Radio Foto Log

PUBLISHED BY NATIONAL UNION RADIO CORPORATION
57 STATE STREET NEWARK, NEW JERSEY

LLEN RO

COMPLETE REPAIR SERVICE ON A ... SATISFA

SILVERTON SYcamore 75



TELEVISION IN THE HOME



PROFESSOR QUIZ



CHARLIE McCARTHY
AND ANDREA LEEDS



MARTHA TILTON

Vocal Star of Benny Goodman's Swing Band

You can
your can
play any night
play if your
RADIO'S
RIGHT! NEWS DRAMA DANCE BANDS OPERA TIONAL ASR US OBDIN NEW SETS . EXPERT RADIO SERVICE

Radio Foto Log PUBLISHED BY NATIONAL UNION RADIO CORPORATION 57 STATE STREET NEWARK, NEW JERSEY

Manufacturers of National Union Radio Tubes and Parts

EDITED BY SAMUEL KAUFMAN

The Listener Always Wins

PROGRAM executives of leading radio stations and advertising agencies are ever on the alert for new ideas that will win mass audiences. The competition to win and hold listeners to air features is always keen. Keen rivalry is demonstrated between sponsors of similar wares as well as between advertisers who maintain simultaneous broadcasting schedules.

Radio editors of newspapers and magazines have often indicated that their readers disliked two stellar hours on the air at the same time inasmuch as they were forced to forego one in favor of the other and it was difficult to make a choice.

However, sponsors haven't got much choice in the matter of time. True, there are twenty-four hours to the day but most big advertisers desire the evening hours between 7 and 10 o'clock when they believe they can reach the biggest possible audiences.

Rather than the listener losing one good program by listening to another excellent feature on the air at the same time, he should remember that the high standard of the broadcast to which he's listening is main-

tained by the scheduling of a high calibre hour on the other station or He's network. not losing anything. Rather, he's given a wider choice of program fare and the odds of giving him a program he'll enjoy are considerably in his favor.

From season to season, the main classifications of radio programs retain large followings they have earned through the years. Dance bands, comedy, drama, news, variety, classical music and other headings are never replaced. But new ideas as well as new stars do constantly pop into the radio schedules and some of them reach the high-salary and high-popularity brackets in very short time.

Audience-participation shows have been gaining larger and larger followings since they came into being on a big scale a couple of seasons back. Amateur hours, under this heading, were the opening guns in the campaign to recruit Mr. Next Door Neighbor for microphone appearances. Now the lead in audience participation has been taken by the many quiz, spelling bee and "what do you know?" features that stud program scneJules.

But the heavy draw of new ideas—even the smash hits—doesn't dig into the popularity of such perennial headliners as Jack Benny, Rudy Vallee, Bing Crosby and the many other topnotch stars who helped make broadcasting the leading entertainment medium it now is.

The intriguing thing about radio listening

is that it always brings surprises and thrills in new offerings as well as reliably presenting the best of the old-established stars. And listeners, through experience, know that forthcoming features are "sure things" in the way of good, wholesome en. tertainment.



Jack Benny Comes to Town

KNOWLEDGE IS FUN

YOU may never have thought so when you went to school. But since radio quizz programs came into popularity, it's been fun indeed to participate in the "what do you know?" games. Sidewalk interviews, studio spelling and question bees, word games and even musical-guessing programs have soared the heights of radio fame, many of these features ranking among the most popular (according to surveys) on the air. One reason why the listener gets an added kick out of the quizz features is that he has the chance of participating in the mike game himself. He can test his own wits against the microphone contestants. But he must remember that he has two advantages. He can look the answer up in dictionaries, atlases and other reference books, and there is no chance of mike-fright.



"True or False?" asks Dr. Harry Hagen after he reads a statement. No, the placard-toting men are not pickets. It's customary on quiz programs to have the contestants wear their names on cards over their chests so that the master-of-ceremonies can address them.







Left to right: Max Eastman, author, humorist and raconteur, who heads the CBS Word Game; Professor Quiz (Craig Earl) paying off a winner with silver dollars, and Paul Wing, master of the NBC Spelling Bee.







Three topnotch cross-examiners: (left to right): "Uncle Jim" McWilliams of Question Bee fame; Kay Kyser, the orchestra leader who directs the musical quizz show known as the Kollege of Musical Knowledge, and Franklin P. Adams ("F. P. A.") of NBC's "Information Please."

[2]



VOX POP

THIS program, conducted by Parks Johnson and Wallace Butterworth, was one of the first of the quiz programs and claims to be the first network show of its type. The show differs from the other question-and-answer periods in that it is broadcast from public and semi-public spots and never from a studio. It used to go on the air from street corners until traffic congestion caused it to be moved into hotel lobbies, railroad terminals and the like. Passers-by, unrehearsed, are recruited from the crowd that gathers around the mike and the result is an amusing, informative quiz program which is greatly enhanced by the spontaneous humor arising from Johnson's and Butterworth's banter with their guests. Turn over to the next page and see how you would score if you happened to be selected for the Vox Pop broadcast. Parks Johnson selected the questions (and parenthetical answers) especially for readers of Radio Foto Log.

Here they are: Vox Poppers Parks Johnson and Wallace Butterworth.





Left: They're never too young to know the answer! Here's a five-year-old doing his stuff! Right: The English vicar who married the Duke and Duchess of Windsor—Rev. Robert Anderson Jardine—and a Chinese nurse meet for a session of Q's and A's wit!: Johnson.





Even a cigar store Indian pops up at the Vox Pop mike, but we doubt whether he was interviewed. Right: Harry M. Nanos—noted for his likeness to the late Will Rogers—takes to the air with Parks and Wally.

WHAT DO YOU KNOW?

You've often had the answer while listening at home much quicker than the fellow at the mike. Here's a specimen mike quiz prepared by Parks Johnson. Try it with your family and friends and figure how you would have fared if you faced the Vox Pop mike.

OUESTIONS

A monkey clumbing a greased pole 30 feet high goes up 3 feet in 10 seconds. He slips back 2 feet in 5 seconds. How long will it take him

to reach the top? Quickly: 11 is 1/6th of 3 times what number? Is the half of a hundred the same as 100

divided by 1/2?

divided by ½2?

If you stand on your head, face to the East, in which direction is your right shoulder pointed? Would it be the same if you were standing on your fect, facing East?

If you drive 60 miles at 20 m.p.h. going, and return at 30 m.p.h., what is your "AVERAGE" speed for the 120 miles?

Two candles, one will burn 4 hours and the other will burn five hours. Both are lighted simultaneously. Both are extinguished when what remains of one is exactly four times as long as what remains of the other. How long had the candles been burning?

If I work the first day for \$100, the second day for \$50, the third day for \$25, and so on . . how many days will I work before I have earned \$200?

have earned \$200?

You have an engagement for 12 noon. Your friend phones that he must "Advance" the engagement a half hour. At what time will you

meet him?

10. In 15 seconds tell me how to change a twenty-dollar bill into dollars and half-dollars so that I will have ONE MORE half-dollar than I will

11. If "This and That" plus one-half of "This and That" equals 11, how much is "This and That"?

If a person is consistently inconsistent, would you say that person is consistent or incon-

If a coat is turned inside out, would the right arm still go into what was the right sleeve? Would you think a "Hugger-mugger" is a lovsistent?

which is farthest West: Detroit, Michigan-Pensacola, Florida, or Indianapolis, Indiana?

Honestly, DO you know how many of your own teeth you now have in your mouth?

A bicycle rider travels a mile in three minutes WITH the wind; he returns over the same course in four minutes AGAINST the wind. How fast could he make the mile if there were NO wind?

Which is the longer, a cigarette or a stick of

chewing gum?

19. Is the Sahara desert flat, rolling or mountain-

What abbreviations for State names make com-

plete words? start work Monday morning at \$1 per day. You start work Thomas morning at \$1 per day. You start work Tuesday morning at \$2 per day. How many days will you work before you will have earned TWICE as much as 1? How many times per day does the ordinary watch tick?

watch tick?

23. In the line: "Little Miss Muffet sat on a TUFFETT"... what is a "tuffet"?

24. Quickly ... count from 10 to 1, backwards.

25. How many STATES in the United States?

26. Do the words "In God we Trust" appear on all current U. S. Coins?

On every package of ordinary pins there appears the initials: "S. C.", "M. C." or "B. C.". What do these mean?

If a chicken has a gizzard what has an "Izzard"?

29. If the laundry goes out Monday morning and is returned Thursday noon, what is the minimum number of shirts a man must have in order to wear a clean shirt each morning?

30. Assume it takes 30 seconds to toast one side of a slice of bread. Now, in an old-style two-slice toaster, what's the shortest time it will take to toast THREE slices of bread on BOTH sides?

31. If Tom, Dick and Tarry agree to lunch together, each bearing is own share of the cost,
what about this sit on. Tom brings 6 eggs;
Dick brings 3 eggs tarry brought NO eggs,
but tossed 15c on the table. HOW should the 15c be divided?

Take an ordinary sheet of letter paper, business size. Tear it in two, and stack the halves on top of each other. Do this fifty times. How high will the stack be after the fiftieh tear and stacking?

A barrel has three spigots. They empty the barrel in 15, 30 and 45 minutes, respectively. If ALL are opened at the same time, how long will it take to empty the barrel?

TRICKS TRIED AGAINST DESIGNATED TIME LIMITS:

Say Alphabet backward in 30 seconds. Spell one's full name backward in 15 seconds. Say months of year backward in 10 seconds.

ing will answer from 15 to 30 minutes! 6 eggs! OVER 22 million miles high! 8.2/11ths minutes, though many without think-33. 35

TOM gets the 15c, as Harry ate 3 of Tom's 114 minutes, not 2 minutes. Toast one side of No. 1 and No. 2. Then toast final side of No. 1, and once side of No. 3; finally toast remain-ing sides of Nos. 2 and 3.

Our alphabet . . . the letter "z". Minimum of eleven shirts.

M), they do not appear on either five-cent piece, or the Indian Head one-cent coin. Small, medium or Big CORKIN, Corkin being an old Scotch-English term meaning "Pin". Our alphabet . , the letter "z". .72 .02

Ah, ah . . . it should be 1, 2, 3, etc.! "Com-Technically, forty-four States and four "Com-monwealths", viz: Kentucky, Massachusetts, Pennsylvania and Virginia. eceptable.

432,000 times per 24-hour day. An old English measure, the equivalent of half-bushel. She probably sat on the inverted 22

Unabridged. Ark; Ill; Ida; La; Me; Mass; Miss; Neb; Ore; O; Ken; Wash. .02

The stick of chewing gum.

The Saliara desert contains mountains up to 10,000 feet above sea level—see Webster's I the seven!

Penacola, Florida, farthest West. Bennacola, Florida, farthest West. Estimated not one in a rhousend knows. You forgot the wind HELPED him only 3 of The 7 minutes, while it HINDERED him four of the seven!

Hugger-Mugger, according to Webster is: "privacy, secrecy, or in privacy, secrecy, Or, also, Priventusion, a muddle", At any reace, NO privacy or secrecy about hugging or mugging these days!

Fourteen halves, and 13 dollars.
7-1/3, 3/2 equals 11; ½ equals 1/3 of 11, or 3-2/3; 2/2, or "This and That" then equals (2).

Webster says "Advance; to make earlier, os an event or date", so you would meet at 11:30—though personally, I would not show up until

NOT 25, but 24 miles per hour. 3 hours and 45 min.

Asreh. .6 ·OV ·(ZZ)

seconds, total 415 seconds, or 6:15. of mirutes and 55 seconds. He uses 82 upward 55 to squis Josed 72; sbno seconds of 155

VNZMEKS (No lair peckin)

Mr. Next Door Neighbor Takes the Air

THE quiz programs mentioned on the preceding pages are but one of several popular forms of audience-participation shows. There are amateur hours, public forums and comedy and variety hours in which the listener is heard from by voice, applause and laughter. Audience-participation shows have gained tremendous popularity probably because listeners like to hear from Mr. Next Door Neighbor as well as from professional broadcasters.



Tickets to broadcasts are in great demand





"America's Town Meeting of the Air" has been cited as the best example of freedom of the air. Here, the listener can debate with the celebrities on the platform on topics of the day. George V. Denny, Jr., is shown at the left giving the floor to a questioner who (above) is seen taking it.







Jerry Belcher (left) takes his mike right into homes of listeners. Center: Lyman Bryson (at head of table) invites "typical citizens" to dinner for the extemporaneous "People's Platform" feature of CBS. The mikes are hidden under napkins to keep the guests immune of mikefright. Right: Major Bowes and his amateurs hold their grip on popularity. Here he is with a fellow playing two musical saws.



The applause and laughter of a typical studio audience such as the one portrayed on the right are measured by the "applause meter" shown above.





George Burns and Gracie Allen, one of the highest-paid comedy teams in the land.

KING COMEDY STILL REIGNS

FROM the very beginning of radio context and the comedy has never been displaced as a smash hit classification on stations' schedules. Listeners like to laugh and the broadcasters and sponsors spare no expense in obtaining the world's best funsters. Many of the comedy stars have held their popularity through the years but declare it's a tough assignment to get new material for every broadcast.





"Feud for Thought" might be the caption of the photo at the left showing Jack Benny and Fred Allen meeting. Above: "The Bee or not The Bee—that is the question" Jack seems to wonder as he raises his bow.









Left: Bob Burns, who skyrocketed to comedy stardom and who many believe comes closest to filling the philosopher-comedy role of the late Will Rogers. Above: Two of the old reliables. Al Jolson and Joe Penner. In center oval: Oliver Wakefield, the English comedian who scored favorably in his American broadcasts.





Top: Two popular comedy pairs—Marion and Jim Jordan (Fibber McGee and Molly) and (right) Stoopnagle and Budd. The latter pair, whose real names are F. Chase Taylor and Wilbur Budd Hulick, have popped up solo in recent seasons but singly or doubly, they're great fun!







Parkyakarkas (Harry Einstein), The Mad Russian (Bert Gordon) and the man who introduced both to big-time broadcasts—Eddie Cantor.



Left: Pick and Pat (Pick Malone and Pat Padgett) talk things over with their production man—Frank MacMahon.





Above: Teddy Bergman and Jack Haley who add merriment to the airwaves. Right: The Stroud Twins. Clarence brings the mike to brother Claude. The twins have scored sensationally with Charlie McCarthy.



[7]





Left: Kaltenmeyer's Kindergarten has a recess. Left to right, Professor August Kaltenmeyer (Bruce Kamman), Izzy Finkelstein (Johnny Wolf), Percy Van Schuyler (Merrill Fugit), Cornelius Callahan (Billy White) and Yohnny Yohnson (Thor Ericson). Above: Sam Hearn, better known as Schlepperman whose "Hullo. Stranzer" remark is a famous tag-line.







The movies are the source of considerable comedy material. Andy Devine and Charles Butterworth (above) are popular mike performers. Left: "Tim and Irene"—Tim Ryan and Irene Noblette, do a comedy-ventriloquist routine for the camera.







Bob Hope used the air as a short cut to screen stardom after many years on the stage. He's shown at the left with his comely nemesis, Honeychile. He's known to change his mike partners from season to season, so it's not always the same Honeychile you hear. Above: Billy House, star of "The Laugh Liner" and Cal Tinney, a youngster who, like Bob Burns, has been nominated as a successor to the late Will Rogers.

mary ...

Young Deanna Durbin who followed her radio success with film triumphs has earned a grown-up as well as juvenile following.



Walter Tetley, veteran child dramatic performer, who now shares time between radio and talkie mikes. Hollywood scouts signed him after his spectacular supporting roles with leading air stars. Right: Madge Tucker, director of NBC's children's features and discoverer of many talented youngsters.





"Jolly Bill" Steinke, conductor of a novel junior news program, and Hendrick Willem Van Loon, author and artist, who is as popular with child listeners as with grown-ups, a knack few writers or broadcasters can achieve.

KID STARS AND KID PROGRAMS

A LARGE share of each day's program schedule is devoted to features of especial appeal to youngsters. Sponsors feel that if they reach the children with good programs they are building sales for the future. Network standards for children's programs are very high and each new feature must pass a board of experts on child welfare and psychology.



Ireene Wicker, radio's famous "Singing Lady".
Below: Uncle Don (Donald Carney), popular children's program story-teller, singer, pianist and master-of-ceremonies.



A LITTLE BIT OF EVERYTHING

T'S a standard gag around the studios that whenever a sponsor has a lot of money to spend on an airshow, he auditions all types of programs and finally winds up with a band, a comedian, a vocal star, a dramatic sketch and a master-of-ceremonies, or, in other words, a variety show. It's not always a sure-fire formula but there are many exceptional hit combinations under the heading of "Variety."







Don Ameche, popular singer, actor and master-of-ceremonies of the Chase & Sanborn Hour.



Leaders of three top-notch variety shows. Left to right: Rudy Vallee, Kate Smith and Bing Crosby, all of whom are versatile entertainers as well as program directors.





It's "Good News" to many when the program of that name hits the air. Four of its headliners are shown above: Left to right: Frank Morgan, the hesitant conversationalist of the films; Hanley Stafford, the exasperated daddy of Baby Snooks; Meredith Willson, musical director, and Robert Taylor, the movie star serving as master-of-ceremonies. Right: Ben Bernie, graduated from bandsman to program "m.c." is shown with Sophie Tucker.

Fanny Brice, veteran of the musical comedy and vaudeville stages, in her Baby Snooks characterization—a radio sensation.

DON'T BE YOURSELF!

A FEW radio entertainers have proved that it pays to follow that slogan. In recent seasons, persons who could do exceptional stunts with their voices won lucrative long-time contracts. Ventriloquism, mimicry and other vocal oddities, all of which were once thought unsuitable for the air, are now acknowledged smash-hit formulas.



That impish but lovable Charlie McCarthy and his master (?), Edgar Bergen, try out a script. Below: Bergen shows that even a ventriloquist's dummy demands a wardrobe suited to his status.









Left: Walt Disney, creator of Mickey Mouse, Donald Duck and numerous other imaginary cartoon characters who magically come to life on air programs. Center: Arthur Boran, a first-rate radio mimic who can impersonate the air's "great." Right: Tommy Riggs whose vocal creation of Betty Lou brought him nation-wide fame.

BROADCASTING STATIONS of THE UNITED STATES

| | BROADCAST | | IONS | | F AMILED 21 | WIE2 |
|--|--|---|--|---|---|--|
| Call | | Frequency Power (K.C.) (Watta) | | Call Letters | Location | Frequency Power (K C.) (Watts) |
| ∠etters KABC | Location San Antonio, Tex. Aberdeen, S. Dak. | 1420 100-250 1420 100 | | KGEK | I.ocation Sterling, Colo. Long Beach, Calif Kalispell. Mont. Shawnee Okla. Brownsville, Tex. Los Angeles, Calif. Roswell, N. Mex. Kearney, Nebr. Pierre, S. Dak. San Francisco, Calif. Coffeyville, Kans. Albuquerque, N. Mex. Pueblo, Colo. Little Rock, Ark. Billings, Mont. Butte, Mont. Alamosa, Colo. Tyler, Tex. San Angelo. Tex. Wichita Falis, Tex. Scottsbluff, Nebr. Mason City, lowa Safford, Arlz. (C.P. Honolulu, Hawail Amartlio, Tex. | 1200 100 |
| KABR KADA | Aberdeen, S. Dak. Ada, Okla. | 1420 100 1200 100 | | KGEK KGER KGEZ KGFF KGFJ | Kalispell. Mont. | 1310 100 |
| KALB | Alexandria, La. Portland, Ore. | 1210 100 | | KGFF | Shawnee Okla. | 1420 100 - 250 1500 100 - 250 |
| KALE | Corsicana, Tex. | 1310 100 | | KGFJ | Los Angeles, Calif. | 1200 100 |
| KANS | Wichita, Kans. | 1210 100 890 500-1000 | | KGFL | Kearney, Nebr. | 1310 100 |
| KARK KARM | Fresno, Calif. | 1310 100 | | KGFX | Pierre, S. Dak. | 630 200 |
| KASA KAST | Astoria, Ore. | 1370 100 | | KGGF | Coffeyville, Kans. | 1010 1000 |
| KATE | Albert Lea, Minn. | 14:20 250 1500 100 | | KGFL KGFW KGFX KGGC KGGF KGGM KGHF KGH I | Albuquerque, N. Mex. | 1320 500 |
| KAWM KBIX | Muskogee, Okla. | 1300 1000 1210 100 1210 100 890 500-1000 1210 100 1210 100 1210 100 1420 250 1500 100 1500 100 1500 100 | | KGHI | Little Rock, Ark. | 1200 100-250 780 1000-5000 |
| KBKR KBND | Baker, Ore. (C.P.) Bend, Ore. (C.P.) | 1310 100-250 1420 100 | | KGHL | Butte, Mont. | 1340 1000-2500 |
| KBND KBPS KBST | Oin Coning Toy | 1500 100 | | KG I W KGKB | Alamosa, Colo. Tyler, Tex. | 1320 500 1200 100-2500 780 1000-2500 1340 1000-2500 1420 100 1500 100-250 570 250-1000 1500 100-250 1500 100-250 1500 100-250 1210 100-250 |
| KRIM | Portland, Ure. Big Spring, Tex. Jonesboro, Ark. Kansas City, Kans. Texarkana, Lex. Kansas City, Mo. Enid, Okla. | 1200 100 1310 100 1420 100-250 1370 100 1360 250 1310 100-250 | | KGKL | San Angelo. Tex. | 1370 100-250 570 250-1000 |
| KCKN KCMC | Texarkana, Lex. | 1420 100-250 1370 100 | ec | KGKO KGKY | Scottsbluff, Nebr. | 1500 100-250 |
| KCMO | Kansas City, Mo. | 1370 100 1360 250 | 188 | KGLO KGLU | Safford, Ariz. (C.P. | 1420 100-250 |
| KCRJ | Jerome, Ariz. | 1310 100-250 1500 100 | | KGMB | Honolulu, Hawaii | 1410 1000-2500 |
| KCMC KCMO KCRC KCRJ KDAL KDB | | | ē | KGMB KGNC KGNF KGNO | North Platte, Nebr. | 1430 1000 1340 250 |
| KDFN KDKA | Casper, Wyo. | 980 50000 | ٩ | KG0 | San Francisco, Calif. | 790 7500 750 2500) 1200 100 1260 1000 |
| KOLR | Devils Lake, N. Dak. | 1210 100 | as | KGO KGVL KGVD | Monolulu, Hawall Greenville, Tex. (C.P. | 750 2500) 1200 100 1260 1000 |
| KOLR KDNC KDNT KDON | Santa Barbara, Calif Casper, Wyo. Pittsburgh, Pa. Devils Lake, N. Dak. Lewistown, Mont.(C.P.) Denton, Tex. Monterey, Calif. | 1420 100 | 7 | KĞVÖ | Missoula, Mont. | 1260 1000 620 1000-5000 |
| KDON KDTH | Monterey, Calif. Dubuque, Iowa (C.P.) Salt Lake City, Utah Los Angeles, Calif | 1340 500 | <u>.</u> | KGW KGY KHBC KHBG | Honolulu, Hamail Amarilio, Tex. North Platte, Nebr. Dodge City, Kans. San Francisco, Calif. Honolulu. Hamail Greenville, Tex.(C.P. Missoula, Mont. Portland, Org. Olympia, Wash. Hilo. Hamail Okgulqee. Okla. Los Angeles, Calif. | 1210 100 |
| KDYL | Salt Lake City, Utah | 1290 1000 | er | KHBC | Okmulgee, Okla. | 1210 100 |
| KECA KEEN | Seattle, Wash. | 1370 100 | d t | KHJ | Los Angeles, Calif. | 900 1000-5000 590 1000-5000 |
| KEHE KELA KELD | Los Angeles, Calif. Centralia, Wash. | 1420 100 1210 100 1340 500 1290 1000 1430 1000-5000 1370 1000-5000 1440 500 1370 100 | 10 | KHST | Los Angeles, Calif. Spokane, Wash. Chico, Calif. Waternylle, Calif. | 1260 250 |
| KELO | N. of Eldorado, Ark Sloux Falls, S. Dak. Bakersfield, Calif. | 1370 100 1200 100 | ct. | KHUB KICA KID | Watsonville, Calif. Clovis, N. Mex. Idaho Falls, Idaho | 1370 100 |
| KELO KERN | Bakersfield, Calif. | 1200 100 1370 100 | 2 | KID | Idaho Falls, Idaho | 1320 500-1000 1350 1000-2500 |
| KEUB KEX KFAB KFAC | Price, Utah Portland, Ore. | 180 5000 | ast | KIDW | Bolse, Idaho Lamar, Colo. Eureka, Calif. | 1420 100 |
| KFAB | Lincoln, Nebr. | 1300 10000 | <u> </u> | KIEV | Glendale, Calif | 850 250 |
| KFAM | St. Cloud. Minn. | 610 1000 | 8 | KIDO KIDW KIEM KIEY KINY KIRO | Glendale, Calif Juneau, Alaska Seattle, Wash | 1250 1000 1000 1210 1000 1000 1000 1210 1000 1210 1000 1210 1000 1200 1200 1200 1250 1370 1000 1350 1000 1250 1320 500 1000 1350 1000 1250 1420 1000 1250 1320 500 1000 1350 1000 1250 1320 500 1000 1250 120 |
| KF AR KF88 | N. of Eldorado, Ark Sloux Falls, S. Dak. Bakersfield, Calif. Price, Utah Portland, Ore. Lincoln, Nebr. Los Angeles, Calif St. Cloud. Minn. Fairbank, Alaska (C.P.) Great Falls, Mont. Abilene, Kans. Sacramento, Calif Beaumont, ex. Brookings, S. Dak. Denver, Colo. St. Joseph, Mo. Boone, lowa | 1 280 1000-5000 | P. after station location, indicates construction permit has been issued | IKH | Seattle, Wash. Yakima, Wash. Kansas City, Mo. Garden City, Kans. Pecos, Tex. | 1250 250-500 |
| KFB1 KFBK | Abilene, Kans. Sacramento, Callf | 1490 5000 | lic | KITE | Garden City, Kans. | 1210 100 1420 100 1370 100 |
| KFDM | Beaumont, Tex. | 560 500-1000 780 1000 | Ĕ | KIUN | Pecos, Tex. Durango, Colo. | 1370 100 |
| KFDY KFE L | Denver, Colo. | 920 500 680 2500 1370 100 | | K IRS | Durango, Colo. San Francisco, Calif Seattle, Wash. Carlsbad, N. Mex. La Grande, Ore. (C.P. Blytheville, Ark. | . 1070 500 970 5000 |
| KFEQ KFGQ | St. Joseph, Mo. Boone, lowa | 1370 100 | .0 | KJR KLAH KLBM | Carlsbad, N. Mex. | 1210 100 1420 100-250 1290 100 |
| KFH KFI | Boone, lowa Wichita, Kans. Los Angeles, Calif. | 1300 1000-5000 640 50000 | at | KECN | Blytheville, Ark. | 1290 100 |
| KF10 | Spokane, Wash. Fond du Lac, Wisc. | 1300 1000-5000 640 50000 1120 100 1420 100 1200 100-250 1210 100 | 00 | KLO KLPM KLRA | Minot. N. Dak. | 1240 250 |
| KF1Z KFJB | Marshalltown, lowa | 1200 100-250 | - | KLRA | Little Rock, Ark. Oakland, Calif. | 1390 1000-5000 1280 250 1370 100 |
| KFJI KEJM | Klamath Falls, Ore. Grand Forks, N. Dak. | 1410 500-1000 | .6 | KLS KLUF | Galveston, Tex. | 1370 100 |
| KFJR KFJZ | Portland, Ore. Fort Worth, Tex. | 1410 500-1000 1300 500 1370 100-250 | ta | KLX KLZ KMA | Oakland, Callf. | 880 1000 560 1000-5000 |
| KFKA | Greeley, Colo. Lawrence, Kana. | 880 500-1000 | - H | KMĀ | Shenandoah, lowa | 930 1000-5000 1370 100-250 |
| KFKU KFNF | Lawrence, Kang. Shenandoah, lowa | 890 500-1000 | Ę | KMAC KMBC | Kansas City, Mo. | 950 1000-5000 |
| KFOR KFOX | Lincoln, Nebr. | A 10 500 - 1000 | a | KMED KMJ | Little Rock, Ark. Oakland, Calif. Galveston, Tex. Oakland, Calif. Denver, Colo. Shenandoah, Iowa San Antonio, Tex. Kansas City, Mo. Medford, Ore. Fresno, Calif. Monroe, La. | 560 1000-5000 930 1000-5000 1370 100-250 950 1000-5000 1410 250 580 1000 |
| KFPL | Dublin, Tex. | 1310 100-250 1210 100 | Ь | KMLB | Monroe, La. Clay Center, Nebr. | 1200 100-250 740 1000 |
| KFPW KFPY | Spokane, Wash. | 890 1000-2000 | ن | KMO | lacoma, Wash. | 1330 1000 |
| KFOD KFRC KFRO | Anchorage, Alaska San Francisco, Callf. | 780 250 610 1000-5000 | .: | KMOX KMPC KMTR | St. Louis, Mo. Beverly Hills, Calif Los Angeles, Calif. | 710 500 |
| KFRO | Longview, Tex. | 1370 250 630 500=1000 | NOTE | KMTR | Brady, Tex. | 1000 200 |
| KFRU KFSD KFSG KFUO | San Diego, Calif. | 600 1000 | Ó | KNE L KNE T KNOW | Brady, Tex. Palestine, Tex. Austin Tex | 1420 100 1500 100 |
| KFSG KFU0 | Clayton, Mo. | 550 500-1000 | Z | KNX | Austin, Tex. Los Angeles, Calif. | 1050 50000 |
| KEVS | Los Angeles, Callf. | 1000 1000 1210 100-25 0 | | KOAC | Corvallis, Ore. | 830 5 0000 550 1000 |
| KFWB | Hollywood, Calif. | 1210 100-250 950 1000-5000 1200 100-250 1200 100-250 | | KOAM KOB | Pittsburg, Kans. | 790 1000 1180 10000 |
| KFXJ | Grand Junction, Colo. | 1200 100-250 | | KOBH | Denver. Colo. Corvallis, Ore. Pittsburg, Kans. Albuquerque, N. Mex. Rapid City, S. Dak. Kilgore, Tex. Oklahoma City, Okla. | 1370 100-250 |
| KFXM KFUO | San Bernardino, Calli Clayton, Mo. | 550 500 | | KOCA | Oklahoma City, Okla. | 1310 100-250 |
| KFVD KFVS KFWB KFXD KFXJ KFXJ KFUO KFYO KFYR | Anchorage, Alaska San Francisco, Callf. Longview, Tex. Columbia, Mo. San Diego, Callf. Los Angeles, Callf. Clayton, Mo. Los Angeles, Callf. Cape Girardeau, Mo. Mollywood, Callf. Nampa, Idaho Grand Junction, Colo. San Bernardino, Callf Clayton, Mo. Lubbock, Tex. Bismarck, N. Dak. Spokane, Wash. Tucson, Ariz. | 1310 100-250 550 1000-5000 1470 5000 1370 100-250 | | KOH KOT L | Acid, Nev. | โวลัก เกกก-รถกก |
| | Spokane, Wash. | 1470 5000 | | KOKO | Omana, neur. Portland, Ore. La Junta, Colo. Seattle, Wash. Oklahoma City, Okla. Seattle, Wash. San Antonio, Tex. Marshfield, Ore. | 940 1000-5000 1370 100 |
| KGAR | Jan Diego, Carris | 13:30 1000 | | KOL | Seattle, Wash. | 1270 1000-5000 |
| KGBU | Ketchikan, Alaska | 900 500 1230 500 1270 100 | | KOMA KOMO | Seattle, Wash. | 920 1000-5000 1370 100 |
| KGCA | Decorah, lowa | 1270 100 B) 1200 100 | | KONO KOOS | San Antonio, Tex. Marshfield, Ore. | 920 1000-5000 1370 100 1200 100-250 1420 100 |
| KGBU KGBX KGCA KGCU KGCX | Mandan, N. Bak. | P)1200 100 1240 250 | | KORE | Eugene, Ore. Pipe Bluff, Ark. Valley City, N Dak. | 1600 100 |
| KGCX KGDE | Springrield, Mo. Decorah, lowa Coeur d'Alene, Idaho(C Mandan, N. Bak. Wolf Point, Mont. Fergus Falls, Minn. Stockton, Calif. Huron, S. Dak. | 1450 1000 1200 100-250 | | KOTN KOVC | Valley City, N Dak. | 1500 100-250 1390 1000 |
| KGDM KGDY | Stockton, Calif. | 1200 100-250 1100 1000 1340 250 | [12] | KOY KPAB | Phoenix, Ariz. Laredo, Tex. (C.P.) | 1500 100-250 |
| KGUY | nuron, 3. Dak. | 1340 250 | | | | |

| RPAC PORT ARTHUR, Tax. P. 1200 500 | Call Letters | Location | Frequency Power (K.C.) (Watts) | | Call Letters | Location | Frequency Power (K.C.) (Watts) |
|--|---|---|---|----|--|--|--------------------------------|
| KWOC Poplar Bluff. Mo. 1310 100 [13] WCNW Brooklyn, N. Y. 1500 100-250 | KYUGE KYUGB KYODE KYOOL KYOOL KYOOL KYOOR KYORS | an Luis Obispo, Calif- ireat Bend, Kans. Iacoma, Wash. Logan, Utah (C.P.) Iucson, Ariz. Logan, Utah (C.P.) Logan, Utah Logan, | 1200 250 1370 1000-5000 1200 1000 1260 1000 920 500 1500 100 1500 100 1310 100 1270 1000 1270 1000 1210 100-250 1210 100-250 1210 100-250 1210 100-250 1210 100-250 1370 100 1500 100 1500 100 1500 100 1500 100 1210 100-250 | S. | WBZA WCAD WCAE WCAL WCAM WCAP WCAT WCAT | Boston, Mass. Boston, Mass. Canton, N. Y. Pittsburch, Pa. Northfield, Minn. Canden, N. J. Rapid City. S. Dak. Philadelphia, Pa. Burlington, Yt. Carthade, [ll. Allentown, Pa. Chicago, Ill. Baltimore, Md. Springfield, Ill. Minneapolls, Minn. Chicago, Ill. Charleston, W. Va. Covington, Ky. Cleveland, Ohio. Janesville, Wisc. Joliet, Ill. Ashland, Ky. | 1310 |

| CCC Meridian Miss. 980 900-1000 will be search, N. J. 950 1002-2500 will be searched, M. S. 900 900-1000 will be searched, |
|--|
| WHRE Rock Island III. 1210 100-250 [14] WLW Cincinnati, Ohio 700 50000 |

L

| Call Letters | Location | Frequency Power (K.C.) (Watts) | L | Call Location | Frequency Power (K.C.) (Watts) |
|---|---|--|---|---|---|
| WNAX WNBX WNBF WNBBX WNBZ WNEL WNEW WNLC WOC WOC WOC WOC WOC WOC WOL WOMJ WOMJ WOMJ WOMJ WOMJ WOMZ WORK WORK WORK | Springfield, Mass. Macon, Ga. Detroit, Mich. Peoria, III. 10D (See WIOD-KMBF) Richmond, Va. Joplin, Mo. Chicago, III. Auburn, N.Y. Jacksonville, Fla. Uniontown Pa. Memphis, Tenn. New York, N.Y. boston, Mass. Wilmington, N.C. Plattsburg, N.Y. Hibbing, Minn. Daytona Beach, Fla. Decatur, Ala. High Point, N.C. St. Paul, Minn. Fairmont, W. Va. Lapeer, Mich. Memphis, Tenn. Sheffield, Ala. Cedar Rapids, Iowa Boston, Mass. Norman, Okla. Yankton, S. Dak. New Britain, Conn. Binghamton, N.Y. New Bedford, Mass. Springfield, Vt. Saranac Lake, N.Y. New Bedford, Mass. Springfield, Vt. Saranac Lake, N.Y. San Juan, Puerto Rico New York, N.Y. New London, Conn. Knoxville, Tenn. New York, N.Y. Mashington, D.C. Florence, S.C. Owensboro, Ky. Manitowoc, Wisc. Grand Rapids, Mich. Bristol, Tenn. Newark, N.J. Worcester, Mass. York, Pa. | 1420 100-250 1440 1000-5000 1350 500 1420 100-250 1080 5000 1310 100-250 1420 250 780 1000-5000 1500 100-250 1370 100 1500 100-250 1370 100 1370 100 1370 100 1370 100 1370 100 1370 100 1370 100 1370 100 1370 100 1370 100 1370 100 1370 100 1370 100 1370 100 1370 100 1370 100 1370 100 1370 100 1500 100-250 1430 500-1000 1430 500-1000 1430 100-5000 1230 1000-5000 1230 1000-5000 1230 1000-5000 1380 250 1500 100-250 1500 100-250 1250 1000-2500 1250 1000-2500 1250 1000-2500 1250 1000-2500 1250 1000-2500 1250 1000-2500 1250 1000-2500 1250 1000-2500 1250 1000-2500 1370 1000-5000 1370 1000-5000 1370 1000-5000 1370 1000-5000 | P. after station location, indicates construction permit has been issued. | WSAR Fall River, Mass. WSAV Savannah, Ga. WSAY Rochester, N.Y. WSAZ Huntington, W.Va. WSAZ Huntington, W.Va. WSBE Chicago, III. WSBT South Bend, Ind. WSFA Montgomery, Ala. WSGN Birmingham, Ala. WSGN Birmingham, Ala. WSIX Nashville, Tenn. WSJS Winston-Salem, N.C. WSL1 Jackson, Miss. (C.P.) WSM Nashville, Tenn. WSMS New Orleans, La. WSMK Dayton, Ohio WSMI Bridgeton, N.J. Charlotte, N.C. WSPA Spartanburg, S.C. WSPA Spartanburg, S.C. WSPD Toledo, Ohio WSPR Springfield, Mass. WSTP Salisbury, N.C. (C.P. WSUI St. Petersburg, Fla. WSVA Harrisonburg, Va. WSVS Buffalo, N.Y. WSYR-WSYU Syracuse, N.Y. WTAD Quincy, III. WSYR-WSYU Syracuse, N.Y. WTAD Quincy, III. WTAG Worcester, Mass. Tallahassee, Fla. WTAL Tallahassee, Fla. WTAK Cleveland, Ohio WTAO Green Bay, Wisc. WTAR Norfolk, Va. WTAW College Station, Tex. WTAX Springfield, III. WTBO Cumber land, Md. WTCN Minneapolis, Minn. WTEL Philadelphia, Pa. WTAM Hartford, Conn. WTEL Philadelphia, Pa. WTHT Hartford, Conn. WTIL Trenton, N.J. Trenton, N.J. Trenton, N.J. WTOC Savannah, Ga. Tillamamond, Ind. WWJ Brooklyn, N.Y. WWAE Hammond, Ind. WWJ Brooklyn, N.Y. WWAE Hammond, Ind. WWJ Brooklyn, N.Y. WWAE Hammond, Ind. WWJ Wendeling, W.Va. WXYY Wheeling, W.Va. WXYY Detroit, Mich. | 1320 1000 1380 200 1210 100 100 100 100 100 100 100 1 |
| WOOW ODRAXYN CAOPPRATAM CWWWPPAAAYN CAOPPRATAM CWWPPPAAAAYN CAOPPRRTAM CWWPPPTAM CWWPPPTAM CWWWPPPTAM CWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW | Boston, Mass. Columbus, Ohio New York, N.Y. Omaha, Nebr. Ft. Wayne, Ind. Paducah, Ky. Parkersburg, W. Va. Thomasville, Ga. Portsmouth, Ohio Philadelphia, Pa. Atlantic City, N.J. Sharon, Pa. (C. P.) Mayaguez, Puerto Rico Rore, R.I. Ponce, Puerto Rico Raleigh. N.C. Miami, Fla. Scranton, Pa. Vicksburg, Miss. St. Albans, Vt. New York, N.Y. Williamsport, Pa. Raleigh, N.C. (C.P.) Reading, Pa. Philadelphia, Pa. Columbus, Ga. Washington, D.C. Augusta, Me. Augusta, Ga. Memphis, Tenn. Lawrence, Kans. Rome, Ga. Racine, Wisc. Richmond, Va. Rockford, Ill. Knoxville, Tenn. Dallas, Tex. Richmond, Va. Gainesville, Fla. Richmond, Va. Salisbury, Md. Allentown, Pa. | 130 | NOTE: C. P. after station loca | CANADIAN BROADCAST ST CBF Nontreal, Que. CBL Toronto, Ont. CBM LaPrairie, Que. CBO Mathorne, Ont. CEM LaPrairie, Que. CEM LaPrairie, Que. CEM La LaPrairie, Que. CETAC Calcary, Alta. CFAC Montreal, Que. CFCC Nontreal, Que. CFCC Charlotteton, P.E.I. CFCC Charlotteton, N.B. CFFL London, Ont. CFFL Company Company Company CFFL London, Ont. CFFL Company Company CFFL Company Company CFFL Company Company CFFL | 910 50000 910 50000 910 50000 910 910 910 910 910 910 910 910 910 910 |

THE CURTAIN RISES

PROADCASTING is now an acknowledged branch of drama and the leading names of the stage and screen are attracted by its many opportunities as well as the fat salaries that go with appearance on a sponsored show. Radio drama is divided in two classes: Original and adapted plays are in one branch, and serial and sketch programs are in the second. As far as air audiences go, such names as Amos 'n' Andy and Myrt and Marge, made popular on the air, are just as much an attraction as the marquee names radio recruits from the footlights and kleiglights.





Edward G. Robinson and Claire Trevor, costars of the popular CBS serial "Big Town" are in the ranks of "regular" air performers, differing from most other big movie names who just appear on guest spots.





James Cagney and Noel Coward are caught by the studio candid camerman. Circle: Irene Rich, who, in several seasons on the air. scored as favorably with listeners as she did with theatre and movie audiences.







Left to Right: Cecil B. De Mille, the movie director who added microphone triumphs to his megaphone hits as producer of the CBS "Radio Theatre" programs; Wallace Beery, an occasional guest star, and Jean Hersholt, portrayer of "Dr. Christian" in the radio series of that name.







The theatre's "royal family" is in constant air demand. Left to right: Lionel, Ethel and John Barrymore.



How a radio play takes the air is demonstrated by these four views from NBC's "Spy at Large" series. Upper left: The first script reading. Lines are ironed out and the cast learns story. Upper right: Director Joseph Bell gives some pointers to actresses Consuelo Lembke, Eileen Burns and Elena Karan. Lower left: The dress rehearsal with Miss Burns, Eric Dressler and Miss Lembke going through their paces. Lower right: On the air! Miss Lembke is shown reading the opening lines.





Two popular series of long standing are pictured above. Left: Four members of the cast of "One's Man's Family" which has been a radio hit since 1932. Photo shows Minetta Ellen (Fanny Barbour) with Bernice Berwin (Hazel) at left; Kathleen Wilson (Claudia) at right. and Winifred Wolfe (Teddy) below. Right: The popular team of Lum and Abner in make-up. Chet Lauck plays Lum and Norris Goff portrays Abner.



Amos 'n' Andy are shown with the only woman—and only third person—in their cast, Madaline Lee. The pair. Charles Correll (Amos) and Freeman Gosden (Andy) enact all the other characters themselves. Right: Myrt and Marge. (Myrtle Vail and Donna Damerel).



Fred Waring, head of the Pennsylvanians, a pioneer radio band. Choral offerings are his dish. Right: They don't usually call him the "king of jazz" any more but there's no doubt that he's still its master — Paul Whiteman.

ON WITH THE DANCE!

WHETHER personal preferences go to "swing" or "sweet" music, dance music is a "must" on most listeners' tuning schedules. There are scores of headlining bands and space permits only some of the representative ones to be pictured on these two pages. Most dance bands attempt to establish an individual style to be distinctive and the demand for special arrangements of popular tunes keeps the arrangers working day and night. Many bands have stellar vocalists and instrumental soloists to enhance their offerings.



Phil Spitalny and his All-Girl Orchestra, a radio act that's in great demand for stage appearances. Right: Raymond Paige. Below, left: Guy Lombardo (sented) and his versatile brothers, Leibert, Carmen and Victor. Below, right: B. A. Rolfe, radio old-timer who's still a radio big-timer.











Vincent Lopez, Peter Van Steeden and Robert Armbruster, three ace baton-wavers.





The Dorsey Brothers used to jointly conduct their own orchestra under that name but now they have separate aggregations—both highly successful. Jimmy Dorsey is at the left and rother Tommy at the right.







Al Goodman, George Olsen and Joe Rines, all stellar bandsmen.







Left to Right: Horace Heidt, conductor of the Brigadiers, Gene Krupa, the drummer, who left Benny Goodman to head his own band, and Richard Himber, a consistent broadcaster.

BEAUTY AND THE MIKE

ADIO vies with the stage and screen in the beauty of its female stars. In the long run, radio even goes the other entertainment mediums one better; the microphone drafts the "best-lookers" as well as the best talent from the stage and cinema. And the high standard of mike beauty has brought about many screen offers for the broadcasting damsels. With television in the offing, you will soon enjoy hearing as well as seeing these decorative persons.







Elaine Bassett, an NBC dramatic performer. Left: Betty Lou Gerson, NBC actress and Alice Frost, heard on both CBS and NBC in leading dramatic roles.



Left to right: Olga Andre, NBC songstress frequently featured on shortwave programs because of her ability as a linguist; Virginia Verrill, vocalist presented on both networks and the Lane Sisters—Priscilla and Rosemary, whose air work brought about a Hollywood cinema career. Below, left to right: Wendy Barrie, who reversed the Lane Sisters formula by coming to the air from the screen; Maxine, vocalist with Phil Spitalny's All-Girl Orchestra, and Bess Johnson who plays a featured role in the CBS series "Hilltop House."











Dorothy Lamour, singing co-star of the NBC Chase & Sanborn Hour, whose picture on magazine covers is said to have nearly established a quantity record for radio artists, Ruth Warrick (right), CBS actress, shows the photographer her idea of keeping cool during a broadcast.





Betty Caine and Helen Walpole, NBC actresses, who are undoubtedly adept on figures of speech.





Gale Page, NBC singer and actress, who also used the mike as a short-cut to Hollywood fame. Right: Templeton Fox, NBC actress.

The mirror-lid of this television receiver reflects a picture measuring 12 by 14 inches off a vertically-mounted cathode-ray tube. This set was introduced to the Berlin market and is similar in many respects to models developed in American laboratories.



THERE ARE ADDED THRILLS IN SIGHT

ND sight, of course, means television. The great progress in the video art here and abroad indicates that regular television programs should be available in many parts of the country at an early date. It is certain that the new art will win wide acceptance on a mass scale and that many of the current crop of radio stars will be drafted for the television camera along with stars of the stage and screen.



No, this is not a Hollywood movie set. It is a typical European television studio. Left: This photograph reveals the excellent detail of a projection television image on a theatre-size screen ten feet high and twelve feet wide.







Preparations are under way for the introduction of public-participating television in many American cities. Gilbert Seldes and Peter C. Goldmark, respectively television program director and television engineer of the Columbia Broadcasting System, are seen at the left at the scanning panel of the network's New York video station. In the center photo they are inspecting one of ten giant transformers for the new Chrysler Building sight-and-sound station. A Columbia television studio setting of many years ago is shown at the right. The image was virtually confined to "head and shoulders" in those days. Today, however, the television camera can pick up wide-angle scenes in the manner of a movie camera.

TELEVISION BROADCAST STATIONS

| LICENSEE AND LOCATION | CALL LETTERS | FREQUENCY (kc) OR GROUP* | VISUAL PO | VISUAL POWER AURAL | | |
|--|-----------------|------------------------------|--------------------|--------------------|---|--|
| Columbia Broadcasting System, Inc., New York, N. Y. | W2XAX | В, С | 50w C. P. 7500w | 7500w | A4 A3 | |
| Don Lee Broadcasting System, Los Angeles Calif. | W6XAO | в, с | 150w C. P. 1kw | 150w | A3, A4 | |
| Farnsworth Television Incorporated of Pa., Springfield, Pa. | W3XPF | в, с | 4kw | 1kw | A3, A4 (C. P. only | |
| First National Tele- vision, Inc., Kansas City, Mo. | W9XAL | В, С | 300w | 150w | A3, A4 | |
| General Television Corporation, Boston, Mass. | W1XG | в, с | 500w | | A4 | |
| The Journal Company, Milwaukee, Wisconsin. | W9XD | В, С | 500w | | A4 | |
| Kansas State College of Agriculture & Applied Science, Manhattan, Kansas. | W9XAK | A | 125w | 125w | A3, A4 & Special | |
| National Broadcasting Co., Inc., New York, N. Y. | W2XBS | в, с | 12kw | 15kw | A3, A4 | |
| National Broadcasting Co., Inc., Portable (Camden, N. J. & New York, N. Y.) | W2XBT | D(92,000 & 175000-180000) | 400w | 100w | A1, A2, A3, A4 & Special (C. P. only | |
| Philco Radio & Tele- ision Corp., Philadelphia, Pa. | W3XE | в, с | 10kw | 10kw | A3, A4 | |
| Philco Radio & Tele- ision Corp., Philadelphia, Pa. | W3XP | D(204000- 210000) | 15w | | A4 & Special (C. P. only | |
| ourdue University, West Lafayette, Ind. | M.əXC | A | 1500w | | A4 | |
| Radio Pictures, Inc., Long Island City, N. Y. | W2XDR | В, С | lkw | 500w | A3, A4 | |
| RCA Manufacturing Co., Inc., Portable (Bldg. No. 8 of Camden Plant) | W3XAD | D(124000 to 130000) | 500w | 500w | A3, A4 | |
| RCA Manufacturing Co., Inc., Camden, N. J. | W3XEP | в, с | 30kw | 30kw | A3, A4 | |
| CCA Manufacturing Co., Inc., Portable-Mobile | W10XX | в, с | 50w | 50w | A3, A4 | |
| The Sparks-Withington Company, Jackson, Michigan. | W8XAN | в, с | 100w | 100w | A3, A4 | |
| Iniversity of Iowa, Iowa City, Iowa. | W9XK | A | 100w | | A4 | |
| Iniversity of Iowa, lowa City, Iowa. | W9XUI | в, с | 100w | | A4 | |
| Dr. George W. Young, Minneapolis, Minnesota | W9XAT | в, с | 500w | | A4 | |

*FREQUENCY GROUPS

Group A Group B Group C Group D

2000 to 2100 kc

42,000 to 56,000 kc

60,000 to 86,000 kc

Any 6,000 kc frequency band above 110,000 kc excluding 400,000 to 401,000 kc.

THE SERIOUS SIDE OF RADIO MUSIC

N this age of swing music and such dances as the Big Apple, Lambeth Walk and Yam, radio renditions are by no means confined to jitterbugs' tastes. The serious side of music is not neglected. The best symphony concerts, operas and instrumental and vocal solo bits are offered on radio schedules. Sponsors and networks spare no expense to obtain the best names in the music world.



Lily Pons, the world-famed coloratura, and her noted conductor-husband, Andre Kostelanetz.





There's beauty on the classical programs, too, as these views of Gladys Swarthout and Grace Moore adequately prove.



Arturo Toscanini, acclaimed by many experts as the greatest symphonic conductor of all time. As chief conductor of the NBC Symphony Orchestra, he has contributed greatly towards the advance of broadcast entertainment. An NBC photographer, took these candid shots of Toscanini in action.







Three popular singers of classics-Lawrence Tibbett, Margaret Speaks and Walter Cassell.







Judging by the smiles of these three stars, serious music has its bright side. Left to right: Howard Barlow, CBS conductor; Vivian Della Chiesa, NBC lyric soprano, and Erno Rapee. NBC conductor.





Mario Cozzi, NBC baritone. Left: Pierre French, conductor, who scored favorably with American listeners. Right: Frank Black, NBC conductor.



WORLD-WIDE SHORT-WAVE STATION LIST

| | 1 | | | | | | |
|--|--|--------------------------------------|--|---|--|------------------------------|--|
| Kc. Meters Call | Location | Kw. | Service, etc. | Ke. Meters Call | Location Nanki, Japan Banyana, Caba Bolinsa, Caili. Bolinsa, Calif. Addis Alaba, Ethiepia Maratian, Binaleo, Menico Dideo, Calif. Sachoshibervar, Hungary Zeesen, Garmany Zeesen, Garmany Zeesen, Garmany Zeesen, Garmany Padabandy, Casabosolovakia Davantry, Ragland Lara, Bojiva Zeesen, Germany Reesen Airest, Arger-Ima Wayne, N. J. Pentoisen, Franco Proteisen, Franco Protei | Κω. | Service, etc. |
| 400,000 0.75 W1 NEO 6400 0.000 0.75 W1 NEO 6400 0.000 0.25 W1 NEO 6400 0.000 0 | Storrs, Conn. | 0.5 | Experimental Experimental Exp.; relays KDKA Experimental Experimental Experimental Experimental | 15.500 10.21 JVF 15.505 10.35 CM A3 15.506 19.37 K SM 15.475 19.37 K SM 15.475 19.37 K SM 15.475 19.37 K SM 15.475 19.45 K MO 15.476 19.45 K MO 15.306 19.43 D K W 15.306 19.45 C K W 15.306 19.47 D M 15.306 19.47 D M 15.306 19.47 D M 15.306 19.47 D M 15.306 19.78 D M 15.306 19.79 D K 15.306 19.79 D M 15.306 19.30 W M 15.306 19.35 W W 15.306 W 15.3 | Namiki, Japan Bayane, Cuba | 20.0 | Phone to KWU; occ. ba. Tests, irr. Phone Phone |
| 55,500 5.41 W8XKA | Pittaburgh, Pa. | 0.15 | Exp.; relays KDKA | 15,490 19.37 KEM | Belinss, Calif. Raimss, Calif. | 40.0 40.0 | Phone Phone |
| 31,800 9.50 WIXKA | Chieopee Palls, Mass. | 0.5 | Experiments | 15,450 19.43 IUG | Adds Ababa Ethiopia | | Phone Be : relays XERI. |
| 31,600 9.49 W3XKA 31,600 9.49 W8XAI | Philadelphia, Pa. Rochester, N. Y. | 0.1 | Exp., relays WHAM | 15,420 19.45 KWO | Dislos, Calif. | 20.0 | Be.; relays XEBL Phone to Hawaii, Manila Broadcast |
| 31,600 9.49 W8XKA | Storra, Conn. Pittaburgh, Pa. Pittaburgh, Pa. New York. N. Y. Chieopee Falls, Mass. Philadelphia, Pa. Rochester, N. Y. Pittaburgh, Pa. Detroit, Mich. St. Louis Mo. | 0.1 | Experimental Exp.: relays WWJ | 15,370 19.52 HASE 15,360 19,53 DZG | Zeesen, Germany | 20.0 | Phone Phone to Hawaii |
| 310000 9.49 W9XPD | St. Louis, Mo. | 6,1 20.0 40.0 15.0 | Experimental Exp., relays WEAM Experimental Exp., relays WEJ Exp., relays WEJ Exp., relays KED Broadcast Br. relays KDKA | 15,356 19.54 KWU 15.340 19.56 DJR | Denote, Calif. Zonna, Germany | 20.0 50.0 | Phone to Hawaii Broadcast |
| 21,540 13.93 W8XK | Pitteburgh, Pa. | 40.0 | D. I I I | 15,389 19.57 W2XAD | Schenostady, N. Y. | 20.0 | Broadcast Bc.; relays WGY Broadcast |
| 21,530, 13.93 GSJ 24,520 13.94 W2XE | Wayne, N. J. | 15.0 | Be.; relays WABC | 15,210 19.60 GSP | Daventry, Magland | 20.0 | Broadcast |
| 21,520 13.94 JZM 21 470 13.97 GSH | Detroit, Mich. St. Louis, Mo. Daventry, England Pitteburgh, Pa. Daventry, England Wayne, N. Nasaki, Japan Daventry, England Boston, Man. Lawrenceville, N. J. Harlingham, Argentina | 20.0 | Broadcast | 15,280 19.63 DJQ | Zeesen, Germany | 5-50 | Phone Brindcast |
| 21,460 13.98 W1XAL | Boston, Mass. | 25.0 | Breadeast Broadeast | 15,280 19.68 LHU 15,220 19.66 W2XE | Wayne, N. J. | 15.0 | Be.; relays LR1 Bc.; relays WABC Broadcast |
| 21,420 14.01 WKE | Lawrenceville, N. J. | 20.0 | Broadenst Phone Phone to London and Rio; | 15,200 19.66 GBI 15.230 19.67 WIXAL | Bayentsy, England Beston, Mass. | 15.0 5.0 | Broadcast Broadcast |
| 21,160 14.18 1.814 | nermagnam, Argentina | *** | day Phone | 15,246 19.68 TPA2 | Ponteise, France | 12.0 | Brendcast Brendcast |
| 21,140 14.19 KBI 21,080 14.22 PSA 24,069 14.25 WKA 21,080 14.25 KWM 21,020 14.27 LBN6 20,910 14.35 PSB 20,980 14.37 FFFY | Marapieu, Brazil | 10.0 | Phone; brendcast Phone to England | 15,228 19.71 PCJ | Human, Molland | 20.0 | Broadcast Broadcast Experimental Be: relays KDKA Broadcast Broadcast |
| 24,060 14.25 WKA 21,060 14.25 KWN | Laurenceville, N. J. Dixon, Calif. | 20.0 | Phone | 15,260 19.74 DJS | Zeesen, Garmany | 5-50 | Broadcast |
| 21.020 14.27 L8N6 | Murlingham, Argentina | 60.0 10.0 | Phone to New York; day Phone | 15,180 19.76 G6O | Daventry, Begland | 15.0 | Broadcast |
| 20,860 14.37 EHY | Madrid, Spain | 7.5 | Phone to Buenes Aires Phone | 15,160 19.79 JAK 15.160 19.20 OLRAC | Pedelindy, Osesbeslovakia | 25.0 | Broadcast Broadcast Broadcast |
| 20,780 14.44 KMM | Bolinas, Calif. | 40.0 | Phone | 15.150 19.89 YDC | Bundseng, Java Davenner, Bueland | 15.0 | Broadcast |
| 20,140 14.90 DWG 28,040 14.97 OPL | Leopoldville, Belgian Congo | 9.0 | Phone to ORG; mernings | 15,123 10.94 HYJ | Vatican City | 10.0 5-50 12.0 | Broadcast Broadcast |
| 20,020 14.99 DFZ 19,980 15.92 KAX | Nauen, Germany Mamila, P. I. | 20 0 | Phone to Calif. | 15,070 19.91 PED | Marapien, Brazil | 12.0 | Phone |
| 19,820 15.14 WKN | Lawrenceville, N. J. | 20.0 | Phone Phone to ORG; meraings Phone to South America Phone to Calif. Phone to England Phone Phone Phone | 15,055 17.98 WNC 15,040 19.95 RKI | Manapies, Bensil Historia, Macida Mestory, U.S.S.R. Beltsville, Md. | 0.4 20.0 | Phone to WQG, mornings |
| 20,919 14.35. FSB 20,880 14.37 EBT 20,880 14.41 K&S 20,780 14.44 K&M 20,149 14.44 KMM 20,149 14.45 PT 20,820 14.97 OPL 20,020 14.99 DFZ 19,990 15.22 KAX 18,220 15.14 WKN 19,729 15.21 EAQ 14,760 15.22 DFJ 14,660 15.37 IEW 19,460 15.37 IEW 19,450 15.55 PMA 19,250 15.55 PMA 19,250 15.56 PMK 19,250 15.66 WKF 19,250 15.66 UKF 19,250 U | Masila, P.I. Marapires, Brasil Marapires, Brasil Marapires, Brasil Marapires, Brasil Marapires, M. J. Diecon, Calif. Muriagham, Argeotina Marapiou, Brazil Madrid, Shain Bolinas, Calif. Nauen, Germany Leopoldville, Belgian Congo Nauen, Germany Marila, P. I. Lawneesville, N. J. Madrid, Spain Naues, Germany Mostel, Grande, Argeotina Reuer, Litaly Mostel Grande, Argeotina Reuer, Litaly | | Phone | 15,000 29.0 WWV | Beltsville, Md. | 1.0 | Phone Phone to WQG, mornings Free, standard; Tue, Wed, Fri. 2-3 p.m. F. S. T Phones Mexican stations |
| 10,680 15.31 LSF | Monte Grande, Argentina | 7.0 | Phone Phone Phone to South America | 14 985 YSL 14 980 20.03 KAY 14,970 20.04 LZA 14,960 20.03 YSL 14,935 20.09 PRL 14,910 20.12 JVG | Son Salvader, El Salvador Manilo, P. L. Solia, Bulgaria Son Salvador, El Salvador Marcalou, Branti | 40.0 | Phones Mexican stations Phone to Dixon Broadcast |
| 19,520 15.37 IRW 19,460 15.42 DFM | Monte Grance, Argentina Rome, Italy Nauco, Germany Bandosong, Java, D. E. I. Sepetiba, Brazil Lawreaceville, N. J. Ruysealeda, Bolgium Hurlingham, Argentina | 40.0 | Phone to South America Phone; sometimes bc. | 14,970 20.04 LZA | Sola, Bulgaria | | Broadcast Phone |
| 19,345 15.51 PM A 19,260 15.58 PPU | Bandoong, Java, D. E. I. Senetiba, Brazil | 12.0 | Phone | 14,935 20.09 PRE | Marasiau, Brasil | 10.0 | Phone; broadcast Phone to Formosa; broad- |
| 19,320 15.61 WKF | Lawrenesville, N. J. | 20.0 | Phone Phone | 14,910 20.12 JVG | Manager, salara | 10.0 | CHAL |
| 19.140 15.68 LSM3 | Hurlingham, Argentina | 60.00 | Phone to Madrid, Berlin, | 14,630 20.42 PSF 14,600 30.58 JVH 14,590 20.58 WMN 14,535 20.64 HBJ 14,530 20.65 LSN1 | Marspieu, Brazil Nasald, Japan Lawrenceville, N. J. Prangine, fluitzerland Elucingham, Argentina | 20.0 20.0 20.0 60.0 | Phone: broadcast Phone; broadcast Phone |
| 19,060 15.75 JVC | Nazaki, Japan | | Phone; sometimes be. | 14,598 20:56 WMN | Lawrenceville, N. J. Pranging, fluitzerland | 20.0 20.0 | Phone |
| 19,050 15.75 JVC 19,020 15.77 HESPJ 18,110 T.86 JVA 18,890 15.86 JVA 18,890 15.88 ZSS 18,000 16.91 WKM 18,430 15.93 WKM 18,430 15.93 PDM 18,400 16.13 PDM 18,440 16.23 HBH 18,440 16.23 HBH 18,440 16.30 PCK 11,440 16.30 PCK | Nazaki, Japan Bangkek, Siam Nazaki, Japan Kaipheuvel, S. Africa Roeky Peint, N. Y. Bandoeng, Java, D. E. I. | 20.0 | Phone to Madrid, Berlin, Paris; day Phone; sometimes be. Breadcast Phone to Europe; occ. be. Phone to Rugby | 14,539 20.65 LSN1 | Huringham, Argentina | 60.0 | Phone to New York; mora. |
| 18,890 15.88 ZSS 18,860 15.91 WKM | Rocky Point, N. Y. | | | | Hurlingham, Argentina | 60.0 | Phone to Madrid, Berlin |
| 18,830 15.93 PLE | Bandoeng, Java, D. E. I. Lima, Peru | 40.0 | Phone to Dixon and Nazaki Phone | 14,480 20.72 YMA 14,460 20.75 DZH 14,460 20.75 DZH 14,460 20.75 DZH 13,980 21.46 VPD2 13,980 21.46 VPD2 13,280 21.78 SUDICH 13,280 21.78 SUDICH 13,611 21.78 SUZI 12,760 21.89 TZZ 14,280 12.80 TZZ 14,280 12.80 PZZ 14,280 12.80 PZZ 13,380 PZZ 14,380 PZZ 14,3 | Managua, Nisaragua Nassa, Germany Reglyz, Hagland Strus, Fiji Jakanda Abu Zabai, Cario, Egypt Chiro, Egypt Abu Zabai, Cario, Egypt Abu Babai, Bgypt Bailma, Chill, Wengam, Poland Kemikawa-Cho, Japan Regby, Brighand Recaldi, Japan | | Paria; morn., eve. |
| 18,620 16.11 GAU | Rugby, England | 15.0 | Phone Phone to WM1, VWY Phone | 14,469 20.75 DZH 14,440 39,78 GBW | Ragby, Hagland | 15.0 | Phone Phone Experimental |
| 18,545 16.18 PCM | Keotwijk, Holland | 40.0 | Phone | 13.980 21.46 VPD2 | Suva, Fig Islands Abu Zabal, Cairo, Egypt | 20.0 | Phone |
| 18,480 16.23 HBH 18,405 16.30 PCK | Keetwijk, Helland | 40.0 | Phone to Bandeeng Phone to GAS Phone to France | 13,820 21.76 SUICH | Chire, Egypt | 8.0 | Amateur; broadcast Phone |
| 18,340 16.36 WLA 18,310 16.38 FZS | Lawrenceville, N. J. Sairon, Brench Indo-China | 15.0 | Phone to France | 13,700 \$1.80 TYEZ | Portoise, France | 12.0 40.0 20.0 | Phone to U. S. A. Phone to Japan, Java: Broadcast |
| 18,270 16.42 IUD | Addis Ababa, Ethiopia Nasafri, Japan | 10.0 | Phone to Java; R. I.; bc. | 13,655 22.00 BPW | Watness, Poland | | Broadcast Experimental; bc. |
| 18,165 16,51 PPZ | Sepotibe, Brazil | 20.0 | Phone | 13.536 12.64 FTE 13.536 22.68 GBB | Regby, England | 15.0 | Phone to Manchukuo; also |
| 18.090 16.58 TYE | Lima, Peru Rugby, England Kootwijk, Helland Kootwijk, Helland Kootwijk, Helland Prangias, Switze-land Kootwijk, Helland Lawrenceville, N. J. Saeon, Freach Indo-China Adda Ababa, Ethicpia Nasali, Jacob Rasali, Jacob Booling, Jara Pontolas, Fance Boilmas, Calif. Boilmas, Calif. Boilmas, Calif. Boilmas, Calif. | 40.0 12.0 40.0 40.0 40.0 | Phone: sometimes bc. Phone to U.S. A. Phone | 13.560 22.72 JVI | Rezaki, Japan | | be |
| 18,020 16.65 KQJ | Bolinas, Calif. | 46.0 | Phone Pranapacific phone Phone | 13,337 22.47 YVQ | Marzony, Venezuela British Shive | 20.0 | Phone Phone |
| 17,980 16.69 KQZ 17,940 16.72 WQB- | Bolinas, Calit. | 40.0 | | 13,885 22.58 CGA3 | Drummondville, Canada | 15.0 40.0 | Phone to ships |
| 17.920 16.74 WQF | Rocky Point, N. Y. Rocky Point, N. Y. | 40.0 | Phone Phone Brendozet | 13,210 22.71 PNSK | S.S. Normandie | 1.5 | Phone |
| 17,790 16.86 GSG | Daventry, England Nazaki, Japan | 15.0 | Breadcast Broadcast | 13,060 22.83 CWH | Italian Ships | ****** | , Phone |
| 17,780 16,87 W8XK | Pittsburgh, Pa. Bround Breek, N. I. | 40.0 15.0 | Broadcast: relays WJZ | 13,337 22.47 YYQ 18,330 22.76 12,356 22.66 CGA3 18,259 21.68 CGA3 18,259 21.68 KBJ 13,100 22.71 PNSK 18,140 22.83 CWH 13,660 22.71 PNSK 13,660 22.78 PI 13,660 22.89 13,620 33.04 172E 12,745 11.44 [AC 13,855 83.28 NPG | Marpony, Venesuela Histoph Ships Drummondville, Canada Manila, P. I. S.S. Normandie Cerrite, Uraguay Italian Ships Nasaki, Japan Catane, Italy Sp. Francisco | 52.0 | Phone to ships |
| 17,780 16.87 W9XAA | Chicage, Illinois | 0.5 | Experimental Broadcast Bc., relays WABC | 13,885 23.28 NPG | Bull 11 Bulloto | ******* | E. S. T. |
| 11.405 6.30 PCA 11.340 6.35 PCA 11.316 6.35 PCA 11.316 6.35 PCA 11.310 6.45 PCA 11.310 6.45 PCA 11.310 6.45 PCA 11.310 6.35 | Nazaki, Japan Pittaburch, Pa. Bround Breok, N. J. Chiesge, Illinois Huizen, Holland Wayne, N. J. Zeesen, Germany Hongkong, China Coltano, Italy Bangkok, Sam Britab Ships Nauen, Germany Kirker, India Bound Brook, N. J. Norddeioh, Germany Arlington, Virginia | 23.0 | Bc., relays WABC | 12,830 23.38 CNR 12,680 23.5 YNE 12,630 23.76 NAA | Rabat, Mosoceo Puerto Cabesas, Nicaragua Arlingtoa, Va. | 12.0 | Phone to saips Time signals; 4:55-5:00 p.m E. S. T. Phone to France Phone Time signals; 9:55-10:0 a. m. E. S. T. |
| 17,760 16.89 DJE 17,755 16.90 ZBW5 | Hongkong, China | 5-50 2.0 | Broadcast Broadcast | 12,630 23.76 NAA | Arhington, Va. | | Time signals: 9:55-10:0 |
| 17,730 10.30 140 | Coltano, Italy Bangkok, Siam | 14.0 20.0 | Phone: early meraings | 12,290 24.41 GBU | Rugby, England | 10.0 | 7 2020 |
| 17,640 17.00 17,520 17.12 DFR | British Ships Nauen, Germany | ***** | | 12,250 24.39 1 YB 12,235 24.52 TFJ | Reykjavik, Issland | 15.0 | Broadcast Phone |
| 17,740 16.91 HSF 17,640 17.00 17,520 17.12 DFB 17,480 17.16 VWY2 17,310 17.33 W3XL 17,265 17.37 DAF 1 17,160 17.51 HASS 16,820 17.84 NAA | Kirkee, India | 20 0 | Phone to YVR Phone to Begley Experimental | 12,215 24.56 TYA 12,150 24.69 GBS | Rugby, England | 15.0 | Phone to U. S. A. |
| 17,265 17.37 DAF | Norddeigh, Germany | 20.0 | Phone Broadenst | 12,130 24.73 DZE 12,060 24.88 PDV | Zeesen, Germany Kootwijk, Holland | 60.0 | . Phone Phone |
| 16,820 17.84 NAA | Arlington, Virginia | ***** | Phone Broadeast Time signale; 9:55-10:00 a.m. E. S. T. | 12,020 24.98 VTY- | Malbourne Australia | | . Tests with Drummondville |
| 15,655 18.00 19,305 18.40 PCL 18,770 18.44 WLK 18,440 18.47 KTO 16,120 18.61 IRY 16,030 18,71 KKP 15,955 18.51 PLG 15,955 18.51 PLG 15,955 18.59 FTK 16,755 18.91 CEC 15,860 18.90 JVD 15,310 18.97 LSL3 | German Ships Kootwijk, Holland Lawrenceville, N. J. Manila, P. I. Rome, Ilaly Kabuku, Hawaii Kabuku, Hawaii Bandoeng, Java Sto. Aassee, France La Graoja, Chile Nazaki, Japan Hurlingham, Argentina | | . Phone | 12,000 25.00 RV59 | Moreow, U.S.S.R. | 20-0 3.5 | Phone |
| 16,305 18.40 PCL 16,270 18.44 WLK | Kootwijk, Holland Lawrenceville, N. J. | 20.0 40.0 20.0 40.0 | Phone to Bandoeng Phone to Rugby Phone to Dixon | 11,950 25.11 KKQ | Bolinas, Calif. | 3.5 | rnone |
| 16,240 18.47 KTO 16,120 18.61 IRY | Manila, P. I. Rome, Italy | 40.0 20.0 | Phone to Dixon Phone | 11,900 25.21 XEWI 11,900 25.21 CT1GO | Parede, Portugal | 0.35 | Broadcast Broadcast |
| 16,030 18,71 KKP | Kabuku, Hawaii Kabuku, Hawaii | 40.0 | Phone to KWO Phone Phone; afternoons | 11,900 25.21 OLR4D 11,895 25.22 HPSI | Aquadulos, Panama | 0.05 | Broadcast |
| 15,950 18.81 PLG | Bandoeng, Java | | Phone; afternoons | 11,895 25.22 XEXR 11,880 25.25 XEXA | Parede, Pertugal Podebrady, Caechoslevakii Aquadulee, Panama Mexico, D. F., Mexico Mexico, D. F., Mexico | 0.1 | Broadcast Broadcast Broadcast |
| 16,865 18.91 CEC | La Granja, Chile | 30 0 0.5 | Phone to Saigon Phone | 11.880 25.25 TPA3 | Pontoise, France Chicago, Illinois | | . Broadcast . Bc., relays WENR |
| 15,860 18.90 JVD 15,810 18.97 LSL3 | Hurlingham, Argentina | 60.0 | Phone to Shanghai Phone to London Rio: morn. | 11.876 25.26 OLR4C | Podebrady, Czechoslovaki | 25.0 | Broadcast Bc.: relays KDKA |
| 13,750 19.05 ЛА | Tyureki, Pormosa | 10.0 | Phone to Nazaki | 11,860 26.29 YDB | Soerabaja, 'ava, D. E. I. | 1.0 | Broadcast Broadcast |
| 13,750 19.05 JIA 15,680 19.13 JZA 15,680 19.16 JVE | Tyureki, Pormosa Kanjoshi, Manehukuo Nazaki, Japan | 10.0 20.0 10.0 | and eve. Phone to Nazaki Phone to Nazaki Phone to PLE, P. I.; occ. bc. | 11,855 25.31 DJP | Arhigtea, Va. Rugby, England Pontosse, Frassec Rey karvit, Isolacd Rey karvit, Isolacd Rey karvit, Isolacd Rey karvit, Isolacd Rugby, England Zeesea, Germany Kootwik, Holland Malbourse, Australia Mossew, U.S. S. Holland Malbourse, Australia Mossew, U.S. S. Weiter Rodies Abba, Ethlopia Bolinsa, Calf. Mexico Petropia Resson, D. F., Mexico Pontosiee, Pranec Pontosiee, Pranec Pontosiee, Pranec Pontosiee, Pranec Potentaly, Decadorovaki Pritsburgh, Decadorovaki Pritsbur | 5-50 | Broadcast |
| | | | | | | | |

| Kc. Meters Cal. | | Kω. | | Kc. Meters Cali | | Kw. | Service, etc. |
|--|---|--------------|--|--|---|---------------|---|
| 11.840 25.34 OLR4A 11.830 25.36 W2XE | Podebrady, Czechowlovak New York, N. Y. | 25.0 10.0 | Breadcast Bc.; relays, WABC | 9,520 31.51 XEME 9,520 31.51 HJ4ABE 9,510 31.55 GSB | Merida, Ynestan, Merice | | 15 Be.; relaye XEFC |
| 11,830 25.36 W2XE 11,830 25.36 W9XAA 11,830 25.36 XEBR | Chicago, Illinois | 0.5 | Bc.; relays WABG Bo.; relays WCFL Bc.; relays XEBH | 9,610 31.56 GSB | | 20.0 | Broadcast |
| 11,820 25.38 GSN | Daventry, England | 20.0 0.5 | Breadonst Breadonst | 9.510 31.58 VK3ME | Melbourne, Australia | 5.0 | Broadeast Broadeast |
| 11,810 25.40 12RO4 11,804 25.42 OAX5A | Rome, Italy lea. Peru | 25.0 | Breadcast Breadcast | 9,500 31.58 PRF5 | Rio de Jameiro, Brazil | 25.0 | Broadcast Broadcast |
| 11,810 25.40 CRCX 11,804 25.42 OAXSA 11,804 25.42 OAXSA 11,801 25.42 OER2 11,800 25.42 JZJ 11,795 25.43 DJO 11,790 25.45 W1XAL 11,770 25.49 DJD 11,760 25.51 OLBAR | Hermosille, Senora, Mesic Daventry, England Toronto, Canada Rome, Italy lea, Peru Austria, Vienna Nazaki, Japan Zeesen, Germany Boston, Masa | 1.5 | Breadcast | 9,510 31.56 GSB 9,510 31.58 HJU 9,510 31.58 VK3ME 9,504 31.57 OLR3B 9,504 31.58 PBFS 9,500 31.58 HJIABE 9,496 31.60 XEFT | Buena wentura, Colombia Melbourne, Australia Podebrady, Czachosłovaki, Rio de Jameiro, Brazil Carlagena, Colombia Veracrus, Ver., Mexico Bedinas, Calif. Recky Pant, M. Y. Guadalajara, Jaliece, Mecico | 0.06 | Breadeast Broadeast |
| 11.795 25 43 DJO | Zeesen, Germany | 5-50 5 0 | Experimental | 9,490 31.61 WEF | Bollman, Calif. Rocky Paint, N. Y. | 20 0 40 0 | Phone Phone |
| 11,770 25.49 DJD | Zeesen, Germany | 5-60 | Breadcast | 9,480 21.65 XEDQ | Guadalajara, Jaliece, Mexico | 0.5 | Bc.; relays XED |
| 11 750 25 62 CRD | Pedebrady, Czechoslovaki Daventry, England | 20 B | Broadcast. | 9,480 \$1.66 KET 9,450 31.75 TGWA | Bolines, Calif. Guztemala City. | 46.0 | Phone |
| 11,740 25.55 HP5L 11,730 25.57 PHI 11,730 25.57 CJRX 11,720 25.60 TPA4 11,718 25.60 CR7BH | Daventry, England David, Panama Huisen, Holland | 23.6 | Breadcast; winter menths Be; relays GJRC | 9.441 31.78 HC2EBA | Chatemara | 0.2 | Experimental |
| 11,720 25.60 TPA4 | Winnipeg, Man., Canada Pontoise, France Louronzo Marques, | 12.9 | Be.; relays GJRC Broadcast | 9,441 31.78 HC2EBA 9,428 31.82 COCH 4 9,426 31.83 NAA | Havana, Geba Arlington, Va. | 10.0 | Broadcast Breadcast |
| | Marambique Stockholm, Swaden | 0.33 | Breadseat | 9,415 31.86 PLV | | | . Time signals; see article or time signals |
| 11,705 25.63 SM5SX 11,680 25.68 KJO 11,670 25.71 PPQ | Stockholm, Sweden Kabuku, Hawali Sepetiba, Brazzi | 40.0 | Brendcast Phone to Beliand | 9,360 32.06 | Bandeeng, Java, D. E. I. Fort de France, Martinique F. W. I. | . 20 0 | Phone; sometimes tc. |
| 11.000 23 /3 JVL | Sepetiba, Brand Nazaki, Japan | 5.0 | Phone | 9,350 32.00 HSePJ | | | Bass June |
| 11,595 25.88 VRR4 11,540 26.00 XGR 11,495 26.10 VIZ-3 | Nazaki, Japan Stony Hill, Jamaica Shanghai, China | 20 0 | Phone to Russess; hr. Phone to Ministh, Fis. Plane | 9,800 38.20 YNGU | Dangrok, Siam Lima, Pern Maragua, Nicaragua Puerto Cabezna, Nicaragua Szekosfeherrar, Hungary Kirkoe, India | | Breadcast Broadcast Phone Broadcast Phone to England: mortune |
| 11,495 26.10 VIZ-3 11,435 26.24 COCX 11,430 26.25 YNE | Piskville, Australia Havana, Cuba | 1.0 | Phone to Demonoadville Bc.; reizpe CMX | 9.125 32.87 HAT4 | Szekesleherrar, Hungary | 20.0 | Phone Broadcast |
| 11,430 26.25 YNE 11,385 26.35 HBO | Puerto Cabesas, Ni saragus Prangina, Switserland | 20.0 | Please Breadcast | 9,350 32.69 HS6PJ 9,500 38.66 PAXGI 9,400 32.26 YNGU 9,220 32.54 YNE 9,125 32.87 HAT4 9,045 32.17 VWY 8,040 32.19 TYA2 8,040 33.48 FVA 8,048 33.53 HCJB 8,648 33.53 HCJB | Pontoine Prones | 15.0 | Phone to Algeria |
| 11,385 26.35 HBO 11,340 26.46 DAF 11,289 26.50 HIN | Norddesch, Germany Trujille, D. R. | ****** | DL | 8,948 33.53 HCJB | Algiera, Algeria. Quite, Ecuador | 0.5 | Phone |
| 11,289 26.50 HIN 11,140 26.93 11,040 27.17 HRW- | German Ships | ****** | Phone | 8.795 \$4.11 HKV | British Ships, French Ships Bogota, Colombia | | Phone |
| HRY | La Ceiba, Handuras | 0.1 | Phase | 8,775 84.18 PNI 8,710 34.44 KBB | Bogota, Colombia Makasar, Celebes, D. E. I. Mazila, P. I. Suva, Fiji Islands | 3.0 | Phone; occ. bc. |
| 11,040 27.17 CSW 11,000 27.27 ZLT4 11,000 27.27 PLP | Lisbon, Pertugal Wellington, New Zealand | 5.0 | Phone; son be. | 8,719 34.49 VPD2 8,665 34.62 COOJQ 8,605 85.27 YNLG 8,479 35.42 | Suva, Fiji Islands Camaguey, Cuba | 0 20 | Broadcast Breadcast |
| 10,955 27.38 HSG2 . | Bandoeng, Java Bangkok, Siam | 3.0 | Phone; ac. | 8,606 85.27 YNLG 8,479 35.42 | Camaguey, Cuba Mazagua, Nicaragua German Shine | 0.5 | Broadeast |
| 10,955 27.38 HSG2 . 10,850 27.65 DFL 10,840 27.68 KWV 10,770 27.86 GCP | Bangkok, Siam Naven, Germany Dixon, Calif. Rugby, England Nasaki, Japan | | Phone to Hawaii Phone | | Managua, Nicaragua Gesman Ships Norddeich Germany Guayaquil, Ecuador Aspecion Paraguay | | Phone to ships Broadcast |
| 10,740 27.93 JVM | Rugby, England Nazaki, Japan | 15.0 20 0 | Phone to U. S. A.; osc. be.; relaye JOAK | 8,400 35.71 HC2CW 8,300 36.14 ZP10 8,280 26.19 HRW- | Asuncion, Paraguay | 0.015 | Broadcast |
| 10,670 28.12 CEC | La Grania Chile | 0.5 | Phone | DDV | La Ceiba, Honduras | 0.1 | Phone |
| 10,660 28.14 JVN 10,620 28.25 WEF 10,610 28.28 WEA | Nazaki, Japan Rocky Point, N. Y. Rocky Point, N. Y. | 40.0 | Be.; relays JOAK Phone to Europe | 8,183 36.65 PSK 8,120 36.95 RAZ 8,035 37.34 CNR 8,085 37.34 CED 7,901 37.98 LSL1 | Marapieu, Brazil Manifa, P. I. Rabat, Moroceo | 20.0 | Phone; bc. Phone to Dixon, Calif. |
| 10,610 28.28 WEA 10,578 28.36 FYB | Rocky Point, N. Y. Paris, France | 40.0 | Personnel | 8.036 37.34 CED | Antologasta, Chile | 0.4 | Phone: bc. Phone |
| | | 6.0 | Time signals; 7:55- 8 p. m., E. S. T. Phone to Lapas Phone to B. S. A. Phone; 000. bo. | 7,840 38.07 JYR 7,860 38.12 SUX | Kenukawa-Cho, Japan Kenukawa-Cho, Japan Abu Zabal, Rgynt Ottayaquil, Ecuador Kootwijk, Holtand Puerto Cabezas, Mearagua Prancina Smitustand | 5 0 | Phone to Rio; night Broadcast |
| 10,535 28.48 JIB 10,430 28.76 TYE3 10,430 28.76 YBG 10,420 28.79 XGW | Tyureki, Pormosa Pontoise, France Medan, Sunatra, D. E. I. | 12 0 | Phone to B.S. A. | 7,854 39.20 HC2JSB | Ouayaquil, Ecuador | 20.0 | Phone Broadcast |
| 10,420 28.79 XCW | Shanghai, China | 3.0 | Phone | 7,810 28.41 YNE | Puerto Cabezas, Micaragua | 0.1 | Phone Phone |
| 10,410 28.82 KES 10,410 28.82 LSY | Shanghai, Chim Bolinas, Calif. Monte Grande, Argentina Hootwijk, Helland | 10.0 | Phone Phone Phone Phone Phone Phone | 7,797 38.47 HBP 7,240 38.76 CEO | Pangina, Switzerland LeOranje, Chile Addis Ababa, Bihiopia Managua, Nicaragua Puntarana, Costa Rica Kabuku, Hawaii | 20.0 | Broadcast Phone |
| 10.410 28.82 PDK 10.400 28.85 KPZ 10.375 28.92 JVO | Dixon, Cars. | 40.0 | Phone | 7,550 39.68 YNLP | Addis Abaha, Bihiopia Managua, Nicaragua | | Phone Broadcast |
| 10,379 28.93 EAJ43 | Tenerife, Casery Islands | 10.0 | Phone to Manchulsue; bc. Brandenst Brandenst Thran: stee bc. | 7,550 \$9.74 TISWS 7,880 \$9.87 EKH | Puntarenas, Costa Rica Kabulen, Hatraii | 0.12 40.0 | Broadcast Phone |
| 10,350 28.98 BAJ33 10,350 28.98 LSX | Nasan, Japan Tenerie, Canary Islands Caramata, Spain Monte Grande, Arguntina St. George, Bartarda Ruyssolede, Belgium Sepotiba, Brasil | 12.0 | Breadcast Phone; also bc. | 7,510 89.65 JVP 7,670 49.16 JVD | Nasaki, Japan Nasaki, Japan Rocky Point, N. Y. Enbuku, Hawaii Merica, D. F., Merice | 20.0 | Bc.; phone Phone to Java |
| 10,335 29.03 ZFD 10,336 29.03 ORK 10,310 29.10 PPM | St. George, Baratuda Rayssolode, Bolgium | 1.5 | Phone; meetly telegraph Broadcast Phone | 7,465 49,45 WEG 7,870 40,71 KIDO | Rocky Point, N. Y. | 40 6 | Phone |
| 10,310 29.10 PPM 10,300 29.13 LSL2 | Sepetiba, Brasil Fluringham, Argentina | | | 2816 at at VALCE | Mexico, D. P., Mexico | 20.0 | Broadcast |
| 10,260 29.13 LSL2 10,260 29.16 DZC 10,260 29.24 PMN | Zessen, Germany Bandocag, Java, D. R. I. Burlingham, Acception | 3.0 | Phone to London, Kio; might Phone; oce. hc. Phone to Madrid, Berlin, Parin; night Phone: be. | The dist VKsDI | Adelaide, Australia | | Experimental |
| 16,260 29.27 LSK3 | Burlingham, Argentina | 00-0 | Phone to Madrid, Berlin, | 7,220 41.44 BCN1 | Barcelona, Spain | 0.00 | Broadcast Broadcast |
| 10,230 29.33 CED 10,230 29.35 PSH | Antologasta, Ohile Maranica, Brazil | 0.4 | Pleaser be. Pleaser be. Phone | 7,856 38.9 77K 7,856 38.9 77K 7,856 38.9 77K 7,856 38.9 77K 7,956 38.7 71K 7,956 | Montes, D. F., Moute Gennada, Mêzarqua Idelaide, Australia Bacabdin, Sweden Baroelana, Spain Marsagan, Nicaragua Saute D'un Tenerike, C. I. Sea Schmittan, Spain Latte, August Latte, August Latte, August Valenda, Scain Paperta, Tahit Dedrecht, Holland Barceleina, Spain Tettan, Sa. Morocco Passmaribo, Dutch Guina, Guita, Ecuador Guita, Ecuador | | Bc.; amateur Breadcast |
| 10170 29 48 RIO | Marapica, Brazil Baku, U.S.S.R. Leonoldville, Beleian Conse | 15 0 | Phone to ORK | 7,177 GLSO CROAL | Lobita, Angola | | |
| 10,000 29.76 RIR 10,000 29.79 EDN 10,005 29.81 TDE 10,005 29.84 ZFB 10,005 29.84 SUV | Baku, U.K.S.R. Lespoldville, Belgian Conge Tilia, U.K.S.R. Madrid, Spain Kanjoshi, Manehukuo St. George, Bernauda Abu Zabal, Egypt Zeesen, Gernaud | 4.0 | Phone to ORE Phone to EPO, BNE Paperimental Phone to JVO | 7,165 41.67 | Valencia, Scain | 0.5 | Bc.; C. W., phone Broadcast |
| 18,065 29.81 TDE 18,865 29.84 ZFR | St. George Bernada | 29.0 | Phone to JVO Phone | 7,082 42.94 PIII | Dordrecht, Holland | 0.2 | Amateur; semetimes bc. |
| 10,856 29.84 SUV 10,642 29.87 DZB | Abu Zabal, Egypt | 39.0 | Phone to Germany, England | 7,000 49.88 EASAH | Tetuan, Sp. Morocco | | Broadcast Breadcast |
| 10.000 30.00 WWV | Beltsville, Md. Manila, P. I. Lisbon, Portugal | | bene Standard frequency | 4970 43.04 HCETC | Paramaribo Dutch Guiana . Quito Ecuador | 0 03 | Broadcast Broadcast |
| 9,990 30.03 KAZ 9,940 30.18 CSW 9,890 30.32 LSN2 | Liebon, Pertugal | | Phone Brondeast | 6,800 43.48 HI2D | Ciodad, Trucile | 0.1 | Breadcast |
| 9,890 30.32 LSN2 9,860 30.43 EAQ 9,840 30.49 FYS | Hurlingham, Argentina Madrid, Spain Kemikawa-Cho, Japan | 20.0 | Phone to New York; nights Beandcast Be., tests | 4,848 49.81 XGOX | Nenking, China Trujillo, D. R. | 10.0 | Phone Brondcast |
| 9,840 30.49 JYS 9,740 30.80 COCQ 9,875 31.01 DZA | Havana, Cuba | | DC.; NEIAYE CM Q | 7.165 41.87 7.052 42.55 FOSAA 7.052 42.55 FOSAA 7.052 42.55 FOSAA 7.050 42.55 FOSAA 7.050 42.55 FOSAA 7.050 42.55 FOSAA 4.050 42.55 FOSAA | San Pedro de Meceris, D. R. | 0.025 0.15 | Broadcast Broadcast Broadcast Phone to U.S.A.: he |
| 9,675 31.01 DZA 9,670 31.02 TI4NRH 9,666 31.04 CTIAA | | 2.0 | Phone Proadcast Broadcast | 6.730 44.48 H12C | La Romana D R | 0.25 | Broadcast |
| | Marapicu, Brazil | 5.0 | Phone | 6,718-44.95 KBE 6,719-44.71 KEF | Belinas Calif. | 40.0 I | Phone Phone |
| 9,645 31.10 HH36V | Port-au-Prince Haiti | 9.03 | Breadcast | 6,672 44.96 YVQ | San Jeee, Cesta Rica Maraczy, Venezuela Guayaquil, Ecuador Trujille, D. R. | 10.0 | Breadcast Plone Broadcast |
| 9,618 31.18 HJ1ABP | Rome, Italy Cartagena, Colombia Socrabaja, Java, D. E. I. Panama, Panama | 0.7 | Broadcast Broadcast | 6,635 46.22 HC2RL 6,680 45.25 HIT | Guayaquil, Ecuador Trujilla, D. R. | 9.2 | 1 coardonat |
| 9,605 31.23 HP5J | Panama, Panama | 0.16 | Be.; relays YDA Breadcast | 6,620 45.12 PRADO 6,578 45.60 HCVT | | | |
| 9,600 31.25 CB960 | | 0.1 | Prosdesst Breadcast | 6,655 45.78 HI4D 6,550 45.80 TIRCC | Trofillo, D. R. San Jose Costa Rica | ***** | Broadcast Broadcast |
| 9,597 31.26 VK6ME | Moscow, U.S.S.R. Perth, Australia | ****** | Breadcast Esperimental | 6,645 45.84 YVERB | Tehnas, Morocco Chidad Bolisma Venezuela | 0.2 | Broadcast |
| 9.590 31.28 PCJ | Macso, Port China Santiago, Chile Moscow, U.S.S.R. Perth, Australia Prangins, Switzerland Huizea, Holland Philadelphia, Pa. Switzer, Ansterlie | 20.0 E | Proadeast Exp.; breadcast | 6,73 64.71 R.P. 6,673 44.86 TYCP 6,673 44.86 TYCP 6,573 44.86 TYCP 6,573 45.06 HCYT 6,573 45.06 HCYT 6,574 45.07 THCP 6,574 45.07 THCP 6,574 45.07 TYCP 6,574 4 | Ambato, Ecaador Tragillo, D. R. San Jose, Coeta Rica Tatuas, Morocce Caudad Bolivar, Veneruela Managus, Niceragua Valencia, Venezuela | 0.1 | Prosdcast Prosdcast |
| 9,590 31.28 W3XAU 9,590 31.28 VK2ME | Philadelphia, Pa. Sydney, Australia | 10.0 | Be.; selaya WOAU Breadmat | 6,520 46.01 HRW- HRY | La Caiba, Honduras | 0.1 | Phone |
| 9,580 31.31 VK3LR 9,580 31.31 GSC | Sydney, Australia Lyndhurst, Vie., Australia Daventry, Bagland | 20 0 I | Amondagat | 6.500 46.15 HIL | La Caiba, Honduras Trufillo, D. R. Cristo de Aranza, Venezuela | 6 05 E | Broadcast |
| 9.575 31.34 HJ2ABC 9.570 31.35 WIXK | Daventry, Bagland Cueuta, Cotombia Millis, Mass. | 0.25 E | Breadcast Breadcast Bc.: relays WBZ, WBZ.4 | 6,679 46.31 H18A | Terrilla D. D. | A ANE E | orosdesst |
| 9,565 31.36 HPSS 9,665, 31.36 VUB | Bembay, India | | Bc.; relays WBZ, WBZA leoadgast ireadgast | 6.425 46.87 OAX4K | Lima, Peru Bound Brook, N. J. | 0.025 E | Broadeast |
| 9,560 31,38 DJA 9,569 31,38 RJIARR | Bembay, India Zeesen, Germany Barranquilla, Colombia Port-au-Prince, Betta Portebudy Crachelovskies | 5-50 F | roadeast. | 6,429 46.73 HT16 | Santiago, D. R. | 0.02 E | arperimental Broadcast |
| 9,860 31.06 PSJ 9,865 31.10 HBW 9,865 31.10 HBW 9,865 31.10 HBW 9,865 31.10 HBW 9,865 31.20 HPSJ 9,800 31.25 CQN 9,800 31.25 CQN 9,800 31.25 CS950 9,800 31.25 CS950 9,800 31.25 CS950 9,800 31.25 VK6ME 9,585 31.27 HBL 9,580 31.25 PCJ 9,580 31.25 PCJ 9,580 31.25 WSXAU 9,580 31.30 SYSAU 9,580 31.30 SYSAU 9,580 31.30 SYSAU 9,580 31.30 SYSAU 9,580 31.31 SYSAU 9,580 31.41 SYS | Port-au-Prince, Hetti | 0 03 E | Broadcast Broadcast | 6,400 46.88 YV5RH | Sanfiago, D. R. San Jose, Costa Rica Caracas, Venezuela Caracas, Venezuela | 0 25 E | Proadcast Experimental Proadcast Broadcast Broadcast Broadcast |
| 9,550 31.41 OLR3A 9,540 31.47 LKJ1 9,540 31.47 DJN 9,535 31.46 JZ1 | Jeloy, Norway | | | 6.345 97.10 HKW- | | | |
| 9,535 31 46 JZ1 9,530 31,48 W2XAP | Nazaki, Japan Schenectady, N. Y. | P | Broadcast Broadcast | 6,365 47.14 YVIRH | La Ceiba, Honduras Maracaibo, Venezuela | 0.1 F | le.; relays YVIRF |
| 9,530 31.48 W2XAP 9,525 31.49 ZBW3 | Hong-Kong, China | 2.0 B | ic.; relays WGY! | 6,365 47.14 YVIRH 6,360 47.17 TIFA 6,350 47.24 YNH6 | Maracaibo, Venezuela San Jose, Gosta Rica Boom, Nicaragua | 0.1 F | Proadcast Phone |
| | | | | | | | |

| Kc. Met | ers Call | Location | Kω. | Service, etc. | Kc. Meters | Call In | cation | Kω. | Service, etc. |
|--------------------------|--|--|-------------|---|---|-------------------------------|--|--------------------|---|
| 6,350 47. | 24 YNJ5 24 YNJ5 24 YNJ7 20 HRP1 32 YNE 32 YNE 32 YNE 32 YNG 54 HIZ 55 HIG 77 HIG 77 COHB 84 YVSRP 27 YVSRP 20 YVSRJ 55 HIN 11 HRD 19 YVIRG | Location Waspook, Nicaragua Waspook, Nicaragua Waspook, Nicaragua Trujillo, D. R. Nazaki, Japan Trujillo, D. R. Maraeay, Venezuela Trujillo, D. R. Sancti Spirtus, Cuba Lima, Peru Caracas, Venezuela Trujillo, D. R. La Ceiba, Hondura Valera, Venezuela Lima, Peru La Ceiba, Hondura Valera, Venezuela Coro, Venezuela Coro, Venezuela Coro, Venezuela Coro, Venezuela Coro, Venezuela Coro, Venezuela Mexico, D. F., Metico | 0.1 | Phone | 6,023 49.79 HJJ 6,020 49.83 CM 6,020 49.83 CM 6,021 49.88 XE 6,011 49.88 XE 6,011 49.88 XE 6,011 49.89 CM 6,010 49.90 CM 6,010 49.90 CM 6,003 49.97 XE 6,003 49.97 XE 6,003 50.00 TG 6,000 50.00 TG 6,000 50.00 TG 5,980 50.17 HJ 5,985 50.38 HJJ 5,935 50.38 HJJ 5,935 50.38 HJ 5,935 50.38 HJ 5,930 50.08 HJ | ABJ Santa Mar | ta. Colombia rmany rmany rmany rmany rmany resire F. Metrico - F. Metrico - S. Metrico - Otombia - Guebec - F. Metzco - Otombia - Roumana - Madagascar - J. R City Gustemala - Gustemala | 0.025 | Broadcast |
| 6,350 47. | 24 YNJ7 20 HRP1 | Wapam, Nicaragua San Pedro Sula, Honduras | 0.1 | Phone Broadcast | 6,020 49.83 DJ6 | Zeesen, Ge | Ver Mexico - | 5-50 | Broadcast Broadcast |
| 6,340 47. | 32 YNE | Puerto Cabezas, Nicaragua | 0.1 | Phone | 6,015 49.88 XE | WI Mexico, D | F., Mexico | 0.25 | Broadcast |
| 6,330 47. | 32 HIX 39 JZG | Nazaki, Japan | 10.0 | Phone to ships | 6,012 49.90 HJ3 | MR Georgetow | olombia n. British Guiana | 0.25 | Broadcast Amateur: bo |
| 6.310 47. | 54 HIZ | Truillo, D. R. | 0.02 | Broadcast | 6,010 49.92 CO | CO Havana, C | uba | 0.25 | Amateur; bo. Broadcast |
| 6,280' 47. | 77 HIG | Trujillo, D. R. | 0.05 | Broadcast | 6,005 49.96 CF | CX Montreal, | Quebec | 0.075 | Broadcast Bc., relays CFCF Broadcast |
| 6,280 47. | 77 COHB | Sancti Spiritus, Cuba | 0.15 | Broadcast Broadcast | 6,005 49.96 VE | DN Montreal, | Quebec | 4.0 | Broadcast Bc.; relays XEB |
| 6,260 47. | 2 OAX4G | Lima, Peru | ••••• | Broadcast | 6,000 50.00 HJ | ABC Quibdo, C | olombia | 0,1 | Broadcast |
| 6,250 48.0 6,243 48.0 | 00 YV5RJ 05 HIN | Caracas, Venezuela Truillo, D. R. | 0.75 | Broadcast Broadcast | 6,000 50.00 YO 6,000 50.00 RV | I Bucharest 59 Moscow I | Roumania LSS R | 0.3 | Broadcast Broadcast |
| 6,235 48. | II HRD | La Ceiba, Honduras | 0.25 | Broadcast | 6,000 50.00 TG | WA Guatemal | City. Guatemala | 0.2 | Broadcast |
| 6.205 48. | 19 YV1RG 35 YV1RI 39 XEXS 39 COKG, 08 HI8Q 47 HI1A | Coro, Venezuela | 0.2 | Broadcast | 5,980 50.17 HI | Trujillo, I | e, Madagascar . D. R. | 1.0 | Broadcast Broadcast |
| 6,200 48. | 39 XEXS | Mexico, D. F., Mexico | 0.1 2.4 | Broadcast Bc.; relays CMKB | 5,969 50.26 HV | J Vatican C | ity | 10.0 | Broadcast Broadcast |
| 6,198 48. | 08 HISQ | Ciudad, Trujillo | 0.025 | Broadcast | 5,995 50.04 RP | Tashkent. | U.S.S.R. | 1.0 | Phone |
| | | Santiago, Cuba Ciudad, Trujillo Santiago de los Caballeros D. R. | 0.05 | Broadcast | 5,990 50.08 HJ 5,990 50.08 HP | 5K Colon. Pa | nga, Colombia | 0.1 | Broadcast Broadcast |
| 6,164 48. | 67 OAX1B 70 CJRO 78 FT4AJ 73 YV5RD 78 CB615 78 HI5N | Chiclayo, Peru | 0.3 | Bc.; relays OAKIA Be.; relays CJRC Experimental Broadcast | 5,940 50.50 TG | 2X Guatemal | nama a City, Guatemala ince, Haiti Venezuela Venezuela | 0 2 | Broadcast Police; bc. Bc.; relays HH2T |
| 6,150 48. | 78 FT4AJ | Tunis, Tunisia | | Experimental | 5,917 50.71 YV | 4RH Valencia. | Venezuela | | Broadcast |
| 6,156 48. | 73 YV5RD | Chiclayo, Peru Winnipeg, Man., Canada Tunis, Tunista Caracas, Venezuela Santiago, Chile Santiago de los Caballeros, D. R. | 1.0 | Broadcast Broadcast | 5,917 50.71 YV 5,899 50.84 YV | ISRV Maracay, | Venezuela | 0.25 | Broadcast Broadcast |
| d,150 48. | 78 HI5N | Santiago de los Cabalteros, | | | 5,882 51.00 ZE | Salisbury, | So. Rhodenia | 0.325 | Broadcast |
| | | D. R. Pereira, Colombia | 0.1 0.1 | Broadcast Broadcast | 5,890 51.02 IU/ 5,875 51.06 HR | N Addis Abs | pa, Ethiopia | 0.4 | Phone Broadcast Broadcast |
| 6,150 48. | 78 VE9CL | | | | 5,940 50.50 TC 5,925 50.64 HH 5,917 50.71 YV 5,917 50.71 YV 5,899 50.84 YV 5,882 51.00 ZE 5,880 51.02 IU 5,875 51.06 HR 5,865 51.15 HII 5,865 51.28 YV | J San Pedro | de Macoris, D. R. | 0.04 | Broadcast |
| 6,148 48. 6,149 48. | 78 HJ4ABU 78 VE9CL 80 ZEB 86 W8XK 88 CR7AA | Bulawayo, So. Rhodesia Pittsburgh, Pa. | 0.325 | Broadcast Broadcast Bc.; relays KDKA | 5,850 51.28 YV 5,845 51.32 KR 5,830 51.46 TD 5,830 51.46 CW | O Kabuku, I | dawaii | 10.0 | Broadcast Phone |
| 6,137 48. | 88 CR7AA | Pittsburgh, Pa. Lourenzo Marques, | | | 5,830 51.46 TD 5.830 51.46 CW | D Shinkio, M | Lanchukuo . | | Phone to Tokyo |
| 6.133 48.5 | 91 XEXA 92 CTIGO 94 LKJI 94 VP3BG 95 OAX7A 98 CXA4 01 OAX6A 01 OAX6A 02 YDA5 02 XEPW 02 MP5Z 02 WPXE 02 WPXE 04 WEXE | Mozambique Mexico, D. F., Mexico Parede, Portugal | | Broadcast Broadcast | | (Cerrito | Venezuela eto, Venezuela So. Rhodenia ba, Fthiopia ba, Honduras de Macoris, D. R. Venezuela lawaii lanchukuo so, Uruguay) Costa Rica Costa Mica enezuela I. I. ppan | 1.5 | Phone |
| 6,132 48. | 2 CTIGO | Parede, Portugal | | | 5,830 51.46 TIX | iPH San Jose, C2 San Jose, C | Costa Rica Costa Rica | 0.5 | Broadcast Broadcast |
| 6,130 48. | 94 LKJI | Jeloy, Norway | 1.0 | Broadcast | 5,830 51.46 TIC 5,830 51.46 TIJ 5,800 51.72 YV 5,800 51.72 KZ 5,790 51.81 JVU | SRC Caracas, V | enezuela | 1.0 | Broadcast Phone; occ. bc. Phone to Manchukuo; |
| 6,130 48. | 94 VP3BG | Georgetown, British Guiana | 0.15 | Broadcast | 5,790 51.81 JV | J Nazaki, Ja | ipan | i0 0 | Phone to Manchukuo: |
| 6,125 48 | 98 CXA4 | Parede, Portugal Havana, Cuba Jeloy, Norway Georgetown, British Guiana Cuzco, Peru Montevideo, Uruguay Hoguta, Colombia | 1.0 | Broadcast | 5 780 51 90 OA | X4D Lima Par | | 20.0 | also be. Broadcast |
| 6,122 49.0 | DI HJ3ABX DI OAX4P | | | Broadcast Broadcast | 5,780 51.90 HJ | ABD Medellin, | Colombia . | | Broadcast |
| 6,122 49. | OI OAX6A | Huancayo, Peru Arequipa, Peru | 1.5 | | 5,798 52.10 YN 5,735 52,31 HC | OP Managua, 1PM Quito, Eci | Nicaragua . iador | 0.3 | Broadcast |
| 6,120 49. | Nº XEPW | Mexico, D. F., Mexico | 1.5 | Broadcast Broadcast Broadcast | 5,730 52.36 JVV | Nazakı, Ja | pan City Contamble | 0.3 10.0 0.2 | Phone to Formosa; be. Broadcast |
| 6.120 49 | D XEFT | Veracruz, Veracruz, Mexico | 0.12 | Broadcast Broadcast | 5,710 52.54 YV | 2RA San Cristo | bal, Venezuela | 0.75 | Broadcast |
| 6,120 49. | 02 W2XE | Arequipo, Peru Bandoeno, Java, D. E. I. Mesico, D. F., Mexico Veracruz, Veracruz, Mexico Pansma City, Panama Wayne, N. J. Mexico, D. F. Guadaliajara, Merico Barranquilla, Colombia Podebrady, Czechoslovakia Daventry, England Halifara, N. S., Canada Calcutta, India Mauizales, Colombia Bound Brook, N. J. Chicago, Illiniosi | 10.0 | Broadcast Bc.; relays WABC | 5,780 51.90 OA 5,780 51.90 HJ/ 5,788 52.10 YM 5,735 52.31 HC 5,730 52.35 YV 5,713 52.51 TG 5,710 52.54 VV 5,705 52.50 CFI 5,670 52.10 A 5,555 54.00 YM 5,500 54.55 TIS 5,409 54.64 RO 5,435 55.19 LSI 5,415 55.40 PM 5,170 58.03 HR | U Rossland, F Norddeich | U Colombia Nicaragua Jador Jador Japan Jana B. C., Canada J. Germany bezas, Nicaragua n, Coeta Rica 4, U.S. R. Java, D. E. I | | Phone; bc. Phone |
| 6,117 49.0 | 22 W2XE 24 XEUZ 25 XEUZ 26 XECU 26 HJ1ABB 26 OLRZC 27 OVC 27 OVC 28 W3XAL 28 W3XAL 28 W3XF 20 YTC 20 YTJ 20 HJ4ABE | Mexico, D. F. Guadalaiara, Mexico | ••••• | Broadcast Broadcast Broadcast | 5,555 54.00 YN | E Puerto Ca | bezas, Nicaragua | 0.1 0.2 15 0 | Phone |
| 6,115 49. | 06 HJIABB | Barranquilla, Colombia | 1.0 | Broadcast | 5,500 54.55 T15 5,499 54.64 RO | HH San Ramo | n, Costa Rica | 0.2 I | Phone Broadcast Phone |
| 6,110 49. | 10 GSL | Daventry, England | 20.0 | Broadcast Broadcast | 5,435 55.19 LSI | Monte Gr | ande, Argentina | 0.45 | |
| 6,110 49. | 10 VE9BX | Halifax, N. S., Canada | 0.2 | Bc.; relays CHNS | 5,170 58.03 HR | W- Dandoeng | Java, D. E. I. | 0.45 | Phone; bc. |
| 6,108 49. | HJ4APB | Manizales, Colombia | ******* | Broadcast Bc.; relays WJZ Bc.; relays WENR Broadcast | 5 140 58 37 PM | | Honduras Java, D. E. I. alif. | 0.1 | Phone Broadcast |
| 6,100 49. | IS W3XAL | Bound Brook, N. J. Chicago, Illinois | 20.0 5.0 | Bc.; relays WJZ _ Bc.; relays WENR | 5,110 58.71 KJ | CB Bolinas, C | alif. | 40.0 | Phone Phone |
| 6.100 49 | 20 YTC | Chicago, Illinois Belgrade, Yugoslavia Johannesburg, S. Africa Medellin, Colombia | 2.5 | Broadcast Broadcast | 5,140 58.37 PM 5,110 58.71 KI 5,105 58.76 KE 5,025 59.70 ZF/ 5,000 60.00 WV | Hamilton, | Bermuda | | |
| 6,097 49 | 20 HJ4ABE | Medellin, Colombia | 0.1 | Broadcast | 5,000 60.00 WV | W Hamilton, Beltsville, | Md | 1.5 | Frequency Standard; To |
| 6,090 49. | 26 ZBW2 | Hong-Kong, China Ibague, Colombia | | Bo≾ relays ZBW Broadcast | | | | | Frequency Standard; To Wed., Fri.; noon, 1 p E. S. T. |
| 6,090 49. | 26 CRCX | Toronto, Ont., Canada | 0.5 | Broadcast | 5,000 60.00 ZU 4 975 60 30 GB | D Pretoria, S C Rugby E | S. Africa . | | |
| 6,085 49. | 30 HJ5ABD 32 VO7LO | | 1.25 | Broadcast | 4,820 62.24 GD | W Rugby, E | ngland | | Phone to ships Phone to U. S. |
| 6,030 49. | 34 ZHJ | Nairobi, Kenya, Africa Penang, Straits Settlementa La Paz, Bolivia | 0.05 | Broadcast | 4,795 62.56 VE | Y Lawrence | r, B. C. | 20.0 | Broadcast Phone |
| 6,080 49. | 34 WYXAA | Chicago Illinois | 20.0 | Broadcast Bc.; relays WCFL Experimental | 4,753 63.11 WC | O Ocean Ga | te, N. J. | 20.0 | Phone Phone |
| 6,079 49. | 20 YTC 20 YTC 20 YTC 20 YTC 20 YTC 20 YTC 40 E 20 YTC 40 E 20 YTC 40 E 20 YTC 40 YTC 4 | Zeesen, Germany Colon, Panana | 5-50 0.2 | Experimental Broadcast | 5,000 60.00 ZU 4,975 60.30 GB 4,820 62.24 GD 4,795 62.56 VE 4,763 63.11 WC 4,763 63.11 WC 4,610 65.08 YN 4,610 65.08 YN 4,610 65.08 YN 4,610 65.08 SO 4,610 65.08 SO 4,610 65.08 SO 4,610 65.08 SO | J5 Waspook, | S. Africa ngland rgland r, B. C. rille, N. J. te, N. J. Nicaragua Nicaragua bezas, Nicaragua caragua | 0.1 | Phone |
| 6,075 49. | 38 YVIRD | | | Broadcast | 4,610 65.08 YN 4,610 65:08 YN | H6 Boom Ni | bezas, Nicaragua caragua | 0.1 | Phone Phone |
| 6,070 49. | 42 VE9C8 | Maracailo, Venezuela Maraca, Asia Vancouver, B. C., Canada Toronto, Ontario Bogota, Colombia Colombo, Ceylon Mexico, D. F., Mexico Skamlebaek, Denmark Gincinnati, Oliio Philadelophia, Pa | 0.01 | Broadcast Broadcast Broadcast Broadcast | 4,605 65.16 HR | | | | |
| 6,070 49. | 42 CFRX | Toronto, Ontario | 0.1 | Renadeast | 4,600 65.22 HC 4,465 C 19 CF | 2ET Guayaqui | Honduras , Ecuador | 0.4 | Phone Broadcast |
| 6.067 49, | 45 VPB | Colombo, Ceylon | | Broadcast | 4,465 C* 19 CF. | A2 Drummon | dville, P. Q. | 15.0 | Phone |
| 6,065 49. | 50 OXY | Mexico, D. F., Mexico Skamleback, Denmark | | Broadcast | 4,355 68.89 IAC | Coltano, I | taly | 56.0 | Phone |
| 6,060 49. | SO WEXAL | Cincinnati, Oliio | 10.0 | Bc.; relays WLW Be.; relays WCAU Broadcast | 4,273 70.21 RV 4,107 73.85 HC | JB Quito, Ecu | sk, 0.5.5.K. Iador | 0.5 | Broadcast Broadcast |
| 6,050 49. | 59 HJ3ABD | Bozota, Colembia | 1.0 | Broadcast | 4,100 73.17 LK. | JI Jeloy, Not | way Pla | 1.0 | Experimental Phone |
| 6,050 49. | 59 XEXF 62 XETW | Gincianati, Olio Philadelphia, Pa. Bogota, Colombia Mexico, D. F., Mexico Mexico, D. F., Mexico Barranquilla, Colombia Miami Beach, Fla. | •• •••• | Broadcast Broadcast | 4,002 74.77 CT | 2AJ San Migu | Honduras I, Ecuador dville, P. Q. taly sk, U.S.S.R. talk talk talk talk talk talk talk talk | 0.5 | Amateur; bo. Broadcast; exp. |
| 6,042 49. | 65 HJIABG | Barranquilla, Colombia | 0.15 | Broadcast Broadcast | 4,000 75.00 CT 3,175 94.48 YN | J7 Wapam, I | vi adelfa Vicaragua | 0.1 | Phone |
| 6,040 49. | 67 HI9B | Miami Beach, Fla. Santiago de los | 2.5 | Bc.; relays WIOD | 3,175 94.48 YN | JS Waspook, | Nicaragua | 0.1 | Phone Phone |
| 40.0 | 67 IN 1 V . 1 | Santiago de los Caballeros, D. R | | Broadcast | 3,170 94.48 YN | E Puerto Ca | hezas, Nicaragua | 0.1 | Phone |
| 6,040 49. | | Boston, Mass. Tandjongpriok, Java, | 5.0 | Broadcast | 3,800 78.95 ZP1 3,770 79.56 HB | | | ***** | Broadcast Broadcast |
| | | D. E. I. | 10.0 | Broadcast | 3,525 85.11 HB | 9AQ Lausanne, | Switzerland . | | Broadcast. |
| 6,033 49. | 75 OLR2B | Podebrady, Czechoslovakia | 25.0 | Broadcast | 4,355 88.89 I AK 4,273 702 I RV 4,107 73 85 HC 4,100 73 1,7 LK 4,007 74.77 CT 4,000 75.00 CT 3,175 94.48 YN 3,175 94.48 YN 3,175 94.48 YN 3,175 94.48 YN 3,170 94.48 YN 3,800 78.95 ZPI 3,770 70.56 HB 3,525 85.11 HB 3,325 85.11 HB 3,330 92.88 YD | V2 Bandjerm | asin, Borneo, | | |
| 6,030 49. | 72 HJ4ABP 75 OLR2B 75 HP5B 75 VE9CA 75 XEBQ | Panama, Panama Calgary, Alberta, Canada | 0.1 | Broadcast Bc.; relays CFCN | 3,040 98.68 YD | D. E. I. | uriok. Java | | Broadcast |
| 6,030 49. | 75 XEBQ | noston, Mass. Tandjongpriok, Java, D. E. I. Medellin, Colombia Podebrady, Czechoslovakia Panama, Panama Calgary, Alberta, Canada Mazatlan, Mexico | | Broadcast | 0,010 #0.00 I D | D. E. 1 | priok, Java, | 10 0 | Broadcast |
| | | | | | | | | | |
| | | | | | | | | | |



Jine quality radio tone depends on fine quality radio tubes and parts . . . Insist on . . . NATIONAL UNION TUBES and PARTS to get the most out of your set.



Ted Husing recruits a mowing machine to carry himself, portable relay transmitter and engineers around the lengthy fairway of a golf club while he presents a word picture of the event.

BROADCASTING THE NEWS

WITH greater speed than newspapers can be published and distributed, radio supplies the public with news flashes throughout the day. In addition to news bulletins, there are stellar commentators who interpret the events of the day editorially. News re-enactment programs are also popular; actors and actresses with expert mimicking ability bring to life the stories of the headlines.





A section of the busy news department of NBC where wired material from press associations is prepared for the air. Right: A scene from the "March of Time," a pioneer news reenactment feature.







Walter Winchell, the Broadway columnist, Lowell Thomas and Edwin C. Hill, three long-established air commentators.





It's always news when the President and the First Lady takes to the airways. The President is shown at the left in a typical railroad platform broadcast. Mrs. Roosevelt is apparently setting a record for broadcasts by Presidents' wives.

SAY IT WITH A SONG

THAT'S what sponsors believe and they do that very thing! Only they're smart enough to have talented men and women do it for them. On these pages are representative vocalists who are responsible for the tunes you hum to yourself after a night of radio listening. This branch of radio, particularly, offers big opportunities to newcomers.

The Revelers, a pioneer air quartet that's still going strong.







"Autograph please!" is the request and Lucille Manners and Lanny Ross are seen obliging.







Del Casino and Loretta Clemens, whose voices are known from coast to coast.





And Harriet Hilliard and Don Ross, two more top-notch mike vocalists. Left: Recognize her! It's Martha Tilton, the girl on the cover. She's featured with Benny Goodman's Orchestra.





Songstresses Dorothy Arnold and Sylvia Froos, who have "an eye" as well as "ear" appeal.







Left to right: Claire Sherman, Jack Baker and Joan Edwards, popular network songsters. And below, left to right, are Lucy Monroe, Jane Froman and Ethel Shutta, whose voices have wide followings.







Right: A scene such as this can only occur in a dream or in a Hollywood musical talkie. In this case it's the latter. And in the foreground is Kenny Baker, the young singer who "made the grade" cinematically as well as microphonically.



YE OLDE FAMILY ALBUM

HERE are some photos from the family albums of your air favorites. Can you identify them from these photos taken when they were young? See how good your guess is before you look at the captions on the lower right.



2. She's known as "The Nitwit of the Networks." She looks innocent enough here but she turned into radio's leading exponent of daffy humor.



1. He's popular as a dance conductor, singer and variety show director. He looks the same today (outside of the haircut!)



3. These two lads used burnt cork and a Harlem dialect to gain fame.





1. This girl's name comes to mind whenever you hear "Shine on, Harvest Moon." The young man at the right scored his greatest mike success with the aid of a gong. He's pictured here as a young yachtsman making a formal (see the hat!) call on neighboring boats.

OF COURSE YOU KNEW!

- 1. Rudy Vallee.
- 2. Gracie Allen.
- 3. Freeman Gosden (Amos) and Charles Correll (Andy).
- 4. Ruth Etting and Major Bowes.



CALL US FOR RADIO REPAIRS

Guaranteed Work on All Makes

F your radio hums, buzzes, crackles, fades or stops playing altogether, call us!

We have scientific instruments which quickly locate radio troubles and show us exactly what must be done to cure them.

We are experts with a broad training in the science of radio repairs and are equipped to cope with problems on all makes of sets.

We use quality parts in all of our work and guarantee every job fully.

Our charges are reasonable and our service is fast.

Call us for radio repairs at any time and be assured of full satisfaction.

A LIHO ROSS

NONAL UNION OF PLETE REPAIR SERVICE ON ALL RADIOS

FOLLOWING THE REPAIR SERVICE ON THE REPAIR SER

SILVER'

SATISFACTION GUARANT

Ycamore 7522 W

ALLAN ROSS

Radio Repair Service
Superior Ave.

Silverton, Ohio

Jefferson - 4453