it-or-not." Ripley KANS KDYL KFYR KGNC KOA KPRC KSD KSTP KYW WAPI WAVE WBAP WBEN WCAE WCSH WDAF WDAY WDEL WEAF WEBC

WFBC WFBR WGY WHO WIBA WIRE WJAR WKY WLW WMAQ WMBG WNAC WMC WOAI WOOD WPTF WRC WSB WSMB WOW WSOC WSPD WTAG WTAM WTAR WTIC WTMJ WWJ

E-8:30 p.m., C-7:30, M-6:30, P-5:30 C — Johnny Presents Russ Morgan KFAB KFH KMBC KMOX KRNT WABC WADC WBBM WBIG WBNS WCAO WCAU WCCO WCOA WDRC WEEI WFBL WFBM WGR WGST WHAS WHEC WHIO WHK WHP WISN WJAS WJR WJSV WKRC WMBD WMBG WNBF WOC WOKO WPRO WSBT WWVA

Jack Haley; Virginia Verrill KDYL KGNC KOA KPRC KSD KSTP KYW WAPI WAVE WBAP WBEN WCAE WCSH WDAF WDEL WEAF WEBC WFBC WFBR WGY WHO WIBA WIRE WJAR WKY WLW WMAQ WMBG WMC WNAC WOAI WOW WPTF WRC WSB WSMB WSOC WSPD WTAG WTAM WTAR WTIC WTMJ WWJ

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

KDB KERN KFAB KFBK KFPY KFRC KGB KHJ KLRA KLZ KMBC KMJ KMON KOIN KOL KOMA KRLD KRNT KSL KTRH KTSA KVI KWG WABC WBBM WBNS WBT WCAO WCAU WCCO WDAE WDBO WDRC WEAN WFBL WFBM WJAS WJR WJSV WKBW WKRC WMBR WOKO WOAM WREC WSPD WWL

- National Barn Dance KDKA KOIL KPRC KSO KTBS KTHS KWK WABY WAPI WAVE

WBAL WBAP WBZ WBZA WFIL WFLA WHK WHAM WIOD WIRE WIS WJAX WJDX WJZ WKY WLS WMAL WMC WMT WOAI WOOD WPTF WREN WRVA WSB WSMB WSOC WSUN WSYR WTAR WWNC WXYZ

E-9:30 p.m., C-8:30, M-7:30, P-6:30 C - Saturday Night Serenade KFAB KFH KFFY KGKO KLRA
KLZ KMBC KMOX KNOW KNX
KOIN KOL KOMA KRLD KSFO
KTRH KTSA KTUL KVI KWKH
WALA WBBM WBIG WBNS WBRC WBT WCAO WCAU WCOA WDAE WDBO WDOD WEEI WFBL WFBM WGAR WGST WHAS WHEC WJAS WJR WJSV WKBW WLAC WMBD

WREC WRVA WSFA WTOC WWL E-10:00 p.m., C-9:00, M-8:00, P-7:00 - Your Hit Parade

WWVA

WMBR WMMN WNOX WOC WQAM

KERN KFAB KFBK KFH KFPY KFRC KGB KGKO KGMB KHJ KLRA KLZ KMBC KMJ KMOX KOH KOIN KOL KOMA KRLD KRNT KSCJ KSL KTRH KTSA KTUL KVI KVOR KWG KWKH WABC WACO WADC WALA WBBM KTHL WBIG WBNS WBRC WBT WCAO WCAU WCCO WCOA WDAE WDBJ WDBO WDNC WDOD WDRC WEAN WFBL WFBM WFEA WGST WHAS WHEC WHK WHP WIBW WIBX WICC WISN WJAS WJR WJSV WKBW WKRC WLAC WLBZ WMAS WMBD WMBG WMBR WNAC WNAX WNOX WOC WOKO WORC WPG WQAM WREC WSBT WSFA WSJS WSPD WTOC WWL WWVA

R - NBC Symphony Orchestra Available to entire Red and Blue Network and to Canadian Network

E-11:00 p.m., C-10:00, M-9:00, P-8:00 B - National Barn Dance

KDYL KFI KFSD KFYR KGHL KGIR KGU KGW KHQ KOA KOMO KPO KSTP KTAR WDAY WEBC WIBA WLW WTMJ

E-11:30 p.m., C-10:30, M-9:30, P-8:30 - Johnny Presents Russ Morgan KFBB KFPY KGVO KIRO KLZ KNX KOIN KSFO KSL KVI KVOR

E-12:00 p.m., C-11:00, M-10:00, P-9:00 C — Professor Quiz KFBB KFPY KIRO KNX KOH

KOIN KOY KSFO KSL KVI

R - "Believe-It-Or-Not" Ripley KERN KFBK KFI KGW KHQ KMJ KOMO KPO KWG

SUNDAY

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

CFRB KERN KFAB KFBH KFBK KFH KFPY KFRC KGB KGVO KMBC KOH KOL KRLD KSL KTRH KTSA KVI KVOR KWG KWKH WABC WACO WADC WALA WBNS WBRC WCAO WCCO WDAE WDBJ WDBO WDNC WESG WFBL WFEA WHAS WHK WIBX WJAS WJR WKRC WLBZ WMBD WMBR

WMMN WOC WOKO WORC WPG WQAM WSBT WSJS WSPD WTOC

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

C - Salt Lake Tabernacie Choir CFRB KFAB KFBB KFBK KFH KFPY KFRC KGB KLZ KOH KOL KRLD KSL KTRH KTSA KVI KVOR KWG WABC WACO WADC WALA WBIG WBNS WBRC WCAO WCCO WDAE WDBJ WDBO WESG WFBL WFEA WGR WHAS WICC WJAS WJR WKRC WLBC WMBR WMMN WOC WOKO WORC WQAM WSBT WSJS WSPD WTOC

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

C - Church of the Air

KFBK KFH KFPY KFRC KGB KHJ KMOX KOH KOL KOMA KRLD KRNT KSCJ KSL KTRH KTSA KVI KVOR KWG WABC WALA WBNS WBT WCAO WCCO WDAE WDBJ WDBO WDRC WESG WFBL WFBM WGR WHAS WHP WIBX WJAS WJSV WKBN WKRC WLAC WLBZ WMBR WNBF WOC WOKO WORC WPG WQAM WREC WSBT WSJS WSPD WTOC WWVA

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

B — Magic Key of RCA CFCF CRCT KDKA KDYL KFI KFYR KGU KGW KHQ KOA KOIL KOMO KPO KPRC KSO KSTP KTBS KTHS KVOO KWK WAPI WAVE WBAL WBZ WBZA WCKY WDAY WEBC WENR WFAA WFIL WFLA WGAR WHAM WHIO WIBA WIOD WIRE WIS WJAX WJDX WJZ WKY WMAL WMC WMT WOAI WPTF WREN WRVA WSB WSM WSMB WSOC WSYR WTAR WTMJ WWNC WXYZ

E-2:30 p.m., C-1:30, M-12:30, P-11:30 C - Jean Hersholt, "Dr. Christlan." C — Jean Hersnoit, "Ur. Christian."
CFRB KFAB KFH KMBC KMOX
KNOW KOMA KRLD KRNT KSCJ
KTRH KTSA KWKHI WABC WADC
WBBM WBNS WBRC WHT WCAO
WCAU WCCO WCHS WDAE WDBO
WDRC WEEI WFBI. WFBM WGAR WGST WHAS WHEC WHIO WHP WIBW WJAS WJR WJSV WKBW WKRC WLAC WLBZ WMAS WMBR WOKO WORC WPRO WQAM WREC WRVA WWL

E-3:00 p.m., C-2:00, M-1:00, P-Noon C - N. Y. Philharmonic

CFRB CKAC KFAB KFBB KFH KGKO KGVO KLRA KLZ KMBC KMOX KNOW KOL KRLD KSCJ KSL KTRH KTSA KWKH WABC WADC WALA WBNS WBT WCAO WCCO WCHS WDAE WDBJ WDBO WDRC WEEI WESG WFBL WFBM WHAS WHK WHP WIBW WIBX WJAS WJR WJSV WKBB WKBN WKBW WKRC WLAC WLBZ WMAS WMBD WMBG WMBR WMMN WNBF WOC WOKO WORC WPAR WPRO WQAM WSBT WSJS WTAQ WTOC WWL

Also on Canadian Network

R - The Radio News Reel KSD KSTP KYW WBEN WCAE

SUNDAY (Continued)

WCSH WDAF WDEL WEAF WFBR WGY WHO WIRE WJAR WMAQ WNAC WOW WRC WSAI WTAG WTAM WTIC WWJ

E-4:30 p.m., C-3:30, M-2:30, P-1:30 R - The World Is Yours; Drama Available to Red Network

E-5:00 p.m., C-4:00, M-3:00, P-2:00

C—Magazine of the Air
CFRB CKAC KFAB KFPY KLZ
KMBC KMOX KNOW KNX KOIN
KOL KOMA KRLD KRNT KSFO KSL KTRH KTSA KTUL KVI WABC WADC WBBM WBNS WCAO WCAU WCCO WDAE WDRC WEEL WGAR WGR WGST WHAS WHEC WHIO WJAS WJR WJSV WKRC WKRC WMBR WOKO WPRO WQAM WWL

Marion Talley

KDYL KFI KGW KHQ KOA KOMO KPO KSTP KYW WBEN WCAE WCOL WCSH WDAF WDEL WEAF WEBC WFBR WGY WHO WIBA WIRE WJAR WMAQ WNAC WOOD WOW WRC WSAI WTAG WTAM WTIC WTMJ WWJ

B — Metropolitan Opera Auditions CFCF CRCT KARK KDKA KECA KEX KFEL KFI KFSD KFYR KGA KGIR KGNC KGO KGU KJR KLO KOIL KPRC KSO KTBS KVOO KWK WABY WAPI WAVE WBAL WBAP WBZ WBZA WCKY WCSC WDAY WEAN WEBR WENR WFIL WFLA WHAM WHK WICC WIOD WIS WJAX WJDX WJZ WKY WMAL WMC WMT WOAI WOWO WPTF WREN WRTD WSB WSM WSMB WSOC WSPD WSUN WSYR WTAR WTCN WWNC WXYZ

E-5:30 p.m., C-4:30, M-3:30, P-2:30 C — Guy Lombardo and Orchestra KFH KMBC KMOX KOMA KTUL WAAB WABC WBNS WCAO WCAU WDRC WEAN WFBL WFBM WGR WHAS WHEC WHK WIBX WICC WJR WJSV WMAS WOKO WORC WSPD WWVA

B - Smiling Ed McConnell

KANS KOKA KECA KERN KEX KFBK KFSD KFYR KGA KGIR KGO KJR KLO KMJ KOIL KSO KTAR KWG KWK WAVE WBAL WBZ WBZA WCKY WCOL WDAY WDSU WEAN WEBC WEBR WENR WFIL WHAM WHK WICC WIZ WMAL WMT WREN WRTD WSM WSPD WSYR WTCN WXYZ

R — Mickey Mouse Theater

KANS KDYL KFI KGNC KGW KHQ KOA KOMO KPO KPRC KSD KSTP KVOO KYW WAVE WBAP WBEN WBRC WCAE WCSH WDAF WDEL WEAF WFBC WFBR WFLA WGY WHO WIBA WIOD WIRE WIS WJAR WJAX WKY WLW WMAQ WMBG WMC WNAC WOAI WOOD WOW WPTF WRC WSB WSM WSMB WSUN WTAG WTAM WTAR WTIC WTMJ WWJ

E-6:00 p.m., C-5:00, M-4:00, P-3:00 C — Joe Penner; Gene Austin KFAB KFPY KGLO KLZ KMBC KMOX KNOW KNX KOIN KOL KOMA KRLD KRNT KSFO KSL KTRH KTSA KVI WABC WBBM WBNS WBRC WBT WCAO WCAU WCCO WDAE WDBO WDRC WEEI WFBL WFBM WGAR WGST WHAS WHEC WJAS WJR WJSV WKBW WKRC WOKO WORC WPRO WQAM WREC WRVA

M - George Jessel; Tommy Tucker To entire MBS and Michigan Net-

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

CFRB CKAC KDAL KFAB KFH KFPY KGAR KGMB KIRO KLRA KLZ KMBC KMOX KNOW KNX KOH KOMA KOY KRLD KRNT KSCJ KSFO KSL KTRH KTSA KTUL KVI WABC WADC WBBM WBT WCAO WCAU WCCO WDAE WDBO WDRC WEEL WFBL WFBM WGAR WGST WHAS WHEC WHIO WHLB WJAS WJNO WJR WJSV WKBW WKRC WMBR WLAC WMFG WNAX WNOX WOKO WPRO WQAM WREC WRVA WTOC WWL WWVA

R — A Tale of Today
WBEN WEAF WGY WJAR WMAQ WOW WRC WTAM

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

KFAB KFH KFPY KLZ KMOX KNOW KNX KOIN KOL KOMA KRLD KRNT KSFO KSL KTRH KTSA KTUL KVI KWKH WABC WADC WBBM WBIG WBRC WBT WCAO WCAU WCCO WDRC WEEI WFBL WFBM WGAR WGBI WGR WGST WHAS WHEC WHIO WJAS WJR WJSV WKRC WOKO WPRO WREC WRVA WTOC WWL

- Jack Benny; Mary Livingstone KSD KYA KYW WBEN WCAE WCSH WDAF WEAF WFBR WGY WHO WJAR WLW WMAQ WNAC WOW WRC WTAG WTAM WTIC ww.i

Also on Canadian Network

E-7:30 p.m., C-6:30, M-5:30, P-4:30 - Phil Baker; Oscar Bradley

KLRA KLZ KRLD KTRH KTSA
KTUL KWKH WABC WACO WADC
WALA WBIG WBNS WBRC WBT
WCAO WCAU WCOA WDAE WDBJ
WDBO WDNC WDOD WDRC WEAN WFBL WFBM WFEA WGR WGST WHAS WHEC WHK WHP WIBX WICC WJAS WJR WJSV WKBN WKRC WLAC WLBZ WMAS WMBR WNAC WNOX WOKO WORC WQAM WREC WSBT WSFA WSJS WSMK WSPD WTOC WWL WWVA

- Ozzie Nelson; Harriet Hilliard KARK KDKA KECA KFEL KEX KFSD KFYR KGA KGO KJR KLO KOIL KPRC KSO KSTP KTAR KTBS KTHS KVOO KWK WABY WAPI WAVE WBAL WBAP WBZ WBZA WCKY WCOL WDAY WEAN WEBC WEBR WFIL WFLA WHAM WHK WIBA WICC WIOD WIS
WIAX WJDX WJZ WKY WLEU
WLS WMAL WMC WMT WOAI
WPTF WREN WRTD WSB WSM WSMB WSOC WSUN WSYR WTAR WTMJ WWMC WXYZ

E-8:00 p.m., C-7:00, M-6:00, P-5:00 - Don Ameche; Edgar Bergen

CFCF CRCT KDYL KFI KFYR KGW KHO KOA KOMO KPO KPRC KSD KSTP KTAR KTBS KVOO KYW WAVE WBEN WCAE WCSH WDAF WDAY WEAF WEBC WFAA WDAY WEAF WEBC WFAA WFBR WFLA WGY WHO WIBA WIOD WIRE WIS WJAR WJAX WJDX WKY WLW WMAQ WMC WNAC WOAI WOW WPTF WRC WRVA WSB WSM WSMB WSOC WSUN WTAG WTAM WTAR WTIC WTMJ WWJ WWNC Also on Canadian Network

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

CFRB CKAC KDB KERN KFAB KFBK KFH KFPY KFRC KGB KGKO KHJ KLRA KLZ KMBC KMJ KMOX KOH KOIN KOL KOMA KRLD KRNT KSCJ KSL KTRH
KTSA KTUL KVI KVOR KWG
KWKH WABC WACO WADC WALA
WBBM WBIG WBNS WBRC WBT WCAO WCAU WCCO WCOA WDAE WDBJ WDBO WDNC WDOD WDRC WEAN WFBL WFBM WFEA WGR WGST WHAS WHEC WHK WHP WIBW WIBX WICC WISN WJAS WJR WJSV WKBN WKRC WLAC WLBZ WMAS WMBD WMBR WNAC WNAX WOC WOKO WORC WQAM WREC WSBT WSFA WSJS WSPD WTOC WWL WWVA

B — Tyrone Power; Drama

KDKA KECA KFSD KGA KGHL KGIR KGO KJR KLO KOIL KSO KTAR KWK WBAL WBZ WBZA WEBC WEBR WENR WFIL WGAR WHAM WICC WJZ WLW WMAL WMT WREN WSYR WXYZ

R - Manhattan Merry-Go-Round CFCF KDYL KFI KFYR KGW KHQ KOA KOMO KPO KPRC KSD WDAY WEAF WEBC WEEL WFAA WFBR WFLA WGY WHO WIBA WIOD WIRE WIS WJAR WJAX WJDX WKY WMAQ WMC WOAL WOW WPTF WRC WRVA WSB WSM WSMB WSOC WTAG WTAM WTAR WTIC WTMJ WWJ WWNC

E-9:30 p.m., C-8:30, M-7:30, P-6:30 R - Album of Familiar Music

CFCF CRCT KDYL KFI KFYR KGW KHQ KOA KOMO KPO KPRC KSD KSTP KTBS KYW WAPI WAVE WBEN WCAE WCSH WDAF WDAY WEAF WEBC WEEI WFAA WFBR WFLA WGY WHO WIBA WIOD WIS WJAR WJAX WJDX WKY WMAQ WMC WOAI WOW WPTF WRC WRVA WSAI WSB WSM WSMB WSOC WTAG WTAM WTAR WTMJ WWJ WWNC

B - Walter Winchell

KDKA KECA KEX KFSD KGA KGHL KGIR KGO KJR KLO KOIL KSO KTAR KWK WBAL WBZA WENR WFIL WGAR WHAM WJZ WLW WMAL WMT WDEN WSYR WXYZ

E-9:45 p.m., C-8:45, M-7:45, P-6:45 B — Irene Rich, Drama KDKA KOIL KSO KWK WBAL WBZ WBZA WCKY WEAN WEBR

SUNDAY (Continued)

WENR WFIL WHAM WHK WICC WJZ WMAL WMT WREN WSPD WSYR WTCN WXYZ

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

KFAB KFPY KLRA KLZ KMBC KMOX KNOW KNX KOIN KOL KOMA KRLD KRNT KSFO KSL KTRH KTSA KTUL KVI WABC WBBM WBNS WBRC WBT WCAU WCCO WDAE WDBO WDRC WEEI WFBL WFBM WGAR WGST WHAS WHEC WJAS WJR WJSV WKBW WKRC WMBR WNOX WOKO WORC WPRO WQAM WWL

R — Rising Musical Stars KDYL KFI KGBX KGW KHQ KOA

KPO KPRC KSD KSTP KTAR KTBS KTHS KYW WAVE WBAP WBEN KTHS KYW WAVE WBAP WBEN
WCAE WCSH WDAF WBAF WFBR
WFLA WGY WHO WIBA WIOD
WIRE WIS WJAR WJAX WJON
WKY WMAQ WMC WNAC WOAI
WOOD WOW WPTF WRC WRVA WSB WSM WSMB WSOC WTAG WTAM WTAR WTIC WTMJ WWJ WWNC

E-10:30 p.m., C-9:30, M-8:30, P-7:30 B - Tyrone Power; Drama KARK KPRC KTBS WAPI WAVE WBAP WJDX WKY WMC WOAI WSB WSM WSMB

E-11:00 p.m., C-10:00, M-9:00, P-8:00 KECA KERN KEX KFBK KFSD

B - Irene Rich, Drama

KGA KGO KJR KLO KMJ KVOD KWG WAPI WAVE WJDX WMC WSB WSM WSMB

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

B — Walter Winchell
KDYL KFI KFSD KGHL KGIR
KGW KHQ KOA KOMO KPO KPRC KTAR KTBS KTHS WAPI WAVE WBAP WJDX WKY WMC WOAI WSB WSM WSMB

E-11:30 p.m., C-10:30, M-9:30, P-8:30 R — Jack Benny-Mary Livingstone KDYL KERN KFBK KFI KFSD KGHL KGIR KGU KGW KHQ KIDO KMJ KOA KOMO KPO KTAR KWG

CLASSIFIED INDEX TO CHAIN PROGRAMS

Time in Eastern Standard C-Columbia; R-National (Red); B-National (Blue); M-Mutual

COMEDY

Fred Allen, 9:00 p.m. Wed., Red Phil Baker, 7:30 p.m. Sun., CBS Jack Benny-Mary Livingstone, 7 and 11:30 p.m. Sun.,

Red Edgar Bergen-Charlie McCarthy, 8 p.m. Sun., Red Fannie Brice, 9 p.m. Thurs., Red Henry Burbig, 7:45 p.m. Wed., Red Bob Burns, 10:00 p.m. Thurs., Red Burns and Allen, 8 and 10:30 p.m., Mon., Red Charles Butterworth, 9:30 p.m. Tues., Red Eddle Cantor, 8:30 and 11:30 p.m. Wed., CBS Jack Haley, 8:30 p.m. Sat., Red Arlene Harris, 9 and 12 p.m. Tues., CBS George Jessel, 6:00 p.m. Sun., MBS Al Jolson, 8:30 and 11:30 p.m. Tues., CBS Ar Josob, 8-30 p.m. Wed., CBS Watter O'Keefe, 9:30 p.m. Tues., Red Parkyakarkus, 8-30 and 11:30 p.m. Tues., CBS Al Pearce, 9 and 12 p.m. Tues., CBS Joe Penner, 6:00 p.m. Sun., CBS
Joe Rines, 5:30 p.m. Sun., Red
Pinky Tomlin, 8:30 and 11:30 p.m. Wed., CBS Oliver Wakefield, 8:30 and 11:30 p.m., Fri., CBS

CONCERTS

Frank Black, 2:00 p.m. Sun., Blue Ford Sunday Evening Hour, 9:00 p.m. Sun., CBS Andre Kostelanetz, 9:00 p.m. Wed., CBS Met. Opera Auditions, 5:00 p.m. Sun., Blue NBC Symphony Orchestra, 10:00 p.m. Sat., Red and Blue

N. Y. Philharmonic, 3:00 p.m. Sun., CBS Philadelphia Symphony, 9:00 p.m. Sun., Blue

DANCE BANDS

Robert Armbruster, 8:00 p.m. Sun., Red Ben Bernle, 9:30 p. m. Wed., CBS Oscar Bradley, 7:30 p.m. Sun., CBS Don Donnie, 9 p.m. Sun., Red Tommy Dorsey, 8:30 p.m. Wed., Red Tommy Dorsey, 8:30 p.m. Wed., Red Eddle Duchin, 10 p.m. Tues., MBS Ted Flo Rito, 8:30 p.m. Sat., Red Al Goodman, 10:00 p.m. Sat., CBS; 10 p.m. Wed., Red Benny Goodman, 10:00 p.m. Tues., CBS Jimmy Grier, 6:00 and 11:00 p.m. Sun., CBS Gustav Haenschen, 9:30 p.m. Sun., Red; 10:00 p.m. Fri., CBS

Phil Harris, 7 and 11:30 p.m. Sun., Red Horace Heidt, 9:00 p.m. Tues., Blue Carl Hoff, 9 and 12 p.m. Tues., CBS Wayne King, 8:30 p.m. Tues., Red: 10 p.m. Mon., CRS

Benny Kreuger, 8:30 p.m. Mon., CBS Guy Lombardo, 5:30 p.m. Sun., CBS Abe Lyman, 9:00 p.m. Fri., Red Frankle Masters, 8:30 p.m. Tues., Blue Jack Miller, 8 and 11:15 p.m. Thurs., CBS

Billy Mills, 9 p.m. Mon., Red Russ Morgan, 8:30 and 11:30 p.m. Sat., CBS; 8:00 p.m. Tues., Red Ozzie Nelson, 7:30 p.m. Sun., Blue

Ray Noble, 8 and 10:30 p.m. Mon., Red Raymond Paige, 9:30 p.m. Tues., Red: 9:00 p.m. Fri,

Jacques Renard, 8:30 and 11:30 p.m. Wed., CBS B. A. Rolfe, 8:00 and 12:00 p.m. Sat., Red Harry Salter, 7:15 and 10:30 p.m. Wed., CBS; 8 p.m. Mon., Blue

Seymour Simons, 6:30 p.m. Sun., CBS Harry Sosnik, 9 and 10:30 p.m. Sun., Blue Phil Spitalny, 9:30 p.m. Mon., Red Georgie Stoll, 9:30 p.m. Tues., CBS Johnny Trotter, 10:00 p.m. Thurs., Red Tommy Tucker, 6:00 p.m. Sun., MBS Rudy Vallee, 8:00 p.m. Thurs.. Red Peter Van Steeden, 9:00 p.m. Mon., Red Don Voorhees, 8:00 p.m. Wed., CBS Mark Warnow, 7:30 and 10:30 p.m. Thurs., CBS; 5 p.m. Sun., CBS

Paul Whiteman, 8:30 and 11:30 Fri., CBS Meredith Willson, 9:00 p.m. Thurs., Red Victor Young, 8:30 and 11:30 p.m. Tues., CBS

DIALOG

Amos 'n' Andy, 7:00 and 11:00 p.m. Mon. through Fri., Red Easy Aces, 7:00 p.m. Tues., Wed., Thurs., Blue Fibber McGee and Molly, 9:00 p.m. Mon., Red Lum and Abner, 7:30 and 11:15 p.m. Mon., Wed.; Fri., Blue Pick and Pat, 8:30 and 11:30 p.m. Mon., CBS Stroud Twins, 8:00 p.m. Sun., Red

DRAMA

Campana's First Nighter, 10:00 p.m. Fri., Red Campana's Grand Hotel, 8:30 p.m. Mon., Blue Death Valley Days, 8:30 p.m. Fri., Blue Gang Busters, 10:00 p.m. Wed., CBS Eddie Guest, 8:30 p.m. Tues., Blue Jean Hersholt, 2:30 p.m. Sun., CBS Hollywood Hotel, 9:00 p.m. Fri., CBS Hollywood Playhouse, 9:00 and 11:30 p.m. Sun., Blue Lone Ranger, 7:30 and 10:30 p.m. Mon., Wed., Fri., MBS

Lux Radio Theater, 9:00 p.m. Mon., CBS
Helen Menken, 7:30 p.m. Tues., CBS
One Man's Family, 8:00 p.m. Wed., Red
Tyrone Power, 9:00 and 10:00 p.m. Sun., Blue
Irene Rich, 9:45 and 11:00 p.m. Sun., Blue
Edward G. Robinson, 8:00 p.m. Tues., CBS
A Tale of Today, 6:30 p.m. Sun., Red
Claire Trevor, 8:00 p.m. Tues., CBS
We, The People, 7:30 and 10:30 p.m. Thurs., CBS

POPULAR PROGRAMS

American Album of Familiar Music, 9:30 p.m. Sun., Believe It Or Not, 8:00 and 12:00 p.m. Sat., Red Major Bowes' Amateurs, 9:00 p.m. Thurs., CBS Major Bowes' Family, 11:30 a.m. Sun., CBS Brave New World, 10:30 p.m. Mon., CBS Carborundum Band, 7:30 p.m. Sat., CBS Cavalcade of America, 8:00 p.m. Wed., CBS Chase and Sanborn Hour, 8:00 p.m. Sun., Red Cheer Up, America, 7:45 p.m. Wed., Red Cities Service Concert, 8:00 p.m. Fri , Red Contented Program, 10:00 p.m. Mon., Red Death Valley Days, 8:30 p.m. Fri., Blue Double Everything, 6:30 p.m. Sun., CBS Gang Busters, 10:00 p.m. Wed., CBS Jack Haley's Variety Show, 8:30 p.m. Sat., Red Hammerstein Music Hall, 8:00 p.m. Fri., CBS Hobby Lobby, 7:15 and 10:30 p.m. Wed., CBS Hollywood Mardi Gras, 9:30 p.m. Tues., Red Hour of Charm, 9:30 p.m. Mon., Red How To Win Friends and Influence People, 10:45 p.m. Tues., Red

It Can Be Done, 8:30 p.m. Tues., Blue Jello Program, 7:00 and 11:30 p.m. Sun., Red Johnny Presents—, 8:00 p.m. Tues., Red; 8:30 and 11:30 p.m. Sat., CBS Kraft Music Hall, 10:00 p.m. Thurs., Red

Kratt Music Hall, 10:00 p.m. Thurs., Red Warden Lawes, 10:30 p.m. Mon., Blue Log Cabin Review, 8:30 p.m. Sat., Red Magazine of the Air, 5 p.m. Sun., CBS Magic Key of RCA, 2:00 p.m. Sun., Blue Manhattan Merry-Go-Round, 9:00 p.m., Sun., Red March of Time, 8:00 p.m. Thurs., Blue Melody Puzzles, 8 p.m. Mon., Blue Mickey Mouse Theater, 5:30 p.m. Sun., Red Mickey Mouse Theater, 5:30 p.m. Sun., Red National Barn Dance, 9:00 and 11:00 p.m. Sat., Blue Northern Messenger, 11:00 p.m. Sat., CBC Jack Oakle's College, 9:30 p.m. Tues., CBS Poetic Melodies, 7:00 and 11:00 p.m. Mon. through Fri., CBS

Professor Quiz., 9:00 and 12:00 p.m. Sat., CBS Radio News Reel, 3:00 p.m. Sun., Red Sait Lake City Tabernacle, 12:30 p.m. Sun., CBS Saturday Night Serenade, 9:30 p.m. Sat., CBS Saturday Night Sering Ciub, 7:00 p.m. Sat., CBS Kate Smith Hour, 8:00 and 11:15 p.m. Thurs., CBS Songshop, 10:00 p.m. Fri., CBS Station E-Z-R-A, 7:15 p.m. Mon., Wed., Fri., Red Swing School, 10:00 p.m. Tues., CBS Texaco Town, 8:30 and 11:30 p.m. Wed., CBS Town Hall Tonight, 9:00 p.m. Fri., Red Uncle Jim's Question Bee, 7:30 p.m. Sat., Blue Vick's Open House, 7:00 p.m. Sun., CBS Voice of Firestone, 8:30 p.m. Mon., Red Vox Pop, 9:00 p.m. Tues., Red

Waitz Time, 9:00 p.m. Frl., Red Watch the Fun go By, 9:00 and 12:00 p.m. Tues., CBS We, The People, 7:30 p.m. Thurs., CBS Your Hit Parade, 10:00 p.m. Sat., CBS Your Hellywood Parade, 10:00 p.m. Wed., Red Zenith Foundation, 10:00 p.m. Sun., CBS

SINGERS

Stuart Allen, 10:00 p.m. Sat., CBS Gene Austin, 6:00 p.m. Sun., CBS Kenny Baker, 7:00 and 11:30 p.m. Sun, Red Morton Bowe, 5 p.m. Sun., CBS Henry Burr, 9:00 and 11:00 p.m. Sat., Blue Rachel Carlay, 9:00 p.m. Sun., Red John Carter, 8 p.m. Sun., Red Buddy Clark, 8 p.m. Mon., Blue; 9:30 p.m. Wed .. CBS Jerry Cooper, 9:00 p.m. Fri., CBS Alice Cornett, 10:00 p.m. Fri., CBS Richard Crooks, 8:30 p.m. Mon., Red Bing Crosby, 10:00 p.m. Thurs., Red Frank Crumit, 10:00 p.m. Fri., CBS Jean Dickenson, 9:30 p.m. Sun., Red Deanna Durbin, 8:30 and 11:30 p.m. Wed., CBS Mary Eastman, 9:30 p.m. Sat., CBS Wilbur Evans, 7:00 p.m. Sun., CBS Jack Fulton, 7:00 and 11:00 p.m. Mon. through Fri., Freddie Gibson, 10:00 p.m., Sat.; CBS; 8 p.m. Mon., Biue Julie Gibson, 5:30 and 11 p.m. Sun., CBS Harriet Hilliard, 7:30 p.m. Sun., Blue Al Jolson, 8:30 and 11:30 p.m. Tues., CBS Alan Jones, 9 p.m. Thurs., Red Reed Kennedy, 10:00 p.m. Fri., CBS Dorothy Lamour, 8:00 p.m. Sun., Red Rosemary Lane, 10:00 p.m. Wed., Red Frances Langford, 9:00 p.m. Fri., CBS Pierre Le Kreeun, 9:00 p.m. Sun., Red Lullaby Lady, 10:00 p.m. Mon., Red Lulu Belle, 9:00 and 11:00 p.m. Sat., Blue Jeanette MacDonald, 7:00 p.m. Sun., CBS Smiling Ed McConnell, 5:30 p.m. Sun., Blue Lucille Manners, 8:00 p.m. Fri., Red Tony Martin, 8:00 and 10:30 p.m. Mon., Red Frank Munn, 9:30 p.m. Sun., Red; 9:00 p.m. Fri., Red Jane Pickens, 9:30 p.m. Wed., CBS Dick Powell, 10:00 p.m. Wed., Red Martha Raye, 8:30 and 11:30 p.m. Tues., CBS Jane Rhodes, 9:30 p.m. Tues., Red Lanny Ross, 9:30 p.m. Tues., Red Kate Smith, 8:00 and 11:15 p.m. Thurs., CBS Margaret Speaks, 8:30 p.m. Mon., Red Marjaret Speaks, 5:50 p.m. Aron, Red Marjon Talley, 5:00 p.m. Sun., Red Lawrence Tibbett, 9:00 p.m. Wed., CBS Virginia Verrill, 8:30 p.m. Sat., Red

TALKS

Dale Carnegie, 10:45 p.m. Tues., Red Boake Carter, 7:45 and 11:15 p.m. Mon., Wed., Fri., CBS Jimmy Fidler, 10:30 p.m. Tues., Fri., Red Gabriel Heatter, 7:30 and 10:30 p.m. Thurs., CBS Gen. Hugh Johnson, 10:00 p.m. Tues., Wed., Blue John B. Kennedy, 8:00 p.m. Sun., Blue Geo. McCall. 7:15 p.m. Tues., Thurs., CBS Harriet Parsons, 8:30 p.m. Wed., Blue Robert L. Ripley, 8:00 and 12:00 p.m. Sat., Red Deems Taylor, 9:00 p.m. Wed., CBS; 8:30 and 11:30 p.m. Fri., CBS Lowell Thomas, 6:45 p.m. Mon. through Fri., Blue Dorothy Thompson, 10:45 p.m. Fri., Red; 7:30 p.m. Tues., Blue Walter Winchell, 9:30 and 11:15 p.m. Sun., Blue

SHORTWAVE BROADCASTING STATIONS OF THE WORLD

Frequencies are given in megacycles. Power is given in parentheses in kilowatts. Schedules are shown in Eastern Standard Time by the 24-hour clock. All schedules daily unless otherwise noted.

1.715	to 2.000	Amateur Stations.	5.975	OAX4P	Huancayo, Peru. (.25).
2.500	XEXP	Monterrey, N. L. (.03).	5.980	HJ4ABD	Medellin, Colombia. 2000-2230.
3.500	to 4.000	Amateur Stations.	5.990	HJ2ABD	Bucaramanga, Colombia. (.67).
3:040	YDA	Tandjong Priok, Java, N.E.I. (10.).			1900-2300.
4:107	НСЈВ	Quito, Ecuador (1.). "Broadcasting	6.000	CXA2	Montevideo, Uruguay. (.5).
		Provincial." 0700-0815; 1130-1430;			Ica, Peru. (.1).
		1645-2215.		XEBT	Mexico City, D. F. (1.). 1800-2400.
4.273	RV15	Khabarovsk, USSR (Siberia). (20.). 0100-1000.		RV59	Moscow, USSR. 1900-2115. Alderney, Channel Islands.
4.600	HC2ET	Guayaquii, Ecuador. Wed., Sat.,	6.005 -	CFCX	Montreal, P. Q. (.075). 0700-2400.
4.000	11021.1	2100-2230.		HP5K	Colon, Panama. 1800-2300.
4.770	HJ2ABJ	Santa Marta, Colombia. (.05).		VE9DN	Montreal, P. Q. (6.).
		1800-2230.		XZ1GY	Rangoon, Burma.
4.780	HJ1ABB	Barranquilla, Colombia (.3). Apartado 715.	6.007	ZRH	Pretoria, U. S. Africa. (5.). Sat. 1000-1645; Sun. 0800-1200; 1215-
4.787	HJ2ABC	Cucuta, Colombia. (.25). "La Voz			1515. Weekdays 1000-1600.
		de Cucuta."	6.010	CICX	Sydney, N. S. (1.).
4.810	YDE2	Solo, Java, N.E.I. (.1).	-	coco	Havana, Cuba. (2.5) Sun., 2000-2200. Weekdays 1030-1300: 1600-2000.
4.840		Bogota, Colombia. 1930-2400. Aptdo. 509.		OLR2A	Prague, Czechoslovakia. (35.). Mon., Wed., Fri., 1600-1630.
4.860	-HJ1ABE	Cartagena, Colombia.		*****	Salgon, French Indo-China.
4.900	• НЈЗАВН	Bogota, Colombia, (1.2). 1800-2300.	6.015	HI3U	Santiago de los Caballeros, D. R.
5.003	нст	Guayaquil, Ecuador. "Radio Tele- fonica."			(.025). Mon. 2000-2100. Daily 0730- 0930; 1200-1430; 1700-1930.
5.415	PMY	Bandoeng, Java, N.E.I. (.45). 0530- 1000.	6.020		Berlin, Germany. (50.). 1040-1630; 1650-2245
5.500	ТІ5НН	San Ramon, Costa Rica. (.2). 2000-		XEUW	Veracruz, Ver. (.02). 1800-2400.
0.000		2330.	6.030	HP5B	Panama City, Panama. (.1). 1700- 2200.
5.710	TGS	Guatemala City, Guat. (.2). Wed., Thurs., Sat., 1800-2100.		OLR2B	Prague, Czecho. (35.).
				VE9BJ	St. John, N. B. (.05).
5.735		Quito, Ecuador. Sat., 2100-2300.		XEBQ	Mazatlan, Sin. (.05).
5.740	YV2RA	San Cristobal, Venez. Weekdays 1830-2130.	6.033	HJ4ABP	Medellin, Colombia. (2.5). 1800-2300.
5.763	YNOP	Managua, Nicaragua. 2000-2130.	6.038	HJ1ABG	Barranquilla, Colombia. (.15). 1100-
5.800	YV5RC	Caracas, Venez. (1.). Sun., 0830- 2130. Weekdays 0700-2200.	6.040	PRA8	2300. Pernambuco, Brazil. (3.). 1500-
5.813	TIGPH2	San Jose, Costa Rica.			2000.
5,825	TIGPH	(also TIXGP3), San Jose, Costa Rica. 1100-1300; 1800-2200.	-	.W1XAL	Boston, Mass. (20.). Daily exc. Sat. and Sun., 1900-2100.
5.850	YV1RB	Maracalbo, Venez. Sun., 1145-1245.		W4XB	Mlami, Fla. (5.).
		Weekdays 0845-0945; 1115-1215; 1645-2145.		YDA	Tandjong Priok, Java, N.E.I. (10.).
5.855	HIIJ	San Pedro de Macoris, D. R. (.04). 1200-1400; 1830-2100.	6.044	ZP14 XETW	Villarica, Paraguay. 1700-1800. Tampico, Tams.
5.875	HRN	Tegucigalpa, Honduras. (.4). Sun., 2030-2130. Weekdays 2030-2200.	6.050	GSA	Daventry, Gt. Britain. (20.).
5.885	нія	Santiago, D. R. 1800-2300.		НЈ6АВА	Pereira, Colombia (6054 assigned).
5.895	YV3RA	Barquisimeto, Venez. 1800-2200.			1800-2200.
5.905	TILS	San Jose, Costa Rica. 1800-2300.	6.060	VQ7I O	Nairobi, Kenya. 1100-2430.
5.913	YV4RH	Valncia, Venez. 1700-0100.	-	W3XAU	Philadelphia, Pa. (10.). 2000-2300.
5.925	HH2S	Port-au-Prince, Haiti. 1900-2200.		W8XAL	Cincinnati, Ohio. (10.). Daily 2300-
5.935	YV1RL	Maracaibo, Venez. (.3). 1700-2230.			0200. Sun. 0800-2000. Weekdays 0800-2000.
5.945	TG2X	Guatemala City, Guat. (.2). Sun., 1300-1400; Mon., Thurs., Sat., 1600-	6.062	SBG	Motala, Sweden. (-5). 1330-1700.
		1800: 2200-2400.	6.064		Georgetown, British Guiana. (.15)
5.947	PJC1	Willemstad, Curacao, N,W.I. (.15) 1835-2035.	0.004	37 31VIN	(assigned 6010). 0745-1015; 1645- 2045.

SHORTWAVE BROADCASTING STATIONS OF THE WORLD

_	OAT	DICT WILL BRONDEHOTH	0 017	HION	OF THE WORLD
6.065		Colon, Panama.	6.282	сонв	Sancti-Spiritus, Cuba. (.15). 2100-
0.070	CFRX	Toronto, Ont. (1.). 1000-2300. F Bogota, Colombia. (.05). 1900-2230.	C 20C	0.710	2300.
	YV1RD	Maracaibo Venez 1900-2400	6.296		
6.075		Maracaibo, Venez. 1900-2400. Guadalajara, Jai. (.045).	6.300 6.310		
0.000	XECU	Guadalajara, Jal.	6.312		Trujillo, D. R. (.1).
6.077		Lima, Peru. (10.) (6082 assigned).	6.330		Villarrica, Paraguay (1.). 1100-1700. Havana, Cuba. 0700-2400.
		1900-2330.	6.335		Chiclayo, Peru. (.2). Daily 2000-
6.080	_DJM	Berlin, Germany. (50.).		0,1,12,1	2300; Sat. 2000-2400.
	VE9CS	Vancouver, B. C. (.01). 1400-2400.	6.340	HI1X	Trujillo, D. R. (.5). Tues., Fri.,
	W9XAA	Chicago, III. (20.). Daily 1900-2200.			2000-2200.
		Weekdays 0600-0730.	6.357	HRP1	San Pedro Sula, Honduras.
6.085	HJ5ABI	D Call, Colombia. 1900-2200.	6.365	YV1RH	Maracaibo, Venez. 1900-2400.
6:090	CRCX	Toronto, Ont. (1.). 0745-1700.	6.380		Caracas, Venezuela.
	HJ4AB0	C Ibague, Colombia. 2000-2200.	6.383		St. Kitts, Brt. West Indies. (.5).
6.095	ZGE	Kuala Lampur, F.M.S.	6.400	ÝV5RH	Caracas, Venezuela.
6.097	ZRJ	Johannesburg, U. S. Africa. (.2).	6.410	TIPG	San Jose, Costa Rica. (1.). 1800-
		Sat. 2345-0045; 0315-0730; 0830-		*******	2230.
		1130. Sun. 0330-0430 or 0400-0500; 0800-1130. Other days 2345-0045;	6.416		Bolivar, Venez.
		0315-0730; 0900-1130.	6.420		Santiago, D. R. (.02). 1800-2300.
	ZRK	Cape Town, U. S. Africa. (5.).	0.423		Lima, Peru. (.2).
		Sun. 1200-1500; Other days 1200-		W3XL	Bound Brook, N. J. (100.). Irrreg.
		1600; 2345-0045.	C 450	WIOXD	A Effie M. Morrissey (.1).
6.100	W3XAL	Bound Brook, N. J. (35.). 2100-0100.	6.450	HI4V	San Francisco de Macoris, D. R.
	_W9XF	Chicago, III. (10.). 1700-2005.	C 4C0	0000	(.025).
		Belgrade, Jugoslavia. (1.). 1200-	6.460 6.465	COCA YV3RB	Havana, Cuba.
		1700.	0.403	LASKD	Barquisimeto, Venez. "La Voz de Lara."
6.108	HJ4ABE	Manizales, Colombia. 1800-2400.	6.479	HI8A	Trujillo, D. R.
6.110	-GSL	London, Gt. Britain, (20.). 1800-	6.485		Santiago de los Caballeros, D. R.
		2030; 2120-2320.		*****	"Emisora Nacional." 0630-0800:
	VUC	Calcutta, India.			1730-1900; 2000-2100.
6.115	OLR2C	Prague, Czecho. (35.).	6.479	HI8A	Trujillo, D. R.
6.118	XEUZ	Mexico City, D. F. (5.). 2300-0300.	6.500	HIL	Trufillo, D. R. (.05).
6.120	W2XE XEFT	New York, N. Y. (10.). Veracruz, Ver. (.012).		YV1RM	Maracaibo, Venez.
	YDA5	Bandoeng, Java, N.E.I. (1.5).	6.508	Radio G	Suardia Civil, Tetuan, Sp. Morocco.
6.122		Bogota, Colombia. 1730-2230.			1900-2000.
01222	OAX6A	Arequipa, Peru. (.1).	6.520	YV4RB	Valencia, Venezuela. 1700-2200.
6.125	CXA4	Montevideo, Uruguay. (1.). 1600-	6.534	EDR4	Palma, Majorca, Balearic Isl.
		2145.	6.540 6.545	YN1GG YV6RB	Managua, Nicaragua.
	HP5H	Panama City, Panama	6.550	TIRCC	Bolivar, Venez. 2100-2300. San Jose, Costa Rica. (.5). Tues.,
	XEPW	Mexico City, D. F. 2100-2400.	. 6.330	IIICO	Thurs., Sat. 1700-1800.
6.128	OAX7A	Cuzco, Peru. (.1).	6.555	HI4D	Trujillo, D. R. (.025). 1700-2000.
6.130	COCD	Havana, Cuba. (.35). 1700-0109	6.575	HC1VT	Ambato, Ecuador.
	VE9HX	Halifax, N. S. (.5). 1700-2300.			
6.132	VP3BG	Georgetown, British Gulana.	6.590	COCU	Havana, Cuba. Sun. 1900-2400;
6.137	CR7AA	Lourenco Marques, Port. East			Weekdays 1900-0100.
		Africa. Sun. 0600-0900. Weekdays	6,622	Prado	Rio Bamba, Ecuador. Thur. 2100-
6.138	MIMARR	9500-0700.	0.020	ніт	2300.
6.140	W8XK	Medellin, Colombia. Pittsburgh, Pa. (40.). 2200-sign off.	6.630	ni i	Trujillo, D. R. (.2). Weekdays,
6.145		Medellin, Colombia (1.). "La Voz	6.635	HC2RL	1800-2100.
0.245	III	de Antioquia." 1800-2230.	0.033	1102112	Guayaquil, Ecuador. Sun. 1745- 1945. Tues. 2115-2315.
6.150	CJRO	Winnipeg, Man. (2.). 1800-2400.	6.690	TIEP	San Jose, Costa Rica. 1600-2300.
	CSL	Lisbon, Portugal. 0700-0830; 1400-	6.700	TIVL	San Jose, Costa Rica.
		1900.	6.720	PMH	Bandoeng, Java, N.E.I. (1.5).
	VPB	Colombo, Ceylon. (.3). Sun. 0700-	6.730	HI3C	La Romana, D. R. 1745-2000.
		1130; Weekdays 0630-1230.	6.780	HIH	San Pedro de Macoris, D. R. (.15).
6.150	ZRD	Durban, U. S. Africa. (.01). Daily			1900-2000.
		2345-0045.	6.800	HI7P	TruJillo, D. R. 1930-2100.
6.153	HI5N	Ciudad Moca, D. R. (.1). 1900-2000.		PZH	Paramaribo, Surinam.
6.156	YV5RD	Caracas, Venez. 1030-1330; 1530-	6.850	TIOW	Puerto Limon, Costa Rica. (.4). Sun., 1600-1700. Daily 1200-1300.
6.174	XEXA-	2200. Mexico City, D. F. 1700-2100.	6.990	VK8X1	Sun., 1600-1700. Daily 1200-1300.
6.180	TG2	Guatemala City, Guatemala.		to 7.300	Port Moresby, Papua. (Doubtful). Amateur stations.
6.190	HI1A	Santiago de los Caballeros, D. R.	7.100	FO8AA	Papeete, Tahiti. (.2). Tues., Frl.,
		(.05). Weekdays 2000-2200.	.1200		2300-2400.
6.198	HISQ	Trujillo, D. R. 1700-1900.			Guadalajara, Jal. "Voice of the
6.200	COKG	Santiago, Cuba. (.05). Daily exc.			Revolutionary Party."
		Sat. 0900-2300.	7.200	YNAM	Managua, Nicaragua. 2000-2400.
	XEXS	Mexico City, D. F.	7.380	XECR	Mexico City, D. F. (20.). Sun.,
6.205	YV1RI	Coro, Venez. (.15). 1700-2200.			1800-2000.
6.225	YV1RG	Valera, Venez. 1730-1930.	1 5.7		Radio Liberte. 1900-2000.
6.235	HRD	La Ceiba, Honduras. (.25). 2000-	7.500		Salamanca, Spain. "Radio
		2300.	9	D1/1	Nacional".
6.243	HIN	Trujillo, D. R. (.75).	7.540	RKI	Moscow, U. S. S.R. (Assigned 7520).
6.250 6.270	YV5RJ YV5RP	Caracas, Venez. (1.2).	7.797	НВР	Geneva, Switz. (20.). Sat., 1730- 1830.
6.280	HIG	Caracas, Venez. (1.2). Trujillo, D. R. (.05).	7.894	YSD	San Salvador, E. S. 2100-2230.
0.200			1.004	. 50	Dan Daniador, to Dr 2109-2230.

			GIA		Of THE HORES
8,580	YNPR	Managua, Nicaragua. (.5). "Radio Pilot". 1330-1430; 2000-2200.	9.562 9.565	OAX4T VUB	Lima, Peru. (10.). 1130-1330. Bombay, India. (4.5).
8.600	HC1EC	Quito, Ecuador.	9.570	KZRM	Manila, P. I. Mon. through Fri. 0500-0900; 1630-1800. Sat., 0500-
8.655		Effie M. Morrissey. (.1).			0500-0900; 1630-1800. Sat., 0500-
8.665	COJK	Camaguey, Cuba (2.4), 1800-0190,			1000; 1630-1800. Sun. 0500-1000.
8.830	HCJB	Quito, Ecuador (1.). "La Voz de		-W1XK	Boston, Mass. (10.). Sun. 0800-
0.000		los Andes." 0700-0815; 1130-1430;			0100. Weekdays 0600-0100.
		1645-2215.		W8XK	Pittsburgh, Pa. (40.). (Not used).
9,030	COBZ	Havana, Cuba.	9.580-	-GSC	Daventry, Gt. Britain. (20.). 1615-
9.125	HAT4	Budapest, Hungary. (20.). Sun.,			2030; 2120-2320.
		Wed., 1900-2000, Sat., 1800-1900.		VK3LR	Melbourne, Australia. (.5). 0100-
9.200	COCA	Havana, Cuba. P. O. Box 3488.		2	0945.
9.210	COBX	Havana, Cuba. (assigned 9200).	9.590	PCJ	Huizen, Netherlands. (20:). Sun.
9.300	HC2CW	Guayaquil, Ecuador. "Ondas del			Huizen, Netherlands. (20:). Sun- 1400-1500; 1900-2115; Mon. 2100-
		Pacifico."			2230; Tues., 1400-1530; 1900-2130;
9.340	OAX4J	Lima, Peru. (.2). 1200-1500; 1700-			Wed., 1900-2130; Thurs., 1900-2130.
		0100.		VK2ME	Sydney, Australia. (20.). Sun.,
9.345	HBL	Geneva, Switz. (20.). Fri. 1430-			0100-0300; 0430-0830; 0900-1100.
		1445; 1930-1945; 2000-2015.		VK6ME	Perth, Australia. (5.). Weekdays
9.350	COBC	Havana, Cuba. Aptdo. 132.			0600-0800.
	HS8PJ	Bangkok, Siam. Mon., Thurs.,		W2XE	New York, N. Y.
0.455	DICC	0730-1000.	100	-W3XAU	Philadelphia, Pa. (10.). 1200-2000;
9.415	PJC2	Willemstad, Curacao, N.W.I.			Thurs., 2200-2300.
	PLV	Bandoeng, Java, N.E.I. (80.). 1000- 1100.		WEXAL	Cincinnati, Ohio. (10.). (Under
9 410	-сосн	Havana, Cuba. (.15). 0700-0100.			construction).
9.425	HC2RA	Guayaquil, Ecuador. Sun. 1600-	9.595	HBL	Geneva, Switzerland. (18.). Sat.
0.445	JOZNA	2200. Daily 2100-2200.			1730-1830.
9.450	HC20D4	Guayaquil, Ecuador. 2100-2200.		RAN	Moscow, USSR. 1900-2115.
9.460	XGOX	Nanking, China. (.5).		ZHO or	ZHP Singapore, St. Settlements.
9.470	PJC1	Willemstad, Curacao, N.W.I. (.15).	9.600	CB960	Santiago, Chile. 1800-1930.
		Sun. 1035-1235.	9.605	HP5J	Panama City, Panama. (1.). 1830-
9.480	EAR	Madrid, Spaln. (20.). Mon. at 2000;			2300.
		Tues., Fri. at 2100.	9.606	ZRK	Johannesburg, U. of S. Africa. 2345-
	XEDQ	Guadalajara, Jal. 1900-0100.			0045. Add: P. O. Box 4559.
9.500	EAC	Madrid, Spain.	0.640-	-MITARD	Cartagena, Colombia. (.75). 1800-
	HJIABE	Cartagena, Colombia. 1700-1800;	3.010	HIJIABI	2200.
	XEWW	2000-2230. Mexico City, D. F. (10.). 0800-2400.			
			9.630	HJ7ABD	Bucaramanga, Colombia. "Radio Bucaramanga."
9.501	PRF5	Rio de Janeiro, Brazil. (60.). 1645-			Taihoku, Taiwan. 0430-1030.
·		1745.			
9.504	OLR3B	Prague, Czecho. (35.). Daventry, Gt. Britain. (20.). 0315-	9.635	12RO	Rome, Italy. (25.). 1230-2100.
9.510 -	GSB	0530; 1220-1600; 1615-2030; 2120-	9.640	CXA8	Montevideo, Uruguay. 0700-2400.
		2320.	9.645	HH3W	Port-au-Prince, Haiti. (.03). 1300-
	HJU	Buenaventura, Colombia. Mon.,			1400; 1900-2000.
		Wed., Fri. 2000-2300.	9.650	CS2WA	Lisbon, Portugal. (2.). Tues.,
	HS8PJ	Bangkok, Siam. Mon., Thurs.,	0.000		Thurs., Sat., 1600-1900.
		0800-1000.	0.000	CRCAA	Lobito, Angola, Port. West Africa.
	VK3ME	Melbourne, Australia. (5.). Week-	9.660	CR6AA	(.5). Wed., Sat., 1445-1645.
		days 0400-0700.			
9.520	HJ4ABH	Armenia, Colombia. (1.). 0800-1100;		LRX	Buenos Aires, Argentina. (5.)
		1800-2200.			1030-2430.
	OZF	Copenhagen, Denmark. (6.). 1400-	9.670	-II4NRH	Heredia, Costa Rica. Tues., Thurs.,
	YSH	San Salvador, E. S.			Sat., 2100-2200. Sun., 0700-0800.
	***	Paris, France, "Radio Liberte."	9.685	TGWA	Guatemala City, Guat. (10.).
9.523	ZRH	Paris, France. "Radio Liberte."	9.685	TGWA	Guatemala City, Guat. (10.). "Radio Nacional." Sun. 2000-2200,
9.523	ZRH	Paris, France. "Radio Liberte." Pretoria, U. of S. Africa. (5.). Add: Box 4559, Johannesburg.	9.685	TGWA	Guatemala City, Guat. (10.). "Radio Nacional." Sun. 2000-2200, Mon., Thur., 2100-2300. Wed.,
9.523	ZRH ZBW3	Paris, France. "Radio Liberte." Pretoria, U. of S. Africa. (5.). Add: Box 4559, Johannesburg. Hong Kong. (2.5). Sat. 2100-2400.			Guatemala City, Guat. (10.)- "Radio Nacional." Sun. 2000-2200, Mon., Thur., 2100-2300. Wed., Sat. 2200-2400.
		Paris, France. "Radio Liberte." Pretoria, U. of S. Africa. (\$). Add: Box 4559, Johannesburg. Hong Kong. (2.5). Sat. 2100-2400.	9.685	COCQ	Guatemala City, Guat. (10.). "Radio Nacional." Sun. 2000-2200. Mon., Thur., 2100-2300. Wed., Sat. 2200-2400. Havana, Cuba. (assigned 9750).
9.525	ZBW3	Paris, France. "Radio Liberte." Pretoria, U. of S. Africa. (9.). Add: Box 4559, Johannesburg. Hong Kong. (2.5). Sat. 2100-2400. Sun. 0000-0100; 0300-0930. Other days 0400-1000; 2330-0100.			Guatemala City, Guat. (10.). "Radio Nacional." Sun. 2000-2200, Mon., Thur., 2100-2300. Wed., Sat. 2200-2400. Havana, Cuba. (assigned 9750). 0700-0100.
	ZBW3	Paris, France. "Radio Liberte." Pretoria, U. of S. Africa. (5.). Add: Box 4559, Johannesburg. Hong Kong. (2.5). Sat. 2100-2400. Sun. 0000-0100: 0300-0930. Other days 0400-1000; 2330-0100. Jeloy, Norway. (1.). 0500-0800.			Guatemaia City, Guat. (10.). "Radio Nacional." Sun. 2000-2200, Mon., Thur., 2100-2300. Wed., Sat. 2200-2400. Havana, Cuba. (assigned 9750). 0700-0100. Fort de France, Martinique. "Radio
9.525	ZBW3	Paris, France. "Radio Liberte." Pretoria, U. of S. Africa. (5.). Add: Box 4559, Johannesburg. Hong Kong. (2.5). Sat. 2100-2400. Sun. 0000-0100; 0300-0930. Other days 0400-1000; 2330-0100. Jeloy, Norway. (1.). 0500-0800. Schenectady, N. Y. (40.). Sat. 1200-		cocq	Guatemala City, Guat. (10.)- "Radio Nacional." Sun. 2000-2200, Mon., Thur., 2100-2300. Wed., Sat. 2200-2400. Havana, Cuba. (assigned 9750)- 0700-0100. Fort de France, Martinique. "Radio Martinique." (.2). Box 136. 1845-
9.525	ZBW3 LKJ1 W2XAF	Paris, France. "Radio Liberte." Pretoria, U. of S. Africa. (9.). Add: Box 4559, Johannesburg. Hong Kong. (2.5). Sat. 2100-2400. Sun. 0000-01000; 0300-0930. Other days 0400-1000; 2330-0100. Jeloy, Norway. (1.). 0500-0800. Schenectady, N. Y. (40.). Sat. 1200- 2400. Other days 1600-2400.	9.700	cocq	Guatemala City, Guat. (10.). "Radio Nacional." Sun. 2000-2200, Mon., Thur., 2100-2300. Wed., Sat. 2200-2400. Havana, Cuba. (assigned 9750). Fort de France, Martinique. "Radio Martinique." (.2). Box 136. 1845- 1945.
9.525	ZBW3 LKJ1 W2XAF	Paris, France. "Radio Liberte." Pretoria, U. of S. Africa. (9.). Add: Box 4559, Johannesburg. Hong Kong. (2.5). Sat. 2100-2400. Sun. 0000-01000; 0300-0930. Other days 0400-1000; 2330-0100. Jeloy, Norway. (1.). 0500-0800. Schenectady, N. Y. (40.). Sat. 1200- 2400. Other days 1600-2400.		cocq	Guatemala City, Guat. (10.)- "Radio Nacional." Sun. 2000-2200, Mon., Thur., 2100-2300. Wed., Sat. 2200-2400. Havana, Cuba. (assigned 9750)- 0700-0100. Fort de France, Martinique. "Radio Martinique." (.2). Box 136. 1845-
9.525	ZBW3 LKJ1 W2XAF W6XBE	Paris, France. "Radio Liberte." Pretoria, U. of S. Africa. (9.). Add: Box 4559, Johannesburg. Hong Kong. (2.5). Sat. 2100-2400. Sun. 0000-0100; 0300-0930. Other days 0400-1000; 2330-0100. Jeloy, Norway. (1.). 0500-0800. Schenectady, N. Y. (40.). Sat. 1200- 2400. Other days 1600-2400. Belmont, Calif. (20.). General Elec. Co. (Under construction).	9.700 9.790 9.830	COCM	Guatemaia City, Guat. (10.). "Radio Nacional." Sun. 2000-2200, Mon., Thur., 2100-2300. Wed., Sat. 2200-2400. Havana, Cuba. (assigned 9750). 0700-0100. Fort de France, Martinique. "Radio Martinique." (.2). Box 136. 1845-1945. Havana, Cuba. (assigned 9833). Rome, Italy.
9.525	ZBW3 LKJ1 W2XAF	Paris, France. "Radio Liberte." Pretoria, U. of S. Africa. (5.). Add: Box 4559, Johannesburg. Hong Kong. (2.5). Sat. 2100-2400. Sun. 0000-0100: 0300-0930. Other days 0400-1000; 2330-0100. Jeloy, Norway. (1.). 0500-0800. Schonectady, N. Y. (40.). Sat. 1200- 2400. Other days 1600-2400. Belmont, Calif. (20.). General Elec. Co. (Under construction). Nazaki, Japan. (50.). 1500-1600;	9.700	COCM	Guatemala City, Guat. (10.). "Radio Nacional." Sun. 2000-2200, Mon., Thur., 2100-2300. Wed., Sat. 2200-2400. Havana, Cuba. (assigned 9750). 0700-0100. Fort de France, Martinique. "Radio Martinique." (.2). Box 136. 1845-1945. Havana, Cuba. (assigned 9833).
9.525 9.530 9.535	ZBW3 LKJ1 W2XAF W6XBE	Paris, France. "Radio Liberte." Pretoria, U. of S. Africa. (5.). Add: Box 4559, Johannesburg. Hong Kong. (2.5). Sat. 2100-2400. Sun. 0000-0100; 0300-0930. Other days 0400-1000; 2330-0100. Jeloy, Norway. (1.). 0500-0800. Schenectady, N. Y. (40.). Sat. 1200- 2400. Other days 1600-2400. Belmont, Calif. (20.). General Elec. Co. (Under construction). Nazaki, Japan. (50.). 1500-1600; 1630-1730.	9.700 9.790 9.830	COCM	Guatemaia City, Guat. (10.). "Radio Nacional." Sun. 2000-2200, Mon., Thur., 2100-2300. Wed., Sat. 2200-2400. Havana, Cuba. (assigned 9750). 0700-0100. Fort de France, Martinique. "Radio Martinique." (.2). Box 136. 1845-1945. Havana, Cuba. (assigned 9833). Rome, Italy.
9.525 9.530 9.535 9.536	ZBW3 LKJ1 W2XAF W6XBE JZ1 VPD2	Paris, France. "Radio Liberte." Pretoria, U. of S. Africa. (5.). Add: Box 4559, Johannesburg. Hong Kong. (2.5). Sat. 2100-2400. Sun. 0000-0100; 0300-0930. Other days 0400-1000; 2330-0100. Jeloy, Norway. (1.). 0500-0800. Schenectady, N. Y. (40.). Sat. 1200- 2400. Other days 1600-2400. Belmont, Calif. (20.). General Elec. Co. (Under construction). Nazaki, Japan. (50.). 1500-1600; 1630-1730. Suva, Fiji. (2.). 0530-0700.	9.700 9.790 9.830 9.860 9.925	COCM IRF EAQ JDY	Guatemala City, Guat. (10.). "Radio Nacional." Sun. 2000-2200, Mon., Thur., 2100-2300. Wed., Sat. 2200-2400. (assigned 9750). 0700-0100. Fort de France, Martinique. "Radio Martinique." (.2). Box 136. 1845-1945. Havana, Cuba. (assigned 9833). Rome, Italy. Madrid, Spain. (20.). Darien, Manchukuo. 0715-0800.
9.525 9.530 9.535	ZBW3 LKJ1 W2XAF W6XBE JZ1	Paris, France. "Radio Liberte." Pretoria, U. of S. Africa. (5.). Add: Box 4559, Johannesburg. Hong Kong. (2.5). Sat. 2100-2400. Sun. 0000-0100; 0300-0930. Other days 0400-1000; 2330-0100. Jeloy, Norway. (1.). 0500-0800. Schenectady, N. Y. (40.). Sat. 1200-2400. Other days 1600-2400. Betmont, Calif. (20.). General Elec. Co. (Under construction). Nazaki, Japan. (50.). 1500-1600; 1630-1730. Suva, Fiji. (2.). 0530-0700. Berlin, Germany. (50.). 0005-1000; 1650-2245	9.700 9.790 9.830 9.860 9.925 9.940	COCQ COCM IRF EAQ JDY CSW	Guatemaia City, Guat. (10.). "Radio Nacional." Sun. 2000-2200, Mon., Thur., 2100-2300. Wed., Sat. 2200-2400. Havana, Cuba. (assigned 9750). 0700-0100. Fort de France, Martinique. "Radio Martinique." (.2). Box 136. 1845-1945. Havana, Cuba. (assigned 9833). Rome, Italy. Madrid, Spain. (20.). Darien, Manchukuo. 0715-0800. Lisbon, Portugal. (5.). 1300-2000.
9.525 9.530 9.535 9.536	ZBW3 LKJ1 W2XAF W6XBE JZ1 VPD2	Paris, France. "Radio Liberte." Pretoria, U. of S. Africa. (5.). Add: Box 4559, Johannesburg. Hong Kong. (2.5). Sat. 2100-2400. Sun. 0000-0100: 0300-0930. Other days 0400-1000; 2330-0100. Jeloy, Norway. (1.). 0500-0800. Schenectady, N. Y. (40.). Sat. 1200- 2400. Other days 1600-2400. Bermont, Calif. (20.). General Elec. Co. (Under construction). Nazaki, Japan. (50.). 1500-1600; 1630-1730. Suva, Fiji. (2.). 0530-0700. Berlin, Gormany. (50.). 0005-1000; 1650-2245	9.700 9.790 9.830 9.860 9.925 9.940 10.000	COCQ COCM IRF EAQ JDY CSW COBC	Guatemala City, Guat. (10.). "Radio Nacional." Sun. 2000-2200, Mon., Thur., 2100-2300. Wed., Sat. 2200-2400. Havana, Cuba. (assigned 9759). 0700-0100. Fort de France, Martinique. "Radio Martinique." (.2). Box 136. 1845-1945. Havana, Cuba. (assigned 9833). Rome, Italy. Madrid, Spain. (20.). Darien, Manchukuo. 0715-0800. Lisbon, Portugal. (5.). 1300-2000. Havana, Cuba.
9.525 9.530 9.535 9.536 9.540	ZBW3 LKJ1 W2XAF W6XBE JZ1 VPD2 DJN	Paris, France. "Radio Liberte." Pretoria, U. of S. Africa. (9.). Add: Box 4559, Johannesburg. Hong Kong. (2.5). Sat. 2100-2400. Sun. 0000-0100: 0300-0930. Other days 0400-1000; 2330-0100. Jeloy, Norway. (1.). 0500-0800. Schenectady, N. Y. (40.). Sat. 1200- 2400. Other days 1600-2400. Belmont, Calif. (20.). General Elec. Co. (Under construction). Nazaki, Japan. (50.). 1500-1600; 1630-1730. Suva, Fiji. (2.). 0530-0700. Berlin, Germany. (50.). 0005-1000; 1650-2245. Prague, Czecho. (35.). Dally 1255- 1640. Weekdays 0925-1010; Mon.,	9.700 9.790 9.830 9.860 9.925 9.940	COCQ COCM IRF EAQ JDY CSW	Guatemaia City, Guat. (10.). "Radio Nacional." Sun. 2000-2200, Mon., Thur., 2100-2300. Wed., Sat. 2200-2400. Havana, Cuba. (assigned 9750). 0700-0100. Fort de France, Martinique. "Radio Martinique." (.2). Box 136. 1845-1945. Havana, Cuba. (assigned 9833). Rome, Italy. Madrid, Spain. (20.). Darien, Manchukuo. 0715-0800. Lisbon, Portugal. (5.). 1300-2000.
9.525 9.530 9.535 9.536 9.540	ZBW3 LKJ1 W2XAF W6XBE JZ1 VPD2 DJN OLR3A	Paris, France. "Radio Liberte." Pretoria, U. of S. Africa. (5.). Add: Box 4559, Johannesburg. Hong Kong. (2.5). Sat. 2100-2400. Sun. 0000-0100: 0300-0330. Other days 0400-1000; 2330-0100. Jeloy, Norway. (1.). 0500-0800. Schonectady, N. Y. (40.). Sat. 1200- 2400. Other days 1600-2400. Belmont, Calif. (20.). General Elec. Co. (Under construction). Nazaki, Japan. (50.). 1500-1600; 1630-1730. Suva, Fiji. (2.). 0530-0700. Berlin, Germany. (50.). 0005-1000; 1650-2245 Prague, Czecho. (35.). Dally 1255- 1640. Weekdays 0925-1010; Mon., Wed., Fri., 2000-2235.	9.700 9.790 9.830 9.860 9.925 9.940 10.000	COCQ COCM IRF EAQ JDY CSW COBC	Guatemala City, Guat. (10.). "Radio Nacional." Sun. 2000-2200, Mon., Thur., 2100-2300. Wed., Sat. 2200-2400. Havana, Cuba. (assigned 9759). 0700-0100. Fort de France, Martinique. "Radio Martinique." (.2). Box 136. 1845-1945. Havana, Cuba. (assigned 9833). Rome, Italy. Madrid, Spain. (20.). Darien, Manchukuo. 0715-0800. Lisbon, Portugal. (5.). 1300-2000. Havana, Cuba.
9.525 9.530 9.535 9.536 9.540 9.550	ZBW3 LKJ1 W2XAF W6XBE JZ1 VPD2 DJN OLR3A XEFT	Paris, France. "Radio Liberte." Pretoria, U. of S. Africa. (5.). Add: Box 4559, Johannesburg. Hong Kong. (2.5). Sat. 2100-2400. Sun. 0000-0100; 0300-0930. Other days 0400-1000; 2330-0100. Jeloy, Norway. (1.). 0500-0800. Schenectady, N.Y. (40.). Sat. 1200- 2400. Other days 1600-2400. Belmont, Calif. (20.). General Elec. Co. (Under construction). Nazaki, Japan. (50.). 1500-1600; 1630-1730. Suva, Fiji. (2.). 0530-0700. Berlin, Germany. (50.). 0005-1000; 1650-2245 Prague, Czecho. (35.). Dalty 1255- 1640. Weekdays 0925-1010; Mon., Wed., Fri., 2000-2235.	9.700 9.790 9.830 9.860 9.925 9.940 10.000 10.065 10.070	COCM IRF EAQ JDY CSW COBC	Guatemala City, Guat. (10.). "Radio Nacional." Sun. 2000-2200, Mon., Thur., 21000-2300. Wed., Sat. 2200-2400. Assigned 9750). O700-0100. Fort de France, Martinique. "Radio Martinique." (.2). Box 136. 1845-1945. Havana, Cuba. (assigned 9833). Rome, Italy. Madrid, Spain. (20.). Darien, Manchukuo. 0715-0800. Lisbon, Portugal. (5.). 1300-2000. Havana, Cuba. Macau, Portuguese China. Communistic Station.
9.525 9.530 9.535 9.536 9.540	ZBW3 LKJ1 W2XAF W6XBE JZ1 VPD2 DJN OLR3A	Paris, France. "Radio Liberte." Pretoria, U. of S. Africa. (5.). Add: Box 4559, Johannesburg. Hong Kong. (2.5). Sat. 2100-2400. Sun. 0000-0100; 0300-0930. Other days 0400-1000; 2330-0100. Jeloy, Norway. (1.). 0500-0800. Schenectady, N. Y. (40.). Sat. 1200- 2400. Other days 1600-2400. Belmont, Calif. (20.). General Elec. Co. (Under construction). Nazaki, Japan. (50.). 1500-1600; 1630-1730. Suva, Fiji. (2.). 0530-0700. Berlin, Germany. (50.). 0005-1000; 1650-2245. Prague, Czecho. (35.). Dally 1255- 1650-2245. Veracruz. Ver. (.02). 1930-2400. Berlin, Germany. (50.). 0005-1100; Berlin, Germany. (50.). 0005-1100;	9.700 9.790 9.830 9.860 9.925 9.940 10.000 10.065	COCM IRF EAQ JDY CSW COBC CQN	Guatemala City, Guat. (10.)- "Radio Nacional." Sun. 2000-2200, Mon., Thur., 2100-2300. Wed., Sat. 2200-2400. Havana, Cuba. (assigned 9750). 0700-0100. Fort de France, Martinique. "Radio Martinique." (.2). Box 136. 1845- 1945. Havana, Cuba. (assigned 9833). Rome, Italy. Madrid, Spain. (20.). Darien, Manchukuo. 0715-0800. Lisbon, Portugal. (5.). 1300-2000. Havana, Cuba. Macau, Portuguese China.
9.525 9.530 9.535 9.536 9.540 9.550	ZBW3 LKJ1 W2XAF W6XBE JZ1 VPD2 DJN OLR3A XEFT DJA	Paris, France. "Radio Liberte." Pretoria, U. of S. Africa. (5.). Add: Box 4559, Johannesburg. Hong Kong. (2.5). Sat. 2100-2400. Sun. 0000-0100; 0300-0930. Other days 0400-1000; 2330-0100. Jeloy, Norway. (1.). 0500-0800. Schenectady, N. Y. (40.). Sat. 1200- 2400. Other days 1600-2400. General Elec. Co. (Under construction). Nazaki, Japan. (50.). 1500-1600; 1630-1730. Suva, Fiji. (2.). 0530-0700. Serlin, Germany. (50.). 0005-1000; 1650-2245. Veracruz. Ver. (.02). 1930-2400. Berlin, Germany. (50.). 0005-1100; 1650-100; 1000-1100; 10000-1100; 10000-1100; 100000-1100; 10000000000	9.700 9.830 9.860 9.925 9.940 10.000 10.055 10.070 10.220	COCQ COCM IRF EAQ JDY CSW COBC CQN	Guatemala City, Guat. (10.)- "Radio Nacional." Sun. 2000-2200, Mon., Thur., 2100-2300. Wed., Sat. 2200-2400. Havana, Cuba. (assigned 9750). 0700-0100. Fort de France, Martinique. "Radio Martinique." (.2). Box 136. 1845- 1945. Havana, Cuba. (assigned 9833). Rome, Italy. Madrid, Spain. (20.). Darien, Manchukuo. 0715-0800. Lisbon, Portugal. (5.). 1300-2000. Havana, Cuba. Macau, Portuguese China. Communistic Station. Rio de Janeiro, Brazil. (12.). 1900- 2100.
9.525 9.530 9.535 9.536 9.540 9.550	ZBW3 LKJ1 W2XAF W6XBE JZ1 VPD2 DJN OLR3A XEFT DJA	Paris, France. "Radio Liberte." Pretoria, U. of S. Africa. (5.). Add: Box 4559, Johannesburg. Hong Kong. (2.5). Sat. 2100-2400. Sun. 0000-0100; 0300-0930. Other days 0400-1000; 2330-0100. Jeloy, Norway. (1.). 0500-0800. Schenectady, N. Y. (40.). Sat. 1200- 2400. Other days 1600-2400. Belmont, Calif. (20.). General Elec. Co. (Under construction). Nazaki, Japan. (50.). 1500-1600; 1630-1730. Suva, Fiji. (2.). 0530-0700. Berlin, Germany. (50.). 0005-1000; 1650-2245. Prague, Czecho. (35.). Dally 1255- 1650-2245. Veracruz. Ver. (.02). 1930-2400. Berlin, Germany. (50.). 0005-1100; Berlin, Germany. (50.). 0005-1100;	9.700 9.790 9.830 9.860 9.925 9.940 10.000 10.065 10.070	COCM IRF EAQ JDY CSW COBC	Guatemala City, Guat. (10.). "Radio Nacional." Sun. 2000-2200, Mon., Thur., 2100-2300. Wed., Sat. 2200-2400. Havana, Cuba. (assigned 9750). Fort de France, Martinique. "Radio Martinique." (.2). Box 136. 1845- 1945. Havana, Cuba. (assigned 9833). Rome, Italy. Madrid, Spain. (20.). Darien, Manchukuo. 0715-0800. Lisbon, Portugal. (5.). 1300-2000. Havana, Cuba. Macau, Portuguese China. Communistic Station. Rio de Janeiro, Brazil. (12.). 1900-

SHORTWAVE BROADCASTING STATIONS OF THE WORLD

-	OLIC	NI WHYE BROND CHOTHE	3 OTHEROIT	S OF THE WORLD
10.330	ORK	Brussels, Belgium. (11.). 1330-1500.	11.855 DJP	Berlin, Germany. (50.).
10.370	EAJ43	Santa Cruz de Tenerife, Canary Isl.	11.860 GSE	Daventry, Gt. Britain. (20.).
		2000-2100.	YDB	Soerabaja I, Java, N.E.I. (1.).
	Ex Eight	"Radio Nacional," Salamanca, Spain. 1700-1825; 2000-2045.	11.870 W8XK	
10.530	JIB	Taihoku, Taiwan. (6.). 0900-1030.	11.875 OLR40	Prague, Czecho. (35.).
10.600	ZIK2	Belize, British Honduras. Tues.,	11.885 TPA3	Pontolse, France. 0200-0500: 1215-
10.660	JVN	Thurs., Sat., 1930-1945.	11.895 HPSI	Aguadulce, Panama. 1930-2130.
10.670	CEC	Nazaki, Japan. (50.). Santiago, Chile. (4.).	11.900 CD119	
10.700		Paris, France. "Radio Milan."	OLR4I	
10.740	JVM	Nazaki, Japan. (50.).	XEWI	
10.823	"Radio	Nacional," Salamanca, Spain. 1630- 1800.	11.955 IUC	Mexico City, D. F. (.25), 1930-2400. Addis Ababa, Ethlopia.
11.000	PLP	Bandoeng, Java, N.E.I. (1.5).	11.960 HI2X	Trujillo, D. R. (.5). Tues., Fri.,
11.048	CSW	Lisbon, Portugal. (5.). 1800-2000.		2000-2200. Sun. 0740-1040.
11.402	нво	Geneva, Switz., Fri. 1400-1415; Sat. 1845-2030.	12.000 RNE	Moscow, USSR. (20.). Sun. 1000- 1100. Sun., Wed., 0609-0700. Sun.,
11.435 -	-cocx	Havana, Cuba. Sun. 1800-2100.	12.120	Mon., Wed., Fri., 1600-1700.
11.535	SPD	Other days 0800-2400. Warsaw, Poland. (2.). Dally 1800-	12.120 12.235 TFJ	Algiers, Algeria. Reykjavik, Iceland. (7.5). Sun.,
24.553	J. D	1900. Sun. until 2000.		1345-1430.
11.698	SBG	Motala, Sweden. (.5). 0100-0130.	12.290 GBU	Rugby, Gt. Britain.
11.700	CB1170		12.295 CB615	Santiago, Chile.
		2300.	12.500 HIN	Trufillo, D. R. (.75).
	HP5A	Panama City, Pan. (.5). 2000-2330. Saigon, Fr. Indo-China. 0500-1100.	12.675	Guayaquii, Ecuador. "Radio Paris."
11.710	XEWB	Guadalajara, Jal.	12.765 VP2LO	
11.713 -	YSM TPA4	San Salvador, E. S. Pontoise, France. 0615-1300.	13.635 SPW	Warsaw, Poland. (10.). Mon., Wed., Fri., 1230-1330. Daily 1800-
11.718	CR7BH	Lourenco Marques, Port. East		1900.
		Africa. (.2). Sun. 0530-0700. Other days 0430-0630.	13.986 DJS 14.000 to 14.40	Berlin, Germany. (20.). Amateur Stations.
11.720- 11.730	PHI	Winnipeg, Man. (2.). 1800-2400. Hilversum, Netherlands. (23.6).	14.050 EA9AH	
	XETM	Villahermosa, Tab.	14.400 UPOL	North Pole. 1400-1605.
	HP5L	David, Panama. (.35).	14.420 HC1JB	
11 750	GSD	Daventry, Gt. Britain. (20.). 0315-	14.535 HBJ	Geneva, Switz. Sat. 1845-2100.
		0530; _0855-1200; 1220-1600; 2120- 2320.	14.900 LZA	Sofia, Bulgaria.
	HVJ	Vatican City.	15.040 -RKI	Moscow, USSR. 1900-2115.
11.760	OLR4B TGWA	Prague, Czecho. (35.). Guatemala City, Guat. (10.).	15.110 DJL	Berlin, Germany. (50.). 0000-0200; 0800-0900; 1040-1630.
		Mon., Thurs., 2000-2200.	15.116 OLR50	
11.770	-D1D	Berlin, Germany. (50.), 1040-1630;	15.120 HVJ	Vatican City. (10.). 1000-1030.
11.790	W1XAL	1650-2245. Boston, Mass. (20.). Sat. 1345-1830.	15.140 GSF	Daventry, Gt. Britain. (15.). 0315- 0530; 0545-1200.
		Sun. 1500-1800. Other days 1645- 1830.	15.150 YDC	Bandoeng, Java, N.E.I. (3.).
11.795	DJO	Berlin, Germany. (8.).	15.160 JZK	Nazaki, Japan. (50.).
11.796	OAX5A		XEWW	
	COGF	Matanzas, Cuba. (1.). 1300-1600;	15.170 CXA14	
	JZJ	1800-2200. Nazaki, Japan. (50.). 1500-1600;	-TGWA	Guatemala City, Guat. (10.). 1200- 1400.
	OER2	1630-1730; 0800-0900; 0030-0130. Vienna. Austria. (1.5). Weekdays	15.175RV96	"Radio Nacional," Lima, Peru. Moscow, USSR.
11.805		0900-1800. Сорепhagen, Denmark. 1830-2100.	15.180 -GSO	Daventry, Gt. Britain. 0315-0530;
11.810-	12R0	Rome, Italy. (25.). 0500-1220.		0545-1000; 1615-1800.
11.820 11.830	GSN KZRM	Daventry, Gt. Britain. Manila, P. I.	15.200 - DJB	Berlin, Germany. (8.). Sun. 1110- 1225. Daily 0005-1100; 1650-2245.
32.300	W2XE	New York, N. Y. (10.). Daily 1830- 1900. Sun. 1900-2400.	15.210 W8XK	Pittsburgh, Pa. (40.). 0900-1900
		Chicago, III. (20.).	15.220 PCJ	Huizen, Netherlands. (20.). Sun. 0330-0500. Wed. 0800-1030.
11.840	CSW	Lisbon, Portugal. (5.). 1300-2000.	15.230 OLR5A	
	KZRM	Manila, P. I. Mon. through Fri. 0500-0900; 1630-1800. Sat. 0500- 1000; 1630-1800. Sun. 0500-1000.	15.243 TPA2	0730. Weekdays 0620-0730. Pontoise, France. 0600-1100.
	OI PAA	Prague, Czecho. (35.). 1915-2155.		Boston, Mass. (20.). Fri. 2100-
	JER4A	1 10gare, Gaechie. (351). 1313-2135.	ZOIZOU WIAMI	(20/) 1111 2100-

		2200; Sun. 1015-1200; Daily exc. Sat. and Sun. 1415-1600.		W8XK W9XAA	Pittsburgh, Pa. (40.). Chicago, III. (5.).	
15.260	GSI	Daventry, Gt. Britain.		W9XF	Chicago, III. (10.).	
15.270	HI3X	Trujillo, D. R. (.5). Sun., 0800-1100. New York, N. Y. (10.). Sat., Sun.	17.785 17.790	JZL GSG	Tokyo, Japan. Daventry, Gt. Britain. (15.). 0315-	
	WAZE	1430-1800; 2000-2400. Mon. through Fri. 1300-1800; 2030-2400.	17.800 19.020	TGWA HS8PJ	0530; 0545-1200; 1220-1600. Guatemala City, Guat. (10.). Bangkok, Siam. (5.). Mon. 0800-	
15.280	DIG	Berlin, Germany. (50.). Sun. 1110-	201020		1000.	
		1225. Daily 0005-0545; 0600-0800; 0815-1100; 1650-2245.	21.450		Prague, Czecho. (35.).	
15,290	LRU	Buenos Aires, Arg. (5.). 0800-1000.	21.460	WIXAL	Boston, Mass. (10.). Tests ir- regularly.	
15.300	XEBM	Mazatlan, Sin. 1000-2300.	21.470	GSH	Daventry, Gt. Britain. 0545-0855;	
15.310-	-GSP	Daventry, Gt. Britain. 1345-1600.			0855-1200.	
15.320	OLR5B	Prague, Czeche. (35.).	21.480	W2XAD	Schenectady, N. Y. (25.).	
15.330		Schenectady, N. Y. (25.). 1100-2100.	21.520	W2XE	New York, N. Y. (10.). Sat., Sun.,	
	WSXBE	Belmont, Calif. (20.). (Under construction).		W3XAU	0800-1300; Other days 0730-1000. Philadelphia, Pa.	
15,340	DJR	Berlin, Germany. (50.). 0800-0900; 1650-2245.	21.530	GSJ	Daventry, Gt. Britain. 0545-0855; 0915-1030.	
15.370	HAS3	Budapest, Hungary. (20.). Sun.	21.540	W8XK	Pittsburgh, Pa. (40.). 0700-0900.	
		0900-1000.	21.550	GST	Daventry, Gt. Britain.	
15.440	XEBM	Mazatlan, Sin. (.05). 1000-2300.	25.950	W4XH	Spartanburg, S. C. (.05) (WSPA).	
15.555	C09WX	Tuinicu, Cuba. (2.).		WEXKG	Los Angeles, Calif. (.1) (KGFJ). 24 hours daily.	
17.310	WIXL	Bound Brook, N. J. (20.).		W9XUP	St. Paul, Minn. (1.) (KSTP).	
17.375	LSY	Buenos Aires, Arg. Fri. 1600-1700.	26.100	GSK	Daventry, Gt. Britain.	
17.760	DJE	Berlin, Germany. (50.). Sun. 1110-		W9XJL	Superior, Wis. (.08) (WEBC).	
	W2XE	1225. Daily 0005-1000. New York, N. Y. (10.). 1830-2000.	26.400	W9XAZ	Milwaukee, Wis. (.5) (WTMJ). 1300-2400.	
17.770		Hilversum, Netherlands, (23.6).	26,550	Waxon	Flushing, N. Y. (.1) (WMCA).	
1		Sun., 0725-1025. Mon., Tues.,	27.100		A Eff(a M. Morrissey (.1).	
		Thurs., Fri., 0825-1000. Sat.,			Amateurs.	
		0825-1040.				
17.780	W3XAL	Bound Brook, N. J. (35.). 0900-1740; 1800-2100.	56.000 to 60.000 Amateurs.			

Time Conversion Table

The time given in our indices is Eastern Standard by the 24-hour clock.

EST 24-hr.	Uy	the 24-nour	CIOCK.		
Clock	EST	CST	MST	PST	GMT
0000	Midn't	11 pm	10 pm		0500
0100	1 am	Midn't	11 pm		0600
0200	2 am	1 am	Midn't		0700
0300	3 am	2 am	1 am		0800
0400	4 am	3 am	2 am	1 am	0900
0500	5 am	4 am	3 am	2 am	1000
0600	6 am	5 am	4 am	3 am	1100
0700	7 am	6 am	5 am	4 am	1200
0800	8 am	7 am	6 am	5 am	1300
0900	9 am	8 am	7 am	6 am	1400
1000	10 am	9 am	8 am	7 am	1500
1100	11 am	10 am	9 am	8 am	1600
1200	Noon	11 am	10 am	9 am	1700
1300	1 pm	Noon	11 am	10 am	1800
14 00	2 pm	1 pm	Noon	11 am	1900
1500	3 pm	2 pm	1 pm	Noon	2000
1600	4 pm	3 pm	2 pm	1 pm	2100
1700	5 pm	4 pm	3 pm	2 pm	2200
1800	6 pm	5 pm	4 pm	3 pm	2300
1900	7 pm	6 pm	5 pm	4 pm	2400
2000	8 pm	7 pm	6 pm		0100
2100	9 pm	8 pm	7 pm		0200
2200	10 pm	9 pm	8 pm		0300
2300	11 pm	10 pm	9 pm		0400
2400	Midn't	11 pm	10 pm	9 pm	0500
		it the entire	world	consult the	RADEX
Time Convert	er.				

61

KEY TO SYMBOLS

Second Column Symbols

Verifies reception for return

As shown in the Index by Frequencies and Dial Numbers

National "Red" network.

Frequency is given in kilocycles; wave lengths in meters. Night power is shown in watts in third column. Daytime power is shown in parentheses in fourth column in kilowatts, thus (.25) indicating 250 watts. Some stations outside the United States use a "split frequency." Their exact frequency is shown in fourth column.

Weather or time only.

Z

```
No information available.

Fourth Column Symbols

National "Blue" network.
                                                                                  Sunday only.
Synchronized.
        postage.
b
      Verifies only occasionally.
                                                                                  Has
                                                                                        permit
                                                                                                   to increase
      Does not verify.
                                            Columbia network.
                                                                                    power.
      Verification 10c; letter 25c.
                                                                                  Has permit to change lo-
                                            Day time only.
h
     Sends own station stamp
                                       Dn
                                           Day time with occasional
                                                                                    cation.
                                            evening hours.
Canadian Brdcstg. Corp.
        for 10c.
                                                                                   Has permit to change fre-
     Sends own station stamp
for 5c.
                                                                             quency.
a-b-c. Small letters show stations
                                       M
                                           Mutual Brdcstg. Sys.
National "Red" and
"Blue" networks.
      Sends own station stamp
                                      N
                                                                                     using same transmitter.
                                                                             1-2-3. Figures denote stations
        for postage.
      Has no stamps.
                                                  construction
                                            Has
                                                                  permit
                                                                                     sharing time.
                                              only.
                                                                              .... No information.
      Verifies for 5c.
   The sign-on and sign-off time of stations is shown in Eastern Standard Time. "ss" means "sunset:"
540 keys. (555.2)
CJRM ak 1000
                                                         -9:30 am-1:30 am
                               Regina, Sask.
                400
                               Nassau, Bahamas
                                                         -1:30 pm-9:30 pm
550 keys. (545.1)
CFNB
KFUO
KFYR
                               Fredericton, N. B.
St. Louis, Mo.
Bismarck, N. Dak.
          ak
                500
                      F (1)
                                                         -7:00 am-11:00 pm
                                                        -8:00 am-Midnight
-8:00 am-1:00 am
                500
          ak
                      N (5)
               1000
          ak
KOAC
               1000
                               Corvallis, Ore.
St. Louis, Mo.
                                                           Noon-Midnight
          ak
                      2R (5)
C (5)
KSD
               1000
          ak
                               San Antonio. Tex.
Waterbury, Vt.
Buffalo, N. Y.
Cincinnati, Ohio
KTSA
          ak
               1000
WDEV
          ak
                500
                      D
                      C (5)
C (5)
D
WGR
          ak
               1000
                                                          -7:00 am-midnight
WKRC
          ak
               1000
                                                        -6:30 am-...
WSVA
          ak
                500
                               Harrisonburg ,Va.
          ak
                               Merida, Yuc.
                100
560 kcys. (535.4)
                      (1) N
C (5)
C (5)
D
KFDM
                500
          ak
                               Beaumont. Texas
KLZ
          ak
               1000
                               Denver, Colo.
San Francisco, Cal.
                                                          -8:30 am-2:00 am
KSFO
                                                        -10:00 am-4:00 am
          ak
               1000
                               Springfield, Mo.
Philadelphia, Pa.
                                                           6:00 am-
KWTO
          ak
               5000
WFIL
               1000
                      BM
          ak
                                                           -7:00 am-midnight
WIND
               1000
                      (5)
N (5)
                               Gary, Ind.
Columbia, S. C.
          ak
                                                           6:00 am 4:00 am
               1000
          ak.
                                                           -7:00 am—midnight
-6:00 am—midnight
WOAM ak
               1000
                               Miami, Fla.
570 kcys. (526.0)
CMCY
          ak
               5000
                              Havana, Cuba
                      CXY(1) Wichita Falls, Tex.

Los Angeles, Calif.
C (5) Tacoma, Wash.
KGKO
KMTR
                250
          ak
               1000
          ak
KVI
WKBN
          ak
               1000
                                                        -9:00 am-3:00 am
                               Youngstown, Ohio
New York, N. Y.
Yankton, S. Dak.
Columbus, Ohio
          ak
                500
                      C1
WMCA
               1000
                      C(5)
WNAX
               1000
                                                          -6:45 am-
          ak
                      1 (1) Columbus, Onto
B (WSYU) Syracuse, N. Y.
N Asheville, N. C.
WOSU
                750
                                                        -9:00 am-11:00 pm
          ak
WSYR
          ak
               1000
                                                        -7:00 am-1:00 am
WWNC
               1000
                                                           7:30 am-1:00 am
580 kcys. (516.9)
                               Prince Rupert, B. C.
Quebec, P. Q.
Toronto, Ont.
                 50
                                                        -8:00 am-midnight
CFPR
          ak
CHRC
          ak
                100
                                                         -8:00 am-midnight
CKCL
                100
          ak
                                                          -8:00 am-midnight
CKUA
          ak
                500
                      F
                               Edmonton, Alta.
                      Ñ
KMJ
          ak
               1000
                               Fresno, Calif.
                                                         --10:00 am--3:00 am
```

```
2 (1)
C (1)
C
                            Manhattan, Kans.
 KSAC
               500
                                                   -10:30 am-6:30 pm
          ak
                            Charleston, W. Va.
 WCHS
          ak
               500
 WDBO
              1000
                            Orlando, Fla.
                                                   -7:00 am-midnight
          ak
              1000
                     2C (5)
                            Topeka, Kans.
                                                    -6:00 am-
 WIBW
          ak
 WILL
          ak
              1000
                     D
                            Urbana, Ill.
                                                    9:00 am ss
                            Worcester, Mass.
                                                    -7:30 am-1:00 am
 WTAG
          ak
              1000
                    D
                            Piedras Negras, Coah.
 XEMU
          7.
 590 keys. (508.2)
 KHO
•WEEI
WKZO
                    R (5)
C (5)
BDX
          ak
              1000
                            Spokane, Wash.
              1000
                            Boston, Mass.
                                                    -6:45 am--...
          ak
                            Kalamazoo, Mich.
              1000
          ak
                            Omaha, Nebr.
                     R (5)
                                                   -7:00 am-3:30 am
 WOW
          ak
              1000
 600 kcys. (499.7)
                     F (1)
BF
                            Windsor, Ont.
 CBW
          ak
                500
                                                   -4:30 pm-11:30 pm
 CFCF
CJOR
CMQ
                            Montreal, P. Q.
Vancouver, B. C.
                500
          ak
                500
                                                   -7:45 am-1:00 am
          ak
          ak 25000
                            Havana, Cuba
 KFSD
              1000
                            San Diego, Calif.
          ak
                    B Galtimore, Ma.
BM (1) Bridgeport, Conn.
BM (5) Cedar Rapids, Iowa
C (5) Memphis, Tenn.
                500
 WCAO
          ak
 WICC
                                                   -6:00 am-1:00 am
          ak
                500
                                                   -6:30 am-1:00 am
 WMT
               1000
          ak
                                                     -7:30 am-1:00 am
 WREC
          ak
               1000
 610 kcys. (491.5)
                     M (5) San Francisco, Ca
DM Cleveland, Ohio.
R (5) Kansas City, Mo.
N(WMBF) Miami, Fla.
 KFRC
               1000
                            San Francisco, Cal.
 WCLE
WDAF
          ak
                500
                                                    -6:45 am-
               1000
                                                   -7:30 am-1:00 am
          ak
 WIOD
          ak
               1000
                                                   -7:00 am-1:00 am
                            Philadelphia, Pa.
 WIR
               1000
 620 kcys. (483.6)
                            Portland, Ore.
Phoenix, Ariz.
San Jose, Costa Rica
 KGW
KTAR
TIPG
                     R (5)
                                                   -9:00 am-2:00 am
               1000
          ak
               1000
                                                   -9:00 am-1:15 am
          ak
                     625
               2000
          z
                     Na (5) Clearwater, Fla.
               1000
                                                     -7:00 am-1:00 am
  WFLA
          ak
                     CD Greensburg, Pa.
CM (1) Bangor, Maine
                                                   -8:00 am-5:00 pm
  WHJB
                250
                     CD
          ak
                500
 WLBZ
          ak
                     Na (5) St. Petersburg, Fla.
                                                   -7:00 am-1:00 am
  WSUN
          ak
               1000
               1000
                     N (5)
                            Milwaukee, Wis.
                                                   -7:15 am-1:00 am
          ak
 630 kcys. (475.9)
 CFCO
CFCY
CJRC
                100
                     F
                             Chatham, Ont.
                                                     8:00 am-10:30 pm
          ak
                            F
          ak
               1000
                500
                     F (1)
          ak
                                                   —11:00 am—1:30 am
—10:00 am—11:30 pm
 CKOV
          ak
                100
  CMCD
          ak
                250
  KFRU
KGFX
          ak
                500
                     1(1)
                             Pierre, S. Dak.
                200
                     D
          ak
                     N1 (1)
B (.5)
C (1)
 -WGBF
          ak
                500
                             Evansville, Ind.
                250
                             Washington, D. C.
                                                     -6:30 am-2:00 am
 WMAIL
          ak
                500
                             Providence, R. I.
                                                   -7:00 am-1:00 am
  WPRO
          ak
                             Merida, Yuc.
                500
  XEZ
          7.
                             Havana, Cuba
             10000
          z
 640 kcys. (468.5)
                             Los Angeles, Calif.
-KFI
          ak 50000
                                                   —9:45 am—3:00 am
                     DP
                             Portland, Maine
  WGAN
                500
          7.
                                                    -6:30 am-8:15 pm
  WHKC
          ak
                500
                             Columbus, Ohio
 WOI
               5000
                             Ames, Iowa
          ak
  XEBX
                             Sabinas, Coah.
          z
                250
  YSS
          ak
                             San Salvador, E. S.
 650 keys. (461.3)
  TIX
                             San Jose, C. R.
Nashville, Tenn.
 WSM
           ak 50000 MN
                                                   -7:30 am-1:00 am
```

		-				
	660 1	kcys.	(454.	3)		
	WAAW WEAF	ak 50000		Omai New	ha, Nebr. York, N. Y. co City, D. F.	-7:00 am—ss -7:30 am—1:00 am
	XEAL XEAO	z 1000 ak 250		Mexic Mexic	co City, D. F. cali, B. Cfa.	
	670 1	kcys.	(447.	5)		
4	-WMAQ -XELO XERO	ak 50000 ak 50000		Tijua	ago, Ill. ma, B. Cfa. pultepec, D. F.	-7:00 am-1:00 am
		kcys.	(440.		Juntepec, D. F.	—2:00 am—2:30 am
	CMBO CMCG	z 5000	P		na, Cuba na, Cuba	7.00
	KFEQ KPO	ak 1000 ak 2500 ak 50000	D R			—7:00 am—midnight —7:00 am—ss —11:00 am—3:00 am
_	VAS VOWR WLAW	akn 2000 ck 500 z 1000	681	St. Jo	Francisco, Cal. Bay, N. S. Dhn's, Nfld. ence, Mass. gh, N. C.	
-	WPTF	ak 1000			gh, Ń. C.	-6:30 am-11:00 pm
		kcys.	•	-		
4-	CFRB CJCJ XET	ak 10000 ak 100 ak 5000	F	Calga Mont	nto, Ont. ry, Alta. errey, N. L.	—8:00 am—midnight —9:30 am—1:00 am —8:30 am—10:00 pm
	700 1	kcys.	(428.	3)		-
_	WLW	ak 50000	0 MN(W	/8 XO)	Cincinnati, O.	-5:45 am-1:30 am
		kcys.				
-	KiRO KMPC WOR	ak 1000 ak 500 ak 50000		Bever Newa	le, Wash. ly Hills, Calif. rk, N. J.	—9:00 am—5:00 am —9:00 am—4:00 am
		cys.				
-	CMK WGN XEH	ak 3000 ak 50000 ak 250	M	Chica	na, Cuba Igo, III. errey, N. L.	-10:00 am-9:00 pm
	730 1	kcys.		7)		
-	CFPL CJCA CKAC CKPR	ak 1000 ak 1000 ak 5000 ak 100	F C F	Mont	on, Ont. onton, Alta. real, P. Q. William, Ont.	—9:00 am—3:00 am —9:00 am—2:00 am —7:30 am—1:00 am —9:00 am—11:00 pm
	CMCL XEPN XERB	z 10000 ak 10000 z 100000	0	Piedra Rosar	na, Cuba as Negras, Coah rito Bch., B. Cfa	.—5:45 am—
	740 1	cys.	(405.	2)		
	KMMJ KTRB	ak 1000 ak 250	D D	Clay (Center, Nebr. sto, Calif.	-6:00 am -9:00 am-8:30 pm
_	WHEB WSB	ak 250 ak 50000		Ports:	mouth, N. H.	-6:55 am-1:00 am
	75 0 1	kcys.	(399.	8)		
	KGU WJR	z 2500 aj 2500 ak 50000	N C	Hono	na, Cuba lulu, Hawaii it, Mich.	—8:00 am—12:15 am —11:30 am—4:30 am —5:45 am—2:00 am
	XEAA XEAM	ak 200 z 25		Mexic Mata	cali. B. Cfa. moros, Tams.	TIVE SALE
	760 1	cys.	(394,	5)		
	СМНХ	ak 200		Cienf	uegos, Cuba	

	KXA WBAL WEW WJZ XEOK	ak 1 ak 50	250 2500 1000 0000 2500	(.5) BMSy D BSy	Baltii St. Lo New	le, Wash. more, Md. ouis, Mo. York, N. Y. na, B. Cfa.	6:00 pm -9:00 pm—1:00 am -8:00 am—ss -7:30 am—1:00 am -All night station
	CMBF KFAB WBBM	z 10 ak 10	0000 0000	389.4 Csy 384.4	Hava: Linco Chica	na, Cuba In, Nebr. go, Ill.	7:00 am1:00 am
	CHWK CKSO CMJK KEHE KFDY KFQD KGHL KWLK WEAN WMC WTAR	dk ak ak ak ak ck ak ak ak ak ak ak ak ak	100 1000 250	F F (5) D N (5)	Chilli Sudb Cama Los A Brook Anche Billin Long Provid Memp Norfo	wack, B. C. ury, Ont. iguey, Cuba ngeles, Calif. ings, S. Dak. orage, Alaska gs, Mont. view, Wash. dence, R. I. phis, Tenn. lk, Va. zo City, D, F.	-11:00 am—1:15 am -9:00 am—midnight -11:00 am—10:00 pm -1:30 pm—3 pm -11:00 pm—5:00 am -10:00 am—1:00 am -6:00 am—1:00 am
-	790 CMGH KGO KOAM WGY	kcys	500 7500 1000 1000	379.5	Mata San F Pittsb Scher	nzas, Cuba Francisco, Cal. Jurg, Kans. Juctady, N. Y.	-10:00 am-3:00 am -7:00 am-1:00 am -7:00 am-1:00 am
_	HIX WBAP WFAA WTBO	ak ak 50 ak 50 ak	800 0000 0000 250	374.8 Na	Truji Fort V Dalla Cumi	llo, D. R. Worth, Texas s, Texas perland, Md.	-6:45 am-midnight -9:00 am-12:30 am -8:30 am-ss
	CMCF WCCO WN YC XEDF XEXC	ak ak 50 ak 1 z z	600 0000 1000 100 350	X C D	Havai Minn New Nuevo Aguas	na, Cuba eapolis, Minn. York, N. Y. o Laredo, Tams. scalientes, Ags.	—7:30 am—1:00 am —7:00 am—7:00 pm .—11:00 am—8:15 pm
-	CMHV WHAS XEBG	ak ak 50 z 1	100 0000 1000	365.6 6 361.2	Santa Louis Tijua	Clara, Cuba ville, Ky. na, B. Cfa.	6:45 am
	CMJX KOA WEEU WHDH WRUF	ak ak 50 ak 1 ak 1 ak 5	500 0000 1000 1000 5000	R D Dn Dn	Cama Denve Readi Bosto Gains	nguey, Cuba er, Colo. ing, Pa. on, Mass. sville, Fla.	9:00 am11:30 pm 9:00 am2:00 am 8:00 am5:00 pm 7:00 am6:30 pm
	CBL CFOC VOGY XERA	ak 50 ak 1 ak ck 35	0000 1000 400 50000	356.9	Toro Saska St. Jo Villa	onto, Ont. Itoon, Sask. Inn's, Nfld. Acuna, Coah.	All night station
	CMCM KIEV WESG	ak	250	352.7 CD	Hava	na, Cuba lale, Calif. a, N. Y.	-8:00 am-midnight -7:30 am-6:00 pm

WKAR ak 1000 D WWL ak 10000 CX	E. Lansing, Mich. New Orleans, La.	7:00 am5:00 pm 6:30 am1:00 am
860 kcys. (348	3.6)	
-WABC ak 50000 C (V	VBOQ) New York, N. Y.	-7:30 am-1:00 am
WHB ak 1000 DM XEMO ak 5000	VBOQ) New York, N. Y. Kansas City, Mo. Tijuana, B. Cfa.	—9:45 am—3:00 am
XENC z 50	Mexico City, D. F.	7.15 am '5.00 am
870 kcys. (344	1.6)	
WENR ak 50000 Ba	Chicago, Ill.	-Noon-midnight
WLS ak 50000 Ba XEFB ak 200	Chicago, Ill. Monterrey, N. L.	-6:30 am-3:00 pm
XEJW z	Mexico City, D. F.	
880 kcys. (340).7)	
CBO ak 1000 F	Ottawa, Ont.	-10:30 am-midnight
CFJC ak 1000 F CMW ak 1400 X KFKA ak 500 2M	Kamloops, B. C. Havana, Cuba	—12:30 pm—1:15 am —7:00 am—midnignt
KFKA ak 500 2M (KLX ak 1000	Havana, Cuba 1) Greeley, Colo. Oakland, Calif.	-7:30 am-1:00 am -10:30 am-2:30 am
KPOF ak 500 2	Denver, Colo.	
TIEP ak 1000 WCOC ak 500 CX	San Jose, Costa Ric	a
WGBI ak 500 C1	San Jose, Costa Ric (1) Meridian, Miss. i) Scranton, Pa. Scranton, Pa. Richmond, Va.	—12:30 pm—10:30 pm —12:30 pm—10:00 pm
WOAN ak 500 1 (1) WRNL ak 500 D	Scranton, Pa. Richmond, Va.	—12:30 pm—10:00 pm —7:30 am—ss
WSUI ak 500 (1)	Iowa City, Iowa	-10:00 am-11:00 pm
890 kcys. (336	5.9)	
KARK ak 500 N (1	Little Rock, Ark.	-7:00 am-1:00 am -6:30 am-1:00 am
KARK ak 500 N (1 KFNF ak 500 2 (1) KFPY ak 1000 C (5	Shenandoah, Iowa Spokane, Wash.	-6:30 am-1:00 am -9:50 am-3:00 am
KUSD ak 500 2	Vermillion, S. Dak.	
WBAA ak 500 (1) WGST ak 1000 C (5	W. Lafayette, Ind. Atlanta, Ga.	-Noon-6:00 pm
WGST ak 1000 C (5 WJAR ak 1000 R (5 WMMN ak 500 C (1	Providence, R. I. Fairmont, W. Va.	-7:30 am-1:00 am
WMMN ak 500 C (1 XEW ak 50000	Mexico City. D. F.	-7:00 am-1:00 am
900 keys. (333	3.1)	
KGBU ak 500 X	Ketchikan, Alaska	
KHJ ak 1000 M (5) Los Angeles, Calif.	4:00 am 9:30 am1:00 am
KSEI ak 250 (1) WBEN ak 1000 R (5	Pocatello, Idaho Buffalo, N. Y. New Haven, Conn.	-7:00 am-1:00 am -6:00 am-ss
WELI ak 500 D WFMD ak 500 D	New Haven, Conn. Frederick, Md.	—6:00 am—ss —6:30 am—ss
WJAX ak 1000 N (5) Jacksonville, Fla.	-6:45 am-1:00 am
WLBL ak 5000 D	 Jacksonville, Fla. Oklahoma City, Ok. Stevens Point, Wis. 	7:45 am1:00 am 9:00 am2:00 pm
WTAD ak 1000 D	Quincy, Ill.	—9:00 am—2:00 pm —8:00 am—5:45 pm
910 kcys. (329	0.6)	
CBF z 50000 FN	Montreal, P. Q.	1:00 am
CKY ak 15000 F CJAT ak 1000 F	Winnipeg, Man. Trail, B. C.	-8:30 am-1:00 am -10:00 am-2:00 am
-XENT ak 150000	Nuevo Laredo, Tame	
000 4 /	(0)	
920 keys. (325		8.00 a 1.00
CMX ak 1000 X KFEL ak 500 Ma	Havana, Cuba Denver, Colo.) Seattle, Wash.	-8:00 am-1:00 am -8:00 am-2:30 am
KOMO ak 1000 R (5) Seattle, Wash.	
KPRC ak 1000 R (5 KVOD ak 500 Ba	Denver, Colo.	
WAAF ak 1000 D	Chicago, Ill. Boston, Mass.	6:00 am—ss
WPEN ak 1000	Philadelphia, Pa.	1

			OKI	II AIV	IERICAN D. C. S	TATIONS, BT TREQUENCIES
9	WSPA WWJ	ak ak	1000 5000	D R	Spartanburg, S. C. Detroit, Mich.	-6:00 am-12:30 am -6:00 am
	930	kcy	s. (322.4	1)	
11.0	CFAC CFCH CFLC CHNS CKPC KMA KROW WBRC WDBJ XEBH	ak ak ak ak ak	1000 100 100 1000 1000 1000 1000 1000	F F F (5) R C (5)	Calgary, Alta. North Bay, Ont. Prescott, Ont. Halifax, N. S. Brantford, Ont. Shenandoah, lowa Oakland, Calif. Birmingham, Ala. Roanoke, Va. Hermosillo, Son.	-9:00 am-2:00 am -7:00 am-10:00 pm -7:30 am-11:00 pm -6:00 am9:00 am-5:00 am -8:00 am-12:30 am -7:00 am-midnight -1:00 pm-midnight
	940	kcy	s. (319.0	0)	
1 1 1	KOIN VOAS WAAT WAVE WCSH WDAY WHA WICA XEFO XEYO	ak ak ak ak ak ak ak ak	1000 100 500 1000 1000 1000 5000 250 5000 5000	C (5) N R (2.5) N (5) D D	Portland, Ore. St. John's, Nfld. Jersey City, N. J. Louisville, Ky. Portland, Maine Fargo, N. Dak. Madison, Wis. Ashtabula, Ohio Mexico City, D. F. Mexico City, D. F.	—6:30 am—6:00 pm —8:00—1:00 am —8:00 am—midnight —6:00 am—1:00 am —9:00 am—5:30 pm
	950	kcy	s. (315.	5)	
1 / 12	CJOC CMBC CRCK KFWB KMBC WHAL WRC	ak ak ak	100 0000 1000 1000 1000 500 500	F (5) C (5) DP RX (1)	Lethbridge, Alta. Havana, Čuba Quebec, P. Q. Hollywood, Calif. Kansas City, Mo. Saginaw, Mich. Washington, D. C.	9:00 am1:00 am 6:55 ammidnight 9:30 am4:00 am 6:55 am1:00 am 6:00 am
	960	kcy	s. (312.3	3)	
1 1 1	CFRN CHNC CMKS CRCY XEAW	z ck	100 1000 100 100 0000	F F	Edmonton, Alta. New Carlisle, P. Q. Guantanamo, Cuba Toronto, Ont. Reynosa, Tams.	—9:30 am—2:00 am —7:30 am—11:00 pm
	970	kcy	s. (<mark>309</mark> .:	1)	
	CMBY KJR WCFL WIBG	ak	150 5000 5000 100	B N D	Havana, Cuba Seattle, Wash. Chicago, III. Glenside, Pa.	8:55 am11:00 pm
	980	kcy	s. (306.0	0)	
	KDKA XEAC XEFE	bk 5 ak z		B	Pittsburgh, Pa. Tijuana, B. Cfa. Nuevo Laredo, Tams	
	990	kcy	s. (302.8	8)	
10	WBZ WBZA XEAF XEK XES	ak 5 ak ak ak ak ak	0000 1000 750 100 250	BSy BSy	Boston, Mass. Springfield, Mass. Nogales, Son. Mexico City, D. F. Tampico, Tams.	6:00 am-1:00 am 6:00 am-1:00 am
	1000) ke	ys.	(299	.8)	
	CMBZ KFVD VOCM	ak ak	500 1000 200	(1) X Dn 1006	Havana, Cuba Los Angeles, Calif. St. John's, Nfld.	7:45 am-midnight 9:00 am-8:15 pm

	NORTH AMERICAN B. C. STATIONS BT					
	WHO XEBI	ak 50000 ak 25	R	Des Moines, Iowa	—8:00 am—2:00 am	
	XEBK XEXS	ak 60 z 100		Nuevo Laredo, Tams. Portable in Mexico	—10:00 am—8:30 pm	
	1010	kcys.	(296	.9)		
	CHML CKCD	ak 100 ak 100	F 1	Hamilton, Ont. Vancouver, B. C.	-8:00 am-midnight	
	CKCK	ak 1000 ak 100 ak 50	F	Ottawa, Ont.	—9:30 am—2:00 am —Noon—11:30 pm	
	CKIC CKWX CMJA	ak 50 ak 100 ak 300	i	Wolfville, N. S. Vancouver, B. C. Camaguey, Cuba	-Noon-4:00 am	
	KGGF KOW	ak 1000 ak 1000	2M M	Camaguey, Cuba Coffeyville, Kans. San Jose, Calif.	—9:30 am—3:00 am	
	WHN WNAD WNOX	ak 1000 ak 1000 ak 1000	(5) 2 C (5)	New York, N. Y. Norman, Okla. Knoxville, Tenn.	-3:00 pm-10:15 pm -6:30 am-2:00 am	
	XEU	ak 250		Knoxville, Tenn. Veracruz, Ver.	-8:00 am-1:00 am	
	1020	kcys.	(293			
-	-WDZ XEJ	ak 10000 ak 250 ak 1000	R D	Philadelphia, Pa. Tuscola, III. Juarez, Chih.	—7:05 am—10:00 pm —7:00 am—6:00 pm	
	1030	kcys.	(291			
	CFCN CJBR CKLW	ak 10000 z 1000	F	Calgary, Alta. Rimouski, P. Q. Windsor, Ont. Havana, Cuba Mexico City, D. F.	—9:00 am—1:30 am	
4	CMCK XEB	ak 5000 z ak 10000	M	Havana, Cuba Mexico City, D. F.	-6:00 am-4:00 am -10:00 am-12:15 am	
	1040	kcys.	(288			
	KRLD KWJJ	ak 10000 ak 500	Ċ	Dallas, Texas Portland, Ore.	-7:00 am-1:00 am -All night station	
5	KYOS WTIC	bk 250 ah 50000	D R	Merced, Calif. Hartford, Conn.	-6:00 am	
	1050	kcys.	(285	.5)		
-	CBM CMKD	ak 5000 ak 250	F	Montreal, P. Q. Santiago, Cuba Abilene, Kans.		
-	KFBI	ak 50000 ak 50000 z 1000	Dn C D	Abilene, Kans. Los Angeles, Calif. Eau Claire, Wis.	-7:00 am-7:45 pm -9:30 am-3:15 am	
	WEAU WGVA	z 1000	DP	Indianapolis, Ind.		
	1060	kcys.	(282			
	KTHS VOAC WBAL	ak 10000 z 40 ak 10000	N 1065 BM	Hot Springs, Ark. St. John's, Nfld. Baltimore, Md.	9:00 am-ss 6:00 am9:00 pm	
	WJAG W3XJ	ak 1000 z 100	D P	Norfolk, Nebr. College Park, Md. Guadalajara, Jal.	-7:30 am—ss -Midnight to 6:00 am	
	XEAD XEMG	ak 125 z 100		Guadalajara, Jal. Atzcapotzalco, D. F.		
	1070	kcys.	(280	.2)		
	CMBX CMHA KJBS	ak 500 z 50		Havana, Cuba Sagua la Grande, Cub	a	
-	WCAZ WTAM	ak 500 ak 100 ak 50000	D R	San Francisco, Calif. Carthage, Ill. Cleveland, Ohio	-6:00 am-midnight	
	1080	kcys.	(277			
-	WBT WCBD	ak 50000 ak 5000	C DnI	Charlotte, N. C. Chicago, Ill.	-6:30 am-midnight	
· des	WMBI XEBA	ak 5000 z 20 ak 500	Dnl	Chicago, Ml. Guzman, Jal. Mexico City, D. F.		
	XEDP	ak 300		MICARCO CITY, D. F.		

	1090	kcys.	(275	5.1)	
i	кмох	ak 50000	C	St. Louis, Mo.	—6:30 am—1:00 am
	1100	kcys.	(272	6)	
	CBR KGDM KWKH WBIL WPG XECL XEL	ak 5000 ak 1000 ak 10000 ak 5000 ak 5000 z 1700 z 1000	F DM C 1 C1	Vancouver, B. C. Stockton, Calif. Shreveport, La. New York, N. Y. Atlantic City, N. J. Mexicall, B. Cfa. Mexico City, D. F.	- 9:00 am- ss -7:30 am-1:00 am
	1110	kcys.	(270	0.1)	
*	CMCJ KSOO WRVA	ak 500 ak 2500 ak 5000	X DnN CM	Havana, Cuba Sioux Falls, S. Dak. Richmond, Va.	—7:00 am—6:45 pm —7:00 am—midnight
	1120	kcys.	(267	(.7)	
_	CHLP CHSJ CKOC CKX CMGF	ak 100 ak 500 ak 500 ak 1000 ak 250	F (1) F (1) F	Montreal, P. Q. St. John, N. B. Hamilton, Ont. Brandon, Man.	—9:00 am—11:00 pm —5:00 am—midnight
	CMKM CRCS	ak 200 ak 100 ak 100	F D	Matanzas, Cuba. Manzanillo, Cuba Chicoutimi, P. Q. Spokane, Wash.	-8:00 am-10:00 pm
*.	KFIO KFSG KRKD KRSC KTBC WCOP WDEL WISN	ak 500 ak 500 ak 250 z 1000 ak 500 ak 250 ak 250	a (2.5) a (2.5) DP D R (.5)	Los Angeles, Calif. Los Angeles, Calif. Seattle, Wash. Austin, Texas Boston, Mass. Wilmington, Del.	-9:00 am-3:00 am -All night station -8:00 am-4:00 pm -9:00 am-1:00 pm -8:00 am-1:00 am
	WJBO WTAW XEJP	ak 500 ak 500 z 100	(265)	College Sta., Tex. Mexico City, D. F.	—5:00 am —1:00 am —7:45 pm —1:00 am
-	CMJI KSL WJJD -WOV	kcys. ak 150 ak 50000 ak 20000 ak 1000	C Dn D	Giego de Avila. Cuba Salt Lake City, Ut. Chicago, Ill. New York, N. Y.	Noon
	1140	kcys.	(263	.0)	
	CMCW KVOO WAPI WSPR	dk 500 ak 25000 ak 5000 ak 500	N1 C1 DM	Havana, Cuba Tulsa, Okla. Birmingham, Ala. Springfield, Mass.	-6:55 am 7:50 am-5:45 pm
	1150	kcys.			
	CMJF -WHAM XEC XEDW	z 200 ak 50000 ak 100 z 20	B	Camaguey, Cuba Rochester, N. Y. Tijuana, B. Cfa. Minatitlan, Ver.	—6:30 am—midnight
	1160	kcys.	(258	.5)	
-	CMHJ CMKG WOWO WWVA XEAS XEBJ XEBZ	ak 175 z ak 10000 ak 5000 ak 50 z 20 ad 100	B1 C1	Cienfuegos, Cuba Santiago, Cuba Fort Wayne, Ind. Wheeling, W, Va. Saltillo, Coah. Merida, Yuc. Mexico City, D. F.	—6:00 am—
	XED XEP	ak 2500 ak 500		Guadalajara, Jal. Juarez, Chih.	—Noon—midnight —9:00 am—2:00 am

```
1170 kcys.
                         (256.3)
 CMBS
            ak
                   150
                                                               -8:00 am-midnight
-6:00 am-1:00 am
                         X
                                   Havana, Cuba
            ak 50000
                                  Philadelphia, Pa.
 1180 kcys.
                         (254.1)
 CMJO
KEX
            ak
ak
                    50
                                  Ciego de Avila, Cuba
                 5000
                         B2
                                  Portland, Ore.
 KOB
                                   Albuquerque, N. M.
            ak 10000
                         N<sub>2</sub>
                                                            -1:00 pm-11:00 pm
 WDGY
WINS
            ak
                         CDn(5) Minneapolis, Minn.
New York, N. Y.
                 1000
                        C
            ak
                 1000
                                 'Macon, Ga.
Tacuba, D. F.
 WMAZ
            ak
                 1000
                                                             -6:45 pm-7:00 pm
 XEFA
            Z.
                  500
                         (252.0)
 1190
            kcys.
 CMKX
                                  Santiago, Cuba
Visalia, Calif.
            7.
 KTKC
VONF
WATR
WOAI
            ãk
                   250
                         Ď
                   500
                         1195
            ok
                                  St. John's, Nfld.
Waterbury, Conn.
                   100
            ak
                         DXZ
            ak 50000
                                  San Antonio, Tex.
Huntington, W. Va.
                                                            -7:30 am-12:30 am
-6:00 am-7:00 pm
-WSAZ
            ak
                 1000
           kcys. (249.9)
 1200
 CFGP
             7
                  100
                        F
                                  Grande Prairie, Alta.
CHAB
CKNX
CKTB
                  100
                                                               -9:00 am-12:30 am
            ak
                                  Moose Jaw, Sask.
Wingham, Ont.
            dk
                                                               -11:00 am-1:00 am
                  100
                        F
                   100
                                                            -9:30 am-11:30 pm
            ak
                                  St. Catharines, Ont.
 CMCO
            ad
                  250
                                  Havana, Cuba
 KADA
KBTM
                                  Ada, Okla.
Jonesboro, Ark.
            ak
                  100
                         DM
                  100
                         D
            ak
                        (.25) P Lewistown, Mont.
N Sioux Falls, S. Dak.
 KDNC
KELO
                  100
            7.
                   100
            Z
KFJB
KFXD
KFXJ
                  100
                         (.25)
(.25)
            ak
                                  Marshalltown, Ia.
                                                               -7:00 am--10:00 pm
-8:00 am--10:00 pm
                                 Nampa, Idaho
Grand Junc., Colo.
Coeur d'Alene, Idaho
           ak
                   100
                         (.25)
DP
            ak
                  100
 KGCI
                   100
                         (.25)
 KGDE
                  100
                                  Fergus Falls, Minn.
                                                            -8:00 am-10:00 pm
 KGEK
KGFJ
KGHI
                                 Sterling, Colo.
Los Angeles, Calif.
Little Rock, Ark.
Greenville, Texas
                  100
           ak
            ak
                  100
                                                               -24 hours daily
                  100
                         (.25)
DP
                                                            -8:30 am-11:00 pm
            ak
 KGVL
                   100
            Z
                         (.25)
(.25)
(.25)
            ak
                   100
                                  Monroe, La.
 KOOS
            ak
                   100
                                  Marshfield, Ore.
                                                               -10:00 am-7:45 pm
                                                             -11:00 am-midnight
                                  Lowell, Ariz.
 KSUN
            ak
                   100
                                  Redding, Calif.
San Luis Obispo, Calif.
 KVCV
            ak
                  100
 KVEC
KVOS
                   250
                         D
            dk
                   100
                          M
                                  Bellingham, Wash.
                                 Stockton, Calif.
Winona, Minn.
Bangor, Maine
 KWG
                   100
                         Ń
            ak
                                                             -10:00 am-3:00 am
 KWNO
                   250
            7
                         D
                        (.25)
 WABI
                   100
            ak
                         C Anderson, S. C.
(.25) Waycross, Ga.
M (.25) Ponca City, Okla.
Huntsville, Ala.
 WAIM
                   100
                                                             -6:00 am-10:00 pm
 WAYX
                   100
100
            ak
                                                             -8:00 am-10:00 pm
 WBHP
            ak
                   100
                                 New Orleans, La.
Rapid City, S. Dak.
Burlington, Vt.
Janesville, Wis.
Cincinnati, Ohio
Superior, Wis.
 WBNO
            ak
                   100
                                                               -1:00 pm to midnight
 WCAT
WCAX
            ak
                   100
                         D
                                                             -Noon-2:00 pm
                         (.25)
(.25)
(.25)
P
                   100
            ak
 WCLO
                   100
            ak
 WCPO
            ak
                   100
                                                             —7:00 am—11:30 pm
 WDSM
                   100
 WEST
                   100
                         3 (.25)
                                  Easton, Pa.
                                  South Bend, Ind.
 WFAM
            ak
                   100
 WFTC
            ak
                   100
                          .25)
                                  Kinston, N. C. Canton, Ohio
 WHBC
            ak
                   100
                         (.25)
 WHBY
                   100
                         (.25)
C (.25)
                                 Green Bay, Wis.
Utica, N. Y.
            ak
 WIBX
            ak
                   100
                                                             —5:30 am—1:00 am
                           25)
 WIL
            ak
                   100
                                  St. Louis, Mo.
 WJBC
            ak
                   100
                         5 (.25)
                                  Bloomington, Ill.
                                                              -4:00 pm-8:30 pm
 WJBI
            ak
                   100
                                  Decatur, III.
 WJBW
            ak
                   100
                                  New Orleans, La.
                                                               -All night station
                         C (.25) W. Palm Beach, Fla.
            ak
 WJNO
                   100
                                                             -7:00 am-11:00 pm
 WJRD
            ak
                   250
                         D
                                 Tuscaloosa, Ala.
Harrisburg, Pa.
                         3 (.25)
(.25)
D
 WKBO
WLVA
WMFR
            ak
                   100
                                                               8:00 am-11:00 pm
                   100
                                  Lynchburg, Va.
High Point, N. C.
                                                               7:00 am-11:00 pm
            ak
            ak
                   100
                         (.25)
 WMPC
                   100
                                  Lapeer, Mich.
```

-wols	Z	100	D	Florence, S. C.	
WRBL	ak	100	(.25)	Columbus, Ga.	-8:00 am-10:30 pm
WSAL	Z	250	D	Salisbury, Md.	
- WTHT	ak	100	M	Hartford, Conn.	-7:00 am-4:15 pm
WTOL	Z	100	DP	Toledo, Ohio	
WWAE	ak	100	8	Hammond, Ind.	

1210 kcys. (247.8) [

```
CHLT
           Z.
                  100
                                Sherbrooke, P. Q.
                                Stratford, Ont.
Aklavik, N.W.T.
Prince Albert, Sask.
Hull, P. Q.
Cobalt, Ont.
Santa Clara. Cuba
 CJCS.
           ak
                   50
                                                         -8:00 am-9:00 pm
                   50
           Z
 CKBI
           ak
                  100
                                                         -9:45 am-1:00 am
 CKCH '
                        Ê
           ak
                  100
                                                         -8:00 am-11:00 pm
 CKMC
           ak
                  50
CMHI *
           ak
                  150
                                Alexandria, La.
                                                         -7:00 am-ss
           ak
                  100
                                Wichita, Kans.
Elk City, Okla.
Devils Lake. N. D.
Monterey, Calif.
 KANS
           ak
                  100
                                                         -7:30 am
                                                                       -midnight
                 100
 KASA
                       M
           C
                                                         -7:00 am-
                                                                       -8:00 pm
 KDLR.
                  100
           ak
                                                         -7:30 am-9:30 pm
 KDON!
                  100
                       M
           z
           ak
                  100
                                Klamath Falls, Ore.
 KFOR | ak
                       CM(.25) Lincoln, Nebr
                 100
                                                         -8:00 am-11:15 pm
 KFPW ak
KFVS ak
                 100
                                Fort Smith, Ark
                       5 (.25) Cape Girardeau, Mo.
                  100
                       M2 San Bernardino, C
C (.25) Mason City, Iowa
M Olympia, Wash.
 KFXM ak
                 100
                                San Bernardino, Cal. -9:00 am-3:00 am
KGLO · z
                 100
 KGY
KHBG
KIUL
           ak
                 100
                                Okmulgee, Okla.
Garden City, Kans. —8:00 am—10:00 pm
Carlsbad, N. Mex.
                 100
100
                       D
           ak
 KLAH
           ak
                 100
                       (.25)
 KOCA;
                                Kilgore, Texas
Helena, Mont.
           ak
                 100
 KPFA.
                 100
                       (.25)
 KPPC
                 100
                                Pasadena, Calif.
                                                         -10:00 am-12:30 am
 KROY
                       CD
                 100
                                Sacramento, Calif.
 KVSO
                 100
                                Ardmore, Okla.
           ak
                       M
                                                         -8:00 am-11:00 pm
KWTN.
                 100
                                Watertown, S. Dak.
Zanesville, Ohio
           ak
 WALR.
           ak
                 100
                                                         -7:00 am-9:00 pm
 WBAK.
                 100
                                Wilkes-Barre, Pa.
           ak
 WBBL WBLY
                 100
           ak
                                Richmond, Va.
                       D
           ak
                 100
                                Lima, Ohio
                                                         -6:00 am-5:15 pm
 WBRB, ak
                       3
N
                 100
                                Red Bank, N. J.
 WCOL .
                 100
                                Columbus, Ohio
                                                         --7:00 am--11:00 pm
                       4 Chicago, Ill.
5 (.25) Harrisburg, Ill.
 WCR-W. ak
                 100
                                                         --11:00 am-7:00 pm
 WEBO, ak
WEDC, ak
                 100
                 100
                                Chicago, Ill.
WFAS. ak
                                White Plains, N. Y.
                 100
                       (.25)
                               St. Augustine, Fla.
Freeport, N. Y.
Gulfport, Miss.
Newburgh, N. Y.
WFOY ak
                 100
 WGBB · ak
                 100
                       (.25)
3
 WGCM ak
                 100
                 100
                                                         -7:30 am-midnight
 WGRM. ak
                 100
250
                               Grenada, Miss.
                       DP
WHAI z
-WHBF ak
                               Greenfield, Mass.
                       (.25)
(.25)
                 100
                               Rock Island, Ill.
                                                         -7:00 am-1:05 am
 WHBU, ak
                               Anderson, Ind.
Poynette, Wis.
                 100
                       (.25)
(.25)
 WIBU
                 100
WIBU.
           ak
                 100
                       (.25) Gadsden, Ala.
Dn(.1) Hagerstown. Md.
                                                         -8:00 am-10:30 pm
 WJEJ,
WJIM,
                  50
           ak
                       (.25) Lansing, Mich.
B (.25) Jamestown, N. Y.
                 100
                                                         -7:15 am-12:30 am
           7.
 WJTN
           ak
                 100
WJW
                 100
           ak
                       (.25)
                               Akron, Ohio
                                                         -8:00 am-10:30 pm
-6:00 am-midnight
WKOK ak
WLMU z
                 100
                               Sunbury, Pa.
                       P (.25) Middlesboro, Ky.
                 100
 WMFG
                 100
                       (.25)
                               Hibbing, Minn.
                                                         -7:30 am-10:00 pm
 WOMT, ak
                 100
                               Manitowoc, Wis.
 WPAX. ak
                 100
                       \hat{\mathbf{D}}
                               Thomasville, Ga.
Rochester, N. Y.
                                                         -8:00 am-6:00 pm
WSAY.
                                                         -7:00 am-4:30 pm
                 100
                       D
WSBC.
                               Chicago, Ill.
Nashville, Tenn.
Bridgeton, N. J.
Charlotte, N. C.
                       4 (.25)
(.25)
D
          ak
                 100
                                                         -6:00 am-midnight
WSIX.
                 100
          ak
                                                           -7:00 am—1:00 am
·WSNJ .
                 100
          7.
                       N (.25)
WSOC
          ak
                 100
                                                         -7:00 am-midnight
WTAX. ak
                 100
                               Springfield, III.
XEAT,
          ak
                 250
                               Parral, Chih.
                                                         -11:00 am-9:00 pm
XEE.
          ak
                  50
                               Durango, Dgo.
                               Juarez, Chih.
Puebla, Pue.
                 100
          ak
· XETH . ak
                 100
```

```
(245.8)
1220 kcys.
CMJE
KFKU
KTMS
                              Camaguey, Cuba
Lawrence, Kans.
          ak
               1000
                      a (5)
                                                        -3:30 pm-7:30 pm
                500
                      B
                               Santa Barbara, Cal.
          7.
KTW
               1000
                      S2
                               Seattle, Wash.
          ak
KWSC
WCAD
               1000
                      2 (5)
                              Pullman, Wash.
Canton, N. Y.
                                                          -9:45 am-12:30 am
          ak
                                                        -12:30 pm-4:00 pm
                      D
          ak
                500
                      MR (5) Pittsburgh, Pa. C (5) Tampa, Fla.
                                                        -7:00 am-2:30 am
WCAE
WDAE
               1000
                                                        -7:30 am
          ak
               1000
                                                          8:00 am-7:00 pm
WREN
               1000
                      Ba(5)
                               Lawrence, Kans.
          ak
XEBL
                 50
                               Mazatlan, Sin.
          z
XEDA
                200
                               Gra. Anaya, D. F.
          2
                250
                               Monterrey, N. L.
Veracruz, Ver.
XEG
XETF
                                                        -11:00 am-1:00 am
          ak
                 30
                      (243.8)
1230
         kcys.
                               Havana, Cuba
                                                        -8:00 am-11:00 pm
CMCB
                      N ...
KGBX
KGGM
KYA
TGW
                500
                               Springfield, Mo.
                               Albuquerque, N. M.
                                                        -9:30 am-11:30 pm
          ak
               1000
                               San Francisco, Cal
          ak
               1000
                      (5)
          ak
               1000
                               Guatemala City, Gt.
                      C (5)
R (5)
WFBM
          ak
               1000
                               Indianapolis, Ind.
Boston, Mass.
                                                        -7:30 am-1:00 am
                                                           6:00 am-1:00 am
WNAC
               1000
          ak
                               Monterrey, N. L.
                                                          -11:00 am-8:00 pm
                100
XEFJ
                      (241.8)
1240
          kcys.
                               Syndey, N. S.
Sancti Spiritus, Cuba
                      F
                                                          -7:00 am-11:00 pm
              1000
CMHB
                 50
                               Sancti Spiritus, cu
Mandan, N. Dak.
Minot, N. Dak.
Fort Worth, Texas
Twin Falls, Idaho
San Juan, P. R.
Detroit, Mich.
                250
250
KGCU
          ak
KLPM
KTAT
KTFI
WKAO
WXYZ
                      îXZ
          ak
          ak
               1000
                      M
               1000
          ak
          ak
               1000
                                                          -6:00 am-9:30 pm
                      B
               1000
          ak
                               Obregon, Son.
Mexico City, D. F
XEAP
                  50
XEAY
XEBS
          ż
                100
                               Mexico City, D. F.
                 200
          Z
                       . . . .
XEKL
                500
                               Leon, Guan.
          Z
XELA
                               Saltillo, Coah.
                  50
          Z
                      (239.9)
         kcys.
1250
                               Santiago, Cuba
CMCK
                150
          ak
                               Long Beach, Calif.
Yakima, Wash.
KFOX
          ak
               1000
                       M (.5)
KIT
          ak
                 250
                       P
                               St. Louis, Mo.
KXOK
          Z
               1000
WAIR
WCAL
WDSU
                               Winst.-Salem, N. C. -6:00 am-ss
          äk
                       Ď
                 250
                       \tilde{2}XZ
          ah
               1000
                               Northfield, Minn.
                               New Orleans, La.
Newark, N. J.
                                                         -7:00 am-midnight
               1000
                       B
          ak
WHBI
               1000
                      a (2.5)
2XZ
          ak
                               Minneapolis, Minn.
New York, N. Y.
Minneapolis, Minn.
 WLB
          ak
               1000
                      a (2.5)
B (5)
                                                           All night station
WNEW
          ak
               1000
                                                           7:00 am midnight
 WTCN
          ak
               1000
                               San Luis Pot., S.L.P.
XEXH
                 250
                      (238.0)
1260 kcys.
                       2X
2
                                                           -7:00 am-midnight
CMBD
                 500
                               Havana, Cuba
Havana, Cuba
          ak
                                                           8:00 am-midnight
                 150
CMC
KGVO
KHSL
           Z
                               Missoula, Mont.
Chico, Calif.
Omaha, Nebr.
                       Ĉ
                                                         -9:00 am-1:00 am
          ak
               1000
                 250
                       BM(5)
                                                          -6:00 am
 KOIL
KPAC
           ak
                1000
                               Port Arthur, Texas
Weslaco, Texas
Siloam Spgs., Ark.
                                                         -6:00 am-5:45 pm
-8:00 am-11:00 pm
                 500
 KRGV
           ak
                1000
           ak
                5000
                       D
                               Tucson, Ariz.
Dayton, Ohio
Springfield, Vt.
Savannah, Ga.
 KVOA
                1000
           ak
                       \dot{\mathbf{C}} (5)
                                                         -6:00 am-1:00 am
                1000
 WHIO
           ak
                 500
                       CM(1)
 WNBX
          ak
                                                         -7:00 am-midnight
WTOC
          ak
                1000
 1270 kcys.
                      (236.1)
 CMHD
           dk
                 250
                                Caibarien, Cuba
                               Decorah, Iowa
Seattle, Wash.
                                                         -9:30 am-3:30 pm
           ak
                 100
                       2D
 KGCA
KOL
           ak
                1000
                       M (5)
                                Colo. Springs, Colo.
                                                        -9:00 am-1:00 am
 KVOR
                1000
 KWLC
                 100
                       2D
                                Decorah, Iowa
           ak
```

```
Grd. Rpds.. Mich.
                                                       -6:30 am-midnight
WASH
                      DaN
          ak
                      R (1)
R (5)
Na
                              Baltimore, Md.
                                                         -7:00 am-midnight
WFBR
          ak
                500
WJDX
WOOD
                              Jackson, Miss.
Gd. Rapids, Mich.
               1000
          ak
          ak
                500
                                                          -7:00 am-midnight
                 50
17
                              Jalapa, Ver.
Mexico City, D. F.
XEXB
          ak
XEXE
1280 kcys.
                      (234.2)
                              Holguin, Cuba
Great Falls, Mont.
CMKO
KFBB
          z
ak
                      C (5)
               1000
                              Oakland, Calif.
Camden, N. J.
Asbury Park, N. J.
Chattanooga, Tenn. —7:30 am—12:30 am
KLS
          ak
                250
WCAM
                500
          ak
WCAP
                500
                      C (5)
N (5)
C
WDOD
               1000
          ak
                               Madison, Wis.
WIBA
          ak
               1000
WORC
                500
                               Worcester, Mass
                                                        -8:00 am-midnight
          ak
WRR
WTNJ
                      M
                               Dallas, Texas
                                                        -8:00 am-midnight
          ak
                500
                              Trenton, N. J.
Mexico City, D. F.
Mexico City, D. F.
                500
          ak
                100
XEMX
XEXM
          z
          Z.
1290 kcys.
                      (232.4)
                500
                               Havana, Cuba
                                                        -6:55 am-1:00 am
CMCU
          ak
KDYL
               1000
                      RX
                               Salt Lake City, Ut.
                                                        -8:00 am-3:00 am
          ak
KLCN
                100
                               Blytheville, Ark.
          ak
                      C (5)
N (5)
C (5)
                               Houston, Texas
Duluth, Minn.
KTRH
          ak
               1000
WEBC
               1000
                                                        -8:00 am-1:00 am
          ak
                              Pittsburgh, Pa.
Saranac Lake, N. Y.
                                                          -7:30 am-
                                                                      -12:30 am
WJAS
          ak
               1000
WNBZ
                      D
                                                          9:30 am-
                100
                                                                      -88
          ak
                      (2.5)
                               San Juan, P. R.
                                                          -5:45 am-
                                                                      -11:30 pm
WNEL
               1000
1300 kcys.
                      (230.6)
KALE
KFAC
          ak
                500
                      CMX
                               Portland, Ore
                               Los Angeles, Calif.
                                                        -All night station
          ak
               1000
KFH
                      C (5)
                               Wichita, Kans.
          ak
               1000
                               Brooklyn, N. Y.
New York, N. Y.
New York, N. Y.
WBBR
          ak
               1000
               1000
WEVD
          ak
WFAB
          ak
               1000
                      N (5)
                               Greenville, S. C.
WFBC
               1000
          ak
                                                        -6:00 pm-midnight
WHAZ
          ak
               1000
                      1
                               Troy, N. Y.
WHBL
                               Sheboygan, Wis.
          ak
                250
1310 kcys.
                      (228.9)
CHCK
                  50
                               Charlottetown, P.E.I.
          ak
                       F
                               North Bay, Ont.
Yarmouth, N. S.
CJKL
CJLS
          ak
                 100
                      F
          ak
                 100
                               Quebec, P. Q.
Corsicana, Tex.
                                                         -7:55 am-11:30 pm
CKCV
          ak
                 100
KAND
                 100
                      D
          Z
KARM
KCKN
                 100
                       C
                               Fresno, Calif.
Kansas City, Kans.
          z
          ak
                 100
                               Jerome, Ariz.
Dublin, Texas
Okla. City, Okla.
Lubbock, Texas
Kalispell, Mont.
                      (.25)
(.25)
(.25)
KCRJ
          ak
                 100
KFPL
          dk
                                                        -7:00 am-10:45 pm
                 100
KFXR,
KFYO
                 100
                                                        -8:00 am-
                                                                      -midnight
          ak
                       (.25)
          ak
                 100
                                                         -8:00 am-
                                                                      10:15 pm
KGEZ
                                                                      -11:00 pm
          ak
                                                           9:00 am-
                 100
KGFW
                               Kearney, Nebr.
Watsonville, Calif.
                                                         -7:00 am-
                                                                     -10:00 pm
                 100
 KHUB
          ak
                 250
                       D
                       XZ
KINY
KPBM
                               Juneau, Alaska
Poplar Bluff, Mo.
          ak
                 100
                 100
                       DP
          Z.
                               Pampa, Texas
Lufkin, Texas
KPDN
          ak
                 100
KRBA
                 100
                       ĎΡ
                               Shreveport, La.
Rochester, Minn.
Santa Fe, N. Mex.
Sherman, Texas
                       (.25)
(.25)
KRMD
          ak
                 100
          ak
                                                         -7:00 am-12:15 am
KROC.
                 100
KRQA
KRRV
          ak
                 100
                       Ď.
                 250
KSRO
          ak
                               Santa Rosa, Calif.
Cedar City, Utah
                                                         -11:00 am-9:00 pm
                 250
                       D
 KSUB
           ak
                 100
KTSM
KVOL
                       N(.25)
                                                        -8:30 am-1:00 am
                 100
                               El Paso. Texas
          ak
                                                          -7:00 am-ss
          ak
                 100
                               Lafayette, La
                       (.25)
 KVOX
                 100
                               Moorhead, Minn.
           7.
KWOS
KXRO
WAML
                 100
                       D
                               Jefferson City, Mo.
           7.
                       M(.25)
          ak
                 100
                               Aberdeen, Wash.
                                                         -10:00 am-2:00 am
                                                           8:00 am - 8:00 pm
                 100
                       (.25)
                               Laurel, Miss.
          ak
WBEO
                               Marquette, Mich.
                                                           10:30 am-5:30 pm
           ak
                 100
```

```
WBOW
             ak
                    100
                          N (.25) Terre Haute, Ind.
                                                             -7:00 am-midnight
   WBRE
                                   Wilkes-Barre, Pa.
             ak
                    100
   WBRK
                          C (.25) Pittsfield, Mass.
                    100
             7
   WCLS
WCMI
                    100
             ak
                                   Joliet, Ill.
                                                              -8:00 am-9:30 pm
                         John H. M. (25) Ashland, Ky. S (25) El Paso, Texas B (25) Buffalo, N. Y. Milwaukee, Wis. Royal Oak, Mich.
                                                             -6:00 am -11:30 pm
-11:30 am -10:30 pm (Sun. only)
             ak
                    100
   WDAH
             ak
                    100
   WEBR
                    100
                                                               7:00 am-midnight
   WEMP
             ak
                   100
50
                                                               7:30 am
                                                                           ss
4:00 am
                                                             -8:00 am
   WEXL
             ak
                         3
   WFBG
             ak
                    100
                                   Altoona, Pa.
                                                             -7:00 am
                                                                           -10:30 pm
   WFDF
                    100
             ak
                                  Flint, Mich.
                                                             -6:00 am
   WGAU
WGH
                   100
                          (.25)P
                                  Athens, Ga.
Newport News, Va.
Wilson, N. C.
             7
             ak
                   100
                         (.25)
D
                                                             -7:00 am-midnight
  WGTM
WHAT
             Z
                   100
             ak
                   100
                                  Philadelphia, Pa.
  WJAC
             ak
                   100
                         3 (.25)
                                  Johnstown, Pa.
                         3 (.25) Johnstown, Pa.
Lakeland, Fla.
(.25) Muncie, Ind.
M Laconia, N. H.
Auburn, N. Y.
(.25) Plattsburg, N. Y.
M (.25) New Bedford, Mass.
MXZ Washington, D. C.
Reading Pa.
  WLAK
                   100
             7.
  WLBC
                   100
             ak
                                                            -7:00 am-midnight
  WLNH.
             ak
                   100
100
  WMBO
WMFF
WNBH
             ak
                   100
             ak
             ak
                   100
                                                            -7:30 am-11:15 pm
  WOL
                   100
                   100
                                  Reading, Pa.
Knoxville, Tenn
             ak
                                                             -7:00 am-11:00 pm
  WROL
             ak,
                   100
                         N(.25)
  WSAJ
WSGN
WSJS
                                  Grove City, Pa.
Birmingham, Ala
             ak
                   100
             ak
                   100
                         B (.25)
                                                             -8:00 am-midnight
                                  Winston-Salem, N. C.—8:00 am-10:00 pm
             ak
                   100
  WTAL
                                  Tallahassee, Fla.
            ak
                   100
                                                              8:00 am-midnight
  WTEL
                   100
            ak
                                  Philadelphia, Pa.
                                                             -8:00 am-midnight
                         (.25)
(.25)
                                  Jackson, Tenn.
            ak
                   100
                   100
  WTRC
            ak
                                  Elkhart, Ind.
Cordoba, Ver.
                                                            -7:00 am-10:30 pm
  XEAG
                    10
            7.
                                  Irapuato, Guan.
Mexico City, D. F.
Tampico, Tams.
Torreon, Coah.
  XEBO
                    25
                         . . . .
  XECW
                    10
            ak
                         . . . .
  XEFW
                   250
            ak
                                                            -11:00 am-10:00 pm
  XETB
XEX
            ak
                   125
                   125
            ak
                                  Monterrey, N. L.
                         (227.1)
           kcys.
  1320
  CMOX
                   200
                                  Havana, Cuba
                                  Pueblo, Colo.
  KGHF
            ak
                  500
                         Ř
                                                              9:00 am-1:00 am
                                 Honolulu, Hawaii
Idaho Falls, Idaho
  KGMB
KID
                 1000
                         CM
                                                              -1:30 am-6:00 pm
            ak
            ak
                  500
                        (1)
C (5)
  KRNT
                 1000
                                 Des Moines, Iowa
            ak
                                                            —6:00 am—1:00 am
  WADC
                 1000
            ak
                        C
                                  Akron, Ohio
York, Pa.
                                                              -7:00 am-1:00 am
  WORK
                 1000
            ak
                        N
R
                                                             -8:00 am-10:00 pm
  WSMB
                                 New Orleans, La.
            ak
                 1000
  1330 kcys.
                        (225.4)
 CMHK
                                 Cruces, Cuba
            Z
                                 San Diego, Calif.
Tacoma, Wash.
Corpus Christi, Tex.
 KGB
KMO
            ak
                 1000
                        M
                                                            -10:00 am-4:00 am
                 1000
                         M
                                                            -9:00 am-3:00 am
            ak
 KRIS
KSCJ
WDRC
            Z.
                  500
                        C (5)
C (5)
MN (5)
                                 Sioux City, Iowa
Hartford, Conn.
            ak
                 1000
                                                              7:00 am-1:00 am
            ak
                 1000
                                                           -7:00 am-midnight
 WSAI
                 1000
                                Cincinnati, Ohio
Green Bay, Wis.
            ak
                                                           -7:00 am-1:00 am
 WTAO
            ak
                 1000
                        (223.7)
 1340
           kcys.
 CMAB
CMJL
KDTH
KGDY
                                 Pinar del Rio, Cuba
            Z
                        Camaguey, Cuba
DP Dubuque, Iowa
D Huron, S. Dak.
N (2.5) Butte, Mont.
Dodge City, Kans.
CX Pensacola, Fla.
            Z
                  500
            z
            ak
                  250
                                                           -10:00 am-1:00 am
 KGIR
                 1000
            ak
 KGNO
WCOA
           ak
                  250
                                                           -8:30 am-midnight
           ak
                  500
 WFEA
           ak
                  500
                        MN(1)
                                Manchester, N. H.
                                                           -6:30 am-1:00 am
WSPD
                                Toledo, Ohio
Jalapa, Ver.
           ak
                1000
                        B (5)
                                                           --6:30 am-
 XEXD
                  350
           7.
                        (222.1)
 1350
           kcys.
 CMCA
                  450
                                Havana, Cuba
                        X
 CMKW
                        N (2.5) Boise, Idaho
 KIDO
                1000
                                                            -10:00 am-midnight
 KWK
           ak
                                                           -6;30 am-1:00 am
                1000
                        BM(5) St. Louis, Mo.
```

```
Zarephath, N. J.
New York, N. Y.
Richmond, Va.
WAWZ ak
                        1(1)
                                                           -6:00 am-...
 WBNX ak
WMBG ak
                1000
500
                        1
R
1360 kcys. (220.4)
CMJH
           dk
                   50
                                 Ciego de Avila, Cuba
                 250
 KCRC
           ak
                        M
                                 Enid, Okla.
                                                           -8:00 am-11:00 pm
KGER
                1000
                                 Long Beach, Calif.
           яk
                       N (1)
C (5)
I (1)
                                Charleston, S. C.
Syracuse, N. Y.
Chicago, III.
WCSC
           ak
                 500
                                                           -7:00 am-midnight
-7:00 am-1:00 am
-8:00 am-9:00 pm
WFBL
                1000
           ak
WGES
WOBC
           ak
                 500
                1000
           ak
                        D
                                 Vicksburg, Miss.
WSBT
           ak
                 500
                        1
                                South Bend, Ind.
1370 kcys.
                        (218.8)
                       F
CFAR
                 100
                                 Flin Flon, Man.
CKCW
CMGE
           ak
                 100
                                Moncton, N. B.
Cardenas, Cuba
                 150
                       Ď...
           ak
                                                           -10:00 am-10:30 pm
KAST
KCMO
KEEN
                 100
                                Astoria, Ore.
Kansas City, Mo.
Seattle, Wash.
                                                           -11:00 am-8:30 pm

-7:00 am-2:00 am

-3:00 pm-1:00 am
           ak
                       3
           ak
                 100
                 100
           ak
                       N
KELD
                                El Dorado, Ark.
Bakersfield, Calif.
                  100
KERN
                 100
                                                           —11:00 am—3:00 am
                                Boone, Iowa
Fort Worth, Texas
Longview, Texas
KFGO
                 100
                        D
                                                           -7:00 am-2:00 pm
-7:30 am-midnight
           ak
                        (.25)
KFJZ .
           ak
                 100
KFRO
           ak
                 250
                        D
                                                           -7:00 am-ss
KGAR
KGFL
                 100
                        C (.25)
           ak
                                Tucson, Arizona
                 100
           ak
                                Roswell, N. Mex.
KGKL
           ak
                 100
                        (.25)
                                San Angelo, Texas
Clovis, N. Mex.
                                                           —9:00 am—11:00 pm
—10:00 am—11:00 pm
KICA
           ak
                 100
KIUP
           ak
                 100
                                Durango, Colo.
KLUF
                 100
                                Galveston, Texas
                                                           -9:00 am-midnight
                                San Antonio, Tex.
Rapid City, S. Dak.
La Junta, Colo.
KMAC
                                                           -8:00 am-9:00 pm
           ak
                 100
                       5 (.25)
KOBH
           ak
                 100
                                                           -8:00 am-midnight
KOKO •
                 100
                       5
           7.
           ak
                 100
                                San Antonio. Tex.
                                                           --7:00 am--11:00 pm
KRE
KRKO
                 100
                       (.25)
3
           ak
                                Berkeley, Calif.
Everett, Wash.
                                                           -24 hours daily
           ak
                  50
KRMC
                        (.25)
                 100
           Z
                                Jamestown, N. D.
KSLM
           ak
                 100
                        M
                                Salem, Ore.
                                                           ---10:00 am--1:00 am
KTEM
           ak
                 250
                                Temple, Texas
KTOK
           bk
                 100
                        M
                                Oklahoma City, Ok.
                                Walla Walla, Wash.
Great Bend, Kans.
Rock Springs, Wyo.
Sheridan, Wyo.
Albany, N. Y.
KUJ
           ak
                 100
                                                           -9:30 am-1:00 am
KVGB
                 100
           z
                        (.25)P
KVRS .
                 100
           Z
                       (.25)
B
KWYO
                 100
                                                           -9:00 am-midnight
           ak
                                Albany, N. A.
Dothan, Ala.
Atlanta, Ga.
Clarksburg, W. Va.
WABY
                                                          -7:00 am-midnight
           ak
                 100
WAGE
           ak
                 250
                                                           -9:00 am -ss
                       (.25)
           ak
                 100
                                                           -7:00 am-1:00 am
WBLK
           ak
                 100
                                                             6:00 am
                       2 (.25)
(.25)
(.25)
(.25)
WBNY
                 100
                                Buffalo, N. Y
Danville, Va.
                                                           -7:30 am-midnight
           ak
WBTM
          ak
                 100
                                                           -7:00 am-10:00 pm
WCBM
           ak
                 100
                                Baltimore, Md.
WDAS ak
                 100
                                Philadelphia, Pa.
                                                           -8:00 am-midnight
                 100
                       D
                                Champaign, Ill.
WEOA
                       \tilde{C}(.25)
           ak
                 100
                                Evansville, Ind
                 100
           ak
                                Hattiesburg, Miss.
                                                           -8:00 am-9:00 pm
WGL
                 100
                                Fort Wayne, Ind.
           ak
WGRC
                                New Albany, Ind.
           ak
                 250
                       D
WHBQ
                                Memphis, Tenn.
Calumet, Mich.
Virginia, Minn.
Jackson, Mich.
           ak
                 100
                                                           -8:00 am-11:30 pm
                       (.25) Calumet, Mich.
C(.25) Virginia, Minn.
(.25) Jackson, Mich.
Sy Lawrence, Mass.
MSy(.25) Lowell, Mass.
WHDF
           ak
                 100
                                                           -10:30 am-6:30 pm
WHLB
                 100
           ak
WIBM
          ak
                 100
                                                            -6:30 am-12:30 am
WLLH
          ak
                 100
                                                           -7:30 am-midnight
-7:30 am-midnight
WLLH, ak
                 100
WMBR
                 100
                       C (.25) Jacksonville, Fla.
Wilmington, N. C.
                                                          -7:30 am-midnight
          ak
WMFD
          ak
                 100
WMFO
          ak
                                Decatur, Ala.
St. Paul, Minn.
                                                             8:00 am-
                 100
                       D
                                                                        6:30 nm
WMIN
                       (.25) St. Paul, Minn.
C (.25) Davenport, Iowa
          ak
                 100
                                                             7:00 am-1:00 am
WOC
           ak
                 100
                                                          -7:00 am-1:00 am
WPAY
          ak
                 100
                                Portsmouth, Ohio
Mayaguez, P. R.
                                                             -7:00 am-10:15 pm
                       (.25)
WPRA
           z
                 100
WRAK
          ak
                 100
                                Williamsport, Pa.
                        .25)
WRDO
                       M
                                Augusta, Maine
Racine, Wis.
                                                          -8:00 am-11:15 pm
          ak
                 100
WRJN.
WSAU
          ak
                 100
                       (.25)
                                                          -8:25 am-midnight
                 100
                                Wausau, Wis.
Buffalo, N. Y
          ak
                                                             7:00 am-11:15 pm
WSVS
          ak
                  50
                       2D
XEC7
          Z
                 100
                                San L. Pot., S.L.P.
                       . . . .
```

```
Morelia, Mich.
Mexico City, D. F.
Owen Sound, Ont.
 XEI
                 125
 XELZ
                 100
           2
                  100
 1380 keys. (217.3)
 CMCR
                                Havana, Cuba
                        . . . .
CMCX
KOH
KQV
                                Havana, Cuba
Reno, Nevada
Pittsburgh, Pa.
                 150
                                                             -9:00 am--11:00 pm
                       Ċ...
                                                           -11:00 am-3:00 am
-7:00 am-10:00 pm
           ak
                 500
                       Č1
C (1)
C
                 500
           ak
 WALA
           ak
                 500
                                Mobile, Ala.
                                                            8:30 am-midnight
WKBH
          ak
                1000
                                La Crosse, Wis
                 250
200
                       Ď
                                New Britain, Conn.
 WNBC
           ak
                                                            -7:00 am-ss
WSMK
                       Č 1
                                Dayton, Ohio
           ak
                                                            -6:00 am-...
1390 keys. (215.7)
CJGX
           ak
                 100
                       F
                                Yorkton, Sask.
                                                            8:30 am-12:30 am
CMJC
                 150
                                Camaguey, Cuba
Little Rock, Ark.
           7.
KLRA
           ak
                1000
                       C (5)
KOY
           ak
                1000
                       \tilde{\mathbf{c}}
                                Phoenix, Ariz.
                                                            -9:00 am-12:15 am
          ak
                 250
                                Lewiston, Idaho
                       BM(2.5) Cleveland, Ohio
D St. Albans, Vt.
 WHK
                1000
           ak
                                                          -6:30 am-midnight
WODM
          dk
                1000
1400 kcys. (214.2)
CMGC
                 150
          ad
                                Matanzas, Cuba
Santiago, Cuba
Hilo, T. H.
Ogden, Utah
Tulsa, Okla.
Brooklyn, N. Y.
Brooklyn, N. Y.
Olean, N. Y.
Indiananolis In
                                Matanzas, Cuba
                                                            -8:00 am-11:00 pm
CKKR
KHBC
                 100
                       CM
          ak
                 250
KLO
KTUL
WARD
                 500
500
                       B
C (1)
                                                          -10:00 am-1:00 am
          ak
ak
                 500
           ak
                       \tilde{2} (1)
WRRC
           ak
                 500
WHDL
           ak
                 250
                       D
                       MR (5) Indianapolis, Ind.
2 Brooklyn, N. Y.
WIRE
           ak
                1000
                                                          -7:30 am-1:00 am
                                Brooklyn, N. Y.
Brooklyn, N. Y.
WLTH
           ak
                 500
WVFW
                 500
           ak
                       (212.6)
          kcys.
1410
CKFC
CKMO
CMCQ
                                Vancouver, B. C.
                  50
           ak
                 100
                       5
                                Vancouver, B. C.
                5000
                                Havana, Cuba
           ak
                        (1)
                                Grand Forks, N. D.
KFJM
           ak
                 500
                       (1) Grand Forks, N.
(2.5) N Amarillo, Texas
N Medford, Ore.
M (1) Boston, Mass.
(1) Bay City, Mich.
(1) Bluefield, W. Va.
(1) Rockford, Ill.
KGNC
           ak
                1000
KMED
           ck
                 250
WAAB
WBCM
                 500
                                                             24 hours daily
           ak
                                                             9:00 am-12:30 am
           ak
                 500
                                                            5:00 am
WHIS
           ak
                 500
                                                             7:30 am-midnight
 WROK
           ak
                 500
                       (1)
C (1)
                                                             7:30 am-midnight
WSFA
                                Montgomery, Ala.
           ak
                 500
 1420 kcys.
                       (211.1)
CHLN
CKGB
           Z
                 100
                                Three Rivers, P. Q.
                                North Bay, Ont.
                                                           -11:00 am-11:30 pm
           ak
                 100
                       (.25)
XZ
                                San Antonio, Texas
Aberdeen, S. D.
                                                          -7:00 am-12:15 am
KABC
                 100
           ak
 KABR
           ak
                 100
                       D
                                Albert Lea. Minn.
                                                            -7:30 am-ss
 KATE
           ak
                 250
                                                          -2:00 pm-8:00 pm
                                Portland, Ore.
 KBPS
           ak
                 100
                       4
                       (.25)
 KCMC
                 100
                                Texarkana, Tex.
           ak
 KEUB
KFAM
                                Price, Utah
St. Cloud, Minn
           ak
                 100
                                                          -9:30 am-midnight
                 100
           z
KFIZ -
KGFF
           ak
                 100
                                Fond du Lac. Wis.
                        (.25) M Shawnee, Okla.
                                                           -8:00 am-10:00 pm
           ak
                 100
                                San Francisco, Cal.
KGGC
KGIW
           ak
                 100
                                 Alamosa, Colo.
                                                             9:30 am-
                                                                         -10:30 pm
           ak
                 100
                                Lamar, Colo.
Pecos, Texas
                                                            -9:00 am-
                                                                         8:00 pm
 KIDW
           ak
                 100
                        1
                                                                         -10:00 pm
 KIUN
                  100
                                                           -8:00 am-
           ak
                  100
                        (.25) P La Grande, Ore.
D Palestine, Texas
 KLBM
 KNET
           ak
                 100
                                Eugene, Ore.
Abilene, Texas
Midland, Texas
 KORE
                        M
           ak
                 100
 KRBC
KRLH
                  100
                        (.25)
                                                          -8:00 am-10:00 pm
           ak
                  100
           ak
                        (.25) P
                                Sioux City, Iowa
 KTRI
           7.
                  100
 KUMA
          ak
                  100
                                 Yuma, Ariz.
```

```
KWBG
                 100
                                Hutchnison, Kans.
KXL
WACO
                 100
                       4 (.25)
C
                               Portland, Ore.
Waco, Texas
                                                          -All night station
          ak
           ak
                 100
                                                            -11:00 am-7:00 pm
-7:00 am-7:00 pm
 WAGM
          ak
                 100
                                Presque Isle, Me.
WAPO
WAZL
WCBS
                       (.25)
                 100
                                Chattanooga, Tenn.
           ak
                 100
                                Hazleton, Pa
                                                            9:00 am-10:00 pm
           ak
                       (.25)
3 (.25)
3 (.25)
                                                          -8:00 am-11:00 pm
           ak
                 100
                                Springfield, Ill.
                               Charlottesville, Va.
Rocky Mount, N. C.
Battle Creek, Mich.
                                                            -7:00 am-midnight
WCHV.
           ak
                 100
WEED
           ak
                 100
WELL
                 100
                                                          -7:30 am-midnight
           ak
                               Albany, Ga.
Cicero, Ill.
Wilmington, Del.
Ironwood, Mich.
WGPC
          ak
                 100
WHFC
                       (.25)
                                                          -7:00 am-1:00 am
           ak
                 100
WILM
           aj
                 100
WJMS
           ak
                 100
                               Lexington, Ky.
Erie, Pa.
Springfield, Mass.
WLAP
           ak
                 100
                        .25)
                       (.25) B
C (.25)
WLEU
           ak
                 100
                                                            -7:00 am—midnight
WMAS
                 100
WMBC.
                 100
                       (.25)
                                Detroit, Mich.
Joplin, Mo.
                                                            -7:30 am-midnight
          ak
WMBH
          ak
                 100
WMBS
                 250
                                Uniontown, Pa.
                                                          -6:00 am-6:00 pm
           ak
WMFJ
                 100
                                Daytona Bch., Fla.
           ak
WMSD
                                Sheffield, Ala.
                 100
                                                          -8:00 am-11:00 pm
           ak
                       (.25) P
                                Watertown, N. Y.
WNNY
                 100
          Z
                       (.25)
C
                                                          -7:00 am-midnight
WPAD
           ak
                 100
                                Paducah, Ky.
Parkersburg, W. V.
WPAR
           ak
                 100
-WPRP
                 100
                       (.25)
                                Ponce, Puerto Rico
           z
                 100
                                Kenora, Ont.
1430 kcys.
                      (209.7)
                      Moron, Cuba
(5) B Los Angeles, Cal.
North Platte, Neb.
BM(2.5) Des Moines, Iowa
C (1)X Columbus, Ohio
C (1) Rochester, N. V
C (1) Harrieb
CMJP
           ak
                                                          -10:00 am-3:00 am
KECA
KGNF
           ak
                1000
                                                          -8:00 am-6:15 pm
           ak
                1000
KSO
WBNS
                 500
           ak
                                                            6:30 am
           ak
                 500
                                                                        midnight
                                                          -7:00 am
 WHEC
                 500
           ak
                                Harrisburg, Pa.
Memphis, Tenn.
Albany, N. Y.
 WHP
           ak
                 500
                                                          -6:30 am
                                                                        -midnight
 WMPS
                 500
                       (1) B
           ak
                       C (1)
                                                           -8:00 am-1:00 am
 WOKO
                 500
           ak
                       (208.2)
 1440 kcys.
                                Havana, Cuba
Casper, Wyo.
Centralia, Wash.
Houston, Texas
 CMOA
                 150
           z
 KDFN
           ak
                 500
 KELA
KXYZ
                  500
                       M
           ak
                       B
                                                          -24 hours daily
-6:30 am-11:30 pm
           ak
                1000
                                Greensboro, N. C.
Allentown, Pa.
 WBIG
           ak
                1000
                                                                        -11:30 pm
-midnight
 WCBA
                 500
                                                          -6:30 am
                       a
C(5)
           ai
 WMBD
                                Peoria, Ill.
                                                             -7:00 am-
                1000
           ak
 WSAN
                                                             1:00 pm-11:30 pm
                                Allentown, Pa.
          aj
ak
                 500
                       Na
 XEFI
                                Chihuahua, Chih.
                 250
                       (206.8)
 1450 kcys.
                       F
                                Victoria, B. C.
Summerside, P.E.I.
Cienfuegos, Cuba
Wolf Point, Mont.
 CFCT
                  500
                                                          -10:45 am-12:15 am
           ak
                                                          -6:30 am-10:00 pm
 CHGS
                  50
           ak
 CMHM
           7.
                  100
 KGCX
           ak
                1000
 KIEM
           ak
                 500
                       M(1)
                                Eureka, Calif.
                                                             -10:00 am—1:00 am
                                                          -7:30 am-1:00 am
                       N
                                Shreveport, La.
 KTBS
           ak
                1000
 WAGA
                  560
                       B (1)
C (1)
                                Atlanta, Ga.
           ak
                                Cleveland, Ohio
Jersey City, N. J.
Fall River, Mass.
                                                          -6:30 am-midnight
 WGAR
           ak
                  500
                                                             7:00 am-midnight
 WHOM
           ak
                  250
 WSAR
XEF
           ak
                1000
                       M
                 100
                                Juarez, Chih.
 1460 kcys.
                       (205.4)
                                Holguin, Cuba
St. Paul, Minn.
Washington, D. C.
 CMKF
           ak 10000
 KSTP
                       R (25)
                                                             7:00 am-2:00 am
 WJSV
           ak 10000
                       (204.0)
          kcys.
                5000
                       BM
                                Spokane, Wash.
Nashville, Tenn.
WLAC
                5000
           ak
                       C
```

1480	kcys.	(202	2.6)	
-KOMA	ak 5000	C	Oklahama City Ok	7 30 1 00
WHIP	z 5000	Ď	Oklahoma City, Ok. Hammond, Ind.	-7:30 am-1:00 am -7:30 am-5:30 pm
-wkbw	ak 5000	C	Buffalo, N. Y.	-8:00 am-1:00 am
1490	kcys.	(201	2)	
1470	RCys.	(201	2)	
KFBK	ak 5000	NX	Sacramento, Calif.	
_WCKY	ak 10000	N	Covington, Ky.	-7:00 am-midnight
4 700		/	0)	
1500	kcys.	(199)	0.9)	
CHC	_	`	,	
CJIC	ak 100 z 100		S. S. Marie, Ont. Gallup, N. Mex.	-10:00 am-10:00 pm
-KAWM KBIX	ak 100	M	Muskogee, Okla	-8:00 am-11:00 pm
KBST KDAL	z 100 ak 100	C	Big Spring, Texas Duluth, Minn.	•
KDB	ak 100 ak 100		Santa Barbara, Cal.	
-KGFI -KGKB KGKY	ak 100	(.25)	Brownsville, Tex.	
- KGKB	ak 100	(.25) (.25)	Tyler, Texas	4.00
-KNEL	ak 100 ak 250	D (.25)	Scottsbluff, Neb.	-8:30 am-11:00 pm -8:00 am-6:00 pm
KNOW	ak 100	č	Brady, Texas Austin, Texas	-0:00 am -0:00 pm
KOTN	ak 100	D	Pine Bluff, Ark.	—8:00 am—ss
KOVC KPLC	ak 100 ak 100	(.25)	Valley City, N. D. Lake Charles, La.	-8:00 am-10:00 pm
- KPLT	z 250	(.25) D	Paris, Texas	
KPQ	ak 100N	I(.25)	Wenatchee, Wash.	
KRNR KROD	ak 100M ak 100	I (.25) P	Roseburg, Ore. El Paso, Texas Salina, Kans.	
KSAL	ak 100	(.25)	Salina, Kans.	
KSAL KUTA,	z 100	P	Salt Lake City, Ut. Santa Ana, Calif.	
KVOE KWEW	ak 100 z 100	M DP ·	Hobbs, N. Mex.	-Noon to 2:00 am
KXO	ak 100		El Centro, Calif.	-11:00 am-midnight
WCNW	ak 100	1 (,25) C	El Centro, Calif. Brooklyn, N. Y. Durham, N. C.	-9:00 am-midnight
- WDNC WGAL	ak 100 ak 100	(.25)	Lancaster, Pa.	-7:30 am-12:30 am
WHBB	ak 100		Selma, Ala.	-7:30 am-ss
-WHEF	ak 100	(.25)	Kosciusko, Miss.	-7:30 am-ss -7:30 am-10:00 pm
WJBK WKAT,	ak 100 z 100	(.25)	Detroit, Mich. Miami Beach, Fla.	-24 hours daily
-WKBB	z 100 ak 100	(.25) (.25)	E. Dubuque, Ill.	
-WKBV	ak 100	(.25)	Richmond, Ind.	
-WKBZ WKEU	ak 100 ak 100	(.25) D	Muskegon, Mich. Griffin, Ga.	-7:00 am-10:00 pm
-WMBO	ak 100	1	Brooklyn, N. Y.	
WMEX	ak 100	(.25) C(.25) DM	Boston, Mass.	
-WNBF -WNLC	ak 100 ak 100	DM	Binghamton, N. Y. New London, Conn.	
WOMI	z 100	(.25)	Owensboro, Ky.	
-WOPI	ak 100	27.00	Bristol, Tenn.	-7:00 am-10:30 pm -7:00 am-9:00 pm
WRDW WRGA	ak 100 ak 100	C(.25) (.25)	Augusta, Ga. Rome, Ga.	-7:00 am-9:00 pm -8:00 am-11:00 pm
WRTD	z 100	B	Richmond, Va.	0.00 am 11.00 pm
WSYB	ak 100	(05)	Rutland, Vt.	-10;00 am-9:00 pm
-WTMV -WWRL	ak 100 ak 100	(.25) 1 (.25) (.25)	E. St. Louis, III. Woodside, N. Y.	-8:00 am-midnight
wwsw	ak 100	(.25)	Pittsburgh, Pa.	0.00 am midnight
1510	kcys.	(198)	.6)	
		F	,	N 44.00
-CFRC	ak 100 ak 100	P	Kingston, Ont. Waterloo, Ont.	Noon11:00 pm 8:00 am11:00 pm
-CKCR TG1	ak		Guatemala City, Gt.	CIOO WALL XXIOO PILI
1530	kcys.	(196)	(0)	
-KXBY	ak 1000	1230	,	- 9.0A am - 2.20 am
WBRY	ak 1000	M	Kansas City, Mo. Waterbury, Conn.	-8:00 am-3:30 am -8:00 am-midnight
				with the same of the
1550	kcys.	(193)	.4)	
KPMC	ak 1000	M	,	10,00 am 2.00 a
WOXR	ak 1000	M	Bakersfield, Calif. New York, N. Y.	-10:00 am-2:00 am -10:00 am-9:15 pm
			1011, 111 1,	20.30 am 7.10 pm

NORTH AMERICAN B. C. STATIONS BY LOCATIONS

Frequency in kilocycles in second column. Night power in watts in third column. Net work affiliations in fourth column. C Columbia, R National Red, B National Blue, N National Red and Blue. F Canadian.

M Mutual.

	M M	utual.	, and the second
ALABAMA	Pine Bluff KOTN 1500 100	KSFO 569 1000 C KYA 1230 1000	DELAWARE
Birmingham	Siloam Springs	San Jose	Wilmington
WAPI 1140 5000 C	KUOA 1260 5000	KQW 1010 1000M	WDEL 1120 250 R
WBRC 930 1000 R WSGN 1310 100 B		San Luis Obispo	WILM 1420 100
	CALIFORNIA	KVEC 1200 250	DISTRICT OF
Decatur WMFO 1370 100	GALIFORNIA	Santa Ana	DISTRICT OF COLUMBIA
	Bakersfield	KVOE 1500 100M	COLUMBIA
Dothan WAGF 1370 250	KERN 1370 100 N	Santa Barbara	Washington
	KPMC 1550 1000M	KDB 1500 100M	WJSV 1460 10000 C
Gadsden WJBY 1210 [100	Berkeley	KTMS 1220 500 B	WMAL 630 250 B
	KRE 1370 100 Beverly Hills	Santa Rosa	WOL 1310 100M
Huntsville WBHP 1200 100	KMPC 710 500	KSRO 1310 250	WRC 950 500 R
Mobile	Chico	Stockton	FLORIDA
WALA 1380 500 C	KHSL 1260 250	KGDM 1100 1000M	
Montgomery	El Centro	KWG 1200 100 N	Clearwater
WSFA 1410 500 C	KXO 1500 100 Eureka	Visalia	WFLA 620 1000 N
Selma	KIEM 1450 500M	KTKC 1190 250	Daytona Beach
WHBB 1500 100	Fresno	Watsonville KHUB 1310 250	WMFJ 1420 100
Sheffield	KARM 1310 100 C	KHUB 1310 250	Gainesville
WMSD 1420 100	KMJ 580 1000 N		WRUF 830 5000
Tuscaloosa	Glendale KIEV 850 250	COLORADO	Jacksonville
WJRD 1200 250	KIEV 850 250 Hollywood		WJAX 900 1000 N WMBR 1370 100 C
	KFWB 950 1000	Alamasa	Lakeland
AT A CITE	Long Beach	KGIW 1420 100	WLAK 1310 100
ALASKA	KFOX 1250 1000	Colorado Springs	Miami
Anchorage	KGER 1360 1000	KVOR 1270 1000 C	WIOD 610 1000 N
KFQD 780 250	Los Angeles	Denver	WMBF 610 1000
Juneau	KECA 1430 1000 B	KFEL 920 500M	WQAM 560 1000 C
KINY 1310 100	KEHE 780 1000 KFAC 1300 1000	KLZ 560 1000 C	Miami Beach
Ketchikan	KFAC 1300 1000 KFI 640 50000 R	KOA 830 50000 R KPOF 880 500	WKAT 1500 100
KGBU 900 500	KFSG 1120 500	KVOD 920 500 B	Orlando
	KFVD 1000 1000	Durango	WDBO 580 1000 C
ARIZONA	KGFJ 1200 100	KIUP 1370 100	Pensacola
MAIZONA	KHJ 900 1000M KMTR 570 1000	Grand Junction KFXJ 1200 100	WCOA 1340 500 C
Jerome	KNX 1050 50000 C		St. Augustine
KCRJ 1310 100	KRKD 1120 500	Greeley KFKA 880 500M	WFOY 1210 100
Lowell	Merced		St. Petersburg WSUN 620 1000 N
KSUN 1200 100	KYOS 1040 250	La Junta KOKO 1370 100	WSUN 620 1000 N Tallahassee
Phoenix	Modesto	Lamar	WTAL 1310 100
KOY 1390 1000 C	KTRB 740 250	KIDW 1420 100	Tampa
KTAR 620 1000 N	Monterey	Pueblo	WDAE 1220 1000 C
Tucson	KDON 1210 100M	KGHF 1320 500 B	West Palm Beach WJNO 1200 100 C
KGAR 1370 100 C KVOA 1260 1000	Oakland	Sterling	1200 100 0
Yuma	KLS 1280 250 KLX 880 1000	KGEK 1200 100	GEORGIA
KUMA 1420 100	KROW 930 1000		Albana
100	Pasadena	CONNECTICUT	Albany WGPC 1420 100
	KPPC 1210 100	CONNECTICUT	Athens
ARKANSAS	Redding		WGAU 1310 100
D1 11 111	KVCV 1200 100	Bridgeport	Atlanta
Blytheville KLCN 1290 100	Sacramento	WICC 600 500M	WAGA 1450 500
El Dorado	KFBK 1490 5000 N	Hartford ·	WATL 1370 100 WGST 890 1000 C
KELD 1370 100	KROY 1210 100 C	WDRC 1330 1000 C	WSB 740 50000 R
Fort Smith	San Bernardino	WTIC 1040 50000 R WTHT 1200 100M	Augusta
KFPW 1210 100	KFXM 1210 100M	New Britain	
Hot Springs	San Diego	WNBC 1380 250	Columbus WRBL 1200 100
KTHS 1060 10000 N	KFSD 600 1000 B KGB 1330 1000M	New Haven	WRBL 1200 100 Griffin
Jonesboro		WELI 900 500	WKEU 1500 100
KBTM 1200 100	San Francisco KFRC 610 1000M	New London	Macon
Little Rock	KGGC 1420 100	WNLC 1500 100M	WMAZ 1180 1000 C
KARK 890 500 N	KGO 790 7500 B	Waterbury	Rome WRGA 1500 100
KGHI 1200 100	KJBS 1070 500	WATR 1190 100	Savannah
KLRA 1390 1000 C	KPO 680 50000 R	WBRY 1530 1000M	WTOC 1260 1000 C
7			

Thom WPAX	asville 1210	100
Wayer WAYX	1200	100

HAWAII

Hilo KHBC 1400 250M Honolulu KGMB 1320 1000 C KGU 750 2500 N

IDAHO

Boise 1350. 1000 N KIDO Coeur d'Alene KGCI 1200 100 Idaho Falls KID 1320 500 Lewiston KRLC 1390 250 Nampa KFXD 1200 100 Pocatello KSEI 900 250 Twin Falls KTFI 1240 1000

ILLINOIS

Bloomington 100 WJBC 1200 Carthage WCAZ 1070 100 Champaign WDWS 1370 100 Chicago WAAP 920 1000 770 50000 C WCBD 1080 5000 5000 N WCFL 970 WCRW 1210 100 WEDG 1210 100 WENR 870 50000 B WGES 1360 500 WGN 50000M 720 WLII 1130 20000 870 50000 B WLS 670 WMAQ 50000 R WMBI 1080 5000 WSBC 1210 100 Cicero WHFC 1420 160 Decatur WJBL 1200 100 East Dubuque WKBB 1500 1 100 East St. Louis WTMV 1500 1 100 Harrisburg WEBQ 1210 100 Joliet WCLS 1310 100 Peoria 1000 C WMBD 1440 Quincy 900 1000 WTAD

Rockf	ord	
WROK	1410	500
Rock	Island	
WHBF	1210	100
Sprin	gfield	
WCBS	1420	100
WTAX	1210	100
Tusco		
WDZ	1020	250
Urbar		
WILL	580	1000

INDIANA

Anderson WHBU 1210 100 Elkhart WTRC 1310 100 Evansville WEOA 100 C 1370 WGBF 630 500 N Fort Wayne 100 N WGL 1370 WOWO 1160 10000 B Gary WIND 560 1000 Hammond 5000 WHIP 1480 WWAE 1200 100 Indianapolis 1000 C WFBM 1230 WGVA 1050 1000 WIRE 1400 1000 R Muncie WLBC 1310 100 New Albany WGRC 1370 250 Richmond WKBV 100 1500 South Bend 100 WFAM 1200 1360 WSRT 500 Terre Haute WBOW 1310 100 N West Lafayette 500 WBAA 890

IOWA

Ames WOI 640 5000 Boone KFGQ 1370 100 Cedar Rapids WMT 600 1000 B Davenport 100 C WOC 1370 Decorah KGCA 1270 KWLC 1270 100 100 Des Moines KRNT 1320 1000 C KSO 1430 500 B WHO 1000 50000 R Dubuque **KDTH 1340** 500 Iowa City 500 WSUI 880

Marshalltown				
KFJB				
Mason	n City			
KGLO	1210	100 C		
Shenandoah				
KFNF	890	500		
KMA	930	1000		
Sioux				
KSCJ	1330	1000 C		
KTRI	1420	100		

KANSAS

Abilene KFBI 1050 5000 Coffeyville 1000M KGGF 1010 Dodge City KGNO 1340 250 Garden City KIUL 1210 100 Great Bend KVGB 1370 100 Hutchinson KWBG 1420 100 Kansas City KCKN 1310 100 Lawrence KFKU 122 KFKU 1220 WREN 1220 1000 1000 B Manhattan KSAC 580 500 Pittsburg KOAM 790 1000 N Salina 1500 KSAL 100 Topeka WIBW 580 1000 C Wichita KANS 1210 100 B KFH 1000 C 1300

KENTUCK Y

Ashland WCMI 1310 100 Covington WCKY 1490 10000 N Lexington WLAP 1420 Louisville 940 WAVE 1000 N WHAS 820 50000 C Middlesboro WLMU 1210 100 Owensboro WOMI 1500 100 Paducah WPAD 1420 100

LOUISIANA

Alexandria
KALB 1210 100
Baton Rouge
WJBO 1120 500 B
Lafayette
KVOL 1310 100

Lake KPLC		
Monr	ne	
KMLB	1200	100
New (Orlear	18
WBNO	1200	100
WDSU	1250	1000 B
WJBW	1200	100
WSMB	1320	1000 R
WWL	850	
Shrev	eport	
KRMD	1310	100
KTBS	1450	1000 N
KWKH	1100	10000 C

MAINE

Augus	sta	
WRDO	1370	100M
Bango	ı	
WABI	1200	100
WLBZ	620	500 C
Portla	ind	
WCSH	940	1000 R
WGAN	640	500
Presa	ue Isl	e
WAGM	1420	100

MARYLAND

Baltir	поге				
WBAL	760	2500	В		
WBAL		10000	В		
WCAO	600	500	C		
WCBM		100			
WFBR	1270	500	R		
Colleg	e Par	·k			
W3XJ					
Cumb	erlan	d			
WTBO		250			
Frede	rick				
WFMD	900	500			
Hager	stown				
WJEJ	1210	50			
Salisbury					
WSAL	1200	250			

MASSACHUSETTS

	MASSA	MASSACHUSETTS			
	Bosto	n			
	WAAB	1410	500 M		
	WBZ	990	50000 B		
	WCOP	1120	500		
	WEEL	590	1000 C		
	WHDH	830	1000		
	WMEX	1500	100		
	WNAC	1230	1000 R		
	WORL	920	500		
	Fall F	livor			
	WSAR		1000M		
	Green		1000111		
	WHAI		250		
	Lawre		200		
	WLAW		1000		
	WLLH				
	Lowel				
-	WLLH	1370	100M		
	New I	Bedfor	rd		
	WNBH				
	Pittsfi				
	WBRK	1310	100 C		

NORTH AMERICAN B. C. STA			TATIONS BY LOCATIONS		
	Springfield WBZA 990 1000 B WMAS 1420 100 C	St. Paul KSTP 1460 10000 R WMIN 1370 100	Wolf Point KGCX 1450 1000	Gallup KAWM 1500 100 Hobbs	
	WSPR 1140 500M Worcester	Virginia WHLB 1370 100 C	NEBRASKA	KWEW 1500 100 Roswell	
	WORC 1280 500 C WTAG 580 1000 R	Winona KWNO 1200 250	Clay Center	KGFL 1370 100 Santa Fe	
			KMMJ 740 1000 Kearney	KRQA 1310 100	
	MICHIGAN	MISSISSIPPI	KGFW 1310 100 Lincoln	NDW WORK	
	Battle Creek WELL 1420 100	Grenada WGRM 1210 100	KFAB 770 10000 C KFOR 1210 100 C	NEW YORK	
	Bay City	Gulfport WGCM 1210 100	Norfolk WJAG 1060 1000	Albany WABY 1370 100	
	Calumet	Hattiesburg WFOR 1370 100	North Platte KGNF 1430 1000	WOKO 1430 500 C Auburn	
	WHDF 1370 100 Detroit	Jackson WJDX 1270 1000 R	Omaha KOIL 1260 1000 B	WMBO 1310 100	
	WJBK 1500 100 WJR 750 50000 C	Kosciusko WHEF 1500 100	WAAW 660 500 WOW 590 1000 R	Binghamton WNBF 1500 100 C	
	WMBC 1420 100 WWJ 920 5000 R	Laurel WAML 1310 100	Scottsbluff KGKY 1500 100	Brooklyn WARD 1400 500	
	WXYZ 1240 1000 B East Lansing	Meridian WCOC 880 500 C		WBBC 1400 500 WBBR 1300 1000	
	WKAR 850 1000 Flint	Vicksburg WOBC 1360 1000	NEVADA	WCNW 1500 100 WLTH 1400 500	
	WFDF 1310 100 Grand Rapids		Reno KOH 1380 500 C	WMBQ 1500 100 WVFW 1400 500	
	WASH 1270 500 N WOOD 1270 500 N	MISSOURI	NEW HAMPSHIRE	Buffalo WBEN 900 1000 R	
	WJMS 1420 100	Cape Girardeau KFVS 1210 100	Laconia	WBNY 1370 100 WEBR 1310 100 B	
	Jackson WIBM 1370 100	Columbia KFRU 630 500	WLNH 1310 100M	WGR 550 1000 C WKBW 1480 5000 C	
	WKZO 590 1000 B	Jefferson City KWOS 1310 100	Manchester WFEA 1340 500 N	WSVS 1370 50 Canton	
	Lansing WJIM 1210 100	Joplin WMBH 1420 100	Portsmouth WHEB 740 250	WCAD 1220 500 Elmira	
	Lapeer WMPC 1200 100	Kansas City KCMO 1370 100	NEW JERSEY	WESG 850 1000 C Freeport	
	Marquette	KMBC 950 1000 C KXBY 1530 1000	Asbury Park	WGBB 1210 100 Jamestown	
	Muskegon	WDAF 610 1000 R WHB 860 1000 M	WCAP 1280 500	WJTN 1210 100 B Newburgh WGNY 1210 100	
	WKBZ 1500 100 Royal Oak	Poplar Bluff KPBM 1310 100	Atlantic City WPG 1100 5000 C	New York	
	WEXL 1310 50 Saginaw	St. Joseph KFEQ 680 2500	Bridgeton WSNJ 1210 100	WABC 860 50000 C WBIL 1100 5000 WBNX 1350 1000	
	WHAL 950 500	St. Louis KFUO 550 500	Camden WCAM 1280 500	WBNX 1350 1000 WBOQ 860 50000 WEAR 660 50000 R	
	MININDOOF	KMOX 1090 50000 C KSD 550 1000 R	Jersey City WAAT 940 500	WEVD 1300 1000 WFAB 1300 1000	
	MINNESOTA	KWK 1350 1000 B KXOK 1250 1000 WEW 760 1000	WHOM 1450 250	WHN 1010 1000 WINS 1180 1000	
	Albert Lea KATE 1420 250	WIL 1200 100	Newark WHBI 1250 1000	WJZ 760 50000 B WMCA 570 1000	
	Duluth KDAL 1500 100 C	Springfield KGBX 1230 500 N KWTO 560 5000	WOR 710 50000M Red Bank	WNEW 1250 1000 WNYC 810 1000	
	WEBC 1290 1000 N Fergus Falls	KW10 300 3000	WBRB 1210 100 Trenton	WOV 1130 1000 WOXR 1550 1000	
	KGDE 1200 100 Hibbing	MONTANA	WTNJ 1280 500	Olean WHDL 1400 250	
	WMFG 1210 100 Minneapolis	Billings KGHL 780 1000 N	Whippany W3XDD 50000	Plattsburg	
	WCCO 810 50000 C WDGY 1180 1000 C	Butte KGIR 1340 1000 N	Zarephath WAWZ 1350 500	WMFF 1310 100 Rochester	
	WLB 1250 1000 WTCN 1250 1000 B	Great Falls KFBB 1280 1000 C	NEW MEXICO	WHAM 1150 50000 B WHEC 1430 500 C	
	Moorhead KVOX 1310 100	Helena KPFA 1210 100	Albuquerque	WSAY 1210 100 Saranac Lake	
	Northfield WCAL 1250 1000	Kalispell KGEZ 1310 100	KGGM 1230 1000 KOB 1180 10000 N	WNBZ 1290 100	
	Rochester KROC 1310 100	Lewistown KDNC 1200 100	Carlsbad KLAH 1210 100	Schenectady WGY 790 50000 R	
	St. Cloud	Missoula	Clovis	Syracuse WFBL 1360 1000 C	
	KFAM 1420 100	KGVO 1260 1000 C	KICA 1370 100	WSYR 570 1000 B	

NORTH AMERICAN B. C. STATIONS BY LOCATIONS

NORTH	AMERICAN B. C.	STATIONS BY LOC	CATIONS
Troy	WSAI 1330 1000 N	Portland	York
WHAZ 1300 1000	W8XO 700 500000	KALE 1300 500 C	WORK 1320 1000 N
WIBX 1200 100 C	Cleveland WCLE 610 500M	KBPS 1420 100 KEX 1180 5000 B KGW 620 1000 R	PUERTO RICO
Watertown WNNY 1420 100	WGAR 1450 500 C WHK 1390 1000 B WTAM 1070 50000 R	KGW 620 1000 R KOIN 940 1000 C KWJJ 1040 500	Mayaguez
White Plains WFAS 1210 100	Columbus	KXL 1420 100 Roseburg	WPRA 1370 100 Ponce WPRP 1420 100
Woodside	WBNS 1430 500 C	KRNR 1500 100M	San Juan
WWRL 1500 100	WCOL 1210 100 N		WKAO 1240 1000
	WHKC 640 500 WOSU 570 750	Salem KSLM 1370 100M	WNEL 1290 1000
NORTH CAROLINA	Dayton WHIO 1260 1000 C		RHODE ISLAND
Asheville	WSMK 1380 200 C	PENNSYLVANIA	Providence
WWNC 570 1000 N	Lima		WEAN 780 1000M
Charlotte WBT 1080 50000 C	WBLY 1210 100	Allentown	WJAR 890 1000 R
	Portsmouth	WCBA 1440 500	WPRO 630 500 C
WSOC 1210 100 N Durham WDNC 1500 100 C	WPAY 1370 100 Toledo	WSAN 1440 500 N	
Greensboro	WSPD 1340 1000 B	Altoona	SOUTH CAROLINA
WBIG 1440 1000 C	WTOL 1200 100	WFBG 1310 100	
High Point	Youngstown	Easton	Anderson
WMFR 1200 100	WKBN 570 500 C	WEST 1200 100	WAIM 1200 100 C
Kinston WFTC 1200 100	Zanesville WALR 1210 100	Erie WLEU 1420 100 B	Charleston WCSC 1360 500 N Columbia
Raleigh		Glenside	WIS 560 1000 N
WPTF 680 1000 N		WIBG 970 100	Florence
Rocky Mount	OKLAHOMA	Greensburg	WOLS 1200 100
WEED 1420 100		WHJB 620 250 C	Greenville
Wilmington WMFD 1370 100	Ada KADA 1200 100M	Grove City WSAJ 1310 100	WFBC 1300 1000 N Spartanburg WSPA 920 1000
Wilson WGTM 1310 100	Ardmore KVSO 1210 100M	Harrisburg	WSPA 920 1000
Winston-Salem	Elk City KASA 1210 100M Enid	WHP' 1430 500 C WKBO 1200 100	SOUTH DAKOTA
WAIR 1250 250	KCRC 1360 250M	Hazleton	Aberdeen
WSJS 1310 100 C	Muskogee	WAZL 1420 100	KABR 1420 100
NORTH DAKOTA	KBIX 1500 100M	Johnstown	Brookings
	Norman	WJAC 1310 100	KFDY 780 1000
Bismarck	WNAD 1010 1000	Lancaster	Huron
	Oklahoma City	WGAL 1500 100	KGDY 1340 250
KFYR 550 1000 N	KFXR 1310 100	Philadelphia	Pierre
Devils Lake	KOMA 1480 5000 C	KYW 1020 10000 R	KGFX 630 200
KDLR 1210 100	KTOK 1370 100M WKY 900 1000 N	WCAU 1170 50000 C WDAS 1370 100	Rapid City KOBH 1370 100 WCAT 1200 100
WDAY 940 1000 N	Okmulgee	WFIL 560 1000 B	Sioux Falls
	KHBG 1210 100	WHAT 1310 100	KELO 1200 100 N
Grand Forks	Ponca City	WIP 610 1000	KSOO 1110 2500 N
KFJM 1410 500	WBBZ 1200 100M	WPEN 920 1000	Vermillion
Jamestown	Shawnee	WTEL 1310 100	KUSD 890 500
KRMC 1370 100	KGFF 1420 100M	Pittsburgh	Watertown
Mandan	Tulsa	KDKA 980 50000 B	KWTN 1210 100
KGCU 1240 250	KTUL 1400 500 C	KQV 1380 500 C	Yankton
Minot KLPM 1240 250	KVOO 1140 25000 N	WCAE 1220 1000 R WJAS 1290 1000 C	WNAX 570 1000 C
Valley City KOVC 1500 100	OREGON	WWSW 1500 100 Reading	TENNESSEE
1500 100	Astoria	WEEU 830 1000	Bristol
	KAST 1370 100	WRAW 1310 100	WOPI 1500 100
ОНІО	Corvallis	Scranton WGBI 880 500	Chattanooga WAPO 1420 100
Akron	KOAC 550 1000	WQAN 880 500	WDOD 1280 1000 C
WADC 1320 1000 C	Eugene	Sunbury	
WJW 1210 100 Ashtabula	KORE 1420 100M Klamath Falls	WKOK 1210 100	Jackson WTJS 1310 100
WICA 940 250	KFJI 1210 100	Uniontown	Knoxville
Canton	La Grande	WMBS 1420 250	WNOX 1010 1000 C
WHBC 1200 100	KLBM 1420 100	Wilkes-Barre	WROL 1310 100 N
	Marshfield	WBAX 1210 100	Memphis
Cincinnati WCPO 1200 100 WKRC 550 1000 C	KOOS 1200 100	WBRE 1310 100 N	WHBQ 1370 100 WMC 780 1000 R
WLW 700 500000 N	Medford	Williamsport	WMPS 1430 500 B
	KMED 1410 250 N	WRAK 1370 100	WREC 600 1000 C

-				
	Nashville	San Angelo	Bellingham	WISN 1120 250 C
V	VLAC 1470 5000 C	KGKL 1370 100 San Antonio	KVOS 1200 100M Centralia	WTMJ 620 1000 N Poynette
V	VSIX 1210 100 VSM 650 50000 N	KABC 1420 100	KELA 1440 500M	WIBU 1210 100
·	1511 050 5000 11	KMAC 1370 100 KONO 1370 100	Everett	Racine
_	TEXAS	KONO 1370 100 KTSA 550 1000 C	KRKO 1370 50	WRJN 1370 100 Sheboygan
_	IEAAS	WOAI 1190 50000 N	Longview KWLK 780 250	WHBL 1300 250
-	Abilene	Sherman KRRV 1310 250	Olympia	Stevens Point WLBL 900 5000
K	RBC 1420 100	Temple 250	KGY 1210 100M Pullman	Superior
K	Amarillo GNC 1410 1000 N	KTEM 1370 250	KWSC 1220 1000	WDSM 1200 100
-	Austin	Texarkana KCMC 1420 100	Seattle	Wausau
	NOW 1500 100 C	Tyler	KEEN 1370 100 KIRO 710 1000 C	WSAU 1370 100
K	TBC 1120 1000	KGKB 1500 100	KJR 970 5000 B	WYOMING
IV.	Beaumont FDM 560 500 N	Waco WACO 1420 100 C	KOL 1270 1000M KOMO 920 1000 R	Cannon
		Weslaco	KRSC 1120 250	Casper KDFN 1440 500
K	Big Spring BST 1500 100	KRGV 1260 1000 N Wichita Falls	KTW 1220 1000	Rock Springs
	Brady	KGKO 570 250 C	KXA 760 250 Spokane	KVRS 1370 100
K	NEL 1500 250		KFIO 1120 100	Sheridan
147	Brownsville GFI 1500 100	UTAH	KFPY 890 1000 C KGA 1470 5000 B	KWYO 1370 100
	College Station	Cedar City	KHQ 590 1000 R	BAHAMAS
V	VTAW 1120 500	KSUB 1310 100	Tacoma	Nassau
	Corpus Christi	Ogden KLO 1400 500 B	KMO 1330 1000M KVI 570 1000 C	ZNS 540 400
K	RIS 1330 500 N	Price	Walla Walla	CANADA
K	Corsicana AND 1310 100	KEUB 1420 100	KUJ 1370 100 Wenatchee	CANADA
1	Dallas	Salt Lake City KDYL 1290 1000 R	KPO 1500 100M	ALBERTA
K	RLD 1040 10000 C	KSL 1130 50000 C	Yakima	
	VFAA 800 50000 N	KUTA 1500 100	KIT 1250 250M	Calgary CFAC 930 1000 F
V	VRR 1280 500M Dublin	VERMONT		CFCN 1030 10000 F
K	FPL 1310 100		WEST VIRGINIA	CJCJ 690 100 F
	El Paso	Burlington WCAX 1200 100	Pluefield	Edmonton
	ROD 1500 100	WCAX 1200 100 Rutland	Bluefield WHIS 1410 500	CFRN 960 100 F CJCA 730 1000 F
	TSM 1310 100 N DAH 1310 100	WSYB 1500 100	Charleston	CKUA 580 500 F
٠,	Fort Worth	St. Albans WQDM 1390 1000	WCHS 580 500 C Clarksburg	Grande Prairie
K	FJZ 1370 100	Springfield	WBLK 1370 100	CFGP 1200 100
	TAT 1240 1000M BAP 800 50000 N	WNBX 1260 500 C	Fairmont	Lethbridge CJOC 950 100 F
**	Galveston	Waterbury WDEV 550 500	WMMN 890 500 C Huntington	750 100 1
K	LUF 1370 100		WSAZ 1190 1000	BRIT. COLUMBIA
	Greenville	VIRGINIA	Parkersburg WPAR 1420 100 C	Chilliwack
V	GVL 1200 100 Houston	Charlottesville	Wheeling	CHWK 780 100 F
	PRC 920 1000 R	WCHV 1420 100	WWVA 1160 5000 C	Kamloops
K	TRH 1290 1000 C XYZ 1440 1000 B	Danville		CFJC 880 1000 F
	Kilgore	WBTM 1370 100	WISCONGIN	Kelowna 100 E
	OCA 1210 100	Harrisonburg WSVA 550 500	WISCONSIN	CKOV 630 100 F Prince Rupert
	Longview EPO 1270 250	Lynchburg	Eau Claire	CFPR 580 50
	FRO 1370 250	WLVA 1200 100	WEAU 1050 1000	Trail
K	Lubbock FYO 1310 100	Newport News	Fond du Lac	CJAT 910 1000 F
	Lufkin	WGH 1310 100 Norfolk	KFIZ 1420 100	Vancouver
	RBA 1310 100	WTAR 780 1000 N	Green Bay WHBY 1200 100	CBR 1100 5000 F CJOR 600 500
	Midland	Richmond	WTAQ 1330 1000 C	CKCD 1010 100
	RLH 1420 100	WBBL 1210 100	Janesville	CKFC 1410 50
	Palestine NET 1420 100	WMBG 1350 500 R WRNL 880 500	WCLO 1200 100	CKMO 1410 100 CKWX 1010 100
	Pampa	WRTD 1500 100 B	LaCrosse WKBH 1380 1000 C	Victoria
K	PDN 1310 100	WRVA 1110 5000 C	Madison	CFCT 1450 500
	Paris	Roanoke WDBJ 930 1000 C	WHA 940 5000	MANITOBA
	PLT 1500 250	700 1000	WIBA 1280 1000 N	
	Pecos IUN 1420 100	WASHINGTON	Manitowoc WOMT 1210 100	Brandon CKY 1120 1000 F
KI			WOMT 1210 100	CKX 1120 1000 F
		Aherdeen	Milwankee	Flin Flor
1	Port Arthur PAC 1260 500	Aberdeen KXRO 1310 100M	Milwaukee WEMP 1310 100	Flin Flon CFAR 1370 100

NORTH	AMERICAN B. C.	STATIONS DI LO	CATIONS
Winnipeg CJRC 630 500 F CKY 910 15000 F	Waterloo CKCR 1510 100 Windsor	Cardenas CMGE 1370 150	CMKW 1350 CMKX 1190
NEW BRUNSWICK	CBW 600 500 F CKLW 1030 5000M Wingham	Ciego de Avila CMJH 1360 50 CMJI 1130 150 CMJO 1180 50	DOMINICAN REPUBLIC
Fredericton CFNB 550 500 F	CKNX 1200 100	Cienfuegos CMHJ 1160 175	Trujillo HIX 800 700
Moncton CKCW 1370 100 F St. John	PRINCE EDWARD ISLAND	CMHM 1450 100 CMHX 760 200	GUATEMALA
CHSJ 1120 500 F	Charlottetown CFCY 630 1000 F	Cruces CMHK 1330 250	Guatemala City
N. W. TERRITORY	CFCY 630 1000 F CHCK 1310 50 Summerside	Guantanamo CMKS 960	TGW 1230 10000 TG1 1510
Aklavik CJCU 1210 50	CHGS 1450 50 F	Havana CMBC 950 10000	MEXICO
NOVA SCOTIA	QUEBEC	CMBD 1260 500	AGUASCALIENTE
Glace Bay	Chicoutimi	CMBF 770 10000 CMBL 750 2500	Aguascalientes XEBI 1000 25
VAS 685 2000	CRCS 1120 100 F	CMBO 680 5000 CMBS 1170 150	XEBI 1000 25 XEXC 810 350
Halifax CHNS 930 1000 F	Hull CKCH 1210 100 F	CMBX 1070 500	
Sydney	Montreal	CMBY 970 150 CMBZ 1000 500	BAJA CALIFORNI
CJCB 1240 1000 F Wolfville	CBF 910 50000 N CBM 1050 5000 F	CMO 1260 150	Mexicali
CKIC 1010 50	CFCF 600 500 B	CMCA 1350 450 CMCB 1230 150	XEAA 750 200 XEAO 660 250
Yarmouth CJLS 1310 100	CHLP 1120 100 F CKAC 730 5000 C	CMCD 630 250	XECL 1100 1700
	New Carlisle	CMCF 810 600 CMCG 680 1000	Rosarito Beach XERB 730 10000
ONTARIO	CHNC 960 1000 F Ouebec	CMCJ 1110 500	Tijuana
Brantford	CHRC 580 100	CMCK 1030 CMCL 730 10000	XEAC 980 5000 XEBG 820 1000
CKPC 930 100 F Chatham	CKCV 1310 100 F CRCK 950 1000 F	CMCM 850	XEC 1150 100
CFCO 630 100 F	Rimouski	CMCO 1200 250 CMCQ 1410 5000	XELO 670 50000 XEMO 860 5000
Cobalt CKMC 1210 50	CJBR. 1030 1000 F	CMCR 1380	XEOK 760 2500
Fort William	Sherbrooke CHLT 1210 100	CMCU 1290 500 CMCW 1140 500	
CKPR 730 100 F	Three Rivers	CMCX 1380 150	CHIHUAHUA
Hamilton CHML 1010 100 F	CHLN 1420 100	CMCY 570 5000 CMK 720 3000	Chihuahua
CKOC 1120 500 F	SASKATCHEWAN	CMOA 1440 150	XEFI 1440 250
Kenora		CMOX 1320 200 CMQ 600 25000	Juarez XEFV 1210 100
1420 100	Moose Jaw CHAB 1200 100 F	CMW 880 1400	XEF 1450 100
Kingston CFRC 1510 100 F	Prince Albert	CMX 920 1000 630 10000	XEJ 1020 1000 XEP 1160 500
London	CKBI 1210 100 F	Holguin	Parral
CFPL 730 100 F	Regina CJRM 540 1000 F	CMFK 1460 250	XEAT 1210 250
North Bay CFCH 930 100 F	CKCK 1010 1000 F	CMKO 1280 Manzanillo	COAHUILA
CJKL 1310 100	Saskatoon CFOC 840 1000 F	CMKM 1120 200	
CKGB 1420 100	CFQC 840 1000 F Yorkton	Matanzas	Piedras Negras XEMU 580
Ottawa CBO 880 1000 F	CJGX 1390 100 F	CMGC 1400 150 CMGF 1120 250	XEPN 730 100000
CKCO 1010 100 F	COSTA RICA	CMGH 790 500	Sabinas XEBX 640 250
Owen Sound 1370 100		Moron CMJP 1430 75	XEBX 640 250 Saltillo
Prescott	San Jose TIEP 880 1000	Pinar del Rio	XEAS 1160 50
CFLC 930 100	TIPG 625 2000	CMAB 1340	XELA 1240 50
St. Catharines CKTB 1200 100 F	TIX 650	Sagua la Grande CMHA 1070 50	Torreon XETB 1310 125
Sault Ste. Marie	CUBA		Villa Acuna
CJIC 1500 100	Caibarien	Sancti Spiritus CMHB 1240 50	XERA 840 35000
Stratford CJCS 1210 50	CMHD 1270 250	Santa Clara	D. F.
CJCS 1210 50 Sudbury	Camaguey CMJA 1010 300	CMHI 1210 150	
CKSO 780 1000 F	CMJC 1390 150	CMHW 820 100	Atzcapotzalco XEMG 1060 100
Toronto	CMJE 1220 50	Santiago CMKC 1250 150	Chapultepec
CBL 840 50000 F CFRB 690 10000 C	CMJF 1150 200 CMJK 780 250	CMKD 1050 250	XERO 670
CKCL 580 100 F	CMJL 1340 75 CMJX 830 500	CMKG 1160 CMKR 1400 100	Gra. Anaya XEDA 1220 200
CRCY 960 100 F			1 ALDED A 1440 400

NORTH AMERICAN B. C. STATIONS BY LOCATIONS

Mexico City XEAL 660 1000 XEAY 1240 100	Leon XEKL 1240 500	SAN LUIS POTOSI San Luis Potosi	Tampico XEFW 1310 250 XES 990 250
XEB 1030 10000 XEBS 1240 200	JALISCO	XECZ 1370 100 XEXH 1250 250	VERACRUZ
XEBZ 1160 100 XECW 1310 10 XEDP 1080 500	Guadalajara XEAD 1060 125	SINALOA	Cordoba XEAG 1310 10
XEDP 1080 5000 XEFO 930 5000 XEJP 1120 100 XEJW 870 XEK 990 100	XED 1160 2500 Guzman XEBA 1080 20	Mazatlan XEBL 1220 50	Jalapa XEXB 1270 50 XEXD 1340 350 Minatitlan
XEL 1100 1000 XELZ 1370 100	MICHOACAN	SONORA	XEDW 1150 20°
XEMX 1280 100 XEN 780 1000 XENC 860 50 XEW 890 50000	Morelia XEI 1370 125	Hermosillo XEBH 930 500 Nogales XEAF 990 750°	Veracruz XETF 1220 30 XEU 1010 250
XEXE 1270 17 XEXM 1280 XEYO 940 500	NUEVO LEON	Obregon XEAP 1240 50	YUCATAN Merida
Tacuba XEFA 1180 500	Monterrey XEFB 870 200 XEFJ 1230 100	TAMAULIPAS	XEBJ 1160 20 XEFG 550 100 XEZ 630 500
DURANGO	XEG 1220 250 XEH 720 250 XET 690 5000	Matamoros XEAM 750 25	NEWFOUNDLAND
Durango XEE 1210 50	XEX 1310 125	Nuevo Laredo XEBK 1000 60 XEDF 810 100	St. John's VOAC 1065 40 VOAS 940 100
GUANAJUATO	PUEBLA	XEFE 980 150 XENT 910 150000	VOCM 1006 200 VOGY 840 400
Irapuato XEBO 1310 25	Puebla XETH 1210 100	Reynosa XEAW 960 50000	VONF 1195 500 VOWR 681 500

CBF 910 50000	CFNB 550 500	CHSJ 1120 500
Montreal, P. Q.	Fredericton, N. B.	St. John, N. B.
CBL 840 50000	CFPL 730 100	CHWK 780 100
Toronto, Ont.	London, Ont.	Chilliwack, B. C.
CBM 1050 5000	CFPR 580 50	CJAT 910 1000
Montreal, P. Q.	Prince Rupert, B. C.	Trall, B. C.
CBO 880 1000	CFQC 840 1000	CJBR 1030 1000
Ottawa, Ont.	Saskatoon, Sask.	Rimouski, P. Q.
CBR 1100 5000	CFRB 690 10000	CJCA 730 1000
Vancouver, B. C.	Toronto, Ont.	Edmonton, Alta.
CBW 600 500	CFRC 1510 100	CJCB 1240 1000
Windsor, Ont.	Kingston, Ont.	Sydney, N. S.
CFAC 930 1000	CFRN 960 100	CJCJ 690 100
Calgary, Aita.	Edmonton, Alta.	Calgary, Alta.
CFAR 1370 100	CHAB 1200 100	CJCS 1210 50
Flin Flon, Man.	Moose Jaw, Sask.	Stratford, Ont.
CFCF 600 500	CHCK 1310 50	CJCU 1210 50
Montreal Que.	Charlottetown, P.E.I.	Akiavik, N. W. T.
CFCH 930 100	CHGS 1450 50	CJGX 1390 100
North Bay, Ont.	Summerside, P.E.I.	Yorkton, Sask.
CFCN 1030 10000 Calgary, Alta,	CHLN 1420 100 Three Rivers, P. Q.	S. Ste. Marie, Ont.
CFCO 630 100 Chatham, Ont.	CHLP 1120 100 Montreal, Que.	North Bay, Ont.
CFCT 1450 500	CHLT 1210 100	CJLS 1310 100
Victoria, B. C.	Sherbrooke, P. Q.	Yarmouth, N. S.
CFCY 630 1000	CHML 1010 100	CJOC 950 100
Charlottetown, P.E.I.	Hamilton, Ont.	Lethbridge, Alta.
CFGP 1200 100 Grande Prairie, Alta.	CHNC 960 1000 New Carlisle, Que.	Vancouver, B. C.
CFJC 880 1000	CHNS 930 1000	CJRC 630 500
Kamloops, B. C.	Halifax, N. S.	Winnipeg, Man.
CFLC 930 100	CHRC 580 100	CJRM 540 1000
Prescott, Ont.	Quebec, Que.	Regina, Sask.

	CKAC 730 5000 Montreal, Que.	CMBY 970 150 Havana, Cuba	CMJF 1150 20
	CKBI 1210 100	CMBZ 1000 500	Camaguey, Cuba CMJH 1360 5
	Prince Albert, Sask.	Havana, Cuba	Clego de Avila, Cuba
	Vancouver, B. C.	CMC 1260 150 Havana, Cuba	CMJI 1130 15 Clego de Avlla, Cuba
	CKCH 1210 100	CMCA 1350 450	CMJK 780 25
_	Hull, Que. CKCK 1010 1000	Havana, Cuba	Camaguey, Cuba
	Regina, Sask.	CMCB 1230 150 Havana, Cuba	CMJL 1340 75 Camaguey, Cuba
	CKCL 580 100 Toronto, Ont.	CMCD 630 250	CMJO 1180 5
	CKCO 1010 100	Havana, Cuba CMCF 810 600	Clego de Avila, Cuba CMJP 1430 7
	Ottawa, Ont.	Havana, Cuba	Camaguey, Cuba
	CKCR 1510 100 Waterloo, Ont.	CMCG 680 1000 Havana, Cuba	CMJX 830 50
	CKCV 1310 100	CMCJ 1110 500	Camaguey, Cuba CMK 720 3000
	Quebec, Que.	Havana, Cuba	Havana, Cuba
	CKCW 1370 100 Moneton, N. B.	CMCK 1030 Havana, Cuba	CMKC 1250 15
	CKFC 1410 50	CMCL 730 10000	Santiago, Cuba CMKD 1050 250
	Vancouver, B. C. CKGB 1420 100	Havana, Cuba	Santiago, Cuba
	North Bay, Ont.	CMCM 850	Holguin, Cuba
	CKIC 1010 50	CMCO 1200 250	CMKG 1160
_	Wolfville, N. S. CKLW 1030 5000	Havana, Cuba	Santiago, Cuba
	Windsor, Ont.	CMCQ 1410 5000 Havana, Cuba	Manzanillo, Cuba
	CKMC 1210 50	CMCR 1380	CMKO 1280
	Cobait, Ont. CKMO 1410 100	Havana, Cuba CMCU 1290 500	Holguin, Cuba CMKR 1400 100
	Vancouver, B. C.	Havana, Cuba	Santiago, Cuba
	CKNX 1200 100 Wingham, Ont.	CMCW 1140 500	CMKS 960
	CKOC 1120 500	Havana, Cuba CMCX 1380 150	Guantanamo, Cuba CMKW 1350
	Hamilton, Ont.	Havana, Cuba	Santiago, Cuba
	CKOV 630 100 Kelowna, B. C.	CMCY 570 5000	Santiago, Cuba
- 0	CKPC 930 100	Havana, Cuba CMGC 1400 150	CMOA 1440 150
	Brantford, Ont.	Matanzas, Cuba	Havana, Cuba
	CKPR 730 100 Fort William, Ont.	CMGE 1370 150 Cardenas, Cuba	Havana, Cuba
	CKSO 780 1000	CMGF 1120 250	CMQ 600 25000
	Sudbury, Ont.	Matanzas, Cuba	Havana, Cuba
	CKTB 1200 100 St. Catharines, Ont.	CMGH 790 500 Matanzas, Cuba	CMW 880 1400 Havana, Cuba
	CKUA 580 500	CMHA 1070 50	CMX 920 1000
	Edmonton, Alta.	Sagua la Grande, Cuba	Havana, Cuba
	Vancouver, B. C.	CMHB 1240 50 Sancti Spiritus, Cuba	CRCK 950 1000 Quebec, Que.
	CKX 1120 1000	CMHD 1270 250	CRCS 1120 100
_	Brandon, Man. CKY 910 15000	Catbarien, Cuba CMHI 1210 150	Chicoutimi, Que.
	Winnipeg, Man.	CMHI 1210 150 Santa Clara, Cuba	Toronto, Ont.
	CMAB 1340	CMHJ 1160 175	HIX 800 700
	Pinar del Rio, Cuba CMBC 950 10000	Clenfuegos, Cuba CMHK 1330 250	Trujillo, D. R. KABC 1420 100
	Havana, Cuba	Cruces, Cuba	San Antonio, Texas
	CMBD 1260 500 Havana, Cuba	CMHM 1450 100	KABR 1420 100
	CMBF 770 10000	Cienfuegos, Cuba CMHW 820 100	Aberdeen, S. Dak. KADA 1200 100
	Havana, Cuba	Santa Clara, Cuba	Ada. Okia.
	CMBL 750 2500 Havana, Cuba	CMHX 760 200 Cienfuegos, Cuba	KALB 1210 100
	CMBQ 680 5000	CMJA 1010 300	Alexandria, La. KALE 1300 500
	Havana, Cuba	Camaguey, Cuba	Portland, Ore.
	CMBS 1170 150 Havana, Cuba	CMJC 1390 150 Camaguey, Cuba	Corsicana, Texas
	CMBX 1070 500	CMJE 1220 50	KANS 1210 100
	Havana, Cuba	Camaguey, Cuba	Wichita, Kans

KARK 890 500 Little Rock, Ark.	KFAM 1420 100 St. Cloud, Minn.	KFXD 1200 10 Nampa, Idaho
KARM 1310 100 Fresno, Calif.	KFBB 1280 1000 Great Falls, Mont.	KFXJ 1200 10 Grand Junction, Colo.
KASA 1210 100 Elk City, Okla.	KFBI 1050 5000 Abilene, Kans.	KFXM 1210 10 San Bernardino, Calif.
KAST 1370 100 Astoria, Ore.	KFBK 1490 5000	KFXR 1310 10
KATE 1420 250	Sacramento, Calif. KFDM 560 500	Oklahoma City, Okla. KFYO 1310 10
Albert Lea, Minn. KAWM 1500 100	Beaumont, Texas KFDY 780 1000	Lubbock, Texas KFYR 550 100
Gallup, N. Mex. 1500 100	Brookings, S. D. KFEL 920 500	Bismarck, N. D. KGA 1470 500
Muskogee, Okla. KBPS 1420 100	Denver, Colo. KFEQ 680 2500	Spokane, Wash.
Portland, Ore.	St. Joseph, Mo. KFGQ 1370 100	Tucson, Ariz.
KBST 1500 100 Big Spring, Texas	Boone, Iowa	San Diego, Calif.
Jonesboro, Ark.	KFH 1300 1000 Wichita, Kans.	KGBU 900 50 Ketchikan, Alaska
KCKN 1310 100 Kansas City, Kans.	KFI 640 50000 Los Angeles, Caiif.	KGBX 1230 50 Springfield, Mo.
KCMC 1420 100	KFIO 1120 100 Spokane, Wash.	KGCA 1270 10 Decorah, Iowa
Texarkana, Texas KCMO 1370 100	KFIZ 1420 100	KGCI 1200 10
Kansas City, Mo.	Fond du Lac, Wis. KFJB 1200 100	Coeur d'Alene, Idaho KGCU 1240 2
Enid, Okla. KCRJ 1310 100	Marshalltown, Iowa KFJI 1210 100	Mandan, N. D. KGCX 1450 10
Jerome, Ariz.	Klamath Falls, Ore.	Wolf Point, Mont.
Duluth, Minn.	Grand Forks, N. D.	Fergus Falls, Minn.
KDB 1500 100 Santa Barbara, Calif.	Fort Worth, Texas	KGDM 1100 10 Stockton, Calif.
KDFN 1440 500 Casper, Wyo.	KFKA 880 500 Greeley, Colo.	KGDY 1340 2 Huron, S. D.
KDKA 980 50000 Pittsburgh, Pa.	KFKU 1220 1000 Lawrence, Kans.	KGEK 1200 1 Sterling, Colo.
KDLR 1210 100	KFNF 890 500 Shenandoah, Iowa	KGER 1360 10 Long Beach, Calif.
Devlis Lake, N. D. KDNC 1200 100	KFOR 1210 100	KGEZ 1310 1
Lewistown, Mont. KDON 1210 100	Lincoln, Neb. KFOX 1250 1000	Kalispell, Mont.
Monterey, Calif.	Long Beach, Calif.	Shawnee, Okla. KGFI 1500 1
Dubuque, Iowa KDYL 1290 1000	Dublin, Texas KFPW 1210 100	Brownsville, Tex.
Salt Lake City, Utah	Fort Smith, Ark.	Los Angeles, Calif.
Los Angeles, Calif.	KFPY 890 1000 Spokane, Wash.	Roswell, N. M.
KEEN 1370 100 Seattle, Wash.	KFQD 780 250 Anchorage, Alaska	KGFW 1310 1 Kearney, Neb.
KEHE 780 1000 Los Angeles, Calif.	KFRC 610 1000 San Francisco, Calif.	KGFX 630 2 Pierre, S. D.
KELA 1440 500 Centralia, Wash.	KFRO 1370 250	KGGC 1420 1
KELD 1370 100	Longview, Texas KFRU 630 500	San Francisco, Calif. KGGF 1010 10
El Dorado, Ark. KELO 1200 100	Columbia, Mo. KFSD 600 1000	Coffey ville, Kans. KGGM 1230 10
Sioux Falls, S. Dak. KERN 1370 100	San Diego, Calif. KFSG 1120 500	Albuquerque, N. M. KGHF 1320 5
Bakersfield, Calif.	Los Angeles, Calif.	Pueblo, Colo. KGHI 1200 1
Price, Utah	St. Louis, Mo.	Little Rock, Ark.
Portland, Ore.	Los Angeles, Calif.	KGHL 780 100 Billings, Mont.
KFAB 770 10000 Lincoln, Neb.	KFVS 1210 100 Cape Girardeau, Mo	KGIR 1340 100 Butte, Mont.
KFAC 1300 1000 Los Angeles, Calif.	KFWB 950 1000 Hollywood, Calif.	KGIW 1420 10
	22013 11000. Oalii.	Alamosa, Colo.

	KGKB 1500 100 Tyler, Texas	KJR 970 5000 Seattle, Wash.	KOIN 940 100 Portland, Ore.
	KGKL 1370 100	KLAH 1210 100 Carlsbad, N. Mex.	KOKO 1370 10
	San Angelo, Texas KGKO 570 250	KLBM 1420 100°	La Junta, Colo. KOL 1270 100
_	Wichita Falls, Texas	La Grande, Ore.	Seattle, Wash.
	Scottsbluff, Neb.	Blytheville, Ark.	Oklahoma City, Okla.
	Mason City, Iowa	Ogden, Utah	Seattle, Wash.
	Honolulu, T. H.	KLPM 1240 250 Minot, N. D.	San Antonio, Texas
	KGNC 1410 1008 Amarillo, Texas	KLRA 1390 1000 Little Rock, Ark.	KOOS 1200 10 Marshfield, Ore.
	KGNF 1430 1000	KLS 1280 250	KORE 1420 10
= -3	North Platte, Neb.	Oakland, Calif. KLUF 1370 100	Eugene, Ore. KOTN 1500 10
	Dodge City, Kans.	Galveston, Texas	Pine Bluff, Ark.
	San Francisco, Calif.	Oakland, Calif.	Valley City, N. Dak.
	KGU 750 2500 Honolulu, T. H.	KLZ 560 1000 Denver, Colo.	KOY 1390 100 Phoenlx, Ariz.
	KGVL 1200 100 Greenville, Texas	KMA 930 1000 Shenandoah, Iowa	KPAC 1260 50 Port Arthur, Texas
	KGVO 1260 1000	KMAC 1370 100	KPBM 1310 10
	Missoula, Mont. KGW 620 1000	San Antonio, Texas KMBC 950 1000	Poplar Bluff, Mo. KPDN 1310 10
	Portland, Ore. KGY 1210 100	Kansas City, Mo.	Pampa, Texas KPFA 1210 10
	Olympia, Wash.	Medford, Ore.	Helena, Mont.
	KHBC 1400 250 Hilo, T. H.	Fresno, Calif.	Lake Charles, La.
	KHBG 1210 100 Okmulgee, Okla.	Monroe, La.	KPLT 1500 10 Paris, Texas
	KHJ 900 1000	KMMJ 740 1000	KPMC 1550 100 Bakersfield, Calif.
	Los Angeles, Calif.	Clay Center, Neb. KMO 1330 • 1000	KPO 680 5000
	Spokane, Wash. KHSL 1260 250	Tacoma, Wash.	San Francisco, Calif. KPOF 880 50
	Chico, Calif.	St. Louis, Mo. KMPC 710 500	Denver, Colo. KPPC 1210 10
	Watsonville, Calif.	Beverly Hills, Calif.	Pasadena, Calif.
	KICA 1370 100 Clovis, N. M.	Los Angeles, Calif.	Wenatchee, Wash.
	KID 1320 500 Idaho Falls, Idaho	KNEL 1500 250 Brady, Texas	KPRC 920 100 Houston, Texas
	KIDO 1350 1000	KNET 1420 100	KQV 1380 50
	Boise, Idaho KIDW 1420 100	Palestine, Texas KNOW 1500 100	Pittsburgh, Pa. KQW 1010 100
	Lamar, Colo.	Austin, Texas	San Jose, Calif. KRBA 1310 10
	Eureka, Calif.	Los Angeles, Calif.	Lufkin, Texas
	KIEV 850 250 Glendale, Calif.	KOA 830 50000 Denver, Colo.	Abilene, Texas
	KINY 1310 100 Juneau, Alaska	KOAC 550 1000 Corvallis, Ore.	KRE 1370 10 Berkeley, Calif.
	KIRO 710 1000	KOAM 790 1000	Weslaco, Texas
	Seattle, Wash.	Pittsburg, Kans. KOB 1180 10000	KRIS 1330 50
	Yakima, Wash.	Albuquerque, N. M.	Corpus Christi, Tex.
	Garden City, Kans.	Rapid City, S. Dak.	Los Angeles, Calif.
	Pecos, Texas	KOCA 1210 100 Kilgore, Texas	Everett, Wash.
	KIUP 1370 100 Durango, Colo.	KOH 1380 500 Reno, Nev.	KRLC 1390 25 Lewiston, Idaho
	KJBS 1070 500	KOIL 1260 1000	KRLD 1040 1000
	San Francisco, Calif.	Omaha, Neb.	Dallas, Texas

KRLH 1420 100 Midland, Texas	KTMS 1220 500 Santa Barbara, Calif.	KWLC 1270 100 Decorah, Iowa
KRMC 1370 100	KTOK 1370 100	KWLK 780 250 Longview, Wash.
Jamestown, N. Dak.	Oklahoma City, Okla. KTRB 740 250	KWNO 1200 250
Shreveport, La.	Modesto, Calif.	Winona, Minn.
KRNR 1500 100	KTRH 1290 1000	Jefferson City, Mo.
Roseburg, Ore.	Houston, Texas KTRI 1420 100	KWSC 1220 1000
Des Moines, Iowa	Sioux City, Iowa	Pullman, Wash.
KROC 1310 100	KTSA 550 1000 San Antonio, Texas	Watertown, S. Dak.
Rochester, Minn.	KTSM 1310 100	KWTO 560 5000
El Paso, Texas	El Paso, Texas	Springfield, Mo. KWYO 1370 100
KROW 930 1000	Tulsa, Okla.	Sheridan, Wyo.
Oakland, Calif.	KTW 1220 1000	KXA 760 250
Sacramento, Calif.	Seattle, Wash.	Seattle, Wash.
KRQA 1310 100 Santa Fe, N. Mex.	Walla Walla, Wash.	KXBY 1530 1000 Kansas City, Mo.
KRRV 1310 250	KUMA 1420 100	KXL 1420 100
Sherman, Texas	Yuma, Ariz. KUOA 1260 5000	Portiand, Ore.
KRSC 1120 250 Seattle, Wash.	Siloam Springs, Ark.	El Centro, Calif.
KSAC 580 500	KUSD 890 500	KXOK 1250 1000
Manhattan, Kans.	Vermillion, S. Dak.	St. Louis, Mo. KXRO 1310 100
KSAL 1500 100 Salina, Kans.	Salt Lake City, Utah	Aberdeen, Wash.
KSCJ 1330 1000	KVCV 1200 100	Houston, Texas
Sioux City, Iowa KSD 550 1000	Redding, Calif. KVEC 1200 250	KYA 1230 1000
KSD 550 1000 St. Louis, Mo.	San Luis Obispo, Cal.	San Francisco, Calif.
KSEI 900 250	KVGB 1370 100	KYOS 1040 250 Merced, Calif.
Pocatello, Idaho	Great Bend, Kans.	KYW 1020 10000
San Francisco, Calif.	Tacoma, Wash.	Philadelphia, Pa.
KSL 1130 50000	KVOA 1260 1000 Tucson, Ariz.	TGW 1230 10000 Guatemala City, Guat.
Salt Lake City, Utah KSLM 1370 100	KVOD 920 500	TG1 1510
Salem, Ore.	Denver, Colo.	Guatemala City, Guat.
KSO 1430 500	Santa Ana, Calif.	San Jose, Costa Rica
Des Moines, Iowa KSOO 1110 2500	KVOL 1310 100	TIPG 625 2000
Sloux Falls, S. Dak.	Lafayette, La.	San Jose, Costa Rica
Santa Rosa, Callf.	KVOO 1140 25000 Tulsa, Okla.	San Jose, Costa Rica
KSTP 1460 10000	KVOR 1270 1000	VAS 685 2000
St. Paul, Minn.	Colorado Springs, Colo.	Glace Bay, N. S. VOAC 1065 40
KSUB 1310 100 Cedar City, Utah	Bellingham, Wash.	St. John's, Nfld.
KSUN 1200 100	KVOX 1310 100	VOAS 940 100
Lowell, Ariz.	Moorhead, Minn. KVRS 1370 100	St. John's, Nfld.
KTAR 620 1000 Phoenix, Ariz.	Rock Springs, Wyo.	St. John's, Nfld.
KTAT 1240 1000	KVSO 1210 100	VOGY 840 400 St. John's, Nfld.
Fort Worth, Texas	Ardmore, Okla. KWBG 1420 100	VONF 1195 508
KTBC 1120 1000 Austin, Texas	Hutchinson, Kans.	St. John's, Nild.
KTBS 1450 1000	KWEW 1500 100	VOWR 681 500 St. John's, Nfld.
Shreveport, La.	Hobbs, N. Mex.	WAAB 1410 500
Temple, Texas	Stockton, Calif.	Boston, Mass.
KTFI 1240 1000	Portland, Ore.	WAAF 920 1000 Chicago, Ill.
Twin Falls, Idaho KTHS 1060 10000	KWK 1350 1000	WAAT 940 500
Hot Springs, Ark.	St. Louis, Mo.	Jersey City, N. J.
KTKC 1190 250	KWKH 1100 10000 Shreveport, La.	Omaha, Neb.
Visalia, Calif.	onicveport, La.	

700			
	WABC 860 50000 New York, N. Y.	WBEN 900 1000 Buffalo, N. Y.	WCBM 1370 100
	WABI 1200 100	WBEO 1310 100	Baltimore, Md. WCBS 1420 100
	Bangor, Maine WABY 1370 100	Marquette, Mich. WBHP 1200 100	Springfield, III. WCCO 810 50000
-	Albany, N. Y. WACO 1420 100	Huntsville, Ala. WBIG 1440 1000	Minneapolis, Minn.
-	Waco, Texas	Greensboro, N. C.	WCFL 970 5000 Chicago, Ill.
	WADC 1320 1000 Akron, Ohlo	WBIL 1100 5000 New York, N. Y.	WCHS 580 500 Charleston, W. Va.
	WAGA 1450 500 Atlanta, Ga.	WBLK 1370 100 Clarksburg, W. Va.	WCHV 1420 100
	WAGF 1370 250	WBLY 1210 100	Charlottesville, Va. WCKY 1490 10000
	Dothan, Ala. WAGM 1420 100	Lima, Ohio WBNO 1200 100	Covington, Ky.
	Presque Isle, Me.	New Orleans, La. WBNS 1430 500	Cleveland, Ohio
	Anderson, S. C.	Columbus, Ohio	Janesville, Wis.
	WAIR 1250 250 Winston-Salem, N. C.	WBNX 1350 1000 New York, N. Y.	WCLS 1310 100 Joliet, Ill.
	WALA 1380 500 Mobile, Ala.	WBNY 1370 100 Buffalo, N. Y.	WCMI 1310 100
1	WALR 1210 100	WBOQ 860 50000	Ashland, Ky. WCNW 1500 100
	Zanesville, Ohio WAML 1310 100	New York, N. Y. WBOW 1310 100	Brooklyn, N. Y. WCOA 1340 500
	Laurel, Miss. WAPI 1140 5000	Terre Haute, Ind.	Pensacola, Fla.
1	Birmingham, Ala.	Red Bank, N. J.	WCOC 880 500 Meridian, Miss.
	WAPO 1420 100 Chattanooga, Tenn.	WBRC 930 1000 Birmingham, Ala.	WCOL 1210 100 Columbus, Ohio
	WARD 1400 500 Brooklyn, N. Y.	WBRE 1310 100	WCOP 1120 500
	WASH 1270 500	Wilkes-Barre, Pa. WBRK 1310 100	Boston, Mass. WCPO 1200 100
	Grand Rapids, Mich.	Pittsfield, Mass. WBRY 1530 1000	Cincinnati, Ohio WCRW 1210 100
*	Atlanta, Ga. WATR 1190 100	Waterbury, Conn.	Chicago, Ill.
	Waterbury, Conn.	WBT 1080 50000 Charlotte, N. C.	WCSC 1360 500 Charleston, S. C.
	WAVE 940 1000 Louisville, Ky.	WBTM 1370 100 Danville, Va.	WCSH 940 1000 Portland, Me.
	WAWZ 1350 500 Zarephath, N. J.	WBZ 990 50000 Boston, Mass.	WDAE 1220 1000
	WAYX 1200 100	WBZA 990 1000	Tampa, Fla. WDAF 610 1000
	Waycross, Ga. WAZL 1420 100	Springfield, Mass. WCAD 1220 500	WDAH 1310 100
	Hazleton, Pa. WBAA 890 500	Canton, N. Y.	El Paso, Texas
	West Lafayette, Ind.	Pittsburgh, Pa.	WDAS 1370 100 Philadelphia, Pa.
	WBAL 760 2500 Baltimore, Md.	WCAL 1250 1000 Northfield, Minn.	WDAY 940 1000 Fargo, N. Dak.
	WBAL 1060 10000 Baltimore, Md.	WCAM 1280 500 Camden, N. J.	WDBJ 930 1000
	WBAP 800 50000 Fort Worth, Texas	WCAO 600 500	Roanoke, Va. WDBO 580 1000
	WBAX 1210 100	Baltimore, Md. WCAP 1280 500	Orlando, Fla.
	Wilkes-Barre, Pa. WBBC 1400 500	Asbury Park, N. J. WCAT 1200 100	Wilmington, Del.
	Brooklyn, N. Y.	Rapid City, S. Dak.	WDEV 550 500 Waterbury, Vt.
	WBBL 1210 100 Richmond, Va.	WCAU 1170 50000 Philadelphia, Pa.	WDGY 1180 1000 Minneapolls, Minn.
	WBBM 770 50000 Chicago, Ill.	WCAX 1200 100 Burlington, Vt.	WDNC 1500 100 Durham, N. C.
	WBBR 1300 1000 Brooklyn, N. Y.	WCAZ 1070 100	WDOD 1280 1000
-	WBBZ 1200 100	Carthage, Ill.	Chattanooga, Tenn. WDRC 1330 1000
	Ponca City, Okla. WBCM 1410 500	Allentown, Pa. WCBD 1080 5000	Hartford, Conn. WDSM 1200 100
	Bay City, Mich.	Chicago, Ili.	Superior, Wis.
	-		

	WDSU 1250 1000 New Orleans, La.	WFIL 560 1000 Philadelphia, Pa.	WHB 860 100 Kansas City, Mo.
	WDWS 1370 100	WFLA 620 1000	WHBB 1500 10
	Champaign, Ill. WDZ 1020 250	Clearwater, Fla. WFMD 900 500	Selma, Ala. WHBC 1200 10
_	Tuscola, Ill. WEAF 660 50000	Frederick, Md.	Canton, Ohio WHBF 1210 10
	New York, N. Y.	Hattiesburg, Miss.	Rock Island, Ill.
	WEAN 780 1000 Providence, R. I.	WFOY 1210 100 St. Augustine, Fla.	WHBI 1250 100 Newark, N. J.
	WEAU 1050 1000 Eau Claire, Wis.	WFTC 1200 100	WHBL 1300 25
	WEBC 1290 1000	Kinston, N. C. WGAL 1500 100	Sheboygan, Wis.
_	Duluth, Minn. WEBQ 1210 100	Lancaster, Pa. WGAN 640 500	Memphis, Tenn.
	Harrisburg, Ill.	Portland, Me.	Anderson, Ind.
	WEBR 1310 100 Buffalo, N. Y.	WGAR 1450 500 Cleveland, Ohlo	WHBY 1200 10 Green Bay, Wis.
	WEDC 1210 100 Chicago, Ill.	WGAU 1310 100 Athens, Ga.	WHDF 1370 10
	WEED 1420 100	WGBB 1210 100	Calumet, Mich.
	Rocky Mount, N. C. WEEL 590 1000	Freeport, N. Y. WGBF 630 500	Boston, Mass. WHDL 1400 25
	Boston, Mass.	Evansville, Ind.	Olean, N. Y.
	WEEU 830 1000 Reading, Pa.	WGBI 880 500 Scranton, Pa.	WHEB 740 25 Portsmouth, N. H.
	WELI 900 500 New Haven, Conn.	WGCM 1210 100 Gulfport, Miss.	WHEC 1430 50 Rochester, N. Y.
	WELL 1420 100	WGES 1360 500	WHEF 1500 10
	Battle Creek, Mich. WEMP 1310 100	Chicago, Ill. WGH 1310 100	Kosciusko, Miss. WHFC 1420 10
	Milwaukee, Wis. WENR 870 50000	Newport News, Va.	Cicero, Ill.
	Chicago, Ill.	WGL 1370 100 Fort Wayne, Ind.	Dayton, Ohio
	WEOA 1370 100 Evansville, Ind.	WGN 720 50000 Chicago, Ill.	WHIP 1480 500 Hammond, Ind.
	WESG 850 1000 Elmira, N. Y.	WGNY 1210 100	WHIS 1410 50
	WEST 1200 100	Newburgh, N. Y. WGPC 1420 100	Bluefield, W. Va. WHJB 620 25
	Easton, Pa. WEVD 1300 1000	Albany, Ga. WGR 550 1000	Greensburg, Pa. WHK 1390 100
	New York, N. Y.	Buffalo, N. Y.	Cleveland, Ohio
	WEW 760 1000 St. Louis, Mo.	WGRC 1370 250 New Albany, Ind.	WHKC 640 50 Columbus, Ohio
	WEXL 1310 50 Royal Oak, Mich.	WGRM 1210 100 Grenada, Miss.	WHLB 1370 10 Virginia, Minn.
	WFAA 800 50000	WGST 890 1000	WHN 1010 100
	Dallas, Texas WFAB 1300 1000	Atlanta. Ga. WGTM 1310 100	New York, N. Y. WHO 1000 5000
	New York, N. Y.	Wilson, N. C.	Des Moines, Iowa
	WFAM 1200 100 South Bend, Ind.	WGVA 1050 1000 Indianapolis, Ind.	WHOM 1450 25 Jersey City, N. J.
	WFAS 1210 100 White Plains, N. Y.	WGY 790 50000 Schenectady, N. Y.	WHP 1430 50 Harrisburg, Pa.
	WFBC 1300 1000	WHA 940 5060	WIBA 1280 100
	Greenville, S. C. WFBG 1310 100	Madison, Wis.	Madison, Wis.
	Altoona, Pa. WFBL 1360 1000	Greenfield, Mass.	Glenside, Pa.
	Syracuse, N. Y.	Saginaw, Mich.	WIBM 1370 10 Jackson, Mich.
	WFBM 1230 1000 Indianapolis, Ind.	WHAM 1150 50000 Rochester, N. Y.	WIBU 1210 10 Poynette, Wis.
	WFBR 1270 500	WHAS 820 50000	WIBW 580 100
	Baltimore, Md.	Louisville, Ky. WHAT 1310 100	Topeka, Kans.
	Flint, Mich.	Philadelphia, Pa.	Utica, N. Y.
	WFEA 1340 500 Manchester, N. H.	WHAZ 1300 1000 Troy, N. Y.	WICA 940 25 Ashtabula, Ohio

	WICC 600 500 Bridgeport, Conn.	WKAQ 1240 1000 San Juan, P. R.	WMAS 1420 10 Springfield, Mass.
	WIL 1200 100 St. Louis, Mo.	WKAR 850 1000 East Lansing, Mich.	WMAZ 1180 100 Macon, Ga.
	WILL 580 1000 Urbana, Ill.	WKAT 1500 100	WMBC 1420 10
	WILM 1420 100	Miami Beach, Fla. WKBB 1500 100	Detroit, Mich. WMBD 1440 100
	Wilmington, Del. WIND 560 1000	East Dubuque, Ill.	Peoria, III. WMBF 610 100
	Gary, Ind. WINS 1180 1000	LaCrosse, Wis.	Miami, Fla. WMBG 1350 50
	New York, N. Y. WIOD 610 1000	Youngstown, Ohio	Richmond, Va.
	Miami, Fla.	WKBO 1200 100 Harrisburg, Pa.	WMBH 1420 10 Joplin, Mo.
	WIP 610 1000 Philadelphia, Pa.	WKBV 1500 100 Richmond, Ind.	WMBI 1080 500 Chicago, Ill.
	WIRE 1400 1000 Indianapolis, Ind.	WKBW 1480 5000	WMBO 1310 10
	WIS 560 1000	Buffalo, N. Y. WKBZ 1500 100	Auburn, N. Y. WMBQ 1500 10
	Columbia, S. C. WISN 1120 250	Muskegon, Mich. WKEU 1500 100	Brooklyn, N. Y. WMBR 1370 10
	Milwaukee, Wis.	Griffin, Ga.	Jacksonville, Fla.
	Johnstown, Pa.	Sunbury, Pa.	WMBS 1420 25 Uniontown, Pa.
	WJAG 1060 1000 Norfolk, Neb.	WKRC 550 1000 Cincinnati, Ohio	WMC 780 100 Memphis, Tenn.
	WJAR 890 1000 Providence, R. I.	Okiahoma City, Okia.	WMCA 570 100 New York, N. Y.
	WJAS 1290 1000	WKZO 590 1000	WMEX 1500 10
	Pittsburgh, Pa. WJAX 900 1000	Kalamazoo, Mich. WLAC 1470 5000	Boston, Mass. WMFD 1370 10
	Jacksonville, Fla. WJBC 1200 100	Nashville, Tenn.	Wilmington, N. C. WMFF 1310 10
	Bloomington, Ill. WJBK 1500 100	Lakeland, Fla.	Plattsburg, N. Y.
	Detroit, Mich.	Lexington, Ky.	WMFG 1210 10 Hibbing, Minn.
	WJBL 1200 100 Decatur, III.	Lawrence, Mass.	Daytona Beach, Fla.
	WJBO 1120 500 Baton Rouge, La.	WLB 1250 1000 Minneapolis, Minn.	WMFO 1370 10
	WJBW 1200 100	WLBC 1310 100	Decatur, Ala. WMFR 1200 10
	New Orleans, La. WJBY 1210 100	Muncie, Ind. WLBL 900 5000	High Point, N. C. WMIN 1370 10
	Gadsden, Ala. WJDX 1270 1000	Stevens Point, Wis.	St. Paul, Minn. WMMN 890 50
	Jackson, Miss.	Bangor, Me.	Fairmont, W. Va.
	WJEJ 1210 50 Hagerstown, Md.	WLEU 1420 100 Erie, Pa.	WMPC 1200 100 Lapeer, Mich.
	WJIM 1210 100 Lansing, Mich.	WLLH 1370 100 Lawrence, Mass.	WMPS 1430 500 Memphis, Tenn.
	WJJD 1130 20000	WLLH 1370 100 Lowell, Mass.	WMSD 1420 100
	Chicago, Ill. WJMS 1420 100	WLMU 1210 100	Sheffield, Ala.
	Ironwood, Mich. WJNO 1200 100	Middlesboro, Ky.	Cedar Rapids, Iowa WNAC 1230 1000
	W. Palm Beach, Fla.	Laconia, N. H.	Boston, Mass.
	Detroit, Mich.	Chicago, Ill.	Norman, Okia.
	WJRD 1200 250 Tuscaloosa, Ala.	Brooklyn, N. Y.	WNAX 570 1000 Yankton, S. D.
	WJSV 1460 10000 Washington, D. C.	WLVA 1200 100 Lynchburg, Va.	WNBC 1380 250
-	WJTN 1210 100	WLW 700 500000	New Britain, Conn. WNBF 1500 100
-	Jamestown, N. Y. WJW 1210 100	Cincinnati, Ohio WMAL 630 250	Binghamton, N. Y.
	Akron, Ohio	Washington, D. C.	New Bedford, Mass.
	WJZ 760 50000 New York, N. Y.	WMAQ 670 50000 Chicago, III.	WNBX 1260 500 Springfield, Vt.

	Saranac Lake, N. Y.	WPTF 680 1000 Raleigh, N. C.	WSFA 1410 500 Montgomery, Ala.
	WNEL 1290 1000	WQAM 560 1000	WSGN 1310 100 Birmingham, Ala.
_	San Juan, P. R. WNEW 1250 1000	Miami, Fla.	WSIX 1210 100
	New York, N. Y.	Scranton, Pa.	Nashville, Tenn.
	WNLC 1500 100	WQBC 1360 1000 Vicksburg, Miss.	WSJS 1310 100 Winston-Salem, N. C.
	New London, Conn. WNNY 1420 100	WQDM 1390 1000	WSM 650 50000
	Watertown, N. Y.	St. Albans, Vt.	Nashville, Tenn. WSMB 1320 1000
	WNOX 1010 1000 Knoxville, Tenn.	WQXR 1550 1000 New York, N. Y.	New Orleans, La.
	WNYC 810 1000	WRAK 1370 100	WSMK 1380 200 Dayton, Ohio
	New York, N. Y. WOAL 1190 50000	Williamsport, Pa. WRAW 1310 100	WSNJ 1210 100
	San Antonio, Texas	Reading, Pa.	Bridgeton, N. J.
	WOC 1370 100 Davenport, Iowa	WRBL 1200 100 Columbus, Ga.	Charlotte, N. C.
	WOI 640 5000	WRC 950 500	WSPA 920 1000
	Ames, Jowa	Washington, D. C. WRDO 1370 100	Spartanburg, S. C. WSPD 1340 1000
	WOKO 1430 500 Albany, N. Y.	Augusta, Me.	Toledo, Ohio
	WOL 1310 100	WRDW 1500 100	WSPR 1140 500
	Washington, D. C. WOLS 1200 100	Augusta, Ga. WREC 600 1000	Springfield, Mass. WSUI 880 500
	Florence, S. C.	Memphis, Tenn.	Iowa City, Iowa
	WOMI 1500 100	Lawrence, Kans.	St. Petersburg, Fla.
	Owensboro, Ky.	WRGA 1500 100	WSVA 550 500
	Manitowoc, Wis.	Rome, Ga.	Harrisonburg, Va. WSVS 1370 50
	Grand Rapids, Mich.	WRJN 1370 100 Racine, Wis.	Buffalo, N. Y.
	WOPI 1500 100	WRNL 880 500	WSYB 1500 100 Rutland, Vt.
	Bristol, Tenn. WOR 710 50000	Richmond, Va.	WSYR 570 1000
	Newark, N. J.	Rockford, Ill.	Syracuse, N. Y.
	WORC 1280 500	WROL 1310 100	WTAD 900 1000 Quincy, Ill.
_	Worcester, Mass. WORK 1320 1000	Knoxville, Tenn.	WTAG 580 1000
	York, Pa.	Dallas, Texas	Worcester, Mass. WTAL 1310 100
	WORL 920 500 Boston, Mass.	Richmond, Va.	Tallahassee, Fla.
	WOSU 570 750	WRUF 830 5000	WTAM 1070 50000 Cleveland, Ohio
	Columbus, Ohio	Gainesville, Fla.	WTAQ 1330 1000
	New York, N. Y.	Richmond, Va.	Green Bay, Wis.
	WOW 590 1000 Omaha, Neb.	WSA1 1330 1000 Cincinnatl, Ohlo	WTAR 780 1000 Norfolk, Va.
_	WOWO 1160 10000	WSAJ 1310 100	WTAW 1120 500
	Fort Wayne, Ind.	Grove City, Pa.	College Station, Tex.
	Paducah, Ky.	WSAL 1200 250 Salisbury, Md.	Springfield, Ill.
	WPAR 1420 100	WSAN 1440 500	WTBO 800 250 Cumberland, Md.
	Parkersburg, W. Va.	Allentown, Pa. WSAR 1450 1000	WTCN 1250 1000
	Thomasville, Ga.	Fall River, Mass.	Minneapolis, Minn.
	WPAY 1370 100	WSAU 1370 100 Wausau, Wis.	WTEL 1310 100 Philadelphia, Pa.
_	Portsmouth, Ohio WPEN 920 1000	WSAY 1210 100	WTHT 1200 10
	Philadelphia, Pa.	Rochester, N. Y.	Hartford, Conn. WTIC 1040 5000
	WPG 1100 5000 Atlantic City, N. J.	WSAZ 1190 1000 Huntington, W. Va.	Hartford, Conn.
	WPRA 1370 100	WSB 740 50000	WTJS 1310 10
	Mayaguez, P. R. WPRO 630 500	Atlanta, Ga. WSBC 1210 100	Jackson, Tenn. WTMJ 620 100
	Providence, R. I.	Chicago, Ill.	Milwaukee, Wis.
	WPRP 1420 100	WSBT 1360 500 South Bend, Ind.	WTMV 1500 10 East St. Louis, III.
	Ponce, P. R.	South Bend, Ind.	Zanov Sv. Zavana, zm.
	1	1	

-						-
	WTNJ 1280 500 Trenton, N. J.		XEBK 1000 60 Neuvo Laredo, Tams.		XELA 1240	50
	WTOC 1260 1000		XEBL 1220 50	-	Saltillo, Coah.	50000
-	Savannah, Ga.		Mazatlan, Sin.		Tijuana, B. Cfa.	30000
	WTOL 1200 100 Toledo, Ohio	1	XEBO 1310 25 Irapuato, Guan.	1	XELZ 1370	100
	WTRC 1310 100		XEBS 1240 200		Mexico City, D.F XEMG 1060	100
	Elkhart, Ind. WVFW 1400 500		Mexico City, D. F.		Atzcapotzalco, D	
	Brooklyn, N. Y.		XEBX 640 250 Sabinas, Coah.		XEMO 860 Tiluana, L. C.	5000
	WWAE 1200 100		XEBZ 1160 100		XEMU 580	
	Hammond, Ind. WWJ 920 5000	-	Mexico City, D. F. XEC 1150 100		Piedras Negras, C	
	Detroit, Mich.		Tijuana, L. C.		Mexico City, D. F	100
	New Orleans, La.		Mexicali, B. Cfa.		XEN 780	1000
	WWNC 570 1000		XECW 1310 10		Mexico City, D. F XENC 860	50
	Asheville, N. C.		Mexico City, D. F.		Mexico City, D. F	
	WWRL 1500 100 Woodside, N. Y.		San Luis Potosi, S.L.P.			150000
	WWSW 1500 100		XED 1160 2500		Nuevo Laredo, Ta XEOK 760	2500
	Pittsburgh, Pa. WWVA 1160 5000		Guadalajara, Jal.		Tijuana, L. C.	
	Wheeling, W. Va.	1	XEDA 1220 200 Gra. Anaya, D. F.		Juarez, Chih.	500
	WXYZ 1240 1000		XEDF 810 100			100000
	Detroit, Mich.	-	Nuevo Laredo, Tams. XEDP 1080 500		Pledras Negras, C	oah.
	Whippany, N. J.		Mexico City, D. F.		XERA 840 Villa Acuna, Coah	350000
	W3XJ 1060 100		XEDW 1150 20		XERB 730	100000
	College Park, Md. W8XO 700 500000		Minatitlan, Ver.		Rosarito Beach, B. XERO 670	. Cfa.
	Cincinnati, Ohio		Durango, Dgo.		Chapultepec, D. F.	
	XEAA 750 200 Mexicali, B. C.		XEF 1450 100		XES 990	250
	XEAC 980 5000		Juarez, Chih. XEFA 1180 500		Tampico, Tams.	5000
	Tijuana, L. C.		Tacuba, D. F.		Monterrey, N. L.	5000
	XEAD 1060 125 Guadalajara, Jal.		XEFB 870 200		XETB 1310	125
	XEAF 990 750		Monterrey, N. L. XEFC 550 100		Torreon, Coah.	30
	Nogales, Son. XEAG 1310 10		Merida, Yuc.		Veracruz, Ver.	30
	Cordoba, Ver.		XEFE 980 150 Laredo, Tams.		XETH 1210	100
	XEAL 660 1000		XEFI 1440 250		Puebla, Pue. XEU 1010	250
	Mexico City, D. F. XEAM 750 25		Chihuahua, Chih.		Veracruz, Ver.	
	Matamoros, Tams.		Monterrey, N. L.		Mexico City, D. F	50000
	XEAO 660 250		XEFO 930 5000		XEX 1310	125
	Mexicall, B. C. XEAP 1240 50		Mexico City, D. F. XEFV 1210 100	-	Monterrey, N. L.	
	Obregon, Son.		Juarez, Chih.		Jalapa, Ver.	50
	XEAS 1160 50 Saltillo, Coah.		XEFW 1310 250 Tampico, Tams.		XEXC 810	350
	XEAT 1210 250	_	XEG 1220 250		Aguascalientes, Ag: XEXD 1340	s. 350
	Parral, Chih.		Monterrey, N. L.		Jalapa, Ver.	330
	XEAW 960 50000 Reynosa, Tams.		XEH 720 250 Monterrey, N. L.		XEXE 1270	17
	XEAY 1240 100		XEI 1370 125	1	Mexico City, D. F. XEXH 1250	250
	Mexico City, D. F. XEB 1030 10000		Morelia, Mich.		San Luis Potosi, S.	
	XEB 1030 10000 Mexico City, D. F.		Juarez, Chih.		XEXM 1280 Mexico City, D. F.	****
	XEBA 1080 20		XEJP 1120 100		XEXS 1000	100
	Guzman, Jal. XEBG 820 1000		Mexico City, D. F.		Portable in Mexico	
	T'juana, B. Cfa.	1	Mexico City, D. F.		XEYO 940 Mexico City, D. F.	500
	XEBH 930 500		XEK 990 100		XEZ 630	500
	Hermosillo, Sonora XEBI 1000 25		Mexico City, D. F. XEKL 1240 500	-	Merida, Yuc.	
	Aguascalientes, Ags.		Leon, Guan.		ZNS 540 Nassau, Bahamas	400
	XEBJ 1160 20		XEL 1100 1000		YSS 640	+ (4) + (4)
	Merida, Yuc.		Mexico City, D. F.		San Salvador, E. S.	

Special DX Calendar

THE time given in the DX Calendar following is in EST by the twenty-four hour clock.

DX Tips Periods

Mon., 0300-0315, KMTR, 570 kcs. 1100-1115, WEEU, 830 kcs. 2115-2130, CJCJ, 690 kcs.

Mon., 2115-2130, CJCJ, 690 kcs. Tues., 1835-1900, W2XAF, 9530 kcs., and W2XAD, 15330 kcs.

Wed., 0035-0045, KOY, 1390 kcs. 1345-1400, WTAR, 780 kcs.

Thurs., 0230-0245, KGMB, 1320 kcs. Fri., 2330-2345, W8XK, 6140, and KDKA, 980 kcs.

Sat., 0230-0245, KLS, 1280 kcs. 0300-0345, KDB, 1500 kcs. 1030-1045, WEEU, 830 kcs.

"Programs of the Week"

The IDA "Programs of the Week", broadcast each Sunday morning, are full-hour programs, full of surprises, thrills, and laughs. Don't miss any of them. (CHWK requires ten cents for a verification.)

Feb. 20, 0300-0400, KECA, Los An-

geles, Calif., 1430 kcs.

Feb. 27, 0330-0400, KGU, 750 kcs. Mar. 6, 0300-0400, CHLN, 1420 kcs.

Mar. 13, 0300-0400, WCKY, 1490 kcs. Mar. 27, 0300-0400, KFOR, 1210 kcs.

Special Broadcasts

Feb. 25, 0530-0600, WEAU, Eau Claire, Wis., 1050 kcs. (URDXC). Feb. 27, 0300-0500, KWSC, Pullman, Wash., 1220 kcs. (URDXC).

Mar. 5, 0245-0400, CHWK, Chilliwack, B. C., 780 kcs. (UDXC).

Mar. 10, 0200-0600, CMHJ, Cienfuegos, Cuba, 1160 kcs. (E. Hidalgo).

Mar. 13, 0100-0300, XEDF, Nuevo Laredo, Tams., 810 kcs. (Arranged by A. J. Parfitt for RADEX, NRC, RN and UDXC).

Apr. 2, 0245-0400, CHWK, Chillawack, B. C., 780 kcs. (UDXC).

May 7, 0245-0400, CHWK, Chilliwack, B. C., 780 kcs. (UDXC).

June 4, 0245-0400, CHWK, Chilliwack, B. C., 780 kcs. (UDXC).

Zenith Tour

(Continued from page 11)

ly morning hours no longer appeal to this writer. But it is easy to believe that, with weather and the intervening period of darkness just right, the "VKs" can be heard as well as Europeans. As for Asia, it is believed, also, that the 50 kilowatts "JZ" of Japan, can be picked up at the right time with some patient tun-However, to date, the best catch on this set was from a tiny portable transmitter set up by an explorer in the jungles of Guiana, in South America, in conversation with his base camp. The power of the set is unknown, but the writer believes that its clear reception on 31 meters by a commercial all-wave set, is remarkable.

On the 20-meter amateur band, stations some distance away, such as on the Pacific coast and in South America, came in much better than nearby stations. This was to be expected, due to the skip effect. The 20-meter band is fairly alive when conditions are right, but the set is selective and much interference can be tuned out. Amateurs on the longer bands, 160, 80 and 40 meters, are heard without difficulty. meter Foreign band works quite well considering its poor reputation. On the police and aviation bands there is much to be heard all over the country. This receiver proved very satisfactory, and what few things there are to make the critical radio engineer unhappy are offset by its good behavior and excellent tone.

At DEADLINE ...

Construction Permits for two new stations have been granted by the FCC. KYSM, 1500 kcs, for Mankato, Minn., will transmit on 1500 kcs, with 100 watts nights and 250 watts days.

Galesburg, Ill. will have a station on 1500 kcs., employing 250 watts daytimes.

TGW Guatemala City is reported now on 1520 kcs. by George Nahas and Norman Glover.

QUICK INDEX TO STATION DATA

North American Broadcast

By	Frequencies	'38,	p.	62
Ву	Locations	'38,	p.	79
By	Calls	'38,	p.	85
Fre	quency ChecksJan	138.	n.	41

Names of Owners Oct. Owners' Addresses Dec. Time on the Air Mar.	'37,	p. 63
Shortwaves		

Broadcasters, with Time on Air Mar.	'38,	p.	57
North American PoliceSept.	'37,	p.	59
1.6 megs. to 6 megs Feb.	'37,	p.	53
6 megs. to 400 megs June	'37,	p.	50
Owners and AddressesJune	'37,	p.	50
By Locations	'37,	p.	61
By Calls Apr.	'37.	D.	65

Foreign Broadcast

By FrequenciesDec.			
By Locations Dec.	'36,	p.	52
By Calls Dec.			
AsiaFeb.	138,	p.	46
OceaniaJan.	'38,	p.	47
South America Max	'37,	p.	50
EuropeJune	'37,	p.	49

Long Waves

By	Frequencies								. Apr.	136,	p.	49
By	Locations	v			·				Apr.	'36,	p.	51
Bv	Calls					١.			Apr.	'36.	D.	52

Miscellaneous

Choosing a Radio				
Roster of DX Clubs	Nov.	'37,	p.	58
NBC Network Stations	. Feb.	'38,	p.	49
Columbia Network Stations	Mar.	'38,	p.	47
Mutual Network Stations				
Canadian Network Stations	Mar.	'37,	p.	49

INSURE YOUR RADIO ENJOYMENT

SEND THIS BLANK TODAY

The Radex Press 14717 Detroit Ave., Cleveland, Ohio:

Enclosed find \$..... for which send me postpaid my choice of your offers as checked below:

- ☐ Two years\$3.25 ☐ Three years\$4.75 (If you live in Ohio, add 3% for State Sales Tax. No tax on subscriptions.)

Print Name Plainly.....

Street and Number.....

City and State.....

117

FOR BETTER RECEPTION



The Perfect Phone Adapter makes it easy to attach headphones to any radio set. Anyone can install it, without tools, in no time at all.

IDEAL FOR THE HARD-OF-HEARING

Those who are very hard of hearing can enjoy radio reception by using our new HOH Model Adapter. The speaker can be silenced if desired.

In ordering be sure to give make and model of receiver and a list of the tubes used.

The HOH Model Phone Adapter \$3.95

We pay the postage on all orders

If you live in Ohio add 3% for Sales Tax

THE RADEX PRESS
14717 Detroit Ave., Cleveland, Ohio

ACCESSORIES FOR USE WITH THE PERFECT PHONE ADAPTER 6. Foot extension cord with connector 500

6-Foot extension cord with connector	50e
Distant Volume Control, for regulation of volume of set from a distance	\$2.00
Trimm Featherweight Headphones. Precision built,	
combining ultra-sensitivity with rugged construction. Weigh 4¼ ounces complete. 24,000 ohms	\$8.50
Trimm Professional Headphones, the choice of countless	
users. Professional type. 4000 ohms	\$4.00
Trimm Dependable Headphones, long a favorite with amateur operators. The best in the world for the money. 2000 ohms	\$3.25
Prices on single-unit or special 'phones on reques	t.
We pay the postage on all orders	

We pay the postage on all orders If you live in Ohio add 3% for Sales Tax

THE RADEX PRESS
14717 Detroit Ave., Cleveland, Ohio

J. E. SMITH, President National Radio Institute Established 1914

Here's Proof



Earned 550 First Month In Spare Time

"I knew nothing about Radio. After four lessons I began

servicing Radios, earning \$50 the first month. Last winter I made as high as \$100 a month in spare time. G. F. WALTON, 808 West Olney Road, Norfolk, Va.

Own Business Pays \$300 a

"I now have my own Radio business which shows three hundred doliars a month profit—thanks

profit—thanks again to National Radio."— FRANK T. REESE, 39 N. Felton St., Philadelphia, Penna.



Set My LESSON on Radio Servicing Tips FREE

Serving up reserving the reserving state what you need to master Radio. My sample sesson text the reserving the result of the reserving the re

I WILL TRAIN YOU

TO START A SPARE TIME OR FULL TIME RADIO SERVICE BUSINESS

WITHOUT CAPITAL

Do you want to make more money? The world wide use of Radlo has made many opportunities for you to have a spare time or full time Radio service business of your own. Three out of every four nomes in the United States have Radio sets which regularly require repairs, servicing, new tubes, etc. I will train you at home in your spare time to sell, install, service, all types of Radio sets—to start your own Radio business and build it up on money you make in your spare time while learning. Mail coupon for my 64-page book. It's Free—it shows what I have done for others—what I am ready to do for you.

Many Make \$5, \$10, \$15 a Week Extra In Spare Time While Learning

Almost every neighborhood needs a good spare time serviceman. The day you enroll I start sending you Extra Money Job Sheets. They show you how to do Radio repair jobs that you can cash in on quickly. Throughout your training I send you plans and ideas that have made good spare time money—from \$200 to \$500 a year—for hundreds of fellows. I send you special equipment which gives you practical Radio experience—shows you how to conduct experiments and build circuits which fillustrate important Radio principles.

Get Ready Now for Your Own Radio Business and for Jobs Like These

Radio broadcasting stations employ engineers, operators, station managers and pay up to \$5,000 a year. Spare time

J. E. SMITH, President, Dept. 8CO

Radio set servicing pays as much as \$200 to \$500 a year—full time servicing jobs pay as much as \$30, \$50, \$75 a week. Many Radio Experts own their own full time or part time Radio businesses. Radio manufacturers and jobbers employ testers, inspectors, foremen, engineers, service men, paying up to \$6,000 a year. Radio operators on ships get good pay, see the world besides. Automobile, police, aviation, commercial Radio, loud speaker systems offer good opportunities. Television promises many good jobs soon. Men I have trained at home hold good jobs in these branches of Radio.

Find Out What Radio Offers You

Mail the coupon now for my Free Lesson and my book, "Rich Rewards in Radio." By Dook, "Rich Rewards in Radio." By Dook there free to snyone of the state of the s

J. E. SMITH, President National Radio Institute, Dest. 800

Washington,

D.C.

RICH REWARDS IN RADIO

GOOD FOR BOTH 64 PAGE BOOK FREE

National Radio Institute, Washington, D. C. Dear Mr. Smith: Without obligating me, send your sample lesson and the book which tells about spare time and full time Radio opportunities, and how I can train for them at home in spare time. (Please write plainly.)
Name
Address
City State