Radio Foto Log

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





TELEVISION
IN THE HOME



PROFESSOR QUIZ



CHARLIS McCARTHY
AND AMDREA LEEDS

MARTHA TILTON
Vocal Star of Benny Goodman's Swing Band

You can

you can

play any might

play any mig

NATIONAL UNION RADIO TUBES
MUTUAL
FOR BEST RECEPTION

NEWS DRAMA

DANCE BANDS



NATIONAL UNION

RADIO TUBES AND CONDENSERS

or Call us for

EXPERT RADIO SERVICE



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Manufacturers of National Union Radio Tubes and Parts

EDITED BY SAMUEL KAUFMAN

The Listener Always Wins

PROCRAM 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 twentyfour 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 hy the scheduling of a high - calibre hour on the other station or network. He's 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 schedules.

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 present-ing 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.

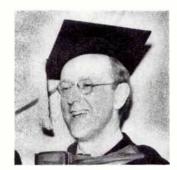






Left to right: Max Eastman, author, humorist and raconteur, who heads the CBS Word Game; Professor Quiz (Craig Earl) paying off a winner with silver dollars, and Paul Wing, master of the NBC Spelling Bee.







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 with 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

- 1. A monkey climbing 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 ton?
- to reach the top?

 2. Quickly: 11 is 1/6th of 3 times what number?

 3. Is the half of w hundred the same as 100 divided by ½?
- If you stand on your head, face to the East, in which direction is your right shoulder pointed?
- which direction is your right annually pointed, would it be the same if you were standing on your feet, 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? 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?
- You have an engagement for 12 noon. Your friend phones that he must "Advance" the engagement a half hour. At what time will you nicet him?
- 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 dollars
- If "This end 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-
- 13. If a coat is turned inside out, would the right arm still go into what was the right sleeve?
 14. Would you think a "Hugger-mugger" is a lov-
- ing sort of a person?
- 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 birycle rider travels a mile in three minutes WITH the wind; he returns over the same course in four minutes AGAINST the wind. How fast rould he make the mile if there were NO wind?
- Which is the longer, a eigarette or a stick of
- chewing gum?
 Is the Sabara desert flat, rolling or mountainous?
- What ahhrevlations for State names make com-
- plete words? start work Monday morning at \$1 per day, Yon start work Tuesday morning at \$2 per day. How many days will you work before you will have earned TWICE as much as 1? \$2 per
- How many times per day does the ordinary watch tirk? 22.
- 23.
- 24.
- watch tick?
 In the line: "Little Miss Muffet sat on a
 TUFFETT" . . . what is a "tuffet"?
 Quickly . . . count from 10 to 1, herkwards.
 How many STATES in the United States?
 Do the words "In God we Trust" appear on all 25. 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?
- chicken has a gizzerd what has an If a "Izzard"?
- If the lanndry goes out Monday morning and is returned Thursday noon, what is the mini-
- as returned introday noon, was is the minimum number of shirts a man must have in order to wear a rlean shirt each morning?

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

- 31. If Tom, Dick and Harry agree to lunch together, each beering his own share of the cost, what about this situation. Tom brings 6 eggs; Dick brings 3 eggs; Harry brought NO eggs, but tossed 15c on the table. HOW should the 15c be divided?
- 15c he divided?

 32. Take an ordinary sleet 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 he after the fiftleth tear and stacking?

 33. 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.

		12 to 30			
त्रुपापुः	anousiw y	ոռու հեսոհ	1 ,astunim	8.2/11ths	.66
		daid soli	m noillim	OVER 22	.28
				1 83330 O	
Lom	to & sts	as Harry	tpe 12c'	TOM gets	.18
. –	•		2 '80M to		

- 1½ minutes, not 2 minutes. Tosst one side of No. No. 2. Then tosst final side of No. 3; finally tosst renisingly and one side of No. 3; finally tosst renising sides of Nos. 2 and 3. OS. "x" - the letter "x". Inc letter "x". Minimini of eleven shirts.
- NJ, they do not appear on either five-cent piece, or the Indian lited onne-cent coin. Small, medium or Big COHKIN, Covkin heing an old Sectle-English term meaning "Pin", the letter "x". .72
- '97

.62

ZZ

٦,

- receptable, . is should he I, 2, 3, etc.!
 Tréchnically, forty-four States and four "Commonwealths", viz: Kentucky, Massachusetts, vis: Mentucky, Massachusetts, Virginia.
- 432,000 times per 24-hour day. O00,288 of balf. She per 24-hour and lengths of balf. Jehend on the inverted Mever.
- TZ Unabridged. Arkt illi Idai Lat Met Masst Misst Nebt Orci O, Kent Wash. oz.
- ot qu aniatmom saisteor testes and S of C of testes and 000,00 feet above sea levelenders The stick of chewing gum.
- Ine seven!
- Penageous, Florida, farthest West.

 Penageola, Florida, farthest West.

 ZiUT 34, minutes, but 3 minutes, 26 seconda.

 You Torgot the wind HELPED him only 3 of the C7 minutes, while it HINDERED him four for 7 minutes, while it HINDERED him four fire seven!
- Hugger-Mugger, according to Wehster is: "privacy, secrecy, Or, also, You'confusion, a muddle". At any rate, NO privacy or secrecy shout hugging or mugging these days!
- (1)
- Feuresca helves, and 15 dollars. 7.2.73. 3/2 equals 11; ½ equals 1/3 of 11, or 5.2/3; 2/2; or "This and That" then equals x 3.2/3; or 7.1/3.
- Websiter says "Advances to make earlier, as an event or date", so you would meet at 11:30shough personally, I would not show up until
 - No. Act of miles per hour. Act miles per hour. S. hut 25, min. S. hours and 45 min.
 - Yourp. *04 (22)
- .Gl: o To ,abnossa Gl& latot ,ubnusus 6 minutes and 55 seconds. He nase 28 npward surkes or 280 seconds; 27 back supps or 185

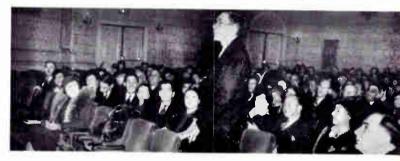
Mr. Next Door Neighbor Takes the Air

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 entertainment, 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.







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.



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

Call	DRUADCAS	Frequency Power	110113	Call	ic didited 3	Frequency Power
Letters	Location	(KC) (Write)		Letters	Location	
KABC Kabr	San Antonio, Tex. Aberdeen, S. Dak.	1420 100-250 1420 100		KGEK	Sterling, Colo.	1380 1000 1500 100
KADA	Ada, Okla. Alexandria, La. Portiand, Ore.	1200 100	•	KGEZ	Kalispell, Mont.	1310 100 1420 100-250 1500 100-250 1200 100
KALB	Alexandria, La. Portland, Ore.	1300 1000		KGFF	Shawnee, Okia.	1420 100~250 1500 100~250
KAND	Corsicana, Tex.	1310 100		KGFJ	Los Angeles, Calif.	1200 100 1370 100
KANS	Portland, Ore. Corsicana, Tex. Wichita, Kans. Little Rock, Ark. Fresno, Calif. Eik City, Okia. Astoria, Ore. Albert Lea, Minn. Gallup, N. Mex. Muskogee, Okia. Baker, Ore. (C.P.) Portland, Ore. Big Spring, Tex.	1210 100 890 500-1000 1310 100	•	KGEK KGEZ KGFF KGFJ KGFJ KGFU	Location Sterling, Eolo. Long Beach, Callf Kalispell. Mont. Shawnee, Okla. Brownsville, Tex. Los Angeles, Callf. Roswell, N. Mex. Kearney, Nebr. Pierre, S. Dak. San Francisco, Call Coffeyville, Kans. Albuquerque, N. Mex Pueblo, Colo. Little Rock, Ark. Billings, Mont. Butte, Mont.	1370 100 1310 100
KARM	Fresno, Calif.		• • • •		Pierre, S. Dak.	630 200
KASA KAST	Astoria, Ore.	1210 100 1370 100		KGGC	Coffeyville, Kans.	f. 1420 :/-100 (1010 1000 . 1230 1000
KATE KAWA	Albert Lea, Minn.	14:20 250 1500 100		KGGC KGGF KGGM KGHF	Albuquerque, N. Mex	. 1230 1000
KRIY	Muskogee, Okla.	1500 100		KGH1	Little Rock, Ark.	1200 100-250
KBKR KBND	Baker, Ore. (C.P.) Bend, Ore. (C.P.)	1310 100-250		KGHL	Butte, Mont.	1340 1000-2500
KBKR KBND KBPS KBST	Portland, Ore.	1210 100 1370 100 1420 250 1500 100 1500 100 1510 100 1310 100-250 1420 100 1500 100		KGHL KGIR KGKB KGKD KGKO KGLU KGMB KGMB KGMB KGMB KGMB	Butte, Mont. Alamosa, Colo. Tyler, Tex. San Angelo, Tex. Wichita Falls, Tex. Scottsbluff, Nebr. Mason Clty, Iowa Safford, Ariz. (C.P Honolulu, Hawall Amarillo, Tex. North Platte, Nebr. Dodge Clty, Kans. San Francisco, Cali	. (230 1000 1320 500 1200 1002-250 790 1000-2500 1340 1000-2500 1500 100-250 1370 100-250 1370 100-250
KBTM	FORTIANG, OPE. Big Spring, Tex. Jonesboro, Ark. Kansas City, Kans. Texarkana, Lex. Kansas City, Mo. Enid, Okla. Jerome, Ariz.	1500 100	•	KGKL	San Angelo, Tex.	1370 100-250
KCKN	Kansas City, Kans. Texarkana, Tex.	1310 100 1420 100-250	eq	KGKO	Wichita Falls, Tex. Scottsbluff, Nebr.	570 250-1000 1500 100-250 1210 100-250 .1 1420 100-250
KCMC KCMO KCRC	Kansas City, Mo.	1370 100	Ž	KGLO	Mason City, lowa	1210 100-260
KCRJ	Jerome, Ariz.	1360 250 1310 100-250	.8	KGMB	Honoiulu, Hawaii	1320 1000
KDAL KDB	Jerome, Ariz. Duluth, Minn. Santa Barbara, Calif	1500 100 1500 100-250	eu	KGNC	Amarillo, Tex.	1410 1000-2500
KDFN		LAIAN KOO	ě	KGNO	Dodge City, Kans.	1410 1000-2500 1430 1000 1340 250 f. 790 7500
KOKA	Pittsburgh, Pa. Devils take, N. Dak.	1510 100	. 😨	KGO	San Francisco, Call Honolulu, Hawali	7. 790 7500 750 2500
KOLR KONC	Lewis Wown, Mont. (C.P.)	200 100-250	Pa	KGVL	Greenville, Tex. (C.P	.) 1200 ,100
KDNT KDON	Monterey, Calif.	1210 100	: =	KGVO	Portland, Ore.	620 1000-5000
KDON KDTH	Casper, World Pa. Devils Lake, N. Dak. Lewiswown, Mont.(C.P.) Denton, Tex. Monterey, Calif. Dubuque, lowa (C.P.) Sait Lake City, Utah	1340 500	Ē	KGY	Olympia, Wash.	f. 790 7500 750 2500 .) 1200 100 1200 1000 620 1000-5000 1210 100 1400 250 1210 100
KDYL KECA	Los Angeles, Calif	1430 1000-5000 1370 100	permit has been issued.	KGV KGVL KGVL KGVD KGV KGV	Okmuigee, Okla.	1210 100
KĒĒN KEHE	Seattle, Wash. Los Angeles, Calif.	.780 1000-5000		KNO	Spokane. Wash.	900 1000-5000 590 1000-5000 1260 250
KELA KELD KELO KERN	Denton, Tex. Monterey, Calif. Dubuque, Iowa (C.P.) Salt Lake City, Utah Los Angeles, Calif. Seattie, Wash. Los Angeles, Calif. Centralia, Wash. N. of Eldorado, Ark Sloux Falis, S. Dak. Bakersfield, Calif. Price. Utah	1440 500 1370 100	construction	Vuc:	Dodge City, Kans. San Francisco, Cali Honoiuiu, Hawali Greenville, Tex. (C.P. Missoula, Mont. Portland, Ore. Olympia, Wash. Hilo, Hawali Okquiqee, Okla. Los Angeles, Calif. Spokane, Wash. Chico, Calif. Watsonville, Calif.	1260 250 1310 250
KELO	Sloux Falls, S. Dak.	1200 100	ī	KICA	Watsonville, Callf. Clovis, N. Mex. Idaho Fails, Idaho	
KERN	Bakersfleid, Calif. Price. Utah	1370 100 1420 100	E	KIDO	Idaho Fails, idaho Boise, idaho	1370 500-1000 1350 1000-2500 1420 100 1450 500-1000 650 250 1310 100
KEX	Portland, Ore.	1180 5000	18	KIDW	Lamar, Colo.	1420 100
KFAC	Lincoln, Neur.	1300 1000	Ö	KIEV	Glendale, Calif	850 250
A STREET	St./Gloud, Minn.	1420 ∵.100 3610 ::1000	60	KIDO KIDW KIEW KIEY KINY	Boise, Idaho Lamar, Colo. Eureka, Calif. Glendale, Calif Juneau, Alaska Seattle, Wash.	1310 100 650 250
KFBB	Bakersfleid, Calif. Price, Utah Portland, Ore. Lincoin, Nebr. Los. Angeles, Calif. Structional Minn. Fairbank Alaska (C.P.) Great-Fails, Monta Abliene, Kans. Sacramento, Calif	1280 1000-5000	P. after station location, indicates	1 10 1 1	Seattle, Wash. Yakima, Wash. Kansas City, Mo. Garden City, Kans. Pecos, Tex.	650 250 1250 250-500 1530 1000 1210 100
KFBK	Abliene, Kans. Sacramento, Calif Beaumont, Tex. Brookings, S. Dak. Denver, Colo.	1490 5000	- <u>- :</u>	KITE	Garden City, Mo.	1210 100
KFDM KFDY	Beaumont, Tex.	560 500-1000 780 1000	nd	KIUN	Pecos, Tex.	420 100 1370 100
KFEL	Denver, Colo.	920 500		KJBS.	Durango, Colo. San Francisco, Call	f. 1070 500
KFEL KFEO KFGO	Jt. Joseph, mo.	1370 100	0.0	KIUN KIUP KJBS KJR KLAH KLBM KLCN	Casiahad N May	970 5000
KFH KFI	Boone, iowa Wichita, Kans, Los Angeles, Calif.	1300 1000-5000 640 50000	. E	KLBM	La Grande Ore. (C.P Biytheville, Ark.	.) 14:20 1 00-250 1290 100
KFIO	Spokane, Wash. Fond du Lac, Wisc.	1120 100	၁၀	KLO	Ogden, Utah	1400 300
KF1Z KFJB		1420 100 1200 100-250	n J	KLO KLPM KLRA	Ogden, Utah Minot, N. Dak. Little Rock, Ark. Oakland, Calif.	1240 250 1390 1000-5000
KFJI	Klamath Falls, Ore. Grand Forks, N. Dak. Portland, Ore. Fort Worth, Tex,	12 10 100 14 10 500-1000	. <u>ō</u>	KI.S.	Oakland, Calif.	1390 1000 -5000 1280 250 1370 1 00
KFJM KFJR	Portland, Ore.	1300 500	fat	KLUF KLX KLZ	Galveston, Tex. Oakland, Calif. Denver, Colo.	880 1000
KFJZ KFKA	Greeley, Colo.	1370 100-250 880 500-1000	56	KLZ	Denver, Colo. Shenandoah, lowa	560 1000-5000 930 1000-5000
KFKU KFNF	Lawrence, Kans. Shenandoah, Iowa	1220 1000-5000	<u> 5</u>	KMAC KMBC	San Antonio, Tex. Kansas City, Mo.	930 1000-5000 1370 100-250 950 1000-5000 1410 250 580 1000
KFOR	Lincoln, Nebr.	1210 100-250	af	KMED	Medford, Ore.	1410 250
KFOX KFPL	Long Beach, Calli. Dublin, Tex.	1220 1000-5000 1220 1000-5000 1210 100-250 1250 1000 1310 100-250	급.	KMJ	Medford, Ore. Fresno, Calif. Monroe, La.	1200 (00-250
KFPW KFPY	Long Beach, Callf. Dublin, Tex. Ft. Smith, Ark. Spokane, Wash.	1210 100 890 1000-5000	ن	KMMJ	Ciay Center, Nebr.	740 1000
KEOD	Anchorage, Alaska	780 250 610 1000-5000		KNOX KMPC	lacoma, wash. St. Louis, Mo. Beverly Hills, Calli Los Angeles, Callf. Brady, Tex. Palestine, Tex. Austin, Tex. Los Angeles, Callf.	1090 50000 f. 710 500
KFOD KFRC KFRO	Anchorage, Alaska San Francisco, Calif. Longview, Tex.	610 1000-5000 1370 250	NOTE:	KMPC KMTR	Beverly Hills, Calif	f. 710 500 570 1000
KFRU KFSD KFSG KFUO		630 500_I000	Ţ	KNEL	Brady, Tex.	570 1000 1500 250 1420 100
KFSG	Los Angeles, Calif.	600 1000 1120 500-2500 550 500-1000	2	KNET KNOW	Austin, Tex.	1420 100 1500 100 1050 50000
KFU0 KEVD	Ciayton, Mo. Los Angeles, Calif. Cape Girardeau, Mo. Hollywood, Calif. Nampa, Idaho Grand Junction, Colo. San Bernardino, Calif.	550 500-1000 1000 1000	F ⊶	KNX KOA	Los Angeles, Calif.	1 0 50 50000 830 50000
KFVD KFVS KFWB KFXD KFXJ	Cape Girardeau, Mo.	1210 100-250 950 1000-5000 1200 100-250 1200 100-250		KOAC	Los Angeles, Calif. Denver, Colo. Corvallis, Ore. Pittsburg, Kans. Albuquerque, N. Mex. Rapid City, S. Dak. Kilgore, Tex. Oklahoma City, Okla. Reno. Nev.	550 1000
KFXD	Nampa, Idaho	1200 100-250		KOAM KOB	Albuquerque, N. Mex.	790 1000 1180 10000 1370 100-250
KFXJ K f XM	Grand Junction, Colo.	1200 100-250 1210 100		KOBH	Rapid City, S. Dak.	1370 100-250
KEUO	Clayton, Mo.	550 500		KOCA KOCY	Oklahoma City, Okla	. 1310 100-250
KFYO KFYR KGA	Clayton, Mc. Lubbock, Tex. Bismarck, N. Dak. Spokane, Wash. Tucson, Ariz. San Diego, Calif.	550 500 1310 100-250 550 1000-5000 1470 5000 1370 100-250 13:30 1000		KO I L	O-aka Naka	1260 1000-5000
KGA	Spokane, Wash. Tucson, Ariz.	1470 5000 1370 100-250		KO I N KOKO	Portland, Ore:	940 1000-5000
KGAR · KGB	San Diego, Calif.	13:30 1 000		KOL	Seattle, Wash.	1270 1000-5000
KGBU KGBX	Retchikan, Alaske Springfield, Mo.	900 500 1230 500		KOMA KOMO	Oklahoma City, Okla. Seattle. Wash.	. 1480 5000 920 1000-5000
KGCA	Decorah lowa	1270 100		KONO	Omana, Neor. Portiand, Ore. La Junta, Colo. Seattie, Wash. Okiahoma City, Okia. Seattie, Wash. San Antonio, Tex. Marshfield, Ore.	1180 10000 1370 100-250 1210 100-250 1210 100-250 1380 500 1260 1000-5000 1370 1000-5000 1370 1000-5000 1480 5000 920 1000-5000 1370 100 1200 1000-250
KGCA KGC I KGCU KGCX	Mandan, N. Dak.	1200 100 1240 250		KOOS KORE	Eugene, Ore. Pine Bluff, Ark.	1200 100-250 1420 100 1500 100
KGCX KGDE	Wolf Point, Mont. Fergus Falls, Minn.	1450 1000 1200 100-250		KOTN	rine Bluff, Ark. Valley City. N. Dak.	1500 100 1500 100-250
KGDM	San Diego, Calli. Ketchikan, Alaske Springfield, Mo. Decorah.: Towa Coeur d'Alene, IdahofCP; Mandan, N. Dak. Wolf Point, Mont. Fergus Falls, Minn. Stockton, Callf. Huron, S. Dak.	1100 1000	[12]	KOYC	Valley City, N Dak. 'Phoen's, Ariz. Laredo, Tex. (C.P.)	, 1500 100-250 1390 1000 1500 100 350
KGDY	nuron, 3, Dak.	1340 250	[12]	KPAB	Larego, Tex. (C.P.)	· 1500 100-250
-						

Call Letters	Location	Frequency Power (K.C.) (Watts)	•	Call Letters	Location	Frequency Power (K.C.) (Watts)
KPAC KPBM KPFA A KPLT KPUC KPDF KPPC KPPC KPPC KOW KRBA KRBA KRBA	Port Arthur, Tex. Poplar Bluffs, Mo.(C.P.) Pampa, Tex. Helena, Mont. Lake Charles, Ls. Paris, Tex. Bakersfield, Calif. San Francisco, Calif. Denver, Colo. Pasadena, Calif. Wenatchee, Wash. Houston, Tex. Pittsburgh, Pa. San Jose, Calif. Lukin, Tex. Abilene, Tex. Bozeman, Mont. (C.P.) Berkeley, Calif. Lukin, Tex. Low Los Angeles, Calif. Everett, Wash. Lew iston, Idaho Dalias, Tex. Midland, Tex. Jamestown, N. Dak. Shreveport, La. Roseburg, Ore. Des Moines, Iowa Rochester, Minn. El Paso, Tex. (C.P.) Oakland, Calif. Santa Fe, N. Mex. Sherman. Tex. Seattle, Wash. Manhattan, Kans. Salrma, Kans. Luntsville, Tex.(C.P.) Soioux City, Iowa St. Louis, Mo. Pocatello, Idaho Salem, Ore. Des Moines, Iowa St. Louis, Mo. Pocatello, Idaho Salem, Ore. Des Moines, Iowa St. Louis, Mo. Salem, Ore. Des Moines, Iowa St. Louis, Mo. Pocatello, Idaho Salem, Ore. Des Moines, Iowa Sioux Falls, S. Dak. Santa Rosa, Calif. St. Paul, Minn. Cedar City, Utah Lowell, Ariz. Phoenix, Ariz. Fort Worth, Tex. Austin, Tex. Jusalia, Calif. Santa Barbara, Calif. Shreveport, La. Temple, Tex. Twin Falls, Idaho Hot Springs Nati.Pk.Ark Visalia, Calif. Sonta Barbara, Cal. Oklahoma City, Okla. Modesto, Calif. Houston, Tex. Sioux City, Iowa St. Lowis, Mash. Yuma, Ariz. Fort Worth, Tex. Santa Barbara, Cal. Oklahoma City, Okla. Modesto, Calif. Houston, Tex. Sioux City, Iowa St. Louis, Mash. Yuma, Ariz. Fort Morth, Tex. Santa Barbara, Cal. Oklahoma City, Utah Sait Lake City, Utah Son Fredding, Calif.	260		KWOS KWSC KWTO KWTO KWYO KXA KXO KXOK KXOK KXOK KYYA KYYA KYYOS KYSM	Jefferson City, Mo. Pullman, Wash. Watertown, S. Dak. Springfield, Mo. Sheridan, Wyo. Seattle, Wash. Portlend, Ore. El Centro, Callf. St. Louis, Mo. (C.P. Aberdeen, Wash. Houston, Tex. San Francisco, Callf. Prescott, Ariz.(C.P. Merced, Callf. Mankato, Minn. (C.P. Philadelphia, Pa. Boston, Mass. Chicago, Ill. Jersey City, N. J. Omaha, Nebri	1310 100 1220 1000-5000 1210 100 560 5000 1370 100-250 1420 100-250 1420 100-250 1310 100-250 1310 100-250 1440 1000 1230 1000-5000 1300 100-250
KRBA KRBC KRBM KRE KRGV KRIC KRKD KRKD KRKO KRLC	Lufkin. Tex. Abilene. Tex Bozeman, Mont. (C.P.) Berkeley, Calif. Weslaco. Tex. Beaumont, Tex. (C.P.) Corpus Christi, Tex. Los Angeles, Calif. Everett, Wash. Lewiston Idaho	310 100 420 100-250 420 100-250 370 100-250 1260 1000 420 100-250 330 500 120 500-2500 370 50000	en issued.	KYSM KYW WAAB WAAF WAAT WABC- WBOO WAB WAB	Mankato, Minn. (C.P. Philadelphia, Pa. Boston, Mass. Chicago, Ill. Jersey City, N. J. Cmaha, Nebr. New York, N. Y Bangor, Me. Albany, M. Y) 1500 100-250 1020 10000 1410 500-1000 920 1000 940 500 660 5000 1200 100-250
KR LD KR LH KRMC KRMD KRNR KRNT KROC KROW KROY	Dallas, Tex. Midland, Tex. Jamestown, N. Dak. Shreveport, La. Roseburg, Ore. Des Moines, Iowa Rochester, Minn. El Paso, Tex. (C.P.) Oakland, Calif.	1000 10000 1420 100-250 1370 100-250 1310 100-250 1500 100-250 1320 1000-5000 1310 100-250 1500 100 930 1000	permit has be	WACTO WACTO WAGA WAGA WAGM WAIR WALA WALA	Maco, fex. Tallmadge, Ohio Athens, Ga. Dothan, Als. Presque Isle, Me. Anderson, S. C. Winston-Salem, N. C. Mobile, Ala. Zanesville, Ohio.	1420 1000-5000 1450 500-1000 1450 500-1000 1450 1000 1420 100 1250 250 1480 500-1000 1210 100-250
MPOA MRRY MRSC MSAC MSAL MSAJ MSCJ MSCJ MSEI MSEI MSEO	Sactamento Call. Santa Fe, N. Mex. Sherman. Tex. Seattle, Wash. Manhattan, Kans. Sailna, Kans. Huntsville, Tex.(C.P.) Sioux City, Iowa St. Louis, Mo. Pocatelio, Idaho San Francisco. Catif	1310 100 1310 250 1120 250 580 500-1000 1500 100-250 1500 100-5000 550 1000-5000 900 250-1000 560 1000-5000	construction	WAPI WAPO WARD WASH WATR WAYE WAYZ WAYZ WAYZ	Jersey City, N. J. Omaha, Nebr. New York, N. Y Bangor, Me. Albany, N. Y. Waco, Tex. Talimadge, Ohio Athens, Ga. Dothan, Als. Presque Isle, Me. Anderson, S. C. Winston-Salem, N. C. Mobile, Als. Chattanooga, Tenn. Birmingham, Ala. Chattanooga, Tenn. Brooklyn, N. Y. Grand Rapids, Mich. Atlanta, Ga. Waterbury, Conn. Louisville, Ky, Zarephath, N. J. Waycross, Ga. Hazieton, Pa. West Lafayette, Ind. Baitimore, Md. Fort Worth, Tex. Witkes-Barre, Pa. Brooklyn, N. Y. Richmond, Va. Chicago, III. Brooklyn, N. Y. Ponca City, Okla. Bay City, Mich. Buffalo, N. Y. Carksburd, W. Va. Lima, Ohio New York, N. Y. Buffalo, N. Y. Carksburd, W. Va. Lima, Ohio New York, N. Y. Buffalo, N. Y. Csee WABC-WBOO) Terre Haute, Ind. Red Bank, N. J. Birminoham, Ala. Wilkes-Barre, Pa. Pittsfield, Mass. Waterbury, Conn. Charlotte, N. C. Danville, Va.	1140 5000 1420 100-250 1400 500 1270 500 1370 100-250 1190 100 940 1000 1350 500-1000 1200 100-250 1420 100
ISAL ISSCJ ISSEJ ISSEJ ISSEJ ISSLM ISSCO I	Sait Lake City, Utah Salem, Ore. Des Moines, Iowa Sioux Falla, S. Dak. Santa Rosa, Calif. St. Paul, Minn. Cedar City, Utah Lowell, Ariz. Phoenix, Ariz. Fort Worth Iox.	1370 50000 1370 100 1430 500-2500 1110 2500 1310 250 1460 10006-2500 1310 100 1200 100-250 620 1000	tion, indicates	WBAA WBAL WBAP WBBC WBBL WBBM WBBR WBBR	West Lafavette, Ind. Baltimore, Md. Fort Worth, Tex. Wilkes-Barre, Pa. Brooklyn, N. Richmond, Va. Chicago, Ili. Brooklyn, N. Y. Ponca City, Okla. Bav City, Okla. Bav City, Okla.	890 500-1000 1080 10000 800 50000 1210 100 1400 500 1210 100 770 5000 1300 1000 1300 1000 1410 500-100
KTBC KTBS KTEM KTF! KTHS KTKC KTMS KTRB KTRB KTRB KTRB KTSA	Austin, Tex. (C.P.) Shreveport, La. Temple, Tex. Twin Falls, Idaho Hot Springs Nati.Pk.Ark Visalia, Calif. Santa Barbara, Cal. Oklahoma City, Okia. Modesto, Calif.	1120 1000 1450 1000 1370 250 1240 1000 11040 10000 1190 250 1220 500 1370 100 740 250	er station loca	WBEN WBEO WBIP WBIL WBIK WBLY WBNS WBNS	Buffalo, N. Y. Marquette, Mich Huntsville, Ala. Greensboro, N.C. New York, N. Y. Clarksburg, W. Va. Lima, Ohio New Orleans, La. Columbus, Ohio New York, N. Y.	900 1000-5000 1310 100 1200 100 1440 1000 1100 5000 1370 100 1210 100 1200 100 1430 500-1000 1350 1000
KTR I KTS A KTS M KTUL KTW KUJ KUMA KUOA KUS D	Sloux City, lowa (C.P) San Antonio, Tex. El Paso, Tex. Tuísa, Okla. Seattle, Wash. Walla Walla, Wash. Yuma, Ariz. Siloam Springs, Ark Yermillion, S. Dak. Salt Lake City, Utah (CP.S. of Redding, Calif.	1420 100-250 550 1000-2500 1310 100-250 1400 500-1000 1370 100 1420 100 1420 100 1420 5000 1420 100 1250 5000 1890 500	TE: C.P. aft	WBNY WABC WBRBCB WBRCE WBRC WBRY WBTIM	Buffalo N. Y. (See WABC-WBDO) Terre Haute, Ind. Red Bank, N. J. Birmincham, Aia. Wilkes-Barre, Pa. Pittsfield, Mass, Waterbury, Conn. Charlotte, N. C. Danville, Ve.	1370 100-250 1310 100-250 1210 100 930 1000-5000 1310 100-250 1530 1000 1000 1000 1370 100-250
KUTA KYCY KYEC KYGB KY I KYNU KYOA KYOD KYOE KYOL KYOO	San Luis Obispo Calif.	1200 250	NOTE	WBZAD WCAE WCAE WCAAM WCAO WCAAY WCAAY WCAAY WCAAX WCBA	Red Bank, N. J. Birmingham, Ala. Wilkes-Barre, Pa. Pittsfield, Mass. Waterburv, Conn. Charlotte, N. C. Danville, Va. Boston, Mass. Boston, Mass. Canton, N. Y. Pittsburgh, Pa. Northfield, Minn. Camden, N. J. Baltimore, Md. Asbury Park, N. J. Rapid City, S. Dak. Philadelphia, Pa. Burlington, Vt. Carthage, Li. Allentone	990 1000 1220 500 1220 1000-5000 1220 1000-5000 1280 500-1000 1280 500-1000 1280 500-1000
KYOOR KYOS KYOS KYOS KYRS KYRS KYRS KWBG KWBG KWBG KWJB KWJB KWJB KWJLC KWKH	Great Bend, Kans. Tacoma, Wash. C.P.) Tucson, Ariz. Denver, Colo. Santa Ana, Calif Lafayette, La Tulsa, Okla. Colorado Springs, Colo Bellingham, Wash. Moorhead, Minn.(C.P.) Rock Springs, Wyo.(C.P.) Ardmore, Okla. Hutchinson, Kans. Hutchinson, Kans. Stockton, Calif. Globe, Ariz. (C.P.) Portland, Ore.	1370 1000 1270 1000 1310 100-250 1370 100-250 1210 100-250 1420 100 1500 100 1200 100 1210 100-250 1060 500 1350 1000-5000 850 1000 1270 100	,	WCAX WCAX WCBA WCBM WCBM WCCO WCF L WCHY WCKY WCLO WCLO	Burlington, Vt. Carthage, II. Allentown, Ps. Chicago, III. Baltimore, Md. Springfield, III. Minneapolls, Minn. Chicago, III. Charieston, W, Va. Chariottesville, Vs. Covington, Ky.	1310
KWKH KWKH KW LC KW LK KWOC	St. Louis, Mo. Shreveport, La. Decorah, Iowa Longview, Wash. Winona. Minn.	1350 1000-5000 850 10000 1270 100 780 250 1200 250 1310 100	13	WCKY WCLE WCLO WCLS WCMI WCNW	Covington, Ky. Coverignton, Ky. Cleveland, Ohio. Janesville, Wisc. Joilet, Iil. Ashland, Ky. Brooklyn, N. Y.	1490 10000 610 500 1200 100-250 1310 100 1310 100-250 1500 100-250

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	MONONONON PRIPER PROPERTAINS OF THE PROPERTY O	VMAL VMAS VMAS VMBC VMBD VMBF-W VMBG	all ters
	Worcester, Mass. York, Pa. 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. Mayaguez, Puerto Rico Providence, R.I. Ponce, Puerto Rico Raleigh. N.C. Miami, Fia. 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. Cincinnati, Ohio Grove City, Pa. Salisbury, Md. Allentown, Pa.	Washington, D.C. Chicago, III Springfield, Mass. Macon, Ga. Detroit, Mich. Peoria, III	Location
	1280 500 1320 1000 920 500 570 750-1000 1130 1000 590 1000-5500 1160 10000 1420 100-250 1420 100 1210 100 1370 100 920 250-500	630 250-500 670 50000 1420 100-250 1180 100-250 1420 100-250 1440 1000-5000 1420 100-250 1420 100-250 1420 100-250 1420 100-250 1420 250 780 100-250 1420 100-250 1420 100-250 1420 100-250 1420 100-250 1420 100-250 1420 100-250 1420 100-250 1420 100-250 1420 100-250 1420 100-250 1420 100-250 1430 500-1000 1600 1000-5000	Fremency Power
•	NOTE: C. P. after station location,	after station location, indicates construction permit has been issued.	
	WWXW WWVA WXYZ	WSSASSE CT AN WSSASSE WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW	Call Letters
	Pittsburgh, Pa. Wheeling, W.Va. Detroit, Mich. CANADIAN BROADCAST ST CBF Wontreal, Que. CBM Garairle, Que. CBM Garairle, Que. CBM Garairle, Que. CBM Lulu Island, B.C. CFAC Calary, Alta. CFAR Filin Flon, Man. CFCE Montreal, Que. CFCH North Bay. Ont. CFCC Catastheore, Alta. CFCC Montreal, Que. CFCY Charlottetom, P.E.I. CFGP Grade Prairle, Alta. CFGP Grade Prairle, Alta. CFGR King, Oht. CHANG Bedford, N.S. CHKK Charlottetom, P.E.I. CHIC Sherbrooke, Que. CHNG Bedford, N.S. CHNG CHNG King, Oht. CHNG Sare-Coour, P.O. CJCG Stratford, Oht. CJCG Stratfo	Location Fall River, Mass. Wausau, Wisc. Savannah, Ga. RcChester, N.Y. Huntington, W.Va. Atlanta, Ga. Chicago, Ill. South Bend, Ind. Montgomery, Ala. Birmingham, Ala. Birmingham, Ala. Minston-Salem, N.C. Jackson, Miss. (C.P.) Nashville, Tenn. New Orleans, La. Dayton, Ohio Bridgeton, N.J. Charlotte, N.C. Spartanburg, S.C. Toledo, Ohio Bridgeton, N.S. Salisbury, N.C. (C.P. Lowa City, lowa St. Petersburg, Fla. Harrisonburg, Va. Buffalo, N.Y. Rutland, Vt. Rutland, Vt. Syracuse, N.Y. Quincy, Ill. Worcester, Mass. Tallahassee, Fla. Cleveland, Ohio Green Bay, Wisc. Norfolk, Va. Springfield, Ill. Cumberland, Md. Minneapelis, Minn. Philadelphia, Pa. Hartford, Conn. Hartford, Conn. Hartford, Conn. Hartford, Conn. Hartford, Conn. Miwaukee, Wisc. E. St. Louis, Ill. Trenton, N.J. Savannah, Ga. Toledo, Ohio Elkhart, Ind. Brooklyn, N.Y. Hammond, Ind. Detroit, Mich. New Orleans, La. Asheville, N.C. Woodside, N.C.	Location
	1500 100-250 1160 5000 1240 1000 AT10NS 910 50000 1000 1000 AT10NS 910 50000 1000 5000 1000 5000 1000 5000 1000 5000 1000 5000 1000 5000 1000 5000 1000 5000 1000 5000 1000 5000 1000 5000 1000	1450	Frequency Power (K.C.) (Watts)

THE CURTAIN RISES

BROADCASTING 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, costure 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 Bcrwin (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 (seated) 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 Brother 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 bead his own band, and Richard Himber, a consistent broadcaster.

BEAUTY AND THE MIKE

RADIO 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 songetress 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.





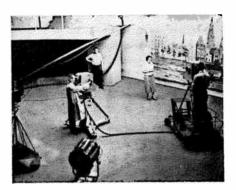
Gale Page, NBC singer and actress, who also used the mike as a short-cut to Hollywood fame. Right: Templeton Fox, NBC actress.

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

AND sight, of course, means televideo 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	CALL FREQUENCY (ke)		POT	BM1001031	
LOCATION	LETTERS	OR GROUP*	VISUAL	AURAL	EMISSION
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)
Phileo Radio & Tele- vision Corp., Philadelphia, Pa.	W3XE	В, С	10kw	10kw	A8, A4
Phileo Radio & Tele- vision Corp., Philadelphia, Pa.	W3XP	D(204000- 210000)	15w		'A4 & Special (C. P. only)
Purdue University, West Lafayette, Ind.	W9XG	A	1500w		44
Radio Pictures, Inc., Long Island City, N. Y.	W2XDR	В, С	1kw	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
RCA Manufacturing Co., Inc., Portable-Mobile	W10XX	В, С	50w	50w	A8, A4
The Sparks-Withington Company, Jackson, Michigan.	W8XAN	В, С	100w	100w	A8, A4
University of Iowa, Iowa City, Iowa.	W9XK	A	100w		A4
University of Iowa, Iowa City, Iowa.	W9XUI	В, С	100w		A4
Dr. George W. Young, Minneapolis, Minnesota	W9XÅT	В, С	500w		A4

*FREQUENCY GROUPS

Group A	Group B	Group C	Group D
2000 to 2100 ke	42,000 to 56,000 ke	60,000 to 86,000 ke	Any 6,000 kc frequency band above 110,000 ke excluding 400,000 to

THE SERIOUS SIDE OF RADIO MUSIC

In 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.



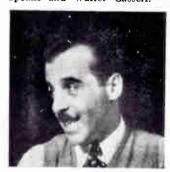




Three popular singers of classics-Lawrence Tibbett, Margaret Speaks and Walter Cassell.







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.



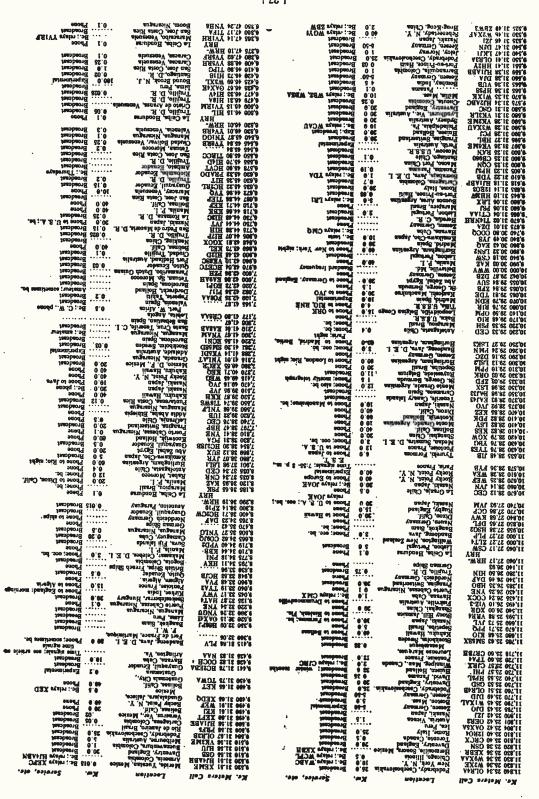


Mario Cozzi, NBC baritone. Left: Pierre French, conductor, who scored favorably with American listeners. Right: Frank Black, NBC conductor.



WORLD-WIDE SHORT-WAVE STATION LIST

Ke. Metera Call	Location	Kω.	Service, etc.	Kc. Metere Call	Location	Kw.	Service, etc.
400,000 0.75 W1XEG	Storre, Conn.	0.5	Experimental	15,620 19.21 JVF 15,505 19.35 CMA3 15,490 19.37 KEM	Nazuki, Japan	20.0	Phone to KWU; occ. bc. Tests, irr.
40.500 4.96 W8XKA	Pittsburgh, Pa.	0.15	Experimental Exp.; relays KDKA	15,490 19.37 KEM	Natauti, Japan Havana, Cuba Belima, Calif. Belima, Calif. Addis Ababa, Ethiopia Manatian, Sisales, Mexico Disbu, Calif. Seshesiahervar, Hungary	40.0	Phone
41,000 7.32 W2XG	Pittaburgh, Pa. New York, N. Y.	0.1	Experimental Experimental	15,475 19.39 KKL 15,450 19.42 IUG	Belinza, Cuff. Addis Ababa, Ethiopia	40.0	Phone Phone
31,600 9.50 WIXKA 31,600 9.49 W3XKA	Chicopee Falls, Mass. Philadelphia, Pa. Rochester, N. Y. Pitteburgh, Pa. Detsoit, Mich.	0.5	Exp., relays KYW Exp., relays WHAM	15,420 19.45 XEBM 15,430 19.45 KWO	Mazztian, Sinales, Mexico		Be.; relays XEBL Phone to Hawaii, Manila
31,600 9.50 WIXRA 31,600 9.49 WSXAI 31,600 9.49 WSXAI 31,600 9.49 WSXWJ 31,600 9.49 WSXWJ 31,600 9.49 WSXPD 21,540 13.93 WSXK 21,540 13.93 GSJ 21,540 13.93 GSJ 21,540 13.94 WSXE	Rochester, N. Y.	0.1	Exp.; relays WHAM	15,430 19.45 KWO 15,370 19.52 HASS	Distra, Calit. Sochasinhervar, Hungary	20.0	Broadcast
31,600 9.49 W8XWJ	Detsoit, Mich.	0.1	Experimental Exp.; relays WWJ	15,360 19,53 DZG 15,355 19.54 KWU	Zeesen, Germany	20.0	Phone Phone to Hawaii
81,600 8.49 W9XPD	St. Louis, Mo.	8.1 20.0	Exp.; relays KSD Broadenst	15 248 14 55 D FB	Dinoh, Calif. Zossen, Germany Schenactedy, N. Y. Pudebrady, Cischoslovakia Davestry, England LaPss, Bolivia	56.0	
21,540 13.93 W&XK	Pitteburgh, Pa.	40.0	Bo.; relays KDKA	15,339 19.57 W2XAD	Schenoctody, N. Y., Padebrades Catcheslovakia	20.0 I	Be.; religie WQY Brondenst
21,530, 13.93 GSJ 21,520 13.94 W2XE	Daventry, England Wayne, H. J.	15.0	Broadcast Bo.; relays WABC	15,310 19.60 GSP	Davestry, England	20.0	Broadcast
21,520 13.94 JZM 21,470 13.97 GSH	Nasaki Ianan		Broadeast	10.200 10.87 W3XAD 15.200 10.88 OLEAS 15.201 10.40 GSF 15.201 10.40 GSF 15.201 10.40 GSF 15.201 10.41 LRV 15.202 10.45 W3XE 15.202 10.45 W3XE 15.202 10.45 W3XE 15.203 10.70 GLEA 15.203 10.70 OLESA 15.203 10.70 OLESA 15.203 10.70 OLESA 15.203 10.70 DSF 15.200 10.70 DSF			Phone Broadcast
	Davestey, England Besten, Mass. Pedebrady, Cseehoslovskia	3 0	Breadcast	15,290 19.65 LRU	Busnos Aires, Argentina	3.0 13.0	Be.; relaye LRI Be.; relaye WABC
21,466 13.96 WIXAL 21,446 13.99 OLR6A 21,420 14.01 WEK 21,166 14.18 LSL4	Pedebrady, Cseehoslovakia Lawrenseville, N. J.	25.0 20.0	Broadeast Phone	15,200 19.60 GSI	Daventry, Kngland	15.0	Broadcast '
21,100 14.18 LSL4	Hurlingham, Argentina	60.0	Phone to Lendon and Rio;	15,250 19.67 WLXAL	Beston, Mass.	5.0 12.0	Broadcast Broadcast
21,140 14,19 KB1	Manila, P. L.	16.0	day Phone	15,230 19.70 OLRSA	Pedebrady, Caechoslevakia	25.0	Broadcast Experimental
21,080 14.22 PSA 21,060 14.25 WKA	Marapion, Brazil Lawrenceville, N. J.	10.6	Phone; broadcast Phone to England	15,220 19.71 PCJ 15,210 19.72 WSXK	Beston, Mass. Postcian, France Postcian, France Postcian, France Postcian Humon, Holland Pittaburgh, Pa. Zeezen, Germany Hongkong, China	40.0	Be.: rolava KDKA
21,000 14.25 WMA 21,000 14.25 KWN 21,000 14.27 L5N6	Lakon, Calif.	20.0 20.0	Phone	15,200 19.74 DJB	Zeepen, Germany	5-50 2.0	Broadcast Broadcast
	Burlingham, Argentina Marapicu, Brazil	60.0 10.0	Phone to New York; day	16,180 19.76 GBO	Hongkong, Chien Daventry, Regland	15.0	Broadcast
20,910 14.35.FSB 20,880 14.37 EHY 20,820 14.41 KSS 20,780 14.44 KMM 20,140 14.90 DWG 20,949 14.97 OPL 20,020 14.99 DFZ 19,880 15.62 KAX 19,820 15.14 WKN 19,720 15.21 FAD	Madrid, Spain Bolinas, Calif. Bolinas, Calif. Nauca, Germany	7.5	Phone Phone to Buenes Aires Phone	15,160 19.79 JZK 15 160 19.79 GLRSC	Nasahi, Japan Podelindy, Csechoslovakia Bandoeng, Java Daventry, England Vatican City	25.0	Broadcast Broadcast
20,820 14.41 KMS 20,780 14.44 KMM	Bolinas, Calif.	40.0 40.0	Phone	15.100 19.79 OLRSC 15.150 19.50 VBC 15.140 19.84 GSF 15.123 19.84 HVJ 16.710 19.81 DJL	Bandeeng, Java	*****	Broadcast Broadcast
30,140 14.90 DWG			Phone to ORG: marnings	15,140 19.84 GBP 15.123 19.84 HVJ	Vaticas City	10.0 5-50	Broadcast
20,020 14.99 DFZ	Namen, Germany	*****	Phone to ORG; meraings Phone to South America	15,710 19.85 DJL			Broadcast Phone
19,680 15.62 KAX 10,890 15.14 WKN	Mantia, P. I. Laurescevilla, N. J.	20.0	Phone to Calif. Phone to England	15,045 19.98 WNC	Historia Plorida		Phone
19,720 15.21 EAQ	Massis, P. I. Lawresowills, N. J. Madrid, Spain Naues, Germany	16 0	Phone to Letin America	15,070 10.91 PMD 15,045 19.93 WNC 15,040 19.95 RKI 15,000 20.0 WWV	Harapicu, Brazil Historia, Florida Moscow, U.S.S.R. Beltsviffe, Md.	20.0 1.0	Freq. standard; Tue. Wed.,
19,720 15.21 EAQ 19,700 15.23 DFJ 19,660 15.26 SUY	Madrid, Spain Nauce, Germany Abusabal, Egypt Monte Grande, Argentina Rome, Italy	0.1	Phone		Sen Salvador, El Salvador		Phone to WQG, mornings Freq. standard; Tue, Wed, Fri., 2-3 p.m. E, S. T. Phones Mexican stations
19,600 15.31 LSF 19,520 15.37 IRW	Monte Grande, Argentina Reme Italy	7.0 20 0	Phone to South America	14 985 YSL 14 980 20.02 KAY 14,970 20.04 LZA 14,940 20.05 YSL 14,915 20.09 PSE 14,910 20.12 JVG	Manila, P. I.	40.0	LPode to Dixon
19,460 18.42 DFM 19,345 15.51 PMA	Nausa, Germany Bandoong, Java, D. E. I. Sepetiba, Brasil Lewrenceville, N. J.	*****	Phone Phone; sometimes bc.	14,978 20.64 LZA	Sona, Bulgaria San Salvador, El Salvador Marapicu, Brazil Nasaki, Japan		Broadcast Phone
	Bandoong, Java, D. E. I. Senetiba, Brazil	12.0	Phone	14,935 20.00 PSE	Marapicu, Brazil		Phone; broadcast Phone to Formosa; broad-
19.220 15.61 WKF	Lewrenceville, N. J. Ruyseelede, Belgium	20.0 8.0	Phone	14,910 20.12 JVG	Nasaki, Japan		
19,200 15.62 ORG 19.140 15.68 LSM2	Hurlingham, Argentina	60.00	Phone to Madrid, Berlin,	14,690 20.42 PSF	Marapiqu, Brazil Namki, Japan	20.0	Phone: broadcast Phone: broadcast
19,050 15.78 JVC			Paris; day Phone; cometimes be.	14,600 20.55 JVH 14,590 20:56 WMN	Lawrenceville, N. J.	20.0	Dhone
18 020 18 77 HSEPI	Nazaki, Japan Bangkok, Siam Nazaki, Japan	20.0		14,535 20.64 HBJ 14,530 20.65 LSN1	Lawrenczville, N. J. Praegine, Switzerland Hurlingham, Argentina	20.0 60.0	Phone Phone to New York; more.
18,910 15.86 JVA 18,890 15.88 ZSS	Nasaki, Japan Klipheuvel, S. Africa	5.0	Phone to Rugby				Eve.
18,880 15.91 WKM 18,830 15.93 PLE 18,670 16.06 OCI 18,620 16.11 GAU	Klipheuvel, S. Africa Rocky Point, N. Y. Bandoeng, Java, D. E. I.		Phone to Dixon and Nasaki	14,500 20.69 LSM2	Hurlingham, Argentina	00.0	Paris; morn., eve. Phone to WNC
18,630 15.93 PLE 18,670 16.06 OCI	Lima, Peru	15.0	Phone	14,480 20.72 YHA 14,440 20.75 DZH 14,440 90,76 GBW 12,980 21.44 YPD2 13,820 21.76 SUZ 13,820 21.76 SUICH 13,811 21.72 SUZ1 12,400 31.80 TYF2	Manague, Nicaragua Nauen, Germany Rugby, England Suva, Fiji Islands	•	Phone to WNC
18,620 16.11 GAU	Lima, Feru Rugby, England Kootwijk, Holland Kootwijk, Holland Prangins, Switze-land Kootwijk, Holland Lawrencevijk, Holland	15.0 40.0	Phone to WM1, VWY	14,440 30,78 GBW	Rughy, England	15.0	Phone
18,600 16.13 PDM 18,545 16.18 PCM	Kootwijk, Holland	40.0 20.0	Phone Phone	13.980 21.46 VPD2 13.820 21.76 SUZ		20.0	Phone .
18,480 16.23 HBH 18,405 16,30 PCK	Kootwijk, Holland	40.0	Phone to Bandoeng	13,820 21.70 SUICH	Caire, Egypt Abu Zabai, Egypt Penteise, France	8.0	Amateur; broadcast Phone
18,405 16.30 PCK 18,340 16.36 WLA	Lawrenceville, N. J.	20.0	Phone to GAS Phone to France	13.811 21.72 SUL1 13.760 21.80 TYE2	Penteise, France	12.0	Phone to U. S. A.
18,270 16.42 IUD	Addis Ababa, Ethicpia		. Phone to Java; P. I.; bc.	13,600 21.91 KKZ	Bolinas, Calif. Warsaw, Poland	40.0 20.0	Phone to Japan, Java:
18,190 16.45 JVB 18,165 16.51 PPZ	Lawrenceville, N. J. Saigon, French Indo-China Addin Ababa, Ethicpia Namki, Japan Sepetiba, Brazil	20.0	Phone	13,760 31.80 TYE2 13,600 21.91 KKZ 13,635 22.00 SPW 13,646 22.64 JYK 12,545 22.86 GBB	Kemikawa-Cho, Japan		Broadcast Experimental; be:
18,135 16.55 PMC	Bandoeng, Java	40.0 12.0	Phone; sometimes be. Phone to U.S.A.	13.565 22.66 GBB 13.560 22.72 JV1	Rugby, England Nazaki, Japan	10.0	Phone to Manchukuo; also
18,090 16.56 1 FE 18,040 16.63 KQR	Bandoesg, Java Pontoise, F.ance Belizze, Calif. Bolizza, Calif. Bolizza, Calif.	46.0 46.6	Phone			20.0	Phone Phone Phone Phone Phone Phone Phone
18,020 16.65 KQJ	Bolizas, Calif.	40.0	Transpacific phone Phone	13,330 22.70	Maracay, Venezuela British Shipe Drummondville, Canada	15.0	Phone
17,940 16.72 WQB-	Donald Carry	40.0		13,265 23.58 CGA3	Mantia, P. I.	15.0 40.0	Phone to ships Phone
18,340 16.38 WLA 18,310 16.38 FZS 18,270 16.42 UUD 18,100 16.45 UVB 18,165 16.51 FYE 18,135 16.55 FMC 18,000 16.58 TYE 16,000 16.58 TYE 16,000 16.58 CUL 17,900 16.58 CUL 17,900 16.58 CUL 17,940 18.72 WUB 17,920 16.74 WUF	Rocky Point, N. Y. Rocky Point, N. Y.	40.0	Phone	13,337 22.47 YVQ 12,320 22.79 12,365 22.58 CGA3 18,265 22.66 KBJ 12,210 22.71 FNSK 12,140 22.83 CWH	S S. Normandie		Phone Phone Phone
17,920 16.74 WQF 17,790 16.86 GSG 17,785 16.87 JZL	Daventry, England Nazaki, Japan	15.0			Cerrita, Uruguay Italian Ships		Phone
17 720 18 87 WEX K	Pittsburgh, Pa.	40.0	Re · rolava KDKA	13,020 23.04 JZE 12,795 22.44 IAC	Nazaki, Japan Coltano, Italy	52 O	Phone
17,780 16.87 W3XAL 17,780 16.87 W9XAA	Bround Breck, N. J. Chicage, Illinois	15.0 0,8	Experimental	13,885 28.28 NPG	San Francisco		Time signals; 4:55-5:00 p.m.
17 775 16.88 PH1	Huizen, Holland	23.6	Broadcast Bc., relays WABC	12,630 23,36 CNR	Rabat, Morocco	12.0	Phone to Prance
17,760 16.89 W2XE 17,760 16.89 DJE	Bround Brook, N. J. Chicage, Illinois Huizen, Holland Wayne, N. J. Zeesen, Germany Hongkong, China Coltano, Italy Banakok Sum	5-50	Broadcast Be, relays WABC Broadcast Broadcast	12,630 23.36 CNR 12,680 23.65 YNE 12,630 23.75 NAA	Puerto Cabesas, Nicaragua Arbuston, Va.	0.1	Phone or Prance Phone Time signals: 9:55-10:00 (a. m. E. S. T. Phone
	nongkong, China Coltano, Italy	14.0	Phone: early mornings		Donald St. J.	11.0	a. m. E. S. T.
17,750 16.90 IAC 17,740 16.91 HSP 17,640 17.00	Bangkok, Siam British Ships		Phone to JVG	12,290 24.41 GBU 12,250 24.49 TYB	Pontoine France		
	Nauen, Germany Kirkee, India		Phone to YVR	12,250 24.59 TYB 12,235 24.52 TFJ	Reykjavik, leeland	15.0	Phone to U.S. A.
	Kirkee, India Bound Brook, N. J.	20.0	Phone to Ragby Experimental	12,215 24.56 TYA 12,150 24.69 GBS	Rugby, England	15.0	Phone to U. S. A.
17,800 17.16 V W 12 17,310 17.33 W3XL 17,265 17.37 DAF 17,180 17.51 HASS	Bound Brook, N. J. Norddeich, Germany	*****	Phone Broadcast	12,130 24.73 DZE	Zeesch, Germany Kootwiik, Holland	60.0	Phone Phone
17,180 17.51 HASS 16,820 17.84 NAA	Szekesfehervar, Hungary Arlington, Virginia	20.0	Time signals; 9:55-10:00	12,215 24.56 TYA 12,150 24.69 GBS 12,130 24.73 DZE 12,060 24.88 PDV 12,020 24.96 VTY- VK3341 12,000 25.00 RV59 11,955 25.09 IUC 11,955 25.11 KKQ	* Malhanna Ametralia		
16,665 18.00	German Ships			12,000 25.00 RV59	Moscow, U.S.S.R.	20.0	Tests with Drummondville Bc. and phone
16 305 18 40 PCL	Kootwija, Holland Lawrenceville, N. J.	****	Phone to Bandoeng Phone to Rugby	11,955 25.09 LUC	Addis Ababa, Ethiopia Bolinsa, Calif.	3.5 -40.0	Phone Phone
16,270 18.44 WLK 16,240 18.47 KTO	Manila, P. 1.	40.0	Phone to Dixon	11.900 25.21 XEWI	Mexico, D. F., Mexico	*****	Broadcast
14 100 18 81 1PV	Rome, Italy Kabuku, Hawaii	20.0	Phone	11,900 25.21 CT1GO 11,900 25.21 OLR4D	Parede, Portugal Podebrady, Czechoslovakia	25.0	Broadcast Broadcast
16,030 18,71 KKP 15,985 18,77 KQH 15,950 18,81 PLG	Kahuku, Hawaii	40.0	Phone	11.895 25.22 HP5I	Aquadulce, Panama	0.05	Broadcast Broadcast
	Bandoeng, Java Ste. Assise, France	30.0	Phone; afternoons Phone to Saigon	11,895 25.22 XEXR 11,880 25.25 XEXA	Parede, Portugal Podebrady, Czechoslovaki: Aquadulce, Panama Mexico, D. F., Mexico Mexico, D. F., Mexico	0.1	Broadcast
15 885 18 Q1 (CFT)	La Granja, Chile Nazaki, Japan	0.5		11,880 25.25 TPA3	Chicago Illinois		Be., relays WENR
15,860 18.90 JVD 15,810 18.97 LSL3	Nasaki, Japan Hurlingham, Argentina	60.0	Phone to London, Rio; morn.	11,875 25.26 OLR4C 11,876 25.27 W8XK	Podebrady, Czechoslovakia	25.0 40.0	Broadcast Bc.; relays KDKA
	Tworeki Formosa	10.0	and eve. Phone to Nazaki	11 860 26 29 YUB	Soerabaja, Java, D. E. I.	1.0	Broadcast
15,750 19.05 JIA 15,680 19.13 JZA	Kanjoshi, Manchukuo Nazaki, Japan	20.0	Phone to Nazaki	11,860 25,30 GSE 11,855 25,31 DJP	Podebrady, Czechoslovakii Pittsburgh, Pa. Soerabaja, Java, D. E. I. Daventry, England Zeesen, Germany	20.0 5-50	Broadcast Broadcast
15,660 19.16 JVE	ARREIT, JAPER	10.0	Phone to PLE, P. I.; occ. be.	11,700 2401 1741	man, occupany	- 00	
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Mr. 14							
Kc. Meters Call 6,350 47.24 YNJ5	Location Waspook, Nicaragua	Кы. 0.1	Sarvice, etc.	Kc. Meters Call 6,025 49.79 HJ1ABJ	Location Santa Marta, Colombia .	Kw.	Service, etc. Broadcast
6,350 47.24 YNJ7 6,357 47.20 HRP1	Wapam, Nicaragua San Pedro Sula, Honduras	0.1	Phone	6,020 49.83 DJC	Veracrus, Ver., Mexico Mexico, D. F., Mexico Bogota, Colombia		Broadcast
	San Pedro Sula, Honduras Puerto Cabrais, Nicaragua	0.075 0.1	Broadcast Phone	6,020 49.83 XEUW 6,015 49.83 XEUW 6,015 49.89 H33ABH 6,010 49.92 YP3MR 6,010 49.92 YP3MR 6,010 49.92 CCCO 6,010 49.92 CCCO 6,005 49.92 CPCX 6,005 49.96 YP3DN 6,003 49.97 XEBT 6,003 49.97 XEBT 6,000 5,000 HJJA BC	Veracrus, Ver., Mexico	0.25	Broadcast Broadcast
6,340 47.32 HIX 6,330 47.39 JZG 6,310 47.54 HIZ 6,300 47.62 YV4RD 6,280 47.77 HIG			Broadcast	6,012 49.90 HJ3ABH	Bogota, Colombia	1.2	Broadcast
6,330 47,39 JZG	Riginio, D. R. Nasaki, Japan Trujillo, D. R. Maracay, Venesuela Trujillo, D. R. Sancti Spiritus, Cuba Caracas, Venesuela Lima, Peru	10.0	Phone to ships Broadcast	6,010 49.92 VP3MR	bogota, Colombia Georgetovin, British Guiana Havana, Cuba Podebrady, Caschoslovakia Montreal, Quebec Montreal, Quebec Mexico, D. F., Mexico Quibdo, Colombia Bucharest, Roumania	0.25	Amateur; be. Broadcast
6,300 47.62 YV4RD	Maracay, Venezuela	0.1	Broadcast	6,010 49.92 OLR2A	Podebrady, Czechoslovakia	25.0	Broadcast
6,280 47.77 HIG	Trujillo, D. R.	0.05 0.15	Broadcast . Broadcast	6,005 49.96 CFCX	Montreal, Quebec	0.075	Bc., relays CFCF Broadcast
6,280 47.77 COHB 6,270 47.84 YV5RP 6,260 47.92 OAX4G 6,250 48.00 YV5RJ	Caracas, Venezuela	0.13	Broadcast	6,003 49.97 XEBT	Mexico, D. F., Mexico	1.0	Bc.; relays XEB
6,260 47.92 OAX4G	Lima, Peru	•••••	Broadcast	6,000 50.00 HJIABC	Quibdo, Colombia	0.1	Broadcast
	Caracas, Venesuela Trujillo, D. R. La Ceiba, Honduras Valera, Venezuela Coro, Venesuela	0.75	Broadcast Broadcast	6,000 50.00 RV59	Moscow, U.S.S.R.	20.0	Broadcast Broadcast
6,235 48.11 HRD	La Ceiba, Honduras	0.25	Broadcast	6,000 50.00 TGWA	Guatemala City. Guatemala	0.2	Broadcast Broadcast
6,225 48.19 YVIRG 6,205 48.35 YVIRI	Valera, Venezuela Coro, Venezuela	0.2	Broadcast	5.980 50.17 HIX	Truiillo, D. R.	1.0	Broadcast
6.235 48.11 HRD 6.225 48.19 YV1RG 6.205 48.35 YV1RI 6.200 48.39 XEXS 6.200 48.39 COKG 6.198 48.08 H18Q		Λ 1	Recodenset	6,000 50.00 HJ/JABC 6,000 50.00 YOI 6,000 50.00 RV59 6,000 50.00 RV59 6,000 50.00 TGWA 6,000 50.00 FIQA 5,980 50.17 HJX 5,969 50.26 HVJ	Vatican City	10.0	Broadcast
6,200 48.39 COKG 6.198 48.08 HIND	Santiago, Cuba Cindad Teniillo	0.025	Bc.; relays CM KB Broadcast	E OUE EO OA DEUT	Tashkent, U.S.S.R.	1.0	Broadcast Phone
6,190 48.47 HILA	Santiago, Cuba Ciudad, Trujillo Santiago de los Caballeros			5,990 50.08 HJ2ABD 5,990 50.08 HP5K 5,940 50.50 TG2X 5,925 50.64 HH2S 5,917 50.71 YV4RH			Broadcast.
6.164 48.67 OAXIB	D. R. Chieleus Peru	0.05	Broadcast Bc.; relays OAKIA	5,990 50.06 HP3B 5,940 50.50 TG2X	Colon, Panama Guatemala City, Guatemala Port-au-Prince, Haiti Valencia, Venezuela Maracay, Venezuela Barquisimeto, Venezuela Salisbury, So. Rhodesia Addis Ababa, Ethupia Tegucyalia, Houduras	0.2 0.1	Broadcast Police; bc.
6,150 48.70 CJRO	Chiclayo, Peru Winnipeg, Man., Canada Tunis, Punisa		Bc.; relaya CJRO	5,925 50.64 HH28	Port-au-Prince, Haiti	ŏ.ī	Bc.; relays HH2T
6,150 48.70 CJRO 6,150 48.78 FT4AJ 6,156 48.73 YV5RD	Tunis, Tunisia Caracas, Venesuela	1.0	Experimental Broadcast	5,917 50,71 YV4RH 5,917 50,71 YV15RV	Valencia, Venezuela Maracuv Venezuela	•••••	Broadcast Broadcast
6,150 48.78 CB615	Santiago, Chile	0.15	Broadcast	5.899 50.84 YV3RA	Barquisimeto, Venezuela	0.25	Broadcast
6,150 48.78 HI5N	Santiago, Chile Santiago de los Caballeros, D. R. Pereira, Colombia		December 4	5,882 51.00 ZEA 5,880 51.02 IUA	Salisbury, So. Rhodesia	0.325	Broadcast Phone
6,150 48.78 HJ4ABU	D. R. Pereira Colombia	0.1 0.1	Broadcast Broadcast	5,875 51.06 HRN	Tegucigalpa, Honduras San Pedro de Macoris, D. R	0.4	Broadcast
6,150 48.78 VE9CL	Winnipeg, Man., Canada Bulawayo, So. Rhodesia			5,865 51.15 HILL	San Pedro de Macoria, D. R	0.04	Broadcast Broadcast
6,150 48.78 VE9CL 6,148 48.80 ZEB 6,140 48.86 W8XK	Bulawayo, So. Rhodesia	0.325	Broadcast Be.; relays KDKA	5,845 51.32 KRO	Kahuku, Hawaii	40.0	Phone
6,137 48.88 CR7AA	Pittsburgh, Pa. Lourenzo Mazques,			5,850 51.28 YVIRB 5,845 51.32 KRO 5,830 51.46 TDD 5,830 51.46 CWD		•••••	Phone to Tokye
#122 40.01 VEVA	Mosambique		Broadcast		(Cerrito) San Jose, Costa Rica San Jose, Costa Rica Caracas, Venesuela Manila, P. I.	1.5	Phone
6,133 48.91 XEXA 6,182 48.92 CT1GO 6,130 48.94 COCD	Mexico, D. F., Mexico Parede, Portugal	0.35	Broadcast Broadcast	5,830 51.46 TIGPH	San Jose, Crete Rica	1.0	Broadcast
6,130 48.94 COCD	Havana, Cuba Jeloy, Norway Georgetowa, British Guiana	0.2	Be.; relays CMCD	5,830 51.46 TIX2 5,800 51.72 YV5RC 5,800 51.72 KZGF 5,790 51.81 JVU	Caracas, Venezuela	1.0	Broadcast Broadcast
6,130 48.94 LKJ1 6,130 48.94 VP3BG	Georgetown, British Guiana	0.15	Broadcast	5,800 51.72 KZGF	Manila, P. 1.		Phone; occ. bc.
A 19R 48 98 ()A Y7A	Cuzco, Peru Montevideo, Uruguay Pegota, Colombia	**1*1**	Broadeast		Nazaki, Japan	10.0	Phone to Manchukuo; also be.
6,125 48.98 CXA4 6,122 49.01 HJ3ABX	Nontrice, Uruguay	1.0	Broadcast	5,780 51.90 OAX4D	Lima, Peru	20.0	Broadcest
6.122 49.01 OAX4P	n ancayo, reru		Broadcast	5,780 51.90 OAX4D 5,780 51.90 HJ4ABD 5,758 52.10 YNOP	Managua Mianagan	• • • • • • •	Broadcast Broadcast
6,122 49.01 OAX6A 6,120 49.02 YDA5	Arequipa, Peru Bandoeng, Java, D. E. L Masteo, D. F., Mexico Veracrus, Mexico Veracrus, Veracrus, Mexico Panama City, Panama Wayne, N. J. Gundaiujars, Mexico Barranquilla, Colombia Daventry, England Halifax, N. S., Canada Calcutta, Lodis	1.5	Broadcast	5.735 52.31 HC1PM	Quito, Ecuador Nasaki, Japan Guatemala City, Guatemala San Cristobal, Venesuela Rossland, B. C., Canada	0.3	Phone to Formous; be.
6,120 49.02 XEPW 6,120 49.02 XEFT 6,120 49.02 HP5Z	Mexico, D. F., Mexico		Broadcast	5,730 52.36 JVV 5,713 52,51 TGS	Nasaki, Japan Guatemala City Guatemala	10.0	Phone to Formosa; be. Broadcast
6,120 49 02 XEFT	Veracrus, Veracrus, Mexico	0.12	Broadcast Broadcast	5,710 52.54 YV2RA 5,705 52.59 CFU	San Cristobal, Venesuela	0.75	Broadcast
6,120,49.02 W2XE 6,117 49.04 XEUZ 6,115 49.06 XECU	Wayne, N. J.	10.0	Bo.; relays WABO		Rossland, B. C., Canada Norddeich, Germany	• • • • • • •	Phone: be. Phone
6,117 49.04 XEUZ	Mexico, D. F.	••••	Broadcast Broadcast	5,555 54.00 YNE 5,500 54.55 TI5HH 5,496 54.64 ROI 5,435 55.19 LSH 5,415 85.40 PMY	Puerto Cabezna, Nicaragua	··	Phone
6.115 49.06 HJ1ABB	Barranquilla, Colombia	1.0	Broadcast	5,500 54.55 TI5HH	Sun Ramon, Costa Rica Sverdlovsk, U.S.S.R.		Broadcast Phone
6,115 49.06 OLR2C	Podebrady, Czechoslovakia	25.0	Broadcast	5,435 55.19 LSH	Monte Grande, Argentina	15 0	Phone
6,110 49.10 GSL 6,110 49.10 VE9HX	Halifax, N. S., Canada	0.2	Broadcast Bc.; relays CHNS	5,415 55.40 PMY	Monte Grande, Argentina Bandoeng, Java, D. E. I.	0.45	Phone; be.
8 100 40 10 VUC	Calcutta, India			5,170 58.03 HRW- HRY	La Ceiba, Honduras	0.1	Phone
6,108 49.11 HJ4ABB 6,100 49.18 W3XAL	Bound Brook, N. J.	20 0	Broadcast Bo.; relays W5Z	5,140 58.37 PMY	Bandoeng, Java, D. E. I. Bolinas, Calif. Bolinas, Calif.	0.6	Broadcast
6,100 49.18 WWXF	Chicago, Illinois	5.0 2.5	Bo.; relays W5Z Bc.; relays WENR Broadcast	5,110 58.71 KIKB 5,105 58.76 KEC	Bolinas, Calif.	40.0 40.0	Phone Phone
6,100 49.18 W3XAL 6,100 49.18 W3XAL 6,100 49.18 W9XF 6,100 49.20 YTC 6,098 49.20 ZTJ 6,097 49.20 HJ4ABE	Johannesburg, S. Africa	5.0	Broadcast Broadcast	5,025 59.70 ZFA 5,000 66.00 WWV	Hamilton, Bermuda	1.5	DL
6,097 49.20 HJ4ABE	Medellin, Colombia	0.1	Broadcast	8,000 60.00 WWV	Beltaville, Md	1.0	Wed. Fri. 2000. 1 p
# 000 40 26 H 14 A BC	Calcutta, India Manizales, Colombia Bound Brook, N. J. Chicago, Illinois Belgrade, Yugoslavia Johannesburg, S. Africa Medellin, Colombia Hong-Kong, China Ibague, Colombia Toconto, Chr. Canada	2.0	Be.; relays ZBW Broadcast				Frequency Standard; To Wed., Fri.; noon, 1 p E. S. T.
6,090 49.26 CRCX 6,085 49.30 HJ5ABD 6,083 49.32 VQ7LO 6,090 49.34 ZHJ	Toronto, Ont., Canada	0.5	Broadcast	5,000 60.00 ZUD 4,975 60.30 GBC	Pretoria, S. Africa Rugby, England Rugby, England Vancouver, B. C.	\$.0	
6,085 49.30 HJ5ABD	Neirobi Kanya Africa	1.25	Broadcast	4,820 62.24 GDW 4,795 62.56 VE9BK	Rugby, England		Phone to ships Phone to U. S.
6,080 49.34 ZHJ	Penang, Straits Settlements	- 0.05	Broadcast	4,795 62.56 VE9BK	Vancouver, B. C. Lawrenceville, N. J.	0.25 20.0	Broadcast Phone
6,080 49.34 CP5		20.0	Broadcast Bc.; relays WCFL	4,753 63.11 WOY 4,753 63.11 WOO	Ocean Gate, N. J.	20.0	Phone
6,080 49.34 CP5 6,080 49.34 W9XAA 6,070 49.35 DJM 6,075 49.38 HP5F 6,075 49.38 YVIRD 6,073 49.37 CVIRD 6,070 49.42 VESCS	Chicago, Illinois Zeesen, Germany Colon, Panama Maracaibo, Venesuela Macao, Asia		EXDURIMENTAL	4,630 65.08 YNJ7 4,610 65.08 YNJ5 4,610 65.08 YNE 4,610 65.08 YNE 4,610 65.08 YNH6	Wapam, Nicaragua Waspook, Nicaragua	0.1	Phone Phone
6,075 49.38 HP5F	Colon, Panama	0.2	Broadcast Broadcast	4,610 65.08 YNE	Waspook, Nicurugua Puerto Cabezas, Nicaragua Boom, Nicaragua	0.1	Phone
6,073 49.37 CQN	Macao, Asia	0.5	Broadcast	4,610 65.08 YNH6 4,605 65.16 HRW•	Boom, Nicaragua	.0.1	Phone
6,070 49.42 VE9CS	Vancouver, B. C., Canada	0.01	Broadcast Broadcast		La Ceiba, Honduras	0.1	Phone
6,070 49.42 HJ3ABF	Bogota, Colombia	0.1	Broadcast	4,600 65.22 HC2ET 4,465 C 19 CFA2	La Ceiba, Honduras Guayaquil, Ecuador Drummondville, P. Q.	0.4	Brondenst
8 067 49 45 VPB	Vancouver, B. C., Canada Toronto, Ontario Bogota, Colombia Colombo, Ceylon Mexico, D. F., Mexico Skalmleback, Denmark Cincinnati, Ohio Philbachthio, Pa		Broadcast		Canada	15.0	Phone
6,063 49.46 XEXR 6,060 49.50 OXY	Skamleback, Denmark		Broadcast Broadcast	4,355 68.89 IAC	Coltano, Italy Khabarovsk, U.S.S.R.	56 0 20.0	Phone Broadcast
6,060 49.50 W8XAL 6,060 49.50 W3XAU 6,050 49.59 HJ3ABD	Cincinnati, Ohio	10.0	Bc.: relays WLW	07 73.05 HCJB		0.5	Broadcast
6,060 49.50 W3XAU	Philadelphia, Pa. Bozota, Colombia	1.0	Be.; relays WCAU	4,100 73.17 LKJI	Jeloy, Norway	1.0	Experimental
6,050 49.59 XEXF	Mexico, D. F., Mexico		Broadcast	4,097 73.23 WND 4,002 74.77 CT2AJ	San Miguel, Azores	0.4	Phone Amateur; bo.
6,050 49.59 XEXF 6,045 49.62 XETW 6,042 49.65 HJIABG	Philadelphia, Pa. Bogota, Colombia Mexico, D. F., Mexico Mexico, D. F., Mexico Barranquilla, Colombia Mami Beach, Fia.		Broadcast	4,355 88.9 JAC 4,273 70.21 RV15 4007 73.05 HCJB 4,007 73.05 HCJB 4,097 73.23 WND 4,002 74.77 CT2AJ 4,000 75.00 CT3AQ 3,175 94.48 YNJ5 1775 94.48 YNJ5	Quito, Ecuador Jeloy, Norway Hialeah, Fla. San Miguel, Azores Funchal, Madeira Wapam, Nicaragua Waspook, Nicaragua Macca, Nicaragua	0.i	Broadcast; exp.
15.U4U 49.07 W 4 A D	Miami Beach, Fla.	2.5	Be.; relays WIOD	5,175 94,48 YN-17 3,175 94,48 YNJ5	Waspook, Nicaragua	0.1	Phone Phone
6,040 49.67 HI9B	Santiago de los Caballeros, D. R.	0.1	Broadcast		Boom, Nicaragua Puerto Cabezas, Nicaragua	0.1	Phone
6,040 49.67 WIXAL	Boston, Mass.	5.0	Broadcast	3,170 94.48 YNE 3,800 78.95 ZP11	Asuncion, Paraguay	0.1	Phone Broadcast
6,040 49.67 YDA	Tandjongprick, Java,	** *		3.770 79.56 HB9B	Basic, Switzerland		Broadeast
6 033 49.72 H.IAARP	D. E. I. Medellin, Colombia	10.0	Broadcast Broadcast	3,525 85.11 HB9AQ 3,376 88.83 HJA3 3,330 92.88 YDV2	Basie, Switzerland Lausanne, Switzerland Barranquilla, Colombia	•••••	Broadcast Phone
6,030 49.75 OLR2B	Podebrady, Czechoslovakia	25.0	Broadcust	3,330 92.88 YDV2	Handtermasin, Borneo.		
6,033 49.72 HJ4ABP 6,030 49.75 OLR2B 6,030 49.75 HP5B 6,030 49.75 YE9CA 6,030 49.75 XEBQ	Medellin, Colombia Podebrady, Czechoslovakia Panama, Panama Calgary, Alberta, Canada Masatlan, Mexico	0.1	Broadcast Bo.; relays CFCN	3,040 98.68 YDA	D. E. I. Tandjongprick, Java, D. E. 1.	20.0	Broadcast
6,030 49.75 XEBQ	Masatlan, Mexico		Broadcast	40.0000	D. E. 1.	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 mau 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.



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