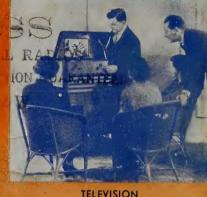
# Radio Foto Log

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

LLEN RO

COMPLETE REPAIR SERVICE ON A

SATISFA
SILVERTON SYcamore 75



IN THE HOME



PROFESSOR QUIZ



CHARLIE McCARTHY



MARTHA TILTON
Vocal Star of Benny Goodman's Swing Band

You can
your any might
play any might
play if your
RADIO'S
RIGHT! NEWS MPHONY DANCE BANDS OPERS TIONAL Ask as about NEW SETS EXPERT RADIO SERVICE

# Radio Foto Log

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 network. He's not losing any. thing. 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 entertainment.



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."



### **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** 

- 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 top? Quickly: II is 1/6th of 3 times what number? Is the half of a 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? 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.l., 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?
- 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 meet him?
- 10. In 15 seconds tell me how to change a twentydollar bill into dollars and half-dollars so that I will have ONE MORE half-dollar than I will
- If "This and That" plus one-half of "This and That" equals 11, how much is "This and That"?
- 12. If a person is consistently inconsistent, would you say that person is consistent or inconsistent?
- 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 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 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?
- Is the Sabara desert flat, rolling or mountain-
- 20. What abbreviations for State names make com-
- plete words? I start work Monday 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?
  In the line: "Little Miss Muffet sat on a TUFFETT"... what is a "tuffet"? Quickly... count from 10 to 1, backwards. How many STATES in the United States? Do the words "In God we Trust" appear on all current U. S. Coins?
- ourrent U. S. Coins; On every package of ordinary pins there ap-pears the initials; "S. C.", "M. C." or "B. C.". What do these mean? If a chicken has a gizzard what has an
- 28. "Izzard"?
- If the laundry goes out Monday morning and is returned Thursday noon, what is the mini-mum number of shirts a man must have in order to wear a clean shirt each morning?
- 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 sii in. Tom brings 6 eggs; Dick brings 3 eggs, but tossed 15c on the table. HOW should the 15c be divided?
- 15c be divided?

  32. 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 fiftieth 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.

- Վուդ	minutes, though many swer from 15 to 30				.88	
				OVER 22	.28	
	 *		12220	legge 0	100000000000000000000000000000000000000	

- receptable.

  Ab, ah. . . it should be 1, 2, 3, etc.!

  Technically, forty-four States and four "Commowealths", vis: Kentucky, Massachusetts, Pennsylsania and Virginia.

  Mo, they do not appear on either five-cent for a piece, or the Indian Head one-cent coin.

  Small, medium or Big CORKIIN. Corkin being an old Scotch-English term meaning "Pin".

  Minimum of eleven shirts.

  1½ minutes, not 2 minutes, Toast one side of Mo. 1 and Mo. 2. Then toast fine side of the ing sides of No. 3; finally toast remaining side of Mo. 3, and 3, and 3.

  TOM gets the 15c, as Harry ate 3 of Tom's elegal. 31
  - 30. .82
- .72 '97

- 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
- .81 Insves sat to
- Pensacola, Florida, farthest West.
  Estimated not one in a thousand knows.
  MOT 3k, minutes, but 3 minutes, 26 seconds.
  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, also, Nonutusion, a mudule", At any rate, NO privacy or secrecy about hugging or mugging these days!
- Fourteen halves, and 13 dollars. 7-1/8, 3/2 equals 11; 3/2 equals 11, 12 of 11, or 5-2/5; 2/2, or 'This and That" then equals (2, 3-2/3, or 7-1/3, '01
- Webster says "Advance; to make earlier, as an event or date", so you would meet at 11:30—115-30.
- - NOT 25, but 24 miles per hour. 3 hours and 45 min. .2
    - Aorth. ·ONT 3. (55)
- seconds, total 415 seconds, or 6:15. 6 minutes and 55 seconds. He uses 28 upward surges or 280 seconds; 27 back slips or 135

ANSWERS (No fair peekin')

## 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 mike-fright. 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

ROM 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.



[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.



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

			TIONS		IE UNITED ST	ATES
Call ∟etters	Location	Frequency Power (K C.) (Watts)		Call Letters	Location	Frequency Power (K C.) (Watts)
KABC	San Antonio, Tex. Aberdeen, S. Dak.	1420 100-250 1420 100 1200 100 1210 100		KGEK KGER KGEZ KGFF KGFJ	Location  Sterling, Golo. 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, Iex. San Angelo, Tex. Wichita Falls, Tex. Scottsbluff, Nebr. Mason City, lowa Safford, Arlz. (C.P.) Honolulu, Hawail	1200 100
KABR KADA	Ada, Ukla.	1200 100		KGER	Kalispell. Mont.	1360 1000
KALB		1210 100 1300 1000		KGFF	Shawnee, Okla.	1310 100 1420 100-250 1500 100-250 1200 100 1370 100
KAND	Corsicana, Tex.	13 10 100		(Car)	Los Angeles, Calif.	1200 100-250
KANS KARK	Wichita, Kans. Little Rock. Ark.	1210 100 890 500-1000		KGFL	Roswell, N. Mex.	1370 100
KARM	Fresno, Calif.	1310 100		KGFX KGGC KGGF KGGM	Pierre, S. Dak.	1310 100 630 200
KASA KAST	Astoria, Ore.	1370 100		KGGC	Coffeville, Kans.	1420 100 1010 1000
KATE KAWM	Albert Lea, Minn. Gallup, N. Mex.	890 500-1000 1310 100 1210 100 1370 100 1420 250 1500 100		KGGM KGHF	Albuquerque, N. Mex.	1230 1000
KBIX	Muskogee, Okla.	1000 100		KGHI	Little Rock, Ark.	1010 1000 1230 1000 1320 500 1200 100-250 780 1000-2500 1340 1000-2500 1420 100
KBKR KBND	Bend, Ore. (C.P.)	1500 100 1310 100-250		KGHL	Billings, Mont. Butte. Mont.	1340 1000-5000
KBPS KBST	Portland, Ore.	1310 100-250 1420 100 1500 100		KGIR KGIW KGKB	Alamosa, Colo.	1420 100
KBTM	Portland, Ore. Corsicana, Tex. Wichita, Kans. Little Rock, Ark. Fresno, Calif. Elk City, Okla. Astoria, Ore. Albert Lea, Minn. Gallup, N. Mex. Muskogee, Okla. Baker, Ore. (C.P.) Bend, Ore. (C.P.) Bend, Ore. Big Spring, Tex. Jonesboro, Ark. Kansas City, Kans. Texarkana, Lex. Kansas City, Mo. Enld, Okla. Jerome, Ariz. Duluth, Minn. Santa Barbara, Calif Casper, Wyo.	1200 100		KGKL	San Angelo, Tex.	1500 100-250 1370 100-250 570 250-1000 1500 100-250 1210 100-250
KCKN KCMC	Texarkana, Lex.	1310 100 1420 100-250 1370 100	ed	KGKD	Wichita Falls, lex. Scottsbluff, Nebr.	1500 100-250
KCMO	Kansas City, Mo.	1370 100 1360 250	ns	KGLO	Mason City, lowa	1210 100-280 1420 100-250
KCRC KCRJ	Jerome, Ariz.	1360 <b>25</b> 0 1310 100-250	.92	KGMB	Honolulu, Hawaii	1420 100-250 1320 1000
KDAL KDB	Santa Barbara, Calif	1310 100-250 1500 100 1500 100-250 1440 500 980 50000 1210 100	ē	KGKL KGKO KGLO KGLU KGMB KGNC KGNF KGNO	Amarillo, Tex.	14:0 1000-2500 14:0 1000 14:0 1000 13:40 250 790 7500 750 2500 1200 1000
KDFN	Casper, Wyo. Pittsburgh, Pa.	1440 500	pe	KGNO	Dodge City, Kans.	1340 250 790 7500
KOLR	Devils Lake, N. Dak.	1210 100	as	KGU	Honolulu, Hawall	750 2500
KDNC	Lewistown, Mont.(C.P.)	1200 100-250	Ë	KGVL	Greenville, Tex.(C.P.)	.750 2500 1200 100 1260 1000
KDON	Monterey, Calif.	1510 100	Ţ.	KGW	Portland, Ore.	620 1000-5000
KDYL	Salt Lake City, Utah	1290 1000	E	KHBC	Hilo, Hawall	620 1000-5000 1210 100 1400 250
KECA	Los Angeles, Calif Seattle, Wash	1430 1000-5000	be	KHBG	Okmulgee, Okla.	1210 100
KEHE	Los Angeles, Calif.	780 1000-5000	п	KHO	Spokane, Wash.	590 1000-5000
KELD	N. of Eldorado, Ark	1370 100	ţi	KGU KGVL KGVO KGW KHBG KHBG KHJO KHJL KHUB KHJCA KHJL KHJCA	Safford, Ariz. (C.P.) Honolulu, Hawaii Amarilio, Tex. North Platte, Nebr. Dodge City, Kans. San Francisco, Calif. Honolulu, Hawaii Greenville, Tex. (C.P.) Missoula, Mont. Portland, Ore. Olympla, Wash. Hilo, Hawaii Okmulgee, Okla. Los Angeles, Calif. Spokane, Wash. Chico, Calif. Watsonville, Calif. Clovis, N. Mex. Idaho Falls, Idaho Bolse, Idaho	1400 250 1210 100 900 1000-5000 590 1000-5000 1260 250 1310 250 1370 100 1320 500-1000 1350 1000-2500 1420 100 1450 500-1000
KELO	Sloux Falls, S. Dak.	1200 100 1370 100	nc	KICA	Clovis, N. Mex.	1370 100
KEUB	Price, Utah	1420 100	it.	KIDO	Bolse, Idaho	1350 1000-2500
KFAB	Lincoln, Nebr.	770 10000	ü	KIDW	Lamar, Colo. Eureka, Calif.	1450 500-1000
KFAC	Los Angeles, Calif	1300 1000 1420 100	ວ	KIEV	Boise, Idaho Lamar, Colo. Eureka, Calif. Glendale, Calif Juneau, Alaska	850 <b>250</b> 1310 100
KFAR	Fairbank, Alaska (C.P.)	610 1000	<u>s</u>	KIDO KIDW KIEM KIEY KINY	Seattle, Wash.	650 250
KFBI	Santa Barbara, Calif Casper, Wyo. Pittsburgh, Pa. Devils Lake, N. Dak. Lewistown, Mont.(C.P.) Denton, Tex. Monterey, Calif. Dubuque, Iowa (C.P.) Salt Lake City, Utah Los Angeles, Calif. Centralia, Wash. Los Angeles, Calif. Centralia, Wash. N. of Eldorado, Ark Sloux Falls, S. Dak. Bakersfield, Calif. Price, Utah Portland, Ore. Lincoln, Nebr. Los Angeles, Calif. St. Cloud, Whinn. Fairbank, Alaska (C.P.) Great-Falls, Mont. Abliene, Kans. Sacramento, Calif Beaumont, Tex. Brookings, S. Dak. Denver, Colo. St. Joseph, Mo. Boone, Iowa Wichita, Kans. Los Angeles, Calif. Spokane, Wash. Fond du Lac, Wisc. Marshalltown Lowa	1050 5000	P. after station location, indicates construction permit has been issued	1 1/1 1	Seattle, Wash. Yakima, Wash. Kansas City, Mo. Garden City, Kans. Pecos, Tex. Durance Colo	1250 250-500 1530 1000
KFBK	Sacramento, Calif Beaumont, Tex.	1490 5000 560 500-1000	Ġ:	KITE	Garden City, Kans.	1510 100
KFDY	Brookings, S. Dak.	780 1000	Э.	KIÜN KIUP KJBS KJAH KLAH KLBM KLCN KLPM KLRA KLUF	Pecos, Tex. Durango, Colo. San Francisco, Calif. Seattle, Wash. Carlsbad, N. Mex. La Grande, Ore. (C.P.) Blytheville, Ark. Ogden, Utah Minot, N. Dak Little Rock, Ark. Oakland, Calif. Galveston, Tex.	1370 100
KFEQ	St. Joseph, Mo.	680 2500	Ę,	KJBS KJR	Seattle, Wash.	1070 500 .970 5000 1210 100
KFGQ KFH	Boone, lowa Wichita, Kans. Los Angeles, Calif. Spokane, Wash. Fond du Lac, Wisc. Marchalltown	1370 100	t;	KLAH	Carlsbad, N. Mex.	1210 100 1420 100-250
KFI	Los Angeles, Calif.	1300 1000-5000 640 50000 1120 100 1420 100 1200 100-250 1210 100 1410 500-1000 1300 500 1370 100-250	ca	KLCN	Blytheville, Ark.	1420 100-250 1290 100 1400 500
KFIZ	Fond du Lac, Wisc.	1420 100	િ	KLPM	Minot, N. Dak.	1400 500 1240 250 1390 1000-5000 1280 250 1370 100 880 1000
KFJB KFJI	Marshalltown, lowa Klamath Falls, Ore.	1200 100-250 1210 100	on	KLRA	Little Rock, Ark.	1390 1000-5000 1280 250
KFJM KFJR	Klamath Falls, Ore. Grand Forks, N. Dak.	1300 500-1000	÷.	KLUF	Galveston, Tex. Oakland, Callf. Denver, Colo. Shenandoah, Iowa	000 1000
KFJZ	Portland, Ore. Fort Worth, Tex.	1370 100-250	ste	KLX	Denver, Colo.	560 1000-5000
KFKA KFKU	Greeley, Colo. Lawrence, Kans. Shenandoah, lowa	880 500-1000 1220 1000-5000 890 500-1000 1210 100-250 1250 1000 1310 100-250	10	KMA	Shenandoah, Iowa San Antonio, Tex. Kansas City, Mo. Medford, Ore.	560 1000-5000 930 1000-5000 1370 1000-5000 1410 250 580 1000-5000
KFNF KFOR	Shenandoah, lowa	890 500-1000	ij	KMAC KMBC	Kansas City, Mo.	950 1000-5000
KFOX	Lincoln, Nebr. Long Beach, Callf.	1250 1000		KMED KMJ KMLB	Medford, Ore. Fresno, Calif. Monroe, La.	1410 250 580 1000 1200 100-250
KFPL KFPW				KMLB	Monroe, La.	1200 100-250 740 1000
KFPY	Spokane, Wash.	890 1000-5000	C	KMMJ	Clay Center, Nebr. Tacoma, Wash.	1220 1000
KFRC KFRO	San Francisco, Callf.	610 1000-5000		KMOX	St. Louis, Mo. Beverly Hills, Calif. Los Angeles, Calif. Brady, Tex. Palestine, Tex. Austin, Tex. Los Angeles, Calif.	1090 50000 710 500 570 1000
KFRO	Columbia, Mo.	1370 250 630 500-1000	NOTE	KMTR	Los Angeles, Calif.	710 500 570 1000 1500 250
KESD	San Diego, Calif.	600 1000	Õ	KNET	Palestine, Tex.	1420 100
KFUO	Clayton, Mo.	550 500-1000	Z	KMTR KNEL KNET KNOW KNX KOA	Los Angeles, Calif.	570 1000 1500 250 1420 100 1500 50000 830 50000 550 1000 1790 1000 1370 100-250 1210 100-250 1310 100-250 1310 100-250
KFVS	Cape Girardeau. Mo.	1000 1000 1210 100 <b>~25</b> 0		KOAC	Denver, Coio. Corvallis, Ore.	830 50000 550 1000
KEYD	Hollywood, Calif.	950 1000-5000		KOAM	Pittsburg, Kans.	550 1000 790 1000
KFXJ	Grand Junction, Colo.	1200 100-250		KOBH	Rapid City, S. Dak.	1370 100-250
KFUO	Clayton, Mo.	550 500		KOCA	Kilgore, Tex. Okiahoma City, Okla.	1210 100-250 1310 100-250
KFRU KFSD KFSD KFVD KFVD KFVB KFXD KFXD KFXM KFYO KFYO KFYO KFYO KFYO	Spokane, Wash. Anchorage, Alaska San Francisco, Callf. Longview, Tex. Columbia, Mo. San Dlego, Callf. Los Angeles, Callf. Clayton, Mo. Los Angeles, Callf. Cape Girardeau, Mo. Hollywood, Callf. Nampa, Idaho Grand Junctlon, Colo. San Bernardino, Callf. Clayton, Mo. Lubbock, Tex. Bismarck, N. Dak. Spokane, Wash. Tucson, Ariz. San Diego, Calif. Ketchikan, Alaska	1310 100-250		KOĀC KOAM KOBH KOCA KOCY KOH KOIL KOIN KOKO	Reno, Nev.	790 1000 1370 1000250 1210 100-250 1210 100-250 1310 100-250 1380 500 1260 1000-5000 940 1000-5000 1370 100
KGA	Spokane, Wash.	1470 5000		KOIN	Portland, Ore.	940 1000-5000
KGAR KGB	San Diego, Calif.	13/0 100-250		KOKO	La Junta, Colo. Seattle, Wash.	1370 100
KGBU	Ketchikan, Alaska	900 500		KOMA	Oklahoma City, Okla.	1260 1000-5000 940 1000-5000 1370 1000-5000 1480 5000 920 1000-5000 1370 100 1200 100-50
KGCA	Decorah, lowa	1270 100		KONO	San Antonio, Tex.	1370 100
KGC I	Mandan, N. Dak.	1200 100 1240 250		KOOS KORE	Marshfield, Ore.	1200 100-250 1420 100
KGBU KGBX KGCA KGCU KGCX KGDE KGDM	Wolf Point, Mont.	1450 1000		KOMA KOMO KONO KOOS KORE KOTN KOVC	Pine Bluff, Ark.	1420 100 1500 100 1500 100-250
KGDM	Stockton, Calif.	1100 1000	[19]	KOY	Phoenix, Ariz.	1500 100-250 1390 1000
KGDY	San Diego, Calif. Ketchikan, Alaska Springfield, Mo. Decorah, lowa Coeur d'Alene, Idaho{CP Mandan, N. Dak. Wolf Point, Mont. Fergus Fails, Minn. Stockton, Calif. Huron, S. Dak.	1340 250	[ 12 ]	KPAB	Austin, lex. Los Angeles, Calif. Denver, Coio. Corvallis, Ore. Pittsburg, Kans. Albuquerque, N. Mex. Rapid City, S. Dak. Kilgore, Tex. Okiahoma City, Okla. Reno, Nev. Omaha, Nebr. Portland, Ore. La Junta, Colo. Seattle, Wash. San Antonio, Tex. Marshfield, Ore. Lugene, Ore. Pipe Bluff, Ark. Walley City, N. Dak. Phoenix, Ariz. Laredo, Tex. (C.P.)	1500 100-250

Call Letters	Location	Frequency Power (K.C.) (Watts)		Call Letters	Location	Frequency Power (K.C.) (Watts)
KPAC KPBM KPDM KPFA KPLT KPMC KPC KPC KPC KPC KPC KPC KPC KPC KPC KRPC KR	Port Arthur, Tex. Poplar Bluffs,Mo.(C.P.) Pampa, Tex. Helena, Mont. Lake Charles, La. Paris, Tex. Bakersfield, Callf. San Francisco, Calif. Denver, Colo. Pasadena, Calif. Wenatchee, Wash. Houston, Tex. Pittsburgh, Pa. San Jose, Calif. 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 Dallas	1260   500	m issued.	KWOS KWSC KWTN KWTO KWYO KXA KXL KXO KXOK KXRO KYYZ KYA KYOS KYSW WAAF WAAF WAAF WAAF WAAW WAAF WAAW WAW WAAW W	Watertown, S. Dak. Springfield, Mo. Sherldan, Wyo. Seattle, Wash. Portland, Ore. El Centro, Calif. St. Louis, Mo. (C.P. Aberdeen, Wash. Houston. Tex. San Francisco, Calif Prescott, Ariz. (C.P. Merced, Calif. Mankato, Minn. (C.P. Philadelphia, Pa. Boston, Mass. Chicago, Ill. Jersey City, N. J. Omaha. Nebr.	1500 100-250 1040 250 1500 100-250 1020 10000 1410 500-1000 920 1000 940 500
KRIMD KRIMD KRIMD KRIMT KROCD	Midland, Tex. Jamestown, N. Dak. Shreveport, La. Roseburg, Ore. Des Moines, Iowa Rochester, Minn. El Paso, Tex. (C.P.) Oakland, Calif. Sacramento. Calif. Sacramento. Calif. Sacramento. Calif. Sacramento. Seattle, Wash. Manhattan, Kans. Seattle, Wash. Manhattan, Kans. Sallna, Kans. Huntsville, Tex. (C.P.) Sioux City, Iowa St. Louls, Mo. Pocatello, Idaho San Francisco, Calif Salt Lake City, Utah Some Francisco, Calif Salt Lake City, Utah Some Francisco, Calif Salt Lake City, Utah Lowell, Ariz. Phoenix, Ariz. Phoenix, Ariz. Phoenix, Ariz. Fort Worth, Tex. Austin, Tex. (C.P.) Shreveport, La. Temple, Tex. Twin Falls, Idaho Hot Springs Natl.Pk. Ark Visalia, Calif. Sonta Barbara, Cal. Oklahoma City, Okla. Modesto, Calif. Houston, Tex. Siloam Springs, Ark Vermillion, S. Dak. Salt Lake City, Utah (CP) Son Antonio, Tex. Siloam Springs, Ark Vermillion, S. Dak. Salt Lake City, Utah (CP) Son Great Red Kans		NOTE: C. P. after station location, indicates construction permit has been issued.	TOO YOUR AREA THE ZX LAALAP XCL M ROUGH AREA TO WARA AREA AREA TO WARA	New York, N. Y Bangor, Me. Y. Waco, Jex. Tallmadge, Ohio Athens, Ga. Dothan, Ala. Presque Isle, Me. Anderson, S. C. Winston-Salem, N. C. Wobile, Ala. Zanesville, Ohio. Laurel, Miss. Birmingham, Ala. Chattanooga, Jenn. Brooklyn, N. Y. Grand Raplds, Mich. Atlanta, Ga. Waterbury, Conn. Louisville, Ky. Zarephath, N. J Waycross, Ga. Hazieton, Pa. West Lafavette, Ind. Baltimore, Md. Fort Worth, Tex. Wilkes-Barre, Pa. Brooklyn, N. Y. Richmond, Va. Chicago, Ill. Brooklyn, N. Y. Marquette, Mich Huntsville, Ala. Greensboro, N.C. New York, N. Y. Clarksburg, L. Clarksburg, L. Clarksburg, L. Clarksburg, L. Clarksburg, L. Columbus, Ohio New Orleans, La. Columbus, Ohio New York, N. Y. See WASC-WBOO) Terre Haute, Ind. Red Bank, N. J. Birminoham, Ala. Wilkes-Barre, Pa. Plttsfield, Mass. Boston, Mass. Boston, Mass. Boston, Mass. Boston, Mass. Boston, Mass. Canton, M. Limadelphia, Pa. Burlington, P. Northfield, Minn. Canden, N. J. Allmore, Md. Limore, Md. Lim	860 50000 1200 100-250 1370 100-250 1370 100-250 1370 100-5000 1350 1000-5000 1370 250 1370 250 1370 250 1380 500-1000 1210 100-250 1420 100 1210 100-250 1420 1000 1310 100-250 1420 1000 1310 100-250 1420 1000 1350 500-1000 1210 1000 1350 500-1000 1200 100-250 1420 100 1350 500-1000 1200 100-250 1420 100 1310 100-250 1420 100 1310 100-250 1410 500-1000 1210 1000 1210 1000 1210 1000 1210 1000 1210 1000 1210 1000 1210 1000 1210 1000 1210 1000 1310 1000-5000 1310 1000-5000 1310 1000-5000 1310 1000-5000 1310 1000-5000 1310 1000-5000 1310 1000-5000 1310 1000-5000 1310 1000-5000 1310 1000-250 1310 1000-250 1310 1000-250 1310 1000-250 1310 1000-250 1310 1000-250 1310 1000-250 1310 1000-250 1310 1000-250 1310 100-250
KWEW KWG KWJB KWJJ KWK KWKH KWLC	Hobbs, N.Mex. (C.P.) Stockton, Calif. Globe, Ariz. (C.P.) Portland, Ore. St. Louis Mo.	1420 100 1500 100 1200 100 1210 100-250 1060 500 1350 1000-5000 850 10000 1270 100 780 250 1200 250 1310 100	[ 13 ]	WCBA WCBM WCBS WCCO WCF L WCHS WCHV WCKY WCKY WCLO WCLS WCNW	Baltimore, Md. Springfield, III. Minneapolls, Minn. Chicago, III. Charleston, W, Va. Charlottesville, Va. Covington, Ky. Cleveland, Ohio. Janesville, Wisc. Joliet, III. Ashland, Ky. Brooklyn, N. Y.	1370 100-250 1420 100-250 910 50000 970 5000 500 500-1000 1420 100-250 1490 10000 610 500 1200 100-250 1310 100-250 1310 100-250 1500 100-250

Call Letters	Location	Frequency Power (K.C.) (Watts)		Call Letters	Location	Frequency Power (K.C.) (Watts)
WEENOAGSTD WEENA ABM WEENSTD WEENA ABM WEENA ABM WEENA ABM WEFA ABM WEFABBBRF A LADWENT WEFNOR WEFNOR WEFNOR WEFNOR WEGAN	Syracuse, N.Y. Indianapolis, Ind. Baltimore, Md Flint, Mich. Manchester, N.H. Philadelphia, Pa. Tampa, Fla. Frederick, Md.	1200   250   1200   250   1370   100   250   1300   1000   760   1000   1300   1000   1300   1000   1300   1000   1200   1000   1300   1000   1200   1300   1000   1300   1000   1300   1000   1300   1000   1300   1000   1300   1000   1300   1000   1300   1000   1300   1000   1300   1000   1300   1000   1300   1000   1300   1000   1300   1000   1300   1000   1300   1000   1300   1300   1000   1300   1000   1300   1000   1300   1000   1300   1300   1000   1300	NOTE: C. P. after station location, indicates construction permit has been issued.	BLOUYFHLBCFCOPØB.CBS. M. AGMUWXAC LIMDSOF E RCGRSXCKLOWY AGRTBHROOVWZUKCT OCKPW.CLZUHUH HAWHHBDDHFLEFFCOPØB.CBS. M. AGMUWXAC LIMDSOF E RCGRSXCKLOWY AGRTBHROOVWZUKCT OCKPW.CLZUHUH HAWHHBDDHFLEFFCOPØB.CBBBBBBBCCCLLLIZIONDPR.RSSXCKLOWY AGRTBHROOVWZUKCKYYZAKPBBBBBCCCLLLIZIONDPR.RSSXCKLOWY AGRTBHROOVWZUKCYZAKPBBBBCCCLLLIZIONDPR.RSSXCKLOWY AGRTBHROOVWZUKCYZAKPBBBBCCCLLIZIONDPR.RSSXCKCYZAKPBBBCCCLLIZIONDPR.RSSXCKCYZAKPBBCCCLLIZIONDPR.RSSXCKCYZAKPBBCCCLLIZIONDPR.RSSXCKCYZAKPBBCCCLLIZIONDPR.RSSXCKCYZAKPBBCCCLLIZIONDPR.RSSXCKCYZAKPBCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	Newark, N. J. Sheboygan, Wisc Memphis, Tenn. Anderson, Ind. Green Bay, Wisc Calumet, Mich. Boston, Mass. Olean, N. Y. Portsmouth, N.H. Rochester, N.Y. Kosciusko, Miss. Cicero, Ill. Dayton, Ohio Hammond, Ind. Bluefled, W. Va. Greensburg, Pa. Cleveland, Ohio Columbus, Ohio Virginia, Minn. Port Huron, Mich. (CP) New York, N. Y. Des Moines, Iowa Jersey City, N.J Harrisburg, Pa. Madjson, Wisc. Glenside, Pa. Jackson, Mich. Poynette, Wisc. Johnstown, Pa. Norfolk, Mo. Urbbna, Ill. Wilmington, Del. Gary, Ino. New York, N. Y. Miami, Fla. Philadelphia, Pa. Indianapolis, Ind. Columbia, S.C. Milwaukee, Wisc. Johnstown, Pa. Norfolk, Nebr. Providence, R. I Pittsburgh, Pa. Jacksonville, Fla. Bloomington, Ill. Detroit, Mich. Decatur, Ill. Baton Rouge, La. New Orleans, La. Gadsden, Ala. Jackson, Misc. Lagerstown, Md. Johnson City, Tenn. (CP) Lansing, Mich. Chicago, Ill. Rice Lake, Wisc. Johnstown, Pa. Nordolk, Nebr. Providence, R. I Pittsburgh, Pa. Jacksonville, Fla. Bloomington, D. Lansing, Mich. Chicago, Ill. Rice Lake, Wisc. Youngstown, Ohlo New Stat Lansing, Mich. Missel Dubuqe, Ill La Crosse, Wisc. Youngstown, Ohlo New Stat Lansing, Mich. Missel Dubuqe, Ill La Crosse, Wisc. Youngstown, Ohlo New Talm Beach, Fla. Lexington, Ky. Lawrence, Mass. Mindeleboro, Ky. Laconia, N.H. Chicago, Ill. Brooklyn, N.Y. Lavinghon, N.Y. Lavingh	610 1000 610 1000 1400 1000-5000 560 1000-5000 1120 250-1000 1310 100-250

Call Letters	Location	Fremency Power (K.C.) (Watts)	-	Call Letters Location	Frequency Power (K.C.) (Watts)
WMAAACO - WMAAAC	Location  Washington, D.C. Chicago, III. Springfield, Mass. Macon, Ga. Detroit, Mich. Peoria, III. IIDD (See MIOD-WMBF) Richmond, Va. Joplin, Mo. Chicago, III. Auburn, N.Y. Jacksonvile, Fla. Uniontown, Pa. Memphis, Tenn. New York, N.Y. bioston, 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. Cadar Rapids, Iowa Boston, Mass. Norman, Okla. Yankton, S. Dak. New Britain, Conn. Binghamton, N.Y. New Bedford, Mass. Springfield, Vt. San Juan, Puerto Rico New York, N.Y. New Bedford, Mass. Springfield, Vt. San Juan, Puerto Rico New York, N.Y. New Hodon, Conn. Knoxville, Tenn. New York, N.Y. San Antonio, Tex. Davenport, Iowa Barnstable Twp., Mass. Ames, Iowa Albany, N.Y. Washington, D.C. Florence. S.C. Owensboro, Ky. Manitowoc, Wisc. Grand Rapids, Mich. Bristol, Tenn. Newark, N.J. Worcester, Mass. York, Pa. Boston, Mass. Columbus, Ohio New York, N.Y. Omaha, Nebr. Ft. Wayne, Ind. Paducah, Ky. Arkersburg, W. Va. Thomasville, Ga. Portsmouth, Ohio Philadelphia, Pa. Atlantic City, N.J. Sharon, Pa. (C.P.) Mayaquez, Puerto Rico Providence, Puerto Rico Raleigh, N.C. Miami, Fla. C. Miami, Fla.	630 250-500 670 50000 1420 100-250 1180 1000-250 1420 100-250 1420 100-250 1420 100-250 1420 100-250 1420 100-250 1420 100-250 1420 250 780 100-250 1500 100-250 1500 100-250 1210 100-250 1210 100-250 1210 100-250 1210 100-250 1210 100-250 1210 100-250 1210 100-250 1210 100-250 1210 100-250 1210 100-250 1200 100-250 1200 100-250 1230 100-250 1310 100-250 1310 100-250 1310 100-250 1310 100-250 1310 100-250 1310 100-250 1310 100-250 1310 100-250 1320 1000	tion, indicates construction permit has been issued.	WSAR WSAU Wausau, Wisc. WSAY Savannah, Ga. WSAY Rcchester, N.Y. WSAZ Huntington, W.Va. Atlanta, Ga. WSEC Chicago, II. WSET South Bend, Ind. WSFA Montgomery, Ala. WSGA WSKE Birmingham, Ala. WSGA WSKE Minston-Salem, N.C. WSLI Jackson, Miss. (C.P.) WSM Nashville, Tenn. WSUS Nashville, Tenn. WSUS Nashville, Tenn. WSWE New Orleans, La. WSMK Dayton, Ohio WSPA Spartanburg, S.C. WSPD Toledo, Ohio WSPA Spartanburg, S.C. WSPD Toledo, Ohio WSPR Springfield, Mass. WSTP Salisbury, N.C. (C.P. WSUI lowa City, lowa WSUN St. Petersburg, Fla. WSVS Buffalo, N.Y. WSVS Buffalo, N.Y. WSYS RVSU Syracuse, N.Y. WTAD Quincy, III. WTAG Worcester, Mass. WTAL Tallahassee, Fla. WTAL Tallahassee, Fla. WTAM Cleveland, Ohio WTAC Green Bay, Wisc. WTAW College Station, Tex. WTAX Springfield, III. WTBC WTAC WTAC Green Bay, Wisc. WTAN WTAC Winneapolis, Minn. WTEL Hartford, Conn. WTUS Jackson, Tenn. WTUS Jackson, Tenn. WTEL Hartford, Conn. WTIC Hartford, Conn. WTIC Hartford, Conn. WTHJ Hartford, Conn. WTIC Savannah, Ga. WTOL Toledo, Ohio WTRC Elkhart, Ind. WVFW Brooklyn, N.Y. WWAE Hammond, Ind. Detroit, Mich. NWC WWNC WWOC Asheville, N.C. WWNL WWOC Asheville, N.C. WWNL WWOC Heans, La. WWNC WWOC Woodside, N.Y. WWSW WHOL WXYZ Detroit, Mich.	580 1000 1310 100-250 1070 50000 1330 1000 780 1000 1120 500 1210 100 800 250 1250 1000-5000 1310 100 1060 5000 1310 100-250 620 1000-5000
WOOWWDARXYNG CAOOWWPPAAAN WPPAGAAAN WPPAGAAAN WPPAGAAAAN WPPAGAAAAN WWRAAKHWAKAAAAN WRRAAKHWAKAAAAN WRAAKHWAKAAAAN WRAAKHWAKAAAAN WRAAKHWAKAAAAN WRAAKHWAKAAAAN WRAAKHWAKAAAAN WRAAKHWAKAAAAN WRAAKHWAKAAAAN WRAAKHWAKAAAAN WAKAAAN WRAAKHWAKAAAN WRAAKHWAKAAAN WRAAKHWAKAAAN WRAAKHWAKAAAN WRAAKAAAN WRAAKHWAKAAAN WRAAKAAAN WRAAKHWAKAAAN WRAAKAAAN WRAAKAAAAN WRAAKAAAN WRAAKAAAN WRAAKAAAN WRAAKAAAN WRAAKAAAAN WRAAKAAAN WRAAKAAAAN WRAAKAAAAN WRAAKAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	Vicksburg, Miss. St. Albans, Vt. New York, N.Y. Williamsport. Pa.	130	NOTE: C. P. after station loc	CANADIAN BROADCAST ST  CBF Montreal, Que. CBL Toronto, Ont. CBM LaPrairie, Que. CBO Hauthorne, Ont. CBR Luiu Island, B.C. CFAR Calcary, Alta. CGR Montreal, Que. CFCC Montreal, Que. CFC Montreal, Que. CHM Montreal, Que. CHM Montreal, Que. CHM Salffeet, Ont. CFM CMM CANADIA CFM Montreal, Que. CHM Salffeet, Ont. CFM CMM CANADIA CHM Montreal, Que. CHM Salffeet, Ont. CCM CMM Bedford, N.S. CMM CANADIA CCM CMM CANADIA CCM CMM CANADIA CCM CMM CANADIA CMM CAN	910 50000 840 50000 1100 5000 1100 5000 1370 1000 1370 1000

## 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, 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 snown 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 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

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 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

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 LOCATION	CALL LETTERS	FREQUENCY (kc) OR GROUP*	VISUAL	VER 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	
Philco Radio & Tele- rision Corp., Philadelphia, Pa.	W3XE	В, С	10kw	10kw	A3, A4	
Philco Radio & Tele- vision Corp., Philadelphia, Pa.	W3XP	D(204000- 210000)	15w		A4 & Special (C. P. only	
Purdue University, West Lafayette, Ind.	W9XG	A	1500w		A4	
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	A3, A4	
The Sparks-Withington Company, Jackson, Michigan.	W8XAN	в, с	100w	100w	A3, 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	W9XAT	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 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

	Meters Call	Location	Kw.	Service, etc.	Kc. Meters Call	Location	Kw.	Service, etc.
400,000 <b>40</b> ,500	0.75 W1XEG 4.96 W8XKA 5.41 W8XKA	Storrs, Conn. Pittsburgh, Pa.	0.5	Experimental Experimental	15,620 19.21 JVF 15,506 19.35 CMAS	Nanki, Japan Bawana, Cuba Bojinna, Calif. Addia Ababa, Ethiopia Mazatiaa, Binahoa, Menico Diden, Calif. Seekeelberevar, Hungary Zeesen, Germany Drien, Gebranay Zeesen, Germany Devent, Capit. Japan Company Pedebandry, Crosbool ovakia Davastry, Hagland Lara, Bojica, Agravima Waysa, Ni J. Bayestry, Bagland Boston, Mass.	20.0	Tests, irr.
40,500 55,500 41,000	5.41 W8XKA 7.32 W2XG	Pittsburgh, Pa. New York, N. Y.	0.15	Exp.; relays KDKA Experimental	15,490 19.37 KEM 15,475 19.39 KKL	Bolinsa, Calif. Bolinsa, Calif.	40.0 40.0	Phone Phone
31,600		Chieopee Falls, Mass.	0.5	Experimental Exp. relaws KVW	15,450 19.42 1UG 15,420 19.45 YEBM	Addis Ababa, Ethiopia Mazatlan, Sinalea, Mexico	•••••	Phone
31,600	9.49 W8XAI	Philadelphia, Pa. Roehester, N. Y. Pittsburgh, Pa. Detroit, Mich.	0.1	Exp., relays KYW Exp.; relays WHAM Exp.; relays WHJ Exp.; relays KSD Broadcast Br.; relays KDKA	15,420 19.45 KWO	Diston, Calif.	20.0	Be.; relays XEBL Phone to Hawaii, Manila Broadcast
31,000	9.49 W8XWJ	Detroit, Mich.	0.1	Exp.; relays WWJ	15,360 19,53 DZG	Zossen, Germany	20.0	Phone
36,100	9.49 W9XPD 11.49 GSK	St. Louis, Mo. Daventry, England Pittsburgh, Pa. Daventry, England	20.0	Broadcast	15,340 19.56 DJR	Zeesen, Germany	20.0 50.0	Phone to Hawaii Broadcast
21,540 21,530	9.49 W8XRA 9.49 W8XWJ 9.49 W9XPD 11.49 GSK 13.93 W8XK 13.93 GSJ 13.94 W2XE	Pittsburgh, Pa. Daventev, England	15.0	Breadcast	15,330 19.57 W2XAD 15,330 19.58 OLR5B	Schenoctady, N. Y., Pedebeader, Czechoslovakia	20.0 25.0	Be.; relays WGY Broadcast
21,520	13.94 W2XE		• • • • • •	Be.; relays WABC	15,210 19.60 GSP 15:368 19.60 CP7	Davestry, England	20.0	Broadcast Phone
21,470	13.94 VZAL 13.94 JZM 13.97 GSH 13.98 W1XAL 13.99 OLR6A 14.01 WKK 14.18 LSL4	Daventry, England Booton, Mass. Pedebrady, Czechoslovakia Lawrenceville, N.J. Hurlingham, Argentina	20.0	Broadcast Broadcast	18,450 19,42 IUG 15,260 19,45 KEBM 15,260 19,45 KWO 15,270 19,45 KWO 15,370 19,32 HASS 13,360 19,33 DZG 15,361 19,55 KWU 15,369 19,55 CG 15,369 19,57 WZXAD 15,369 19,60 CF7 15,269 19,60 CF7 15,269 19,63 DJQ 15,269 19,64 KWZXE 15,269 19,64 WZXE 15,269 19,64 GE1	Zeesen, Germany	5-50	Broadcast
21,450	13.99 OLR6A	Pedebrady, Czechoslovakia	25.0 20.0	Broadeast Phone	15,220 19.65 W2XE	Wayne, N.J.	3.0 15.0	Be.; relays LR1 Bc.; relays WABC
21,160	14.18 LSL4	Hurlingham, Argentina	60.0	Phone to London and Rio;	15,250 19.67 WIXAL	Beston, Mass.	5.0	Broadcast Broadcast
21,140	14.19 KBI	Manila, P.I.	10.0	Phone Phone	15,280 19,70 OLRSA	Podebeady, Cacchoslevakia	25.0	Broadcast Breadcast
21,080 21,068	14.22 PSA 14.25 WKA	Marapieu, Brazil Lawrenceville, N. J.	10.0 20.0 20.0	Phene; breadcast Phene to England	15,226 19.71 PCJ 15,216 19.72 W8XK	Huiten, Molland Pittsburgh, Pa.	20.0	Experimental Be.; relays KDKA
21,060	14.25 KWN 14.27 L8N6		20.0 60:0	Phone to New York; day	15,200 19.74 DJS 15,190 19.75 ZBW4	Zoeson, Gurmany Bongleone, China	5-50	Broadcast Broadcast
20.916	14.35. PSB	Burkagkam, Argentina Marapicu, Brazil Madrid, Spain Bolinas, Calif. Bolinas, Calif. Nauen, Germany Leopoldville, Belgian Congo	10.0	Phone to Buenes Aires	15,180 19.76 GGO	Daventry, England	15.0	Broadcast Broadcast
20,820	14.37 EHY 14.41 KSS	Bolinas, Calif.	40.0	Phone ·	15,160 19.20 OLRSC	Pedebrady, Czecheslovakia	25.0	Broadcast Broadcast
20,146	14.90 DWG	Nauen, Germany	*0.0	Phone Phone	15,140 19.84 GSF	Daventsy, Bagland	15.0	Broadcast
20,046	14.44 KMM 14.90 DWG 14.97 OPL 14.99 DFZ	Nauen, Germany Manila, P. I.	9.0	Phone to South America	15.202 19.65 W2XE 15.202 19.65 W2XE 15.202 19.67 W1XAL 15.204 19.07 W1XAL 15.204 19.08 TPA2 16.202 19.70 OLRSA 15.202 12.71 PCJ 15.210 19.72 W2XK 15.200 12.72 W2XK 15.200 12.72 W4 15.100 19.73 G8O 15.100 19.73 G8O 15.100 19.73 W1XE 15.100 19.73 W1XE 15.100 19.84 W1XE 15.100 19.85 DM 15.700 19.94 W1V 15.710 19.85 DM 15.000 19.95 RKT 15.000 20.0 WWV	Boston, Mass.  Poetsiaes, France Podelmady, Geochotlevakia Rutees, Rioller, Geochotlevakia Rutees, Rioller, Geochotlevakia Rutees, Romaney Blonghong, China Daventry, Bergined Naniei, Japan Podelmedy, Coccheelovakia Bauteerag, Java Daventry, Ruteland Daventry, Ruteland Daventry, Ruteland Daventry, Ruteland Daventry, Ruteland Histone, Placida Mesony, Oki-S. R. Boltaville, Md.	5-50	Broadcast Broadcast
		Manila, P. I. Lawrenceville, N. J.	20.0	Phone to Calit. Phone to England	15,050 19.91 PSD 15,055 19.98 WNC	Marapion, Brazil Hinloria, Plorida	12.0 0.4	Phone Phone
19,726	15.14 WKN 15.21 EAQ 15.22 DFJ	Madrid, Spain	10.0	Phone to Latin America	15,040 19.95 RKI 15,000 20.0 WWV	Moscow, U.S.S.R. Beltaville, Md.	20.0	Phone to WQG, mornings
19,660	15.24 DFJ 15.26 SUY 15.31 LSF 15.37 IRW 15.42 DFM	Madrid, Spain Nauea, Germany Abezabal, Egypt Monte Grande, Argentina Reme, Italy Nauea	0.1 7.0	Phone Phone	14 095 . VST	San Salmadar El Salmador		Phone to WQG, mornings Fro., standard; Tue., Wed. Fri., 2-3 p.m. E. S. T Phones Maxican stations
19,520	15.37 IRW	Rome, Italy	20 0	Phone Phone to South America Phone	14 980 20.03 KAY	Manile, P. L.	40.0	Phone to Dixon
19,345	15.51 PMA	Nauen, Germany Bandoeng, Java, D. E. I.	40.0	Phone; sometimes bc.	14,960 20.05 YSL	San Salvader, El Salvador		Phone :
19,260	15.51 PMA 0 15.58 PPU 0 15.61 WKF 0 15.62 ORG	Naudon, Cermany Bandoeng, Java, D. E. I. Sepetiba, Brazil Lewrenceville, N. J. Ruyseelede, Belgium	12.0 20.0	Phone Phone	14 985 YSL 14 989 20.03 KAY 14,979 20.04 LZA 14,968 20.05 YSL 14,935 20.09 PSE 14,919 20.12 JVG	Son Salvader, El Salvador Manika, P. I. Sofia, Reigaria Son Balvader, El Salvador Manapisu, Brazil Nazaki, Japan	10.0	Phone; broadcast Phone to Formosa; broad-
19,200	0 15.62 ORG 0 15.68 LSM3	Ruysselede, Belgium Hurlingham, Argentina	8.0	Phone Phone to Madrid, Berlin, Paris; day Phone; sometimes bc. Breadcast	14,690 20.42 PSF			Phone: broadcast
19.050	15.75 JVC			Paris; day Phone: sometimes bc.	14,600 20.55 JVH 14,590 20.56 WMN	Nasaid, Japan Lawrenceville, N. J.	20.0	Phone; broadcast
19,020	15.75 JVC 15.77 HS8PJ 15.86 JVA 15.88 ZSS	Bangkok, Siam	20.0	Breadcast Phone to Europe; oec. be- Phone to Rugby	14,690 20.42 PSF 14,600 20.55 JVH 14,590 20.56 WMN 14,535 20.64 HBJ 14,530 20.65 LSN1	Marspieu, Brazil Namald, Japan Lawrenceville, N. J. Praegins, Switzerland Hurlingham, Argentina	20.0 20.0 60.0	Phone to New York; morn.
18,890	15.88 ZSS 15.91 WKM	Klipheuvel, S. Africa	5.6	Phone to Rugby	14,500 20.69 LSM2		60.0	eve. Phone to Madrid, Berlin
18,830	15.93 PLE	Nazaki, Japan Bangkek, Siam Nazaki, Japan Klipheuvel, S. Africa Rocky Peint, N. Y. Bandoeng, Java, D. E. I.	40.0	Phone to Dixon and Nazaki		Hurlingham, Argentina		Paris; morn., eve.
18,620	0 16.08 OCI 0 16.11 GAU	Lima, Peru Hugby, England Kootwijk, Holland Kootwijk, Holland Prangia, Switze-land Koetwijk, Holland Lawrenceville, N. J. Sagoa, French Indo-China Addis Ababa, Ethiopia Nasafi, Jacob	15.0	Phone Phone to WM1, VWY	14,480 20,72 YMA 14,460 20,75 DZH 14,460 20,75 DZH 14,460 20,75 GZH 13,950 21,46 VPD2 13,950 21,46 VPD2 13,850 21,70 SUZ 13,850 21,70 SUZ 13,700 21,70 SUZ 13,700 21,70 SUZ 14,655 21,70 SUZ 14,655 21,90 SPW 14,655 21,90 SPW 15,855 21,	Managua, Nicaragua Nasoa, Germany Rughy, Eagland Suva, Fiji Islands Abu Zabal, Cairo, Egypt	15.0	
18,600 18,545	0 16.13 PDM 5 16.18 PCM	Kootwijk, Helland Kootwijk, Helland	40.0	Phone Phone	14,440 20,78 GBW 13,980 21,46 VPD2	Rugby, England Suva, Figi Islands		Experimental
18,480 18,405	5 16.18 PCM 5 16.23 HBH 5 16.30 PCK 5 16.36 WLA 5 16.38 FZS 5 16.38 FZS	Prangius, Switze land Kootwijk, Holland	20.0 40.0	Phone Phone to Bandeens	13,820 21.70 SUZ 13,820 21.70 SUICH	Abu Zabal, Cairo, Egypt Caire, Egypt		Phone Amateur; broadcast Phone
18,340	16.36 WLA	Lawrenceville, N. J.	20.0	Phone to Bandeeng Phone to GAS Phone to France	13.811 21.72 SUZ1 13.700 21.80 TYE2	Chire, Egypt Abu Zahal, Egypt Penthine, France Belinas, Calif.	8.0	Phone to U. S. A.
18,270	16.42 IUD 16.49 JVB	Addis Ababa, Ethicpia	10.0	Phone to Java; L. I.; bc.	13,600 21.91 KKE	Belimas, Calif. Warness, Peland	12.0 40.0 20.0	Phone to U. S. A. Phone to Japan, Java: Broadcast
18,16	16,51 PPZ	Sepotiba, Brazil	20.0	Phone	11,610 12.04 JYK	Warsam, Poland Kemkawa-Cho, Japan	15.0	Experimental; bc. Phone
18,090	16.58 TYE	Pontoise, France	12.0	Phone; sometimes bc. Phone to U.S. A. Phone	13.560 22.T2 JVI	Regby, England Rezakt, Japan	10.0	Phone to Manchukuo; also bc.
18,020	16.58 TYE 16.63 KQR 16.63 KQR 16.69 KQZ 16.72 WQB- W2XBJ	Pontoise, Fance Bolinas, Calif. Bolinas, Calif. Bolinas, Calif.	40.0	Transpacific phone	13,337 22.47 YYQ	Marzony, Venezuela	20.0	Phone
17,980	0 16.69 KQZ 0 16.72 WQB-		40.0	Phone	13,337 22.47 YVQ 13,330 22.70 13,865 22.58 CGA3 13,240 22.68 KBJ	Marzoay, Venezuela British Ships Drummondville, Canada Mahila, P. I. S.S. Normandie	15.0	Phone to ships
			40.0	Phone Phone	13,210 22.05 KBJ 13,210 22.71 PNSK	Mahi'a, P. I. S.S. Normandie	40.0	Phone Phone
17,790	16.86 GSG	Daventry, England	15.0	Breadcast	13.050 22.99	Italian Shine	1.5	Phone Phone
17,780	0 16,87 W8XK	Pittsburgh, Pa. Bround Breok, N. J.	40.0 15.0	Bc.; relays KDKA Broadcast; relays WJZ Experimental Broadcast	13,020 23.04 JZE 12,785 23.44 IAC 13,885 23.28 NPG	Nazaki, Japan Coltano, Italy	10.0 52.0	Phone to ships
17,780	16.87 W9XAA	Chicage, Illinois	15.0 0.5	Experimental Broadcast				
17,760	0 16.87 JZL 0 16.87 W8XK 0 16.87 W3XAL 0 16.87 W9XAA 5 16.88 PHI 0 16.89 W2XE 0 16.89 DJE 5 16.90 ZBW5	Pittsburgh, Pa. Bround Breok, N. J. Chicage, Illinois Huizen, Holland Wayne, N. J. Zeesen, Germany		Bc., relays WABC	12,830 23.36 CNR 12,680 23.66 YNE 12,630 23.75 NAA	Rabat, Mosoceo Puerto Cabezas, Nicaragua Arlingtoa, Va.	12.0	Phone to France
17,758	5 16.90 ZBW5	Zeceen, Germany Hongkong, China Coltano, Italy Bangkok, Siam British Ships Nauen, Germany Kirkee, India Bound Brook, N. J. Norddeiot, Germany Szekesfeh, Germany	2.0	Broadcast	12,630 23.75 NAA	Arhington, Va.		Time signals; 9:55-10:00 a. m. E. S. T.
17,740	16.91 HSP	Bangkok, Siam	20.0	Phone; early meraings Phone to JVG	12,290 24.41 GBU	Rugby, England	15.0	Phone
17.520	0 17.00 0 17.12 DFB	Nauen, Germany	******	Phone to YVR	12,235 24.52 TFJ	Reykjavik, Issland	15.0	Phone to JVH, ships Broadcast
17 216	0 17.16 VWY2 0 17.33 W3XL	Kirkee, India Bound Brook, N. J.	20.0	Phone to Regby Experimental	12,215 24.56 TVA 12,150 24.69 GBS	Rugby, England		Phone to U.S. A.
17,26	5 17.37 DAF 1 0 17.51 HAS5 0 17.84 NAA		20.0	Phone to Regby Experimental Phone Broadeast	12,130 24.73 DZE 12,060 24.88 PDV	Zeesen, Germany Kootwijk, Holland	60.0	Phone Phone
		Armigon, virginia		Time signals; 9:55-10:00 a.m. E. S. T.	12,020 24.96 VIY- VK3MB	Melbourne, Australia		
16,665	5 18.00 5 18.40 PCL	German Ships Kootwijk, Holland	••••	Phone Phone to Bandoeng	12,000 25.00 RV59	Moseew, U.S.S.R.	20:0	Tests with Drummondville Be. and phone Phone
16,270	0 18.44 WLK 0 18.47 KTO	Lawrenceville, N. J. Manila, P. I.	20.0 40.0	Phone to Rugby Phone to Dixon	12,600 23.05 NAA  12,230 24.41 GBU 12,235 24.32 TFF 12,235 24.32 TFF 12,235 24.32 TFF 12,135 24.35 TFF 12,135 24.36 TFF 12,135 24.36 TFF 12,000 24.36 VFF 12,000 24.36 VFF 12,000 24.36 VFF 12,000 24.36 VFF 11,955 25.00 IUC 11,950 25.11 KKQ 11,950 25.11 KKQ 11,950 25.11 KKQ 11,950 25.11 KKQ	Bolinas, Calif. Mexico, D. F., Mexico Parede, Portugal	40.0	Phone Broadcast
16,120	0 18.61 IRY 0 18.71 KKP	Rome, Italy	20.0	Phone Phone to KWO	11,900 25.21 CT1GO	Parede, Portugal	0.35 25.0	Broadcast Broadcast
		Kahuku, Hawaii Kahuku, Hawaii	40.0	Phone	11,895 25.22 HP5I	Podebrady, Csechoslovakia Aquadulee, Panama Mexico, D. F., Mexico Mexiso, D. F., Mexico	0.05	Broadcast Broadcast
15,880	0 18.81 PLG 0 18.89 FTK 5 18.91 CEC 0 18.90 JVD 0 18.97 LSL3	Bandoeng, Java Ste. Assise, France	30.0	Phone; afternoons Phone to Saigon	11,880 25.25 XEXA	Mexico, D. F., Mexico	0.1	Broadcast
15,860 15,860	18.91 CEC 0 18.90 JVD	La Granja, Chile Nazaki, Japan	0.5	Phone to Shanghai	11,880 25.25 TPA3 11,880 25.25 W9XF	Chicago, Illinois		Broadcast Bc., relays WENR
		nurungnam, Argentina	60.0	Phone to London, Rio; morn.	11,875 25.26 OLR4C 11,876 25.27 W8XK	Podebrady, Czechoslovakia	40.0	Bc.; relays KDKA
15,750	0 19.05 JIA 0 19.13 JZA 0 19.16 JVE	Tyureki, Formosa Kanjoshi, Manchukuo Nazaki, Japan	10.0 20.0	Phone to Nazaki Phone to Nazaki	11,860 25.29 YDB 11,860 25,30 GSE	Pitisburgh, Pa. Soerabaja, Java, D. E. 1. Daventry, England Zeesen, Germany	20.0	Broadcast Broadcast
15,550	19.16 JVE	Nazaki, Japan	10.0	Phone to PLE, P. I.; occ. bc.	12,000 25.00 FUC 11,955 25.00 FUC 11,950 25.11 KRQ1 11,900 25.21 XRQ1 11,900 25.21 XRQ1 11,900 25.21 XRQ1 11,900 25.22 XRQ1 11,900 25.22 HPS1 11,900 25.22 HPS1 11,900 25.25 HPS1 11,900 25.25 XFZA 11,900 25.25 W9XF 11,800 25.25 W9XF 11,800 25.25 W9XF 11,800 25.27 W8XK 11,800 26.20 YDB 11,800 25.30 GSE 11,805 25.30 GSE 11,805 25.30 GSE	Zeesen, Germany	5-50	Broadcast

Kc. Meters Call	Location	Kw.	Service, etc.	Kc. Meters Call	Location	Kw.	
11,840 25.34 OLR4A P. 11,830 25.36 W2XE N. 11,830 25.36 W3XA C. 11,830 25.36 XEBR H. 11,830 25.36 SEBR H. 11,810 25.40 CRCX T. 11,810 25.40 CRCX T. 11,810 25.40 CRCX C. 11,801 25.42 OASA I. 11,801 25.42 OASA I. 11,801 25.42 OER2 A.	odebrady, Csechoslovakia lew York, N. Y. biesgo, Illinois termosille, Senora, Mesico laventry, England oronte, Canada	25.0 10.0	Breadcast Bc.; relays, WABC	9,520 31.51 XEME 9,520 31.51 HJ4ABH 9,510 31.55 GSB 9,510 31.58 HJU 9,510 31.58 VK3ME 9,504 31.57 OLR3B 9,500 31.58 PRFS	Merida, Yusatan, Mexico Armenia, Colorabia	0.018	Be.; relays XEFC Be.; relays HJ4ABN Broadcast
11,830 25.36 W9XAA C 11,830 25.36 XEBR H	bieago, Illinois fermosille, Senora, Mesico	0.5	Bc.; relays WABC Bo.; relays WCFL Bc.; relays XEBH	9,510 31.55 GSB 9,510 31.58 HJU	Daventry, England		Broadcast Broadcast
11,820 25.38 GSN D 11,810 25.40 CRCX T	Paventry, England	20.0	Breadcast Breadcast	9,510 31.58 VK3ME 9,504 31.57 OLR3B	Melbeurne, Australia Podebrady, Czechoslovakia Rio de Jameiro, Brazil	5.0	Broadcast Broadcast
11,810 25.40 I2RO4 R	ome, Italy	25.0	Breadcast Breadcast	9,500 31.58 PRF5 9,500 31.58 HJ1ABE	Rio de Janeiro, Brazil		Broadeast
11,801 25.42 OER2 A 11,800 25.42 JZJ N	ome, tasy ea, Peru ustria, Vienna azaki, Japan eesen, Germany oeton, Mass.	1.5	Broadnast.	9,498 31.60 XEFT 9,490 34.61 KEI	Cartagena, Colombia Veracruz, Ver., Mexico Bellnaz, Calif. Bocky Peint, M. Y. Guadalajara, Jaliece,	02	Broadcast Broadcast Broadcast
11,795 25.43 DJO Z	eesen, Germany	5-50	Broadcast Experimental Breadcast	9,490 31.61 WEF	Rocky Point, M. Y.	40 0	Phone Phone
11,790 25.45 WIXAL B 11,770 25.49 DJD Z 11,760 25.51 OLR4B P 11,750 25.53 GRD D 11,740 25.55 HPSL D 11,730 25.57 PH 1 11,730 25.57 CJRX W 11,720 25.60 TPA4 P 11,730 25.60 CPRB L 11,730 25.60 CPRB L 11,730 25.60 CPRB L	ecsen, Germany	5-50	Breadcast	9,480 21.65 XEDQ	Mexico Bolinas, Calif.	0.5	Bc.; relays XED
11,750 25.51 OLR4B PO 11,750 25.53 GSD D	aventry, England	20.0	Breadcast Breadcast	9,480 31.65 KET 9,450 31.75 TGWA	Liuatemala City,	46.0	Phone
11,740 25.55 HP5L D 11,730 25.57 PHI H	David, Panama	0.35 28.6 2.0	Breadcast; wister menths Bc.; relays CJRC	9,441 31.78 HC2EBA	Guayaquil, Ecuador Havana, Guba	0.2	Experimental Broadcast
11,730 25.57 CJRX W 11,720 25.60 TPA4 P	Vinnipeg, Man., Canada ontoise, France ouronzo Marques,	12.9	Bc.; relaye CJRC Broadcast	9,428 31.82 COCH · 9,426 31.83 NAA		10.0	Breadcast Time signals; see article of
	ouronze Marques,		Breaduast				time signals Phone; sometimes bc.
11,705 25.63 SM5SX 81 11,680 25.68 KIO K 11,670 25.71 PPQ Se	Mezambique tockholm, Sweden ahuku, Hawaii epetiba, Brasii		Breadcast Phone to Bolinas	9,415 31.86 PLV 9,360 32.05	Fort de France, Martinique.		Broadcast
11,670 25.71 PPQ Se	epetiba, Brasil azaki, Japan			9,350 32.09 H36PJ 9,520 32.16 OAX4I 9,300 32.26 YNGU 9,220 32.54 YNE 9,125 32.87 HAT4	Bangkok, Siam		Breadcast
11.595 25.88 VER4 St	lony Hill, Jamaica	20 0	Phone to Farmesa; bc. Phone to Mississh, Fla.	9.300 32.26 YNGU	Lima, Peru Managua, Nicaragua Puerte Cabezas, Nicaragua		Breadcast Breadcast Phone Broadcast
11,495 26.10 VIZ-3 F	iskville. Australia	20 0	Phone to Domamondville Bc.; reine CMX	9,125 32.87 HAT4	Szekesfeherrar, Hungary	29.0	Broadcast
11,430 26.25 YNE P	lavana, Cuba uerto Cabezza, Nisaragua	0.1	Phone	9,040 33.19 TYA2			
11,385 26.35 HBO Pr 11,340 26.46 DAF N 11,280 26.50 HIN To	rangins, Switserland orddech, Germany rujille, D. R. erman Ships	20,0	Breadcast Phone Breadcast	8,960 83.48 FVA 8,948 33.58 HCJB	Pontoise, France Algiers, Algeria. Quite, Ecuader Brisish Ships, French Ships	0.5	Phone Broadcast
11,289 26.50 HIN T	rujille, D. R. Jerman Ships	0.75	Breadcast Phone	8,838 33,96 8,795 34.11 HKV	British Ships, French Ships Bogota, Colombia		Phone Breadcast
11,040 27.17 HRW- HRY L	a Ceiba, Henduras	0.1	Phese	8,900 33.48 FYA 8,948 33.53 HCJB 8,638 33.96 4,795 34.11 HKV 8,775 84.11 FNI 8,710 34.44 KBB 8,710 34.49 VPD2 8,605 34.62 COOJQ 8,605 35.27 YNLG 8,605 35.27 YNLG	Bogota, Celembia Makassar, Celebes, D. E. I. Manila, P. I.	3.0	Phone; occ. bc,
11,040 27.17 CSW Li 11,000 27.27 ZLT4 W	isbon, Pertugal Vellington, New Zealand	5 0	Broadcast	8,719 34.40 VPD2 8,665 34.62 CO9JO		0.20	Broadcast Broadcast
11,900 27.27 PLP B	andoeng, Java	3.0	Phone; see. be.	8,605 85.27 YNLG 8,479 35.42	Managua, Nicaragua	0.5	Broadeast
10,859 27.65 DFL N		90.0	Phone to Hamaii	8,479 35.42 8,765 34.23 DAF 8,400 35.71 HC2CW 8,300 36.14 ZP10 8,290 36.19 HRW- HRY	Norddeich Germany		Phone to ships
10,840 27.68 KWV D 10,770 27.86 GCP R 10,740 27.93 JVM N	ugby, England	20.0 15.0	Phone Phone	8,300 36.14 ZP10	Asuncion, Paraguay	0.015	Broadcast Broadcast
		20 0	Phone to U. S. A.; oec. bc.; relays JOAK	HRY	La Ceiba, Honduras	0.1	Phone
10,670 28.12 CEC L2 10,660 28.14 JVN N 16,620 28.25 WEF R	a Granja, Chile azaki, Japan	20.0	Phone Be.; relays JOAK	8,185 86.65 PSK 8,120 36.95 KAZ	Marapieu, Brazil Manila, P. 1.	20.0	Phone; bc. Phone to Dixon, Calif.
10.610 28.28 WEA R	azaki, Japan ocky Point, N. Y. ocky Point, N. Y.	40.0	Phone to Europe Experimental	8,035 87.34 CNR 8,085 37.34 CED	Rabat, Moroceo Antofagasta, Chile	0.4	Phone; bc.
10,578 28.36 FYB Pa	aris, France	• • • • • • • • • • • • • • • • • • • •	Experimental Time signals; 7:55- 8 p. m., E. S. T.	7,901 37.98 LSL1 2,860 38.07 JYR	Hurfingham, Argentina Kemikawa-Cho, Japan	5 0	Phone to Rio; night Broadcast
10,535 28.48 JIB T	yureki, Formosa ontoise, France ledan, Sumatra, D. E. I.	12.0	Phone to Japan Phone to U.S. A.	7,860 38.12 SUX 7,854 39.20 HC2JSB	Abu Zabal, Egypt	20.0	Phone Broadcast
10,535 28.48 JIB T. 10,430 28.76 TYE3 P. 10,430 28.76 YBG M. 10,420 28.79 XGW St. 10,410 28.82 KES B.	edan, Sumatra, D. E. I.	3.0	Phone; occ. bc.	7,830 38.34 PGA	La Ceiba, Honduras Marapieu, Brazil Manila, P. I. Rabat, Moroceo Antolagasta, Chile Hurfingham, Argentina Kemikawa-Cho, Japan Abu Zabal, Egypt Guayaquil, Ecuador Kootwijk, Holland Puerto Cabezes, Nicaragua Pranzina, Switzerland	60.0	Phone Phone
10,410 28.82 KES Bo 10,410 28.82 LSY M	ofinas, Calif.	49.4	Phone Phone Phone	7,797 38.47 HBP	Prangins, Switzerland LaOrania, Chile Addis Abaha, Ethiopia Managua, Nicaragua	20.0	Broadcast Phone
10.410 28.82 PDK 10.400 28.85 KEZ 10.375 28.92 JVO N	ootwijk, Helland	60.0	Phone Phone	7,620 89,32 IUB	Addis Ababa, Bithiopia		Phone
19,375 28.92 JVO N	edan, Sunatra, D. E. I. hanghai, Chira nanghai, Chira olinas, Calif. oute Grande, Argentina ootwijk, Heiland izon, Calif. asaki, Japan eneriie, Casary Islands aramsos, Spain aramsos, Spa	18 0	Phone to Manchulsue; be.	\$200 28.19 HRW-HRY \$1.85 36.65 PSK \$1.20 30.35 PKAZ \$1.30 SKAZ \$1.30 SK		0 19	Broadcast Broadcast
10,370 28.93 EAJ43 Te 10,350 28.98 BAJ33 Ca	enerne, Casery Islands aramaca, Spain		Breadonst Breadonst	7,610 89.85 JVP	Kabuku, Hawaii Nazaki, Japan Nazaki, Japan Nazaki, Japan Rocky Point, N. Y. Kabuku, Hawaii Mcrios, D. F., Mexice	20.0	Phone Bc.; phone
10,350 28.98 EAJ33 Ct 10,350 28.98 LSX M 10,355 29.03 ZFD St 10,335 29.03 ORK R 10,310 29.10 FPM St	onte Grande, Azgentina L. George, Bermuda	1.5	Phone; also bc. Phone; mostly telegraph Broadcast	2,470 49.16 JVQ 2,445 49.45 WEG	Nasaki, Japan Rocky Point, N. Y.	10.0	Phone to Java Phone
10,330 29.03 ORK R: 10,310 29.10 PPM Se	uyssolede, Belgiara spetiba, Brasil	20.0	Broadcast Phone	7,870 40.71 KEQ 2,860 48.45 XECR	Mahuku, Hawaii Mexica, D. F., Mexico	40.0 20.0	Phone Broadcast
10.200 29.13 LSL2 Hi 10.200 29.16 DZC Ze	urlingham, Argentina	00.0	Phone to London, Rio; night Phone	2816 41.01 YMLAT			Brondenet
10,260 29.24 PMN B	seson, Germany andocag, Java, D. E. I. urlingham, Argentina	3.0	Phone to Madrid, Borlin, Phone to Madrid, Borlin, Paris, night	7381 41.90 83458D 2220 41.65 BCN1	Stockbolm, Sweden Berrelone, Spain		Experimental Broadcast Broadcast
10 230 29 33 CED A	ntoferesta Chile		Paria; might Phone: he	7,200 41.67 YNAM 7,710 41.61 EARAR	Barcelona, Spain Managaa, Nicaragus Santa Oruz, Tenerile, C. I. San Schattlan, Spain		Bc.; amateur Breadcast
10,230 29.33 CED A. 10,220 29.35 PSH M 10,170 29.48 RIO B. 10,140 29.50 OPM L. 10,000 29.76 RIR TI 10,000 29.79 EDN M	aranica Brazil		Please; bc. Please; bc. Phone	1200 GL67	San Sebastian, Spain		
16.140 29.50 OPM La	espoldvitle, Belgian Congo	15.0	Phone to ORK Phone to RIO, RNE Daperimental Phone to JVO	7 400 41 07	Lebita, Angola Pert. W. Africa	0.5	Bc.; C. W., phone
10,000 29,79 EDN M	adrid, Spain	10.0	Paperimental	7,100 (2.25 POSAA	Valencia, Spain Paperte, Tahiti Dordrecht, Holland	0.2	Broadcast Broadcast
			Phone .	7,036 42.73 EGP1	Bordrecht, Holland Bareclena, Spain Tetuan, Sp. Morocco Pasamaribo, Dutch Guiana Quito, Ecuador Port Hedland, Australia		Amateur; semetimes bc. Broadcast
10,036 29.84 SUV AI 10,042 29.87 DZB Ze	bu Zabal, Egypt sesen, Germany .		Phone to Germany, England Phone	7,000 42.86 EA9AH 7,000 42.86 PZH	Paramaribo, Dutch Guiana		Breadcast Breadcast
9,990 30.03 KAZ M	eceen, Germany eltsville, Md. lanila, P. I. inbon, Portugal	40.0	Standard frequency Phone	6,000 42.10 VK8SC	Port Hedland, Australia		
	sebon, Portugal Serlingham, Argentina	60.0	Breadcast Phone to New York; nights	7.165 61.87 7.106 62.25 FOSA. 7.106 62.25 FOSA. 7.106 62.25 FOSA. 7.108 62.25 FOSA. 7.108 62.25 FOSA. 7.100 62.25 EASAH	Bolinas, Calif.	40.0	Phone
9,860 30.43 EAQ M 9,840 30.49 JYS K	emikawa-Cho Janan	10.0	Breadcast Bc., tests	6,845 45.81 XGOX 6,805 34.07 HI7P	Nunking, China Trujillo, D. R. San Pedro de Maceris, D. R.		Broadcast Broadcast
9.675 31.01 DZA	EVER, CUDA		Bc.; relays CMQ Phone	6,775 44.88 HJH 6,750 44.44 JVT	San Pedro de Maceris, D. R. Nazald Japan	20.0	Phone to U. S. A.; bc.
9,670 31.02 114NRH H	eredia, C. R.	2.0	Phone Broadcast Broadcast	6,730 44.48 HISC 6,718-44.66 KBK	La Romana, D. R.	0.25	Broadcast
9,660 31.06 PSJ M	arapicu, Brazil uenos Aires, Argentina	5.0	Phone Be.; selays LR1	6,710 44.71 KEF	Bolinas, Cahi.	40.0	Phone
9,645 31.10 HH36V PG	ort-au-Prince, Haiti	A 03	Breadcast Broadcast	6,672 44.96 YVQ 6,635 45.22 HC2RL 6,630 45.25 HIT 6,620 45.25 PRADO 6,573 45.60 HCVT 6,555 45.76 HI4D 6,566 45.80 TIRCC	Maracay, Venezuela Guayaquil, Ecuador Trujillo, D. R.	10.0	Phone Broadcast
9,618 31.18 HJ1ABP C	artagena, Colombia	0.7	Breadcast Breadcast Be.; relays YDA Breadcast	6,680 45.25 HIT	Trutillo, D. R.	0.2	Broadcast Be.; Thursdays
9,605 31.23 HP5J Pr	anama, Panama	0.16	Breadcast	6,578 45.60 HCVT	Ambato, Ecuador .	•••••	Broadcast Broadcast
9,400 31.25 CB960 Se	antiago, Chile	0.1	Breadcast Breadcast	6,550 45.80 TIRCC	San Jose, Costa Rica		Broadcast
9,597 31.26 VK6ME Pe	erth, Australia		Breadeast Experimental Broadeast	6,545 45.84 YVERB	Chudad Bolivar, Venezuela	0.25	Broadcast
9,590 31.27 HBL Pr 9,590 31.28 PCJ H	nizen. Holland	20 0	Exp.: breadcast	6,545 45.84 YVORB 6,545 45.84 YVORB 6,540 45.87 YNIGG 6,520 46.01 YV4RB 6,520 46.01 HRW-	Managua, Nicaragua Valencia, Venezuela	0.3	Broadcast Broadcast Broadcast Broadcast Broadcast
9,590 31.28 W3XAU PI 9,590 31.28 VK2ME Sy	hiladelphia, Pa. ydney, Austraka	10.0	Be.; selays WCAU Breadcast	HAI			
9,580 31.31 VK3LR L 9,580 31.31 GSC D	yndhurst, Vie., Australia	20.0	Broadcast Broadcast	6,500 46.15 HIL 6,800 46.15 YV1RM	La Caiba, Honduras Trufillo, D. R. Cristo de Aranza, Venezuela.	0.05	Broadcast Broadcast
9,575 31.34 HJ2ABC -CI 9,570 31.35 W1XK M	neuta, Colombia	A OF	Breadcast Bc.: relays WBZ, WBZA	6,479 46.31 HISA 6,477 46.33 HIAV	Trapillo, D. R. Trunillo, D. R.		Broadcast
9,565 31.36 HP5S	, Panama	4 5	Broadcast Broadcast Broadcast	6.425 46.67 OAX4K	Lima, Peru Bound Brook N	00.0	Broadeast Experimental
9,560 31,38 DJA Ze	, Panama embay, India eesen, Germany arranquilla, Colombia	5-50	Breadcast Breadcast	6,506 46.15 HIL 6,609 46.15 YVIRM 6,479 46.31 HI8A 6,477 46.33 HI4V 6,425 46.59 W3XL 6,425 46.69 W3XL 6,420 46.73 HIIS 6,410 46.80 TIPG 6,400 46.88 YV5RH 6,380 47.02 YV5RF 6,375 47 10 HRW	Cristo de Aranza, Venezueta Trujillo, D. R. Irujillo, D. R. Lima, Peru Bound Brook, N. J. Santiago, D. R. San Jose, Costa Rica Caracas, Venezuela Caracas, Venezuela	0.02	Broadcast Experimental Broadcast Broadcast Broadcast Broadcast Broadcast
9,551 31.41 HH2Y PO	opt-au-runce, mana	0.03	Broadcast Broadcast	6,400 46.88 YV5RH	Caracas, Venezuela	0.25	Broadcast Broadcast
9,540 31.47 LKJ1 Je	Inv Norway	10					T-1
9,660 31.06 LRX P.	eesen, Germany azaki, Japan chenectady, N. Y. ong-Kong, China		Broadcast Broadcast	6,365 47.14 YV1RH	La Ceiba, Hondu as Maracaibo, Venezuela	0.1	Phone Be.; relays YV1RF Broadcast Phone
9,530 31.48 W2XAF Sc 9,525 31.49 ZBW3 H	ong-Kong, China	40 0 2.0	Bc.; relays WGY1 Bc.; relays ZBW	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	Phone

Ka Matan Call	*	ν.					
Kc. Meters Call 6.350 47.24 YNJ5 6.350 47.24 YNJ5 6.350 47.24 YNJ7 6.350 47.29 HRP1 6.340 47.32 HIX 6.350 47.32 HIX 6.350 47.33 JZC 6.310 47.54 HIZ 6.300 47.62 YV4RD 6.280 47.77 HIG 6.280 47.77 HIG 6.280 47.77 CHS 6.270 47.84 YVSRP 6.270 47.84 YVSRP 6.250 48.30 HIX 6.253 48.11 HRD 6.254 48.30 HIX 6.255 48.11 HRD 6.254 48.30 HIX 6.255 48.31 YVIR 6.256 48.33 YVIR 6.200 48.33 YEXS 6.200 48.39 YEXS 6.200 48.30 YEXS	Location Waspook, Niceargua Waspook, Niceargua Waspook, Niceargua San Pedro Sula, Honduras Puerto Cabezas, Nicaragua Trujillo, D. R. Nazaki, Japan Trujillo, D. R. Saneta Spiritus, Cuba Caracas, Venezuela Trujillo, D. R. Saneta Spiritus, Cuba Caracas, Cenzuela Caracas, Cenzuela Trujillo, D. R. La Ceiba, Honduras Valera, Venezuela Coro, Cenzuela Coro, Cenzuela Coro, Cuba Ciudad, Trujillo Santiago, Guba Ciudad, Trujillo Santiago de los Caballeros D. R.	<b>Kω.</b> 0.1	Service, etc.	Kc. Meters Call 6,025 49,79 H1ABJ 6,020 49,83 DJC 6,020 49,83 XEUW 6,015 49,88 XEUW 6,015 49,88 XEWI 6,010 49,92 VF3MR 6,010 49,92 CCCO 6,010 43,92 CCCO 6,010 43,92 CCCO 6,010 43,92 CCCO 6,005 49,96 CCES 6,005 49,96 CCES 6,005 49,96 CCES 6,00 50,00 TSW 6,00 50,00 TOW 6,00 50,00 TOW 6,000 50,00 TOW 6,000 50,00 TOW 6,000 50,00 FIQA	Location	Kw.	Service, etc.
6,350 47.24 YNJ7	Wapam, Nicaragua	0.1	Phone Broadcast	6,020 49.83 DJC	Zeesen, Germany	5-50	Broadcast Broadcast
6,340 47.32 YNE	Puerto Cabezas, Nicaragua	0.075		6,020 49.83 XEUW 6.015 49.88 XEWI	Veracruz, Ver., Mexico -	0.25	Broadcast Broadcast
6,340 47.32 HIX 6.330 47.30 JZG	Trujillo, D. R.	10.0	Broadcast Phone to ships	6,012 49.90 HJ3ABH	Bogota, Colombia	1.2	Broadcast
6.310 47.54 HIZ	Truillo, D. R.	0.02		6,010 49.92 CCCO	Havana, Cuba	0.25	Amateur; bo. Broadcast
6,300 47.62 YV4RD 6,280 47.77 HIG	Maracay, Venezuela Truillo, D. R.	0.1	Broadcast Broadcast	6,010 49.92 OLR2A	Podebrady, Czechoslovakia	25.0	Broadcast Bc., relays CFCF Broadcast
6,280 47.77 COHB	Sancti Spiritus, Cuba	0.15	Broadcast Broadcast Broadcast Broadcast	6,005 49.96 VE9DN	Montreal, Quebec	4.0	Broadcast
6,260 47.92 OAX4G	Lima, Peru	•••••	Broadcast	6,003 49.97 XEBT 6,000 50,00 HJ1ABC	Mexico, D. F., Mexico Quibdo, Colombia	1.0	Bc.; relays XEB Broadcast
6,250 48.00 YV5RJ 6,243 48.05 HIN	Caracas, Venezuela	0.75		6,000 50.00 YOI	Bucharest, Roumania	0.3	Broadcast
6,235 48.11 HRD	La Ceiba, Honduras	0.25	Broadcast Broadcast	6,000 50.00 TGWA	Guatemala City. Guatemala	0.2	Broadcast Broadcast
6.205 48.35 YV1RI	Coro, Venezuela	0.2	Broadcast	6,000 50.00 FIQA 5,980 50.17 HIX	Tananarive, Madagascar Truillo, D. R	10	Broadcast Broadcast
6,200 48.39 XEXS	Mexico, D. F., Mexico	0.1	Broadcast Bc.; relays CMKB Broadcast	6,000 50.00 FIQA 5,980 50.17 HIX 5,969 50.26 HVJ 5,955 50.38 HJN	Vatican City	10.0	Broadcast
6,198 48.08 HISQ	Ciudad, Trujillo	0.025	Broadcast	5.995 50.04 RPT	Tashkent, U.S.S.R.	1.0	Broadcast Phone
0,190 48.47 HIIA	Santiago de los Caballeros D. R.	0.05	Broadcast	5,990 50.08 HJ2ABD 5,990 50.08 HP5K	Bucaramanga, Colombia Colon, Panama	0.1	Broadcast.
6,164 48.67 OAX1B 6,150 48.70 CJRO 6,150 48.78 FT4AJ 6,156 48.73 YV5RD 6,150 48.78 CB615 6,150 48.78 HI5N		0.3	Bc.; relays OAK1A Bc.; relays CJRC	5,990 50.08 HJ5K 5,990 50.08 HJ5K 5,940 50.50 TG2X 5,925 50.64 HH2S 5,917 50.71 YV4RH 5,917 50.71 YV15RV 5,899 50.84 YV3RA 5,889 50.84 YV3RA 5,889 51.00 ZEA	Guatemala City, Guatemala	0.2	Broadcast Police; bc.
6,150 48.78 FT4AJ	Tunis, Tunisa			5,926 50.04 HH2S 5,917 50.71 YV4RH	Valencia, Venezuela	0.1	Bc.; relays HH2T Broadcast
6,156 48.73 YV5RD 6,150 48 78 CR615	Winnipeg, Man., Canada Tunis, Tunista Caracas, Venezuela Santiago, Chile Santiago de los Caballeros,	1.0	Broadcast Broadcast	5,917 50.71 YV15RV 5,899 50 84 VV3RA	Maracay, Venezuela		Broadcast
6,150 48.78 HI5N	Santiago de los Cabalteros,			5,882 51.00 ZEA	Salisbury, So. Rhodesia	0.325	Broadcast Broadcast
		0.1 0.1	Broadcast Broadcast	5,000 JI.UZ TUA	Location  Santa Marta, Colombia, Zeesen, Germany Veracruz, Ver., Mexico — Mexico, D. F., Mexico Bogota, Colombia Georgetown, British Guiana Havana, Cuba Podebrady, Czechoslovakia Montreal, Quebec Guebec Gu	0.4	Phone Broadcast
6,150 48.78 HJ4ABU 6,150 48.78 VE9CL 6,148 48.80 ZEB 6,149 48.86 W8XK 6,137 48.88 CR7AA	Pereira, Colombia Winnipeg, Man., Canada Bulawayo, So. Rhodesia		Broadcast Broadcast	5,865 51.15 HIIJ 5,850 51.28 VVIDB	San Pedro de Macoris, D. R.	. 0.04	Broadcast
6,140 48.86 W8XK	Pittsburgh, Pa.	40.0	Bc.; relays KDKA	5,845 51.32 KRO	Kahuku, Hawaii	40.0	Broadcast Phone
	Lourenzo Marques,	0.33	Broadcast	5,865 51.15 H1IJ 5,850 51.28 YV1RB 5,845 51.32 KRO 5,830 51.46 TDD 5,830 51.46 CWD	Maracaibo, Venezuela Kahuku, Hawaii Shinkio, Manchukuo Montevideo, Uruguay		Phone to Tokyo
6,133 48.91 XEXA	Lourenzo Marques, Mozambique Mexico, D. F., Mexico Parede, Portugal Havana, Cuba Jeloy, Norway Georgetowe, British Guiana Cuzco, Peru Montevideo, Uruguay Bogota, Colombia Huancayo, Peru	******	Broadcast		Montevideo, Uruguay (Cerrito) San Jose, Costa Rica San Jose, Costa Rica Caracas, Venezuela Manila, P. I. Nazaki, Japan	1.5	Phone Broadcast
6,133 48.91 XEXA 6,132 48.92 CT1GO 6,130 48.94 COCD 6,130 48.94 LKJ1 6,130 48.94 VP3BG	Parede, Portugal Havana, Cuba	0.35	Bc.; relays CMCD	5,830 51.46 TIGPH 5,830 51.46 TIX2 5,800 51.72 YV5RC 5,800 51.72 KZGF	San Jose, Costa Rica	0.5	Broadcast
6,130 48.94 LKJ1	Jeloy, Norway	1.0	Broadcast	5,800 51,72 YV5RC 5,800 51,72 KZGF	Caracas, Venezuela Manila, P. I.	1.0	Broadcast Phone: occ. be
6,128 48,96 OAX7A 6,125 48.98 CXA4	Cuzco, Peru			5.790 51.81 JVU	Nazaki, Japan	10.0	Phone; occ. bc. Phone to Manchukuo;
6,125 48.98 CXA4 6,122 49.01 HJ3ABX	Montevideo, Uruguay Bogota, Colombia	1.0	Broadcast Broadcast	5,780 51.90 OAX4D	Lima, Peru	20.0	also be. Broadcast
6,122 49.01 OAX4P	Huancayo, Peru		Broadcast	5,780 51.90 HJ4ABD 5.758 52.10 YNOP	Lima, Peru Medellin, Colombia Managua, Nicaragua	• • • • • • •	Broadcast Broadcast
6,122 49.01 HJ3ABX 6,122 49.01 OAX4P 6,122 49.01 OAX6A 6,120 49.02 YDA5 6,120 49.02 XEPW 6,120 49.02 XEPT 6,120 49.02 WEFT 6,120 49.02 WZXE 6,117 49.04 XEUZ 6,115 49.06 XECU 6,115 49.06 MIJABB 6,115 49.06 MIJABB 6,115 49.06 MIJABB	Hogota, Colombia Huancayo, Peru Arequipa, Peru Arequipa, Peru Bandoeng, Java, D. E. I. Mexico, D. F., Mexico Veracruz, Veracruz, Mexico Panama City, Panama Wayne, N. J. Mexico, D. F. Guadalajara, Mexico Barranquilla, Colombia Podebrady, Czechoslovakia Daventry, England Halifax, N. S., Canada Calcutta, India Manizales, Colombia	1.5	Broadcast	5,780 51.90 OAX4D 5,780 51.90 HJ4ABD 5,788 52.10 YNOP 5,735 52.31 HCIPM 5,730 52.36 JV 5,713 52.51 TGS 5,710 52.54 YV2RA 5,705 52.59 CFU 5,670 52.91 DAF 5,555 54.00 YNE 5,500 54.55 TISHH 5,490 54.64 ROI 5,435 55.19 LSH 5,415 55.40 PMY 5,170 58.03 HRW-	Managua, Nicaragua Quito, Ecuador Nazaki, Japan Guatemala City, Guatemala San Cristobal, Venezuela Rossland, B. C., Canada Norddeich, Germany	0.3	
6,120 49.02 XEPW 6,120 49.02 XEFT	Mexico, D. F., Mexico Veracruz Veracruz Mexico	0.12	Broadcast Broadcast	5,713 52.51 TGS	Guatemala City, Guatemala	10.0	Phone to Formosa; bc. Broadcast
6,120 44.02 HP5Z	Panama City, Panama	0.2	Broadcast Bc.; relays WABC	5,710 52.54 YV2RA 5,705 52.59 CFU	San Cristobal, Venezuela Rossland B C. Canada	0.75	Broadcast Phone; bc.
6,117 49.04 XEUZ	Mexico, D. F.	10.0	Broadcast	5,670 52.91 DAF	Norddeich, Germany		Phone
6,115 49.06 XECU 6.115 49.06 HJ1ABB	Guadalajara, Mexico Barranquilla, Colombia	1.0	Broadcast Broadcast	5,500 54.55 TI5HH	Puerto Cabezas, Nicaragua San Ramon, Costa Rica Sverdlovsk, U.S.S.R. Monte Grande, Argentina Bandoeng, Java, D. E. I.	0.1	Phone Broadcast
6,115 49.06 OLR2C	Podebrady, Czechoslovakia	25.0	Broadcast Broadcast	5,490 54.64 ROI 5,435 55.19 LSH	Sverdlovsk, U.S.S.R.	15 0	Phone Phone
6,110 49.10 VE9EX	Halifax, N. S., Canada	0.2	Bc.; relays CHNS Broadcast	5,415 55,40 PMY 5,170 58.03 HRW-	Bandoeng, Java, D. E. I.	0.45	Phone; bc.
6,109 49.10 VUC 6.108 49.11 H.J4A1!B	Calcutta, India	0.5	Broadcast Broadcast	UDV	La Ceiba, Honduras	0.1	Phone
6,100 49.18 W3XAL	Bound Brook, N. J.	20.0	Bc.: relava W.IZ	5,140 58.37 PMY 5,110 58.71 KIKB 5,105 58.76 KEC 5,025 59.70 ZFA 5,000 60.00 WWV	La Ceiba, Honduras Bandoeng, Java, D. E. I. Bolinas, Calif. Bolinas, Calif.	0.6 40.0	Broadcast Phone
6,100 49.18 W 9AF 6,100 49.20 YTC	Belgrade, Yugoslavia	5.0 2.5	Bc.; relays WENR Broadcast	5,105 58.76 KEC	Bolinas, Calif.	40.0	Phone
6,098 49.20 ZTJ 6,097 49.20 HJ4ABE	Johannesburg, S. Africa Medellin, Colombia	5.0 0.1	Broadcast Broadcast	5,000 60.00 WWV	Hamilton, Bermuda Beltsville, Md	1.5	Phone Frequency Standard; Te
6,090 49.26 ZBW2	Calcutta, India Manizales, Colombia Bound Brook, N. J. Chicago, Illinois Belgrade, Yugoslavia Johannesburg, S. Africa Medellin, Colombia Hong-Kong, China Ibague, Colombia Toronto, Ont., Canada	2.0	Bo∴ relays ZBW				Frequency Standard; To Wed., Fri.; noon, 1 p E. S. T.
6,090 49,26 CRCX	Toronto, Ont., Canada		Broadcast Broadcast	5,000 60.00 ZUD	Pretoria, S. Africa	5.0	
6,085 49.30 HJ5ABD	Najrohi Kanya Africa	1.25	Broadcast	4,820 62.24 GDW	Rugby, England Rugby, England		Phone to ships Phone to U. S.
0.115 49.06 HJ JABB 0.115 49.06 HJ JABB 0.115 49.06 OLRXC 0.110 49.10 VEGRX 0.100 49.10 VEGRX 0.100 49.10 VUC 0.100 49.11 HJ ABT 0.100 49.18 W3XAL 0.100 49.18 W3XAL 0.000 49.20 ZTJ 0.007 49.20 ZTJ 0.007 49.20 ZTJ 0.009 49.26 LJ LABC 0.009 49.26 ZBW 0.000 49.26 CRCX 0.000 49.32 VGTLO 0.000 49.34 UJ LJ CABB 0.000 49.34 UJ LJ CABB 0.000 49.34 UJ KJ CABB 0.000 49.34 UJ KJ CABB 0.000 49.35 UJ KJ	Nairobi, Kenya, Africa Penang, Straits Settlements La Paz, Bolivia	0.03	Broadcast	4,795 62.56 VE9BK	Vancouver, B. C. Lawrenceville, N. J.	0.25	Broadcast Phone
6,080 49.34 W9XAA	Chicago, Illinois	20.0	Broadcast Bc.; relays WCFL	4,753 63.11 WOO	Ocean Gate, N. J.	20.0	Phone Phone
6,079 49.35 DJM 6,075 49.38 HP5F	Chicago, Illinois Zeesen, Germany Colon, Panama	5-50 0.2	Bc.; relays WCFL Experimental Broadcast	4,610 65.08 YNJ5	Pretoria, S. Africa Rugby, England Rugby, England Vancouver, B. C. Lawrenceville, N. J. Ocean Gate, N. J. Wapam, Nicaragua Waspook, Nicaragua Puerto Cabezas, Nicaragua Boom, Nicaragua	0.1	Phone
6,075 49.38 YVIRD	Maracaibo, Venezuela		Broadcast	4,610 65.08 YNE 4,610 65:08 YNH6	Puerto Cabezas, Nicaragua Boom, Nicaragua	0.1	Phone Phone
6,070 49.42 VE9CS	Vancouver, B. C., Canada	0.01	Broadcast Broadcast	5,000 60.00 ZUD 4,975 60.30 GBC 4,820 62.24 GBW 4,795 62.55 VE9BK 4,783 63.11 WOY 4,753 63.11 WOY 4,754 63.11 WOY 4,610 65.08 YM.5 4,610 65.08 YM.5 4,610 65.08 YM.6 4,606 65.16 HRW- HRY			
6,070 49.42 CFRX 6,070 49.42 HJ3ABF	Toronto, Ontario Bogota, Colombia	1.0 0.1	Broadcast Broadcast	4,600 65.22 HC2ET 4,465 (* 19 CFA2	La Ceiba, Honduras Guayaquil, Ecuador Drummondville, P. Q.	0.1 0.4	Phone Broadcast
\$6,000 49.34 WyXAA \$6,079 49.35 DJM \$6,073 49.38 PLPSF \$6,073 49.38 YVIRD 6 \$6,073 49.37 CQN \$6,070 49.42 VEBCS \$6,070 49.42 VEBCS \$6,070 49.42 VEBCS \$6,070 49.45 VPB \$6,067 49.45 VPB \$6,065 49.95 WEXAL \$6,060 49.50 WSXAL \$6,060 WSXAL \$6,000	Colon, Panama Maracaibo, Venezuela Macao, Asia Vancouver, B. C., Canada Toronto, Ontario Bogota, Colombia Colombo, Ceylon Mexico, D. F., Mexico Skamlebaek, Denmark Gincinnati, Ohio		Broadcast Broadcast	4,465 C* 19 CFA2	Drumonodville, P. Q. Cannda Coltano, Italy Khabarovsk, U.S.S.R. Khabarovsk, U.S.S.R. Guito, Ecuado Jelov, Norway Hinleah, Fla. San Miguel, Azores Funchal, Madeira Waspook, Nicaragua Waspook, Nicaragua Boom, Nicaragua Puerto Cabezas, Nicaragua Asuncion, Paraguny Basle, Switzerland Lausanne, Switzerland Lausanne, Switzerland	15.0	Phone
6,060 49:50 OXY	Skamlebaek, Denmark	0.5	Broadcast	4,355 68.89 IAC	Coltano, Italy	56.0 20.0	Phone Broadcast
6,060 49.50 W8XAL 6,060 49.50 W3XAII	Cincinnati, Olio Philadelphia, Pa	10.0 10.0	Bc.; relays WLW Bc.; relays WCAU	4,107 73.95 HCJB	Quito, Ecuador	0.5	Broadcast
6,050 49.59 HJ3ABD	Bogota, Colembia	1.0	Broadcast	4,100 73.17 LKJ1 4,097 73.23 WND	Jeloy, Norway Hialeah, Fla.	1.0	Experimental Phone
6,045 49.62 XETW	Mexico, D. F., Mexico		Broadcast Broadcast	4,002 74.77 CT2AJ	San Miguel, Azores	0.4	Experimental Phone Amateur; bo. Broadcast; exp.
6,042 49.65 HJ1ABG 6,040 49.67 W4XB	Bogota, Colombia Mexico, D. F., Mexico Mexico, D. F., Mexico Barranquilla, Colombia Miami Beach, Fla.	0.15	Broadcast Bc.; relays WIOD	3,175 94.48 YN.17	Wapam, Nicaragua	0.1	Phone
6,040 49.67 HI9B	Santiago de los Caballeros, D. R		Broadcast	3,175 94.48 YNJ5 3,175 94.48 YNH6	Waspook, Nicaragua Boom, Nicaragua	0.1 0.1	Phone Phone
6,040 49.67 W1XAL			Broadcast Broadcast	4,355 68.99 IAC 4,273 70.21 RV15 4,107 73.65 HCJB 4,100 73.17 LKJI 4,007 73.25 HCJB 4,000 75.00 CT3AQ 4,000 75.00 CT3AQ 3,175 44.48 YM15 3,175 94.48 YM16 3,170 94.48 YME 3,170 94.48 YME 3,170 94.48 YME 3,170 94.48 YME 3,170 97.50 FP11 3,770 79.56 HB9B 3,525 85.11 HB9AQ	Puerto Cabezas, Nicaragua	0.1	Phone Broadcast
6,040 49.67 YDA	Tandjongpriok, Java,	10.0	Broadcast.	3,770 79.56 HB9B	Basle, Switzerland		Broadcast
6,033 49.72 HJ4ABP	Medellin, Colombia		Broadcast Broadcast	3,525 85.11 HB9AQ 3,376 88.83 HJA3 3,330 92.88 YDV2	Barranquilla Colombia		Broadcast Phone
6,030 49.75 OLR2B 6,030 49.75 HP5B	Podebrady, Czechoslovakia Panama, Panama	25.0	Broadcast Broadcast	3,330 92.88 YDV2	Bandjermasin, Borneo,		Broadcast
6,633 49.72 HJ4ABP 6,030 49.75 OLR2B 6,030 49.75 HP5B 6,030 49.75 VE9CA 6,030 49.75 XEBQ	Doston, Mass. Tandjongpriok, Java, D. E. I. Medellin, Colombia Podebrady, Czechosłovakia Panama, Panama Calgary, Alberta, Canada Mazatlan, Mexico	0.1	Bc.; relays CFCN	3,040 98.68 YDA	Bandjermasin, Borneo, D. E. I. Tandjongpriok, Java, D. E. I.		
0,000 49.70 AEBQ	Massellin, Mexico		Broadcast		D. E. I.	10 0	Broadcast



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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 longestablished 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

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