



PHILCO
RADIO LOG

*American and
Foreign Stations*

PRICE **10** CENTS

LEWIS I. ZETTLEMÖYER
"EDJOL DEALER"
R. D. 3 Box 50
TAMAQUA, PA.

NOV 47

FALL 1934

50	75	100	150	200	250	300	500	750	1000	POWER	1500	2000	2500	5000	10000	15000	25000	50000
F	G	H	I	J	K	L	M	N	O	CODE	P	Q	R	S	T	U	V	W

Stations in the chart below are grouped in exact dial-number order. Each group is map-like. Power is shown by letters F to W, see code above. Networks: * Columbia, † National WEA, ‡ National WEA, § National WEA or WJZ. For dials numbered 540 to 1500, or 54 to 150, there may be slight variations so record the exact number from your dial in the blank center column. For dials numbered 100 to 0, or otherwise, refer to alphabetical list, if necessary, record YOUR number opposite kilocycle number in chart below and you not only translate that technical term, but after a few, are able to find desired programs listed in newspapers. You'll note your numbers appear in exact order and stations between can be identified without station announcements. Nothing could be more simple.

Revision 44 Copyright, 1934—by Haynes' Radio Log, 161 West Harrison St., Chicago, Illinois FALL, 1934

WESTERN Wash., Ore., Cal., Utah, Etc.		MIDDLE WESTERN Minn., Ia., Neb., Mo., Tex., Etc.		KILO	Dial No.	CENTRAL Ill., Mich., Ohio, Tenn., Etc.	EASTERN Mass., N. Y., Pa., N. C., Etc.
CJRM Mouse Jaw, Sask.	O	†KSD-KFUD St. Louis, Mo.	O	54			
KOAC Corvallis, Ore.	O	†KFYR Bismarck, N. D.	O	55		*WKRC Cincinnati, Ohio.	CFNB Fredericton, N. B. M
*KLZ Denver, Colo.	O	KFTO Springfield, Mo.	M	56	WSVA Staunton, Va.	M	*WGR Buffalo, N. Y.
KTAB San Francisco, Cal.	O	KFDM Beaumont, Tex.	O	57	*WIND Chicago-Gary.	O	WDEV Waterbury Vt.
*KVI Tacoma, Wash.	O	*WIKY Yankton, S. D.	R	58	*WNOX Knoxville, Tenn.	O	†WFI-†WLIT Philadelphia M
KMTR Los Angeles, Cal.	O	KGKO Wichita Falls, Tex.	M	59	*WKBN Youngstown, Ohio M	O	WQAM Miami, Fla.
CKUA Edmonton, Alta.	M	*WIBW Topeka, Kas.	O	60	WOSU Columbus, Ohio.	O	*WUNC Asheville, N. C.
KMJ Fresno, Cal.	M	KSAC Manhattan, Kas.	M	61	*WCHS Charleston, W. Va. O	O	WMCANew York (WSYR) M
†KHQ Spokane, Wash.	O	†WOW Omaha, Neb.	O	62	*WBO Orlando, Fla.	K	†WTAG Worcester, Mass.
CJOR Vancouver B.C.	M	XEPN Podras Nebras. Coah W		63	WKZO Kalamazoo, Mich.		†WEEI Boston, Mass.
KFSR San Diego, Cal.	M	*WMT Waterloo, Iowa.	O	64	CMW Havana, Cuba.	P	*WICC Bridgeport (WCAC) M
*KFRS San Francisco, Cal.	O	†WDAF Kansas, City, Mo.	O	65	†CFCF Montreal, Que.	M	*WCAO Baltimore, Md.
†KGW Portland, Ore.	O			66	WREX Memphis, Tenn.	M	WIP Philadelphia, Pa.
KJAR Phoenix, Ariz.	O			67	WJAY Cleveland, Ohio.	M	†WBMJ Bangor, Maine.
*KJGX Yorkton, Sask.	M	KFRU Columbia, Mo.	M	68	†WFMJ Milwaukee, Wis.	R	WLBZ Bangor, Maine.
*KTRH Houston, Tex.	O	WOS Jefferson City, Mo.	M	69	WFLA-WSUN Florida	O	WHJB Pittsburgh, Pa.
†KFI Los Angeles, Cal.	W	WOI Ames, Iowa.	S	70	WGBF Evansville, Ind.	M	CFCY Charlottetown, PEI M
		XFG Mexico City, D. F.	O	71	WAIU Columbus, Ohio.	M	WMAL Washington, D. C. M
				72	†WSM Nashville, Tenn.	W	
		WAAW Omaha, Nebr.	M	73			†WEAF New York City.
				74	†WMAQ Chicago, Ill.	W	
†KPO San Francisco, Cal.	W	KFEQ St. Joseph, Mo.	R	75	CMAF Havana, Cuba.	O	†WPTF Raleigh, N. C.
CJGJ Calgary, Alta.	M	XET Monterey, Mex.	M	76	NAA Arlington, Va.	O	*CFRB Toronto, Ont.
				77	†WLW Cincinnati, Ohio.	W	
KMPC Beverly Hills, Cal.	M	XEN Mexico City.	O	78			†WOR Newark, N. J.
				79	WGN Chicago, Ill.	W	
CJCA Edmonton, Alta.	M			80	CMK Havana, Cuba.	S	*CKAC Montreal, Que.
KTRB Modesto, Cal.	K	KMMJ Clay Center, Neb.	O	81	WSB Atlanta, Ga.	W	*WHEB Portsmouth, N. H., K
†KGU Honolulu, Hawaii.	R			82	†WJR Detroit, Mich.	T	†WJZ New York (WBAL), W
KXA Seattle, Wash.	M	WEW St. Louis, Mo.	O	83			
		*KFAB Lincoln, Nebr.	V	84	*WBBM Chicago, Ill.	V	
KFQD Anchorage, Al.	K	†KGHL Billings, Mont.	O	85	WMC Memphis, Tenn.	O	*WEAN Providence, R. I.
KTM Los Angeles (KELW) M		†KFYD Brookings, S. D.	O	86	CMCQ Havana, Cuba.	M	WTFB Norfolk, Va.
†KGO San Francisco, Cal.	T			87	CMJK Canagney, Cuba.	M	†WGY Schenectady, N. Y.
		†WFAA Dallas, (WBAP).	W	88			WTBO Cumberland, Md., K
		*WCCO Minneapolis, Minn. W		89	*WHAS Louisville, Ky.	W	WNYC New York City.
		†KOA Denver, Colo.	W	90	WRUF Gainesville, Fla.	S	WHDH Boston, Mass.
CFQC Saskatoon, Sask.	O			91	CMC Havana, Cuba.	M	WEEU Reading, Pa.
KIEV Glendale, Cal.	K	WHB Kansas City, Mo.	M	92	WWL New Orleans, La.	T	†CRCT Toronto, Ont.
XEMO Tijuana, Mex.	P			93			*WABC-WBOQ New York, W
		WSUI Iowa City, Ia.	M	94	†WENR-†WLS Chicago, Ill. W		
KLX Oakland, Cal.	O	KFKA-KPOF Colorado.	M	95	CRCO Ottawa, Ont.	O	WGBI-WQAN Scranton, Pa M
RSEI Pocatello, Idaho.	K	KUSD Vermillion, S. D.	M	96	WCCO Meridian, Miss.	O	WPHR Petersburg, Va.
KARK Little Rock, Ark.	M	KFNF Shenandoah, Ia.	M	97	WILL Urbana, Ill (WBAA) K		†WGST Atlanta, Ga.
†KGA Spokane, Wash.	S	†WKY Okla. City, Okla.	O	98	WMMN Fairmont, W. Va. M		†WJAR Providence, R. I.
*KHJ Los Angeles, Cal.	O	XEW Mexico City.	S	99	WLEL Stevens Pt., Wis.	R	†WBEN Buffalo, N. Y.
CJAT Trail, B.C.	K			100	CMX Havana, Cuba.	M	†WJAX Jacksonville, Fla.
†KOMO Seattle, Wash.	O	†KPRC Houston, Texas.	O				CRCM Montreal, Que.
XEOK Tijuana, Mex.	R	KFEL-KVOD Denver.	M		†WWJ Detroit, Mich.	O	WBSO Needham, Mass.
KROW Oakland, Cal.	O	KMA Shenandoah, Ia.	O		WAAF Chicago, Ill.	M	HHK Port au Prince, Haiti. M
KFWI San Francisco, Cal. M		†WDAV Fargo, N. D.	O		*WBRC Birmingham, Ala.	M	CHNS Halifax, N. S.
*KGIN Portland, Ore.	R	WHA Madison, Wis.	R		†WAVE Louisville, Ky.	O	WDBJ Roanoke, Va.
KFWB Hollywood, Cal.	O	*KMBC Kansas City, Mo.	O		XEFO Mexico City, Mex.	T	†WCSH Portland, Maine.
		XEAW Reynosa, Tams.	U				WAAT Jersey City, N. J.
		CKY Winnipeg, Man.	U				†WRC Washington, D.C.
†KJR Seattle, Wash.	S	XEP Mexico City.	O		†WCFL Chicago, Ill.	P	WIBG Glenside, Pa.
							†KDKA Pittsburgh, Pa.
		XEAF Nogales, Mexico.	Q		WJEM Tupelo, Miss.	M	†WBZ-WBZA Boston, Mass. W
KFVD Los Angeles, Cal.	K	†WHO-WOC Des M-Dav'pt, W					WORK York, Pa.

Police Broadcasts:

Entering short wave, Kilocycles are abandoned in favor of Megacycles, thus. The preceding page ends with 1570 Kilocycles. The first line below is 166 Kilocycles, but point off 3 places and you have 1.66 Megacycles.

WESTERN	MIDDLE WESTERN	Megs. Mtrs.	CENTRAL	EASTERN
Berkeley, Cal. Santa Cruz, San Francisco, San Jose, Palo Alto	St. Louis	1.66 180.1 1.67 179.1	Cincinnati, Lexington, Ky. Chicago	Pittsburgh, Somerville, Providence
Los Angeles, Pasadena	Waco, Dallas Beaumont	1.71 175.2 1.87 160.0	VOTED TO AMATEURS CONVERSING AT NIGHT TALKING TO GROUND STATIONS AT NIGHT	
Klamath Falls, Ore.	HERE YOU WILL LISTEN TO AIR CRAFT	2.30 130.0 2.38 125.8 2.41 124.6	Birmingham	Auburn, Rochester, Syracuse
Seattle, Spokane, Tacoma, Aberdeen	Salt Lake City Little Rock	2.41 124.2 2.42 123.8	Detroit, Atlanta	Albany, Utica, Clarksburg, Baltimore
Fresno, Santa Barbara, Santa Fe, Vallejo, Cal.	Albuquerque, El Paso Topeka, Kansas City	2.43 123.3 2.44 122.8 2.45 122.4	New Orleans, Dayton, Columbus	Buffalo, Washington, Portland
Portland, Salem, Reno, Denver	Minneapolis, St. Paul, Shreveport	2.46 122.0 2.47 121.7 2.48 121.4	Saginaw, Grand Rapids, Lansing, Indianapolis, Louisville	Haokensack, N. J. Reading New York Charlotte
Honolulu	Wichita, Okla. City, Tulsa	2.49 120.8 3.00 100.0 4.00 75.00	Cleveland, Akron, Youngstown Memphis, Bay City, Flint, Port Huron	Woonsocket Swarthmore, Philadelphia Mineola, N. Y.
Omaha, Sioux City, Des Moines, Cedar Rapids, Davenport Las Vegas, Nev. San Diego, Long Beach, Santa Ana, Lincoln	Lubbock, Wichita Falls, Rockford ANOTHER INCH OF YOUR DIAL DEVOTED THOUSANDS OF AMATEURS, FROM SURPRISING		Hammond, South Bend, Kokomo, Ft. Wayne	TO AIR CRAFT OFTEN THRILLING TO HEAR DISTANCE CAN BE HEARD NEAR THIS POINT

Principal Short Wave Stations Being Heard in America

In the list below, we have endeavored to give the Short Wave Listener something tangible to shoot at with reasonable likelihood of success. The Time is for Central Standard. Do not expect to hear short wave stations from all over the world at any time the receiver is turned on. Tune systematically. Refer to this list and try for those stations that are operating at the time you are tuning (usually evening hours at the point of broadcast). Simply because a station is on the air, do not assume that it should necessarily be heard in your location. There are skip distances to be considered, storms between you and the station, as well as other obstacles to overcome. A station may be heard on schedule one day, and not the next. Tune slowly and carefully. Be guided by side notes and notice that stations shift assignments with hours of the day. Very few foreign stations will be heard below 6.00 Megacycles. These suggestions are offered as practical tips on tuning. There are always possible exceptions to the rule.

ASIA, AFRICA, ETC.	NORTH AMERICA	Megs. Mtrs.	CENTRAL AND SOUTH AMERICA	EUROPE
		4.10 73.00 4.24 70.65 4.28 70.00	HCJB Quito, Ecuador 7:30-10:30 PM. RVIS (Kharkovsk, USSR 2 AM-7 AM TWEEN SHIPS AND LAND STATIONS HERE	
		5.70 52.65 5.83 51.49 5.86 51.20 5.95 50.40 5.97 50.26 6.00 50.00 6.02 49.83 6.06 49.50 6.06 49.50 6.07 49.50 6.07 49.42 6.08 49.30 6.09 49.22 6.10 49.18 6.10 49.18 6.11 49.08 6.12 49.02 6.12 49.00 6.14 48.86 6.18 48.50 6.25 48.00 6.28 47.80 6.31 47.50 6.38 47.00 6.43 46.69 6.44 46.60 6.61 45.38 6.63 45.31 6.65 45.11 6.66 45.00 6.84 43.86 6.99 42.92 7.21 41.00 7.40 40.54 7.79 38.47 8.04 37.33 8.18 36.65 8.32 35.90 8.55 35.00 9.50 31.56 9.51 31.55 9.52 31.51 9.53 31.48 9.57 31.35	HCK Quito, Ecuador 7-10 PM. HJ2ABA Hunja, Col. 6:30-9 PM. HJ4ABE Medellin, Col. 6-10 PM. HIX Santo Domingo 6-9 Sun., Tu & Fri. HVJ Vatican City 4 A Sun. & 1-1:15 P RV 59 Moscow, USSR 1-5 PM. DJC Zeesen, Germany, 7:30-10:30 PM. GSA Davenport, Eng. 5-7 PM. OXY Skamieback, Den. 1-5:30 PM. YV5RMO Maracaibo, Ven. 7-10 PM. CP5 LaPaz, Bolivia 5:30-10:30 PM. YV2RC Caracas, Ven. 4:15-8:30 PM. YV3RC Caracas, Ven. 3:30-9 PM. TGW Guatemala City 4-11 PM. HJ3ABF Bogota, Col. 6-10 PM. H11A Dominican Republic 6:30-8 PM. HIZ Santo Domingo 3:30-4:30 PM. HJ5ABD Cali, Colombia HJ1ABB Barranquilla, Col. 5-9 PM. REN Moscow, USSR Noon-5 PM. PRADO Riobamba, Ec. 8-10 PM. Thurs. HC2RL Guayaquil, Ec. 5-7 Sun. 8-10 Tu. HAS2 Budapest, Hungary 2-4 PM. LCL Jeloj, Norway 10 AM.-5 PM. HJ4ABBManizales, Col. 11-12 PM. HJ3ABB Bogota, Col. 8-10 PM. HBP Geneva, Switz. 4:30-5 PM. Sat. DON'T HEAR IS SENT OVER ANOTHER CHANNEL PRA3 Rio de Janeiro 4:30-5 PM. GSB Davenport, Eng. 11-4:30; 10-12 PM. OXY Skamieback, Den. 1-5:30 PM. DJA Zeesen, Ger., 4-7:15 PM.	
	COC Havana, Cuba 3-5 PM. XEBT Mexico City, 9 AM.-11 PM. W3XAU Philadelphia (WCAU) W8XAL Cincinnati, Ohio (WLW) VE9GW Bowmanville, Ont. W9XF Chicago (WENR) W3XAL Boundbrook, N. J. (NBC) VUC Calcutta, India 8:30-11 AM. VE9HX Halifax, N. S. 5-8 PM. PKIWK Bandoeng, Java 4-5:30 A W2XE Wayne, N. J. (WABC) ZTJ Johannesburg, Africa 7 AM.-2 PM. W8XK Pittsburgh, Pa. (KDKA) W3XAL Boundbrook, N. J. (NBC) KZF Byrd Expedition CNR Rabat, Morocco 1:30-4 PM. Sun. CN6HJ Tuinuel, Cuba KZF Byrd Expedition SHIP TO SHORE, EVENINGS, THE PART YOU VK3ME Melbourne Aus 4-5:30 A W & S W2XAF Schenectady, N. Y. (WGY) WIXAZ Springfield, Mass. (WBZ)			

(Continued on Page 10)

EUROPE—AMERICA— Everything you want in radio!

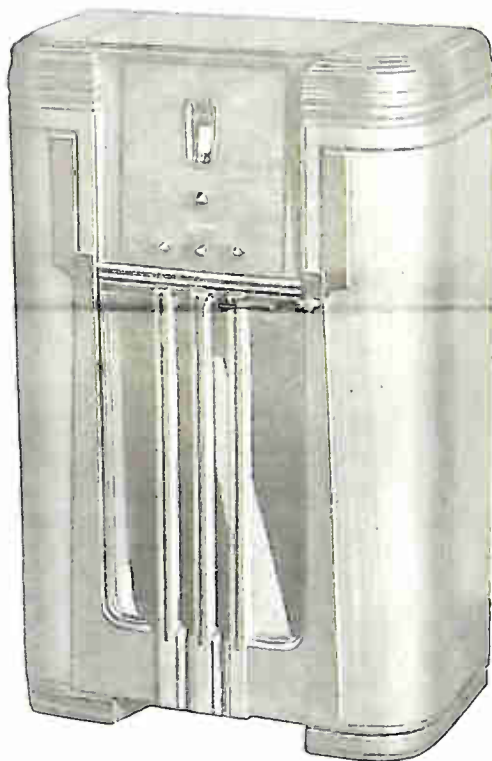
NEW 1935 PHILCO

PHILCO presents forty-nine magnificent new models. Radios that bring in both American and Foreign stations for those who enjoy world-wide reception. Radios for those who want American stations only. Every kind of radio—every type of radio, all-electric, AC or DC, battery and 32-volt.

Here is a line so complete in chassis types, cabinet selection and price range, that everyone may have the *exact radio* he wants—in PHILCO. And true to PHILCO tradition, each gives you unexcelled tone and performance in its particular price class. Such values are made possible only by PHILCO's sales leadership for five consecutive years!



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at our store*



EASIEST TERMS

*Extra-Liberal
Trade-in Allowances*

Tune-in
PHILCO'S New
Program on EAQ,
Madrid, Spain (9.87
on your PHILCO dial)
Sundays, 7 P. M.
Eastern Standard
Time

A PHILCO FOR EVERY PURSE AND PURPOSE

AMERICAN and FOREIGN BROADCAST RECEIVERS	\$39.95 to \$600
AMERICAN BROADCAST RECEIVERS	\$20 to \$200
NEW PHILCO AUTO RADIOS	\$39.95 to \$75

Prices slightly higher Denver and West. All prices subject to change without notice

LISTEN TO BOAKE CARTER OVER KEY COLUMBIA STATIONS.

INTERNATIONAL MORSE CODE

A	G	M	S	Y	4
B	H	N	T	Z	5
C	I	O	U		6
D	J	P	V	1	7
E	K	Q	W	2	8
F	L	R	X	3	9

8 or more revised Radio Logs during 20 months mailed to subscribers for \$1.00. 2 successive issues 25c. Address Haynes' Radio Log, Chicago.

ALPHABETICAL INDEX OF RADIO STATIONS

<p>KABC San Antonio, Tex 1420 M KALE Portland, Ore 1300 M KARK Little Rock, Ark 890 M KASA Elk City, Okla 1240 H KBPS Portland, Ore 1420 M KBTM Jonesboro, Ark 1200 H KCMC Texarkana, Ark 1420 S KCRC Enid, Okla 1370 K KCRJ Jerome, Ariz 1310 H KDB Santa Barbara, Cal 1500 H KDFN Casper, Wyo 1440 M KDKA Pittsburgh, Pa 980 W KDLR Devils Lake, N.D. 1210 H KDYL Salt Lake City, U. 1290 O KECA Los Angeles, Cal 1430 O KELW Burbank, Cal 780 M KERN Bakersfield, Cal 1370 H KEX Portland, Ore 1480 S KFAB Lincoln, Neb 770 V KFAC Los Angeles, Cal 1300 O KFBB Great Falls, Mont 1280 O KFBI Abilene, Kas 1050 S KFBK Sacramento, Cal 1310 H KFEI Everett, Was 1370 F KFDM Beaumont, Tex 560 M KFDY Brookings, S.D. 780 O KFEL Denver, Col 920 M KFEQ St. Joseph, Mo 580 R KFGQ Boone, Iowa 1370 H KFH Wichita, Kan 1300 O KFI Los Angeles, Cal 640 W KFIO Spokane, Was 1120 H</p>	<p>KFXD Nampa, Idaho 1200 H KFXJ Grand Junction, Col 1200 H KFXM San Bernardino, 1220 H KFXR Okla. City, Okla 1310 K KFYD Lubbock, Tex 1310 K KFYR Blount, N. D. 550 O KGA Spokane, Was 900 S KGAR Tucson, Ariz 1370 K KGB San Diego, Cal 1330 O KGBU Ketchikan, Alaska 900 M KGBX Springfield, Mo 1310 M KGBZ York, Neb 930 O KGCA Decorah, Iowa 1270 H KGCC Mandan, N.D. 1240 K KGCX Wolf Point, Mont 1310 K KGDE Fergus Falls, Minn. 1200 K KGDM Stockton, Cal 1100 K KGDY Turon, SD 1340 K KGEE Tuma, Col 1200 H KGEK Long Beach, Cal 1360 O KGEE Kallspeck, Mont 1310 H KGFF Shawnee, Okla 1420 H KGFG Okla. City, Okla 1370 H KGFI Cor. Christi, Tex 1500 K KGFJ Los Angeles, Cal 1200 H KGFK Duluth, Minn. 1500 H KGFL Roswell, N.M. 1370 H KGFV Kearney, Neb 1310 H KGFX Pierre, S.D. 630 J KGFC San Francisco, Cal 1420 H KGCF Coffeyville, Kan 1010 O KGGM Albuquerque, N.M. 1230 M</p>	<p>KIDO Boise, Ida 1350 O KIDW Lamar, Col 1420 H KIEM Eureka, Cal 1210 H KIEV Glendale, Cal 850 K KIT Yakima, Was 1310 H KJBS San Francisco, Cal 1070 M KJCS Seattle, Was 970 S KJCN Blytheville, Ark 1290 H KLO Ogden, Utah 1400 M KLPM Almot, N. D. 1240 K KLRA Little Rock, Ark 1390 R KLS Oakland, Cal 1440 K KLST Galveston, Tex 1370 K KLUF Oakland, Cal 860 O KLX Denver, Col 560 O KMA Shenandoah, Ia 930 O KMAC San Antonio, Tex 1370 H KMEC Kansas City, Mo 950 O KMEF Medford, Ore 1310 K KMFD Fresno, Cal 580 M KMJ Eureka, Cal 1200 H KMLB Monroe, La 1200 H KMMJ Clay Center, Neb 740 O KMO Tacoma, Was 1330 K KMOX St. Louis, Mo 1090 W KMP Beverly Hills, Cal 710 M KMTR Austin, Tex 1500 H KNOW Los Angeles, Cal 1050 W KNX Denver, Col 830 V KOAC Corvallis, Ore 550 O KOB Albuquerque, N.M. 1180 T KOH Reno, Nev 1380 M</p>
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<p>KFIZ Fond du Lac, Wis. 1420 H KFJB Marshalltown, Ia. 1200 H KFJI Klamath Falls, Ore 1210 H KFJM Gd. Forks, ND 1370 M KFJR Portland, Ore 1300 M KFJZ Ft. Worth, Tex 1370 H KFKA Greeley, Col 880 M KFKU Lawrence, Kan 1220 O KFN Shenandoah, Ia 830 W KFOR Lincoln, Neb 1210 F KFOX Long Beach, Cal 1250 O KFPL Dublin, Tex 1310 H KFPM Greenville, Tex 1310 C KFPV Ft. Smith, Ark 1210 H KFPY Spokane, Was 1340 O KFQD Anchorage, Alaska 780 O KFRS San Francisco, Cal 610 O KFRU Columbia, Mo 630 M KFSD San Diego, Cal 600 O KFSG Los Angeles, Cal 1120 M KFUD St. Louis, Mo 550 M KFVJ Los Angeles, Cal 1000 K KFVS C. Girardeau, Mo 1210 K KFWB Los Angeles, Cal 950 O</p>	<p>KCHF Pueblo, Col 1320 M KGHI Little Rock, Ark 1200 K KGHL Billings, Mont 780 O KGIR Butte, Mont 1360 O KGIW Alamogordo, Cal 1200 H KGIX Las Vegas, Nev 1420 H KGKB Tyler, Tex 1500 H KGKL San Angelo, Tex 1370 K KGKO Wichita Falls, Tex 570 M KGCU Soota Bluff, Neb 1500 H KGMB Honolulu, T. H. 1320 K KGNF No. Platte, Neb 1430 M KGNO Dodge City, Kas 1340 K KGSO San Francisco, Cal 790 T KGRS Amarillo, Tex 1410 O KGUL Honolulu, Hawaii 1750 H KGVD Missoula, Mont 1200 H KGW Portland, Ore 620 O KGY Olympia, Was 1210 H KHJ Los Angeles, Cal 900 O KHO Spokane, Was 590 Q KICA Clovis, N.M. 1370 H KICK Carter Lake, Ia 1420 H KIDK Idaho Falls, Ida 1320 M</p>	<p>KOIL Council Bluffs, Ia 1260 O KOIN Portland, Ore 940 R KOL Seattle, Was 1270 O KOMA Okla. City, Okla 1480 S KOMD Seattle, Was 920 O KONJ San Antonio, Tex 1320 H KOOS Marshfield, Ore 1200 H KORE Eugene, Ore 1420 H KOTN Pine Bluff, Ark 1500 H KOV Phoenix, Ariz 1390 M KPCB Seattle, Was 710 K KPJM Prescott, Ariz 1500 H KPO San Francisco, Cal 680 W KPOF Denver, Col 880 M KPPC Pasadena, Cal 1210 F KPRC Houston, Tex 920 O KPWC Weatohchee, Was 1500 H KQV Pittsburgh, Pa 1380 M KQW San Jose, Cal 1010 O KRE Berkeley, Cal 1370 H KREG Santa Ana, Cal 1500 H KRCV Weslaco, Tex 1260 M KRRD Los Angeles, Cal 1120 M KRLD Dallas, Tex 1040 T</p>
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CANADIAN

CFAC	Calgary	Alta 930 H
CFCH	Montreal	Que 600 M
CFCH	North Bay	Ont 930 H
CFCN	Calgary	Alta 1030 T
CFCO	Chatham	Ont 600 H
CFCY	Charlottetown	PEI 630 M
CFJC	Kamloops	B.C. 888 H
CFLC	Prescott	Ont 930 H
CFNB	Fredericton	N.B. 550 M
CFPL	London	Ont. 730 H
CFQC	Saskatoon	Sask 840 O
CFRB	Toronto	Ont 690 T
CFRC	Kinston	Ont 1510 H
CHCK	Charlottetown	PEI 1310 F
CHGS	Summerside	PEI 560 F
CHLP	Montreal	Que 1120 H
CHNS	Halifax	N.S. 930 M
CHRC	Quebec	Que 530 H
CHSJ	St. John	N.B. 1120 H
CHWC	Regina	Sask 1010 M

CHWK	Chilliwack	B.C. 780 H
CJAT	Trail	B.C. 910 K
CJBT	Edmonton	Alta 730 M
CJCB	Sydney	N.S. 1240 O
CJCC	Calgary	Alta 690 H
CJCX	Yorkton	Sask 630 M
CJDC	Lethbridge	Alta 1230 H
CJDR	Vancouver	B.C. 600 M
CJEF	Moos Jaw	Sask 540 O
CKAC	Montreal	Que 730 S
CKCD	Vancouver	B.C. 1010 H
CKCK	Regina	Sask 1010 M
CKCL	Toronto	Ont 580 H
CKCO	Ottawa	Ont 1010 H
CKCR	Waterloo	Ont 1030 S
CKLW	Windsor	Ont 1420 H
CKMK	Cobalt	Ont 1210 F
CKMO	Vancouver	B.C. 1410 H
CKNC	Toronto	Ont 1420 H
CKOC	Hamilton	Ont 1120 M

CUBAN

CKOV	Kelowna	B.C. 630 H
CKPC	Preston	Ont 930 H
CKPR	Ft. William	Ont 930 F
CKQA	St. Catharines	Ont 1200 H
CKUB	Edmonton	Alta 580 M
CKWX	Vancouver	B.C. 1010 M
CKX	Brandon	Man 1450 M
CKY	Winnipeg	Man 960 U
CRCK	Quebec	Que 1050 O
CRCD	Montreal	Que 910 S
CRCE	Edmonton	Alta 880 O
CRCS	Chicoutimi	Que 950 H
CRCT	Toronto	Ont 840 S
CRCV	Vancouver	B.C. 1100 O
CMAF	Havana	Cuba 680 O
CMCQ	Havana	Cuba 835 M
CMCQ	Havana	Cuba 775 M
CMCY	Havana	Cuba 1335 O
CMJK	Camaguey	Cuba 790 M
CMK	Havana	Cuba 730 S

MEXICAN

CMKQ	Santiago	Cuba 885 K
CMQ	Havana	Cuba 630 M
CMW	Havana	Cuba 595 P
CMX	Havana	Cuba 875 M
HEAF	Fortau Prince	Haiti 920 O
HEAF	Nogales	Mex 710 O
XEAW	Reynosa	Mex 950 T
XEB	Mexico City	Mex 1010 T
XEBC	Aguas Calientes	Mex 1280 R
XEFO	Mexico City	Mex 940 S
XEMO	Juarez	Mex 1020 M
XEN	Mexico City	Mex 860 R
XENT	New Laredo	Mex 1340 W
XEOK	Tijuana	Mex 920 R
XEP	Mexico City	Mex 970 O
XEPN	Piedras Negras	590 W
XET	Monterrey	Mex 690 M
XEW	Mexico City	Mex 890 S
XEYZ	Mexico City	Mex 780 T

50	75	100	150	250	300	500	750	1000	POWER	1500	2000	2500	5000	10000	15000	25000	50000
F	G	H	I	J	K	L	M	N	D	P	Q	R	S	T	U	V	W

PHILCO REPLACEMENT TUBES IMPROVE THE PERFORMANCE OF ANY RADIO

WAAB Boston... Mass 1410 M	WABC Duluth... Minn 1290 R	WJAX Jacksonville... Fla 900 O	WOMT Manltowoc... Wis 1210 H
WAAF Chicago... Ill 920 M	WBEQ Harrisburg... Ill 1210 K	WJAY Cleveland... Ohio 610 M	WOOD Gd Rtpds... Mich 1270 M
WAAT Jersey City... N. J. 1348 M	WBEF Buffalo... N. Y. 1310 K	WJBC Red Bank... N. J. 1210 H	WOPI Bristol... Tenn 1500 W
WAAB Omaha... Neb 660 M	WEDC Chicago... Ill 1210 H	WJBB HighlandPk. Mich 1500 H	WORB Newark... N. J. 710 W
WABC New York... N. Y. 860 W	WEEQ Rocky Mt... N.C. 1420 H	WJBL Decatur... Ill 1200 H	WORC Worcester... Mass 1280 M
WABI Bangor... Me 1200 H	WEEI Boston... Mass 590 O	WJBO New Orleans... La 1420 H	WOSU Jefferson City... Mo 630 M
WACD Waco... Tex 1420 H	WEEU Reading... Pa 830 O	WJBW New Orleans... La 1200 H	WOSU Columbus... Ohio 570 O
WADC Akron... Ohio 1370 O	WEHC Charlotteville Va 1350 M	WJBY Greensburg... Ala 1210 H	WOW New York... N. Y. 1130 O
WAGF Dothan... Ala 1370 H	WEHS Chicago... Ill 1420 H	WJGX Jackson... Miss 1270 O	WOWO Omaha... Neb 590 O
WAGM Proques Isle... Me 1420 H	WELL Battle Ck... Mich 1420 F	WJJE Hagerstown... Md 1210 H	WPAO Ft. Wayne... Ind 1130 K
WAIU Columbus... Ohio 640 M	WENR Chicago... Ill 870 W	WJEM Tupelo... Miss 990 M	WPEN Philadelphia... Pa 920 K
WALA Mobile... Ala 1380 M	WESG Klmra... N. Y. 1090 O	WJIM Lansing... Mich 1210 H	WPFB Hattlesburg... Miss 1370 H
WALR Zionsville... Ohio 1210 H	WEVD New York... N. Y. 4300 O	WJMS Ironwood... Mich 1420 H	WPHR Atlantic City... N. J. 1100 S
WAMC Anniston... Ala 1420 H	WEXL Royal Oak... Mich 1310 F	WJRW Detroit... Mich 750 T	WPRO Providence... R. I. 880 M
WAML Laurel... Miss 1310 H	WFAA Dallas... Tex 800 W	WJTL Atlanta... Ga 1370 H	WPTF Raleigh... N. C. 680 S
WAPI Birmingham... Ala 1140 S	WFAB New York... N. Y. 1300 O	WJWJ Akron... Ohio 1210 H	WQAM Miami... Fla 560 O
WARO Brooklyn... N. Y. 1400 M	WFAM South Bend... Ind 1200 H	WJZZ New York... N. Y. 760 W	WQAN Scranton... Pa 880 K
WASH Grand Rapids... N. 1270 M	WFAS White Plains... N. Y. 1210 H	WKKR E. Lansing... Mich 1040 O	WQBC Meigsburg... Miss 1360 M
WATR Waterbury... Conn 1190 H	WFBC Greenville... S. C. 4300 K	WKKB E. Dubuque... Ill 1500 H	WQDM St. Albans... Vt 1370 H
WAVE Louisville... Ky 940 O	WFBE Cincinnati... O 1200 K	WKKF Indianapolis... Ind 2400 M	WQDX Thomasville... Ga 1210 H
WAVZ New York... N. Y. 1350 K	WFBG Altoona... Pa 1310 H	WKKH La Crosse... Wis 1380 O	WRAC Williamsport... Pa 1370 H
WBAJ Lafayette... Ind 890 M	WFBL Syracuse... N. Y. 1360 R	WKKI Chicago... Ill 1420 H	WRAP Reading... Pa 1310 H
WBAL Baltimore (700)... 1060 T	WFBN Indianapolis... Ind 1230 O	WKKL Chicago... Ill 1420 H	WRAX Philadelphia... Pa 920 K
WBAP Fort Worth... Tex 1270 O	WFRB Baltimore... Md 1270 M	WKKM Harrisburg... Pa 1200 H	WRBL Columbus... Ga 1200 H
WBAX Wilkes-Barre... Pa 1210 H	WFRD Flint... Mich 1310 H	WKKW Buffalo... N. Y. 1450 S	WRCC Danoke... Va 1410 M
WBBC Brooklyn... N. Y. 1400 M	WFEA Manchester... N. H. 1430 M	WKKY Richmond... Ind 1500 H	WRDO Augusta... Ga 1500 H
WBBL Richmond... Va 1210 H	WFFI Philadelphia... Pa 560 O	WKKZ Muskegon... Mich 1500 H	WRER Memphis... Tenn 600 O
WBMM Chicago... Ill 1170 V	WFLA Clearwater... Fla 1220 M	WKEU La Grange... Ga 1500 H	WRFA Lawrence... Kan 1220 O
WBRR Brooklyn... N. Y. 1300 O	WGAL Lancaster... Pa 1500 K	WKEW Greenwald... Miss 1210 H	WRGA Rome... Ga 1500 H
WBZV Waterbury... Conn 1190 H	WGAR Cleveland... O 1450 O	WKFC Sunbury... Pa 1210 H	WRIN Racine... Wis 1250 O
WBZM Bay City... Mich 1410 M	WGBF Evansville... Ind 630 M	WKJC Cincinnati... Ohio 550 O	WRKJ Rockford... Ill 1410 M
WBEN Buffalo... N. Y. 900 O	WGBI Scranton... Pa 880 M	WKKE Oklahoma City... Okla 900 O	WROL Knoxville... Tenn 1310 H
WBEO Marquette... Mich 1310 H	WGCM Gulfport... Miss 1210 K	WKZO Kalamazoo... Mich 590 O	WRRR Dallas... Tex 1280 M
WBHS Huntsville... Ala 1200 H	WGCP Newark... N. J. 1250 O	WLAC Nashville... Tenn 1470 S	WRUF Gainesville... Fla 830 S
WBIG Greensboro... N.C. 1440 M	WGES Chicago... Ill 1360 M	WLAE Washington... Ky 1420 K	WSAI Cincinnati... Oh 1330 O
WBNS Columbus... Ohio 1430 O	WGBB Freeport... N. Y. 1210 H	WLBF Minneapolis... Minn 1250 O	WSAJ Grove City... Pa 1440 K
WBNX New York... N. Y. 1350 K	WGBF Evansville... Ind 630 M	WLDF Kan. City... Kan 1420 H	WSAN Allentown... Pa 1440 K
WBOQ New York... N. Y. 860 S	WGBI Scranton... Pa 880 M	WLBK Stevens Pt... Wis 900 R	WSAR Fall River... Mass 1450 K
WBOV Terre Haute... Ind 1310 H	WGCM Newark... N. J. 1250 O	WLBW Erie... Pa 1260 O	WSAT Huntington... W. Va 1190 O
WBRC Birmingham... Ala 930 O	WGES Chicago... Ill 1360 M	WLEU Bangor... Me 620 M	WSBC Atlanta... Ga 740 W
WBRE Wilkes-Barre... Pa 1310 H	WGBB Freeport... N. Y. 1210 H	WLEY Lexington... Mass 1370 K	WSBT Philadelphia... Pa 1210 H
WBSC Needham... Mass 920 O	WGLC Hudson Fla... N. Y. 1370 H	WLFI Philadelphia... Pa 560 M	WSBN South Bend... Ind 1360 M
WBT Charlotte... N. C. 1080 W	WGNL Chicago... Ill 720 W	WLGH Laconia... N. H. 1310 H	WSBU Columbus... Ohio 1200 H
WBTM Danville... Va 1370 H	WGNV Chester Twp... N. Y. 1210 H	WLS Chicago... Ill 870 W	WSFA Montgomery... Ala 1410 M
WBZ Springfield... Mass 990 W	WGPC Albany... Ga 1420 H	WLTH Brooklyn... N. Y. 1400 M	WSGN Birmingham... Ala 1310 H
WBZA Boston... Mass 990 O	WGR Buffalo... N. Y. 550 O	WLVA Lynchburg... Va 1200 H	WSIX Springfield... Tenn 1210 H
WBZC Storrs... Conn 600 M	WGT Atlanta... Ga 1420 H		
WBZD Canton... N. Y. 1220 M	WGY Schenectady... N. Y. 790 W		
WCAE Pittsburgh... Pa 920 O	WHA Madison... Wis 940 R		
WCAL Northfield... Minn 1250 R	WHAM Rochester... N. Y. 1150 W		
WCAM Camden... N. J. 1280 M	WHAS Louisville... Ky 820 W		
	WHAT Philadelphia... Pa 1310 H		
	WHT Troy... N. Y. 1300 M		
	WHB Kansas City... Mo 850 M		
	WHBC Canton... Ohio 1200 H		

WCAO Baltimore... Md 600 M	WHBD Bellefontaine... O 1370 H	WLW Cincinnati... O 700 W	WSJS Winston-Salem... N.C. 1310 H
WCAP Asbury Park... N. J. 1280 M	WHBF Rock Island... Ill 1210 K	WLWL New York... N. Y. 1100 S	WSM Nashville... Tenn 650 W
WCAT Rapid City... S. D. 1200 H	WHBL Sheboygan... Wis 1410 M	WMAJ Washington... D.C. 630 M	WSMB New Orleans... La 1320 O
WCAU Philadelphia... Pa 1370 W	WHBQ Memphis... Tenn 1370 H	WMBG Chicago... Ill 670 W	WSOC Dayton... N. C. 1380 J
WCAX Burlington... Vt 1200 H	WHBU Anderson... Ind 1210 H	WMAJ Springfield... Mass 1420 K	WSPA Spartanburg... S.C. 1420 K
WCBA Burlington... Ill 1070 H	WHBY Green Bay... Wis 1200 H	WMAZ Macon... Ga 1180 O	WSPD Toledo... O 1340 O
WCBC Allentown... Pa 1440 K	WHCF Calumet... Mich 1370 K	WMBD Detroit... Mich 1420 K	WSUI Iowa City... Ia 880 M
WCBD Zion... Ill 1080 S	WHDH Boston... Mass 830 O	WMBE Peoria... Ill 1440 O	WSUN St. Petersburg... Fla 620 O
WCBM Baltimore... Md 1370 K	WHDL Tupper Lake... N. H. 740 K	WMBH Richmond... Va 1210 H	WSVA Staunton... Va 550 M
WCBS Springfield... Ill 1210 H	WHEB Portsmouth... N. H. 740 K	WMBI Chicago... Ill 1100 S	WSWB Buffalo... N. Y. 1370 F
WCBO Minneapolis... Minn 810 W	WHEC Rochester... N. Y. 1430 M	WMBQ Auburn... N. Y. 1310 H	WSYR Buffalo... N. Y. 1500 K
WCFL Chicago... Ill 1190 P	WHBF Koeluskoo... Miss 1500 K	WMBR Brooklyn... N. Y. 1500 H	WSYR Syracuse... N. Y. 570 K
WCHE Charlotte... N. C. 1420 H	WHFC Chicago... Ill 1420 H	WMBR Jacksonville... Fla 1370 H	WTAQ Quincy... Ill 1440 M
WCCK Covington... Ky 1490 S	WHFD Bluefield... W. Va 1410 H	WMCB New York... N. Y. 570 O	WTAM Worcester... Mass 580 M
WCDF Janesville... Wis 1200 H	WHJB Pittsburgh... Pa 920 K	WMCX Boston... Mass 1500 K	WTAP Eau Claire... O 1070 W
WCLE Joliet... Ill 1310 H	WHK Cleveland... Ohio 1390 R	WMMF Fairmont... W. Va 890 M	WTAR Norfolk... Va 780 M
WCNW Brooklyn... N. Y. 1500 K	WHN New York... N. Y. 1010 O	WMPN Waterloo... Ia 600 O	WTAW College Sta... Tex 1120 M
WCNA Pensacola... Fla 1340 M	WHO Des Moines... Ia 1000 W	WNAJ Peoria... Ill 1440 O	WTAX Springfield... Ill 1210 H
WCOC Meridian... Miss 880 O	WHOM Jersey City... N. J. 1450 K	WNAK Boston... Mass 1200 H	WTEG Cumberland... Md 800 K
WCRC Chicago... Ill 1210 H	WHI Harrisburg... Pa 1430 O	WNAO Normal... Ill 1010 M	WTEL Philadelphia... Pa 1310 H
WCSC Charleston... S. C. 1360 O	WIBA Madison... Wis 1280 O	WNAZ Yankton... S. D. 570 F	WTFI Athens... Ga 1450 M
WCSS Portland... Me 940 R	WIBG Glenside... Pa 970 H	WNBF Binghamton... N. Y. 1500 H	WTIC Hartford... Conn 1040 W
WDAA Tampa... Fla 1120 O	WIBM Jackson... Mich 1370 H	WNBH Silver Haven... Pa 1200 H	WTJS Jackson... Tenn 1310 K
WDAG Kansas City... Mo 610 O	WIBU Poynette... Wis 1210 H	WNBO Memphis... Tenn 1420 M	WTMJ Milwaukee... Wis 620 R
WDAL Amarillo... Tex 1410 O	WIBX Topeka... Kan 580 O	WNBR Joplin... Mo 1420 K	WTOT Trenton... N. J. 1280 M
WDAL El Paso... Tex 1310 H	WICC Bridgeport... Conn 600 M	WNBS Springfield... N. Y. 1290 H	WTRC Elkhart... Ga 1260 O
WDAS Philadelphia... Pa 1370 K	WILL St. Louis... Mo 1200 K	WNEL San Juan... P. R. 1290 M	WTFB Brooklyn... N. Y. 1400 M
WDAY Fargo... N. D. 940 O	WILL Urbana... Ill 890 K	WNEW Newark... N. J. 1250 R	WWAE Hammond... Ind 1200 H
WDEJ Roanoke... Va 930 O	WILM Wilmington... Del 1420 H	WNOX Knoxville... Tenn 560 Q	WWJ Detroit... Mich 920 O
WDBO Orlando... Fla 580 K	WINR Gary... Ind 560 O	WNOX Muscle Shls... Ala 1420 H	WWK Savannah... Ga 1260 O
WDEL Wilmington... Del 11320 O	WINS New York... N. Y. 1380 H	WNYC New York... N. Y. 810 M	WWRL Woodside... N. Y. 1500 K
WDEV Waterbury... Vt. 550 M	WIOD Miami Beach... Fla 1300 O	WOAI San Antonio... Tex 1190 W	WWVA Wheeling... W. Va 1160 S
WDGY Minneapolis... Minn 1280 O	WIP Philadelphia... Pa 610 M	WOC Davenport... Ia 1000 W	WXVZ Detroit... Mich 1240 O
WDNC Durham... N. C. 1500 H	WIS Columbia... S. C. 1010 O	WOK Jamestown... N. Y. 1210 F	
WDOD Chattanooga... Tenn 1280 R	WISN Milwaukee... Wis 1120 M	WOL Ames... Ia 640 S	
WDRG Hartford... Conn 1330 O	WJAG Johnston... Pa 1310 H	WOL Albany... N. Y. 1430 M	
WDSU New Orleans... La 1280 O	WJAR Providence... R. I. 890 M	WOL Washington... D.C. 1310 K	
WDZ Tuscola... Ill 1070 H	WJAS Pittsburgh... Pa 1290 R		
WEAF New York... N. Y. 660 W			
WEAN Providence... R. I. 780 M			

50	75	100	150	200	250	300	500	750	1000	POWER	1500	2000	2500	5000	10000	15000	25000	50000
F	G	H	I	J	K	L	M	N	O	CODE	P	Q	R	S	T	U	V	W

The range of reception is materially reduced by old, worn out tubes. But more important than that—your tubes lose their efficiency so gradually during a year that your ears accustom themselves to inferior tone quality and you do not realize how poorly the perfect broadcasts of elaborate programs from the studios are reproduced through your set. Replace your tubes once a year and notice the amazing difference.

ENJOY

improved reception

with the **NEW**

PHILCO

High-Efficiency

TUBES

Put your radio in the finest condition to get all the big programs on the air. Replace your old, worn-out tubes with the remarkable new PHILCO High-Efficiency Tubes which improve the performance of ANY radio! You will be amazed at the small cost of a complete new set of these tubes—and equally surprised at the added enjoyment they will provide.



PHILCO HIGH-EFFICIENCY TUBES
are more compact, more efficient and
consume less current

TUBES TESTED FREE!

Bring in your old tubes—we'll test them for you FREE on our accurate tube tester.

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