

MAR 10 1937

# Radio Log



ARMIDA, who is heard in the "Paris Night Life" Series over the WABC—Columbia Network

AMERICAN  
and  
FOREIGN  
RADIO STATIONS  
MORE THAN  
50  
RADIO STAR  
PHOTOS  
PRICE TEN CENTS

# WHAT GOES WRONG WITH RADIO SETS—AND WHY

Note that similar symptoms may result from many different defects

## ANTENNA GROUND LIGHTNING ARRESTER

NO SHORT WAVE  
INTERMITTENT RECEPTION  
POOR RECEPTION  
LACK OF VOLUME  
EXCESSIVE NOISE

## LF WAVE TRAP

CODE INTERFERENCE  
INTERMITTENT RECEPTION

## RADIO FREQUENCY COILS INTERMEDIATE COILS

INTERMITTENT RECEPTION  
POOR SELECTIVITY  
LACK OF SENSITIVITY  
POOR FIDELITY  
FADING

## TUNING CONDENSERS

NOISY RECEPTION  
DEAD SPOTS  
INTERMITTENT RECEPTION  
MICROPHONIC HOWLS  
CALIBRATION OF DIAL  
FADING

## RADIO CABINET

RESONANCE  
TINNY SOUNDS  
RUMBLES

## ALIGNMENT OF STAGES

LACK OF SENSITIVITY  
POOR TONE QUALITY  
OSCILLATION  
CODE INTERFERENCE  
CALIBRATION OF DIAL  
POOR SELECTIVITY

## AUDIO TRANSFORMERS

NOISY RECEPTION  
NO RECEPTION  
REDUCED VOLUME  
INTERMITTENT RECEPTION  
POOR TONE QUALITY

## FILTER CONDENSERS

EXCESS HUM  
NO RECEPTION  
INTERMITTENT RECEPTION

## TUBES

NO RECEPTION  
DISTORTION  
HUM  
LACK OF SENSITIVITY  
MICROPHONICS  
INTERMITTENT RECEPTION  
FADING  
NOISY RECEPTION  
OSCILLATION

## SPEAKER

DISTORTION  
TINNY SOUNDS  
SCRATCHING & GRATING  
EXCESSIVE HUM  
INTERMITTENT RECEPTION  
NO RECEPTION

## BY PASS CONDENSERS

OSCILLATION  
POOR TONE QUALITY  
INTERMITTENT RECEPTION  
FADING  
LOSS OF VOLUME  
HUM  
NOISY RECEPTION  
NO RECEPTION

## OSCILLATOR

LACK OF SENSITIVITY  
EXCESSIVE HISS  
DISTORTION  
ERRATIC OPERATION  
DEAD SPOTS ON SHORT WAVE  
FREQUENCY INSTABILITY  
INTERMITTENT OPERATION

## POWER TRANSFORMER

NO RECEPTION  
INTERMITTENT RECEPTION  
EXCESS NOISE  
EXCESS HUM

## LINE CORD & PLUG

INTERMITTENT RECEPTION  
NO RECEPTION  
NOISY RECEPTION

## HOUSE WIRING

INTERMITTENT RECEPTION  
NO RECEPTION  
NOISY RECEPTION

## PIPES IN HOUSE

INTERMITTENT RECEPTION  
NOISY RECEPTION

## ATMOSPHERIC CONDITIONS

FADING  
NOISY RECEPTION  
DISTORTION  
LACK OF SHORT  
WAVE RECEPTION

## WAVE CHANGE SWITCH

LOSS OF VOLUME ON SHORT WAVE  
INTERMITTENT OPERATION  
NO RECEPTION  
NOISY RECEPTION  
SHORT WAVE DEAD SPOTS  
FADING  
LOSS OF VOLUME  
AVC NOT FUNCTIONING

## RESISTORS

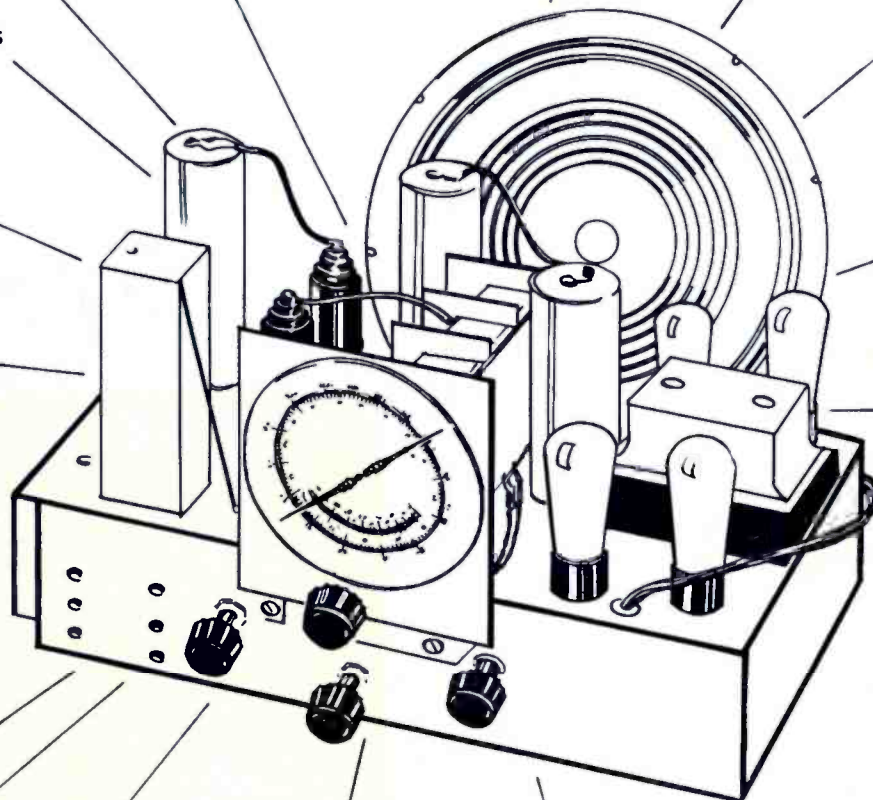
INTERMITTENT RECEPTION  
DISTORTION  
FADING  
NO RECEPTION

## VOLUME CONTROL TONE CONTROL

NOISY RECEPTION  
NO CONTROL OF VOLUME  
NO CONTROL OF TONE  
INTERMITTENT RECEPTION  
NO RECEPTION  
LOSS OF SENSITIVITY  
OSCILLATION

## LOCAL MACHINERY AND APPLIANCES

NOISY RECEPTION  
CLICKS



Based on experience records of service organizations handling more than 100,000 sets annually

Compiled by  
*Radio Today*

# BROADCASTING STATIONS IN THE U. S.

Alphabetically by Call Letters, Location, Frequency and Power

Compiled by John M. Borst

Call	Location	kc.	kw.	Call	Location	kc.	kw.	Call	Location	kc.	kw.
KABC	**San Antonio, Texas (1-.25 kw.)	1420	.1	KGIR	Butte, Mont.	1340	1-2.5	KSL	Salt Lake City, Utah	1130	50
KABR	Aberdeen, S. Dak	1420	.1	KGIV	Alamosa, Colo.	1420	.1	KSLM	Salem, Ore.	1370	.1
KADA	Ada, Okla.	1200	.1	KGKB	Tyler, Tex.	1500	.1	KSO	**Des Moines, Iowa (.5-1 kw.)	1430	.25-.5
KALB	Alexandria, La.	1420	.1	KGKL	San Angelo, Tex.	1370	1-2.5	KSOO	Sioux Falls, S. Dak.	1110	2.5
KALE	Portland, Ore.	1300	.5	KGKO	Wichita Falls, Tex.	570	.25-1	KSTP	St. Paul, Minn.	1460	10-25
KARK	Little Rock, Ark.	890	.25-.5	KGKY	Scottsbluff, Nebr.	1500	1-2.5	KSUN	Lowell, Ariz.	1200	.1
KASA	Elk City, Okla.	1210	.1	KGMB	**Honolulu, T.H.(1 kw.)	1320	.25	KTAR	Phoenix, Ariz.	620	1
KAST	Astoria, Ore.	1370	.1	KGNC	Amarillo, Tex.	1410	1-2.5	KTAT	Fort Worth, Tex.	1240	1
KBPS	Portland, Ore.	1420	.1	KGNF	North Platte, Nebr.	1430	1	KTBS	Shreveport, La.	1450	1
KBTM	Paragould, Ark.	1200	.1	KGNO	Dodge City, Kans.	1340	.25	KTFI	**Twin Falls, Ida.(1 kw.)	1240	.5-1
KCMC	Texarkana, Ark.	1420	.1	KGU	Honolulu, T. H.	750	2.5	KTGS	Hot Springs National Park, Ark.	1040	10
KCRC	Enid, Okla.	1370	1-1.25	KGVO	Millsola, Mont.	1260	1	KTRB	Modesto, Calif.	740	.25
KCRJ	Jerome, Ariz.	1310	.1	KGW	Portland, Ore.	620	1-5	KTRH	**Houston, Tex.(1-5kw) (*1290 kc.)	1330	1-2.5
KDB	Santa Barbara, Calif.	1500	.1	KGW	Olympia, Wash.	1210	.1	KTSA	San Antonio, Tex.	550	1-5
KDFN	Casper, Wyo.	1440	.5	KGW	Hilo, T. H. (C.P.)	1420	.1	KTSM	El Paso, Tex.	1310	.1
KDKA	Pittsburgh, Pa.	980	50	KHJ	Los Angeles, Calif. (C.P. for 5 kw.—daytime)	900	1	KTUL	Tulsa, Okla.	1400	.5-1
KDLR	Devils Lake, N. Dak.	1210	.1	KHQ	Spokane, Wash.	590	1-2	KTW	Seattle, Wash.	1220	1
KDON	Del Monte, Calif. (C.P.)	1210	.1	KHSL	Chico, Calif.	950	.25	KUJ	Walla Walla, Wash.	1370	.1
KDCY	Salt Lake City, Utah	1290	1	KICA	Clovis, N. Mex.	1370	.1	KUMA	Yuma, Ariz.	1420	.1
KEAL	**Los Angeles, Calif. (1-5)	1430	1	KID	Idaho Falls, Ida.	1320	.25-.5	KUOA	Fayetteville, Ark.	1260	1
KEHE	Los Angeles, Calif.	780	5-1	KIDO	Boise, Ida.	1350	1-2.5	KUSD	Vermillion, S. Dak.	890	.5
KELD	Eldorado, Ark.	1370	.1	KIDW	Lamar, Colo.	1420	.1	KVI	Tacoma, Wash.	570	1
KELW	Burbank, Calif.	780	.5	KIEM	Eureka, Calif.	1210	.1	KVL	Seattle, Wash.	1370	.1
KERN	Bakersfield, Calif.	1370	.1	KIEV	Glendale, Calif. (C.P. for .25 kw.)	850	.1	KVOA	Tucson, Ariz.	1260	.5
KEX	Portland, Ore.	1180	5	KINY	Juneau, Alaska	1310	.1	KVOD	Denver, Colo.	920	.5
KFAB	Lincoln, Nebr.	770	10	KIRO	*Seattle, Wash. (710 kc., .5 kw.)	650	.25	KVOL	Lafayette, La.	1310	.1
KFCAC	Los Angeles, Calif.	1300	1	KIT	Yakima, Wash.	1310	1-2.5	KVOO	Tulsa, Okla.	1140	25
KFBF	Great Falls, Mont.	1280	1-2.5	KIUJ	Santa Fe, N. Mex.	1310	.1	KVOR	Colorado Springs, Colo.	1270	1
KFBI	Abilene, Kans.	1050	5	KIUL	Garden City, Kans.	1210	.1	KVSO	Ardmore, Okla.	1210	.1
KFBK	**Sacramento, Calif. (1490.5)	1310	.1	KIUN	Pecos, Texas	1420	.1	KWEA	Shreveport, La.	1210	.1
KFDM	Beaumont, Tex.	560	5-1	KIUP	Durango, Colo.	1370	.1	KWBG	Hutchinson, Kans.	1420	.1
KFDY	Brookings, S. Dak.	780	1	KJBS	San Francisco, Calif.	1070	1-1.5	KWG	Stockton, Calif.	1200	.1
KFEL	Denver, Colo.	920	.5	KJR	Seattle, Wash.	970	5	KWJJ	*Portland, Ore. (1040 kc.)	1060	.5
KFEQ	St. Joseph, Mo.	680	2.5	KJLN	Blytheville, Ark.	1290	.1	KWK	St. Louis, Mo.	1350	.1
KFGQ	Boone, Iowa	1370	.1	KLO	Ogden, Utah	1400	.5	KWKC	Kansas City, Mo.	1370	.1
KFH	Wichita, Kans.	1300	1	KLPM	Minot, N. Dak.	1240	.25	KWKH	*Shreveport, La. (1100 kc.)	850	10
KFI	Los Angeles, Calif.	640	50	KLRA	Little Rock, Ark.	1390	-2.5	KWLC	Decorah, Iowa	1270	.1
KFIO	Spokane, Wash.	1120	.1	KLS	Oakland, Calif.	1440	.25	KWSC	**Pullman, Wash. (1-5 kw.)	1220	1-2
KFIZ	Fond du Lac, Wis.	1420	.1	KLUF	*Galveston, Tex. (1- .25 kw.)	1370	.1	KWTN	Watertown, S. Dak.	1210	.1
KFJB	Marshalltown, Iowa	1200	1-1.25	KLX	Oakland, Calif.	880	1	KWTO	**Springfield, Mo.(5kw)	560	1
KFJM	*Grand Forks, N. Dak. (1-1.25)	1370	.1	KLZ	**Denver, Colo.(1-5kw.)	560	1	KWYO	Sheridan, Wyo.	1370	.1
KFJR	Portland, Ore.	1300	.5	KMA	Shenandoah, Iowa	930	1-2.5	KXA	Seattle, Wash.	760	.25-.5
KFJZ	Fort Worth, Tex.	1370	.1	KMAC	San Antonio, Texas	1370	.1	KXL	Portland, Ore.	1420	1-1.25
KFKA	Greeley, Colo.	880	5-1	KMBC	**Kansas City, Mo. (1-5 kw.)	950	1-2.5	KXO	El Centro, Calif.	1500	.1
KFKU	Lawrence, Kans.	1220	1-5	KMED	Medford, Ore.	1310	1-1.25	KXRO	Aberdeen, Wash.	1310	.1
KFNF	Shenandoah, Iowa	890	5-1	KMJ	Fresno, Calif.	580	5-1	KXYZ	Houston, Tex.	1440	5-1
KFOR	Lincoln, Nebr.	1210	1-1.25	KMLB	Monroe, La.	1200	.1	KYA	San Francisco, Calif.	1230	1
KFOX	Long Beach, Calif.	1250	1	KMMJ	Clay Center, Nebr.	740	1	KYW	Philadelphia, Pa.	1020	10
KFPL	**Dublin, Tex. (1-1.25 kw.)	1310	.1	KMO	Tacoma, Wash.	1330	.25	WAAB	Boston, Mass.	1410	.5
KFPM	Greenville, Tex.	1310	.015	KMOX	St. Louis, Mo.	1090	50	WAAC	Chicago, Ill.	920	.5
KFPW	Ft. Smith, Ark.	1210	.1	KMPC	Beverly Hills, Calif.	710	.5	WAAT	Jersey City, N. J.	940	.5
KFPY	Spokane, Wash.	1340	1	KMTR	Los Angeles, Calif.	570	1	WAAB	Omaha, Nebr.	660	.5
KFQD	Anchorage, Alaska	780	25	KNOW	Austin, Tex.	1500	1	WBAB	New York, N. Y.	860	50
KFRC	**San Francisco, Calif. (1-5 kw.)	610	1	KNEL	Brady, Tex.	1500	1	WBBI	Bangor, Me.	1200	.1
KFRD	Longview, Tex.	1370	.1	KNK	Los Angeles, Calif.	1050	50	WBVB	Albany, N. Y.	1370	.1
KFRU	Columbia, Mo.	630	5-1	KOA	Denver, Colo.	830	50	WBVC	Waco, Tex.	1420	.1
KFSB	San Diego, Calif.	600	1	KOAC	Corvallis, Ore.	550	1	WBWC	Tallmadge, Ohio	1320	1-2.5
KFSG	Los Angeles, Calif.	1120	5-1	KOBE	Palestine, Tex. (C. P.)	1420	.1	WBWF	**Dothan, Ala.(1-1.25kw.)	1370	.1
KFUO	Clayton, Mo.	550	.5-1	KOBN	Albuquerque, N. Mex.	1180	10	WBWG	Presque Isle, Me.	1420	.1
KFVD	Los Angeles, Calif.	1000	.25	KOH	Reno, Nev.	1380	.5	WBWM	Anderson, S. C.	1200	.1
KFVS	Cape Girardeau, Mo.	1210	1-1.25	KOIL	Council Bluffs, Iowa	1260	1-2.5	WBWN	Columbus, Ohio	640	.5
KFWB	Hollywood, Calif.	950	1-2.5	KOIN	Portland, Ore.	940	1-5	WBWA	Mobile, Ala.	1380	5-1
KFXD	Nampa, Ida.	1200	1-1.25	KOL	Seattle, Wash.	1270	1-2.5	WBWB	Zanesville, Ohio	1210	.1
KFXJ	Grand Junction, Colo.	1200	1-1.25	KOMA	Oklahoma City, Okla.	1480	5	WBWL	Lafayette, Ind.	1310	.1
KFXM	San Bernardino, Calif.	1210	.1	KOMO	**Seattle, Wash.(1-5)	920	1	WBWP	Birmingham, Ala.	1140	5
KFXR	Oklahoma City, Okla.	1310	1-1.25	KONO	San Antonio, Tex.	1370	.1	WBWR	Brooklyn, N. Y.	1400	.5
KFYV	Lubbock, Tex.	1310	1-1.25	KOOS	Marshfield, Ark.	1200	.25	WBWS	Grand Rapids, Mich.	1270	.5
KFYR	Bismarck, N. Dak.	550	1-5	KORE	Eugene, Ore.	1420	.1	WBWT	Waterbury, Conn.	1190	.1
KGA	Spokane, Wash.	900	1-2.5	KOTN	Pine Bluff, Ark.	1500	1	WBWA	Louisville, Ky.	940	1
KGAR	Tucson, Ariz.	1370	1-1.25	KOY	Phoenix, Ariz.	1390	5-1	WBWB	Zarephath, N. J.	1350	5-1
KGB	**San Diego, Calif. (1-2.5 kw.)	1330	1	KPAC	Port Arthur, Tex.	1260	.5	WBWC	Hazleton, Pa.	1420	.1
KGBU	Ketchikan, Alaska	900	.5	KPJM	Prescott, Ariz.	1500	.1	WBWA	West Lafayette, Ind.	890	5-1
KGBX	*Springfield, Mo. (1230.5)	1310	1	KPLC	Lake Charles, La.	1500	1	WBAL	*Baltimore, Md. (760 kc., 2.5 kw.)	1060	10
KGBZ	York, Nebr.	930	1-2.5	KPO	San Francisco, Calif.	680	50	WBAP	Fort Worth, Tex.	800	50
KGCA	Decorah, Iowa	1270	.1	KPOF	Denver, Colo.	880	.5	WBAX	Wilkes-Barre, Pa.	1210	.1
KGCU	Mandan, N. Dak.	1240	.25	KPPC	Pasadena, Calif.	1210	.05	WBBC	Brooklyn, N. Y.	1400	.5
KGCV	Wolf Point, Mont.	1310	1-1.25	KPPK	Wenatchee, Wash.	1500	1-1.25	WBBL	Richmond, Va.	1210	.1
KGDE	Fergus Falls, Minn.	1200	1-1.25	KPVC	Houston, Tex.	920	1-5	WBBS	Chicago, Ill.	770	50
KGDM	**Stockton, Calif. (1 kw.)	1100	.25	KQV	Pittsburgh, Pa.	1380	.5	WBBS	Brooklyn, N. Y.	1300	1
KGDY	Huron, S. Dak.	1340	.25	KRE	San Jose, Calif.	1010	5-1	WBBS	Ponca City, Okla.	1200	.1
KGEK	Sterling, Colo.	1200	.1	KREG	Berkeley, Calif.	1370	1-1.25	WBBS	Bay City, Mich.	1410	.5
KGER	Long Beach, Calif.	1360	1	KRGV	Santa Ana, Calif.	1500	1	WBBS	Buffalo, N. Y.	900	1
KGEZ	Kalispell, Mont.	1310	.1	KRKO	Weslaco, Tex.	1260	.5	WBBS	Marquette, Mich.	1310	1
KGFV	Shawnee, Okla.	1420	.1	KRKL	Los Angeles, Calif.	1120	5-1	WBBS	Huntsville, Ala.	1200	.1
KGFG	Oklahoma City, Okla.	1370	.1	KRLD	Everett, Wash.	1370	.05	WBBS	Greensboro, N. C.	1440	5-1
KGFI	Corpus Christi, Tex.	1500	1-1.25	KRLH	Lewiston, Ida.	1420	1	WBBS	New Orleans, La.	1200	.1
KGFL	Los Angeles, Calif.	1200	.1	KRMD	Dallas, Tex.	1040	10	WBBS	Columbus, Ohio	1430	5-1
KGFK	Moorhead, Minn.	1500	.1	KRML	Midland, Tex. (C. P.)	1420	.1	WBBS	New York, N. Y.	1350	.25
KGFL	Roswell, N. Mex.	1370	.1	KRND	Shreveport, La.	1310	.1	WBBS	Buffalo, N. Y. (C. P.)	1370	1-1.25
KGFV	Kearney, Nebr.	1310	.1	KRNT	Roseburg, Ore. (C. P.)	1500	.1	WBBS	See WABC		
KGFY	Pierre, S. Dak.	630	.2	KRRT	Des Moines, Iowa	1320	5-1	WBBS	**Terre Haute, Ind. (1-1.25 kw.)	1310	.1
KGGC	San Francisco, Calif.	1420	.1	KROC	Rochester, Minn.	1310	.1	WBBS	Red Bank, N. J.	1210	.1
KGGF	Coffeyville, Kans.	1010	1	KROW	Oakland, Calif.	930	1	WBBS	Birmingham, Ala.	930	1
KGGM	Albuquerque, N. Mex.	1230	.25-.5	KRSC	Seattle, Wash.	1120	.1	WBBS	Wilkes-Barre, Pa.	1310	.1
KGHF	Pueblo, Colo.	1320	.5	KSCJ	Manhattan, Kans.	580	5-1	WBBS	Needham, Mass.	920	.5
KGHI	Little Rock, Ark.	1200	1-1.25	KSD	Sioux City, Iowa	1330	1-2.5	WBBS	Charlotte, N. C.	1080	50
KGHL	*Billings, Mont. 780	950	1-2.5	KSEI	**St. Louis, Mo. (1-5 kw.) (*1 kw.)	550	5-1	WBBS	Danville, Va.	1370	5A-25
				KSFO	Pocatello, Ida.	900	.25-.5	WBBS	Boston, Mass.	990	50
					San Francisco, Calif.	560	1				

All station listings and maps supplied through courtesy of Radio News.

Call	Location	kc.	kw.	Call	Location	kc.	kw.	Call	Location	kc.	kw.
WBZA	Boston, Mass.	990	1	WHIO	Dayton, Ohio	1260	1	WNBH	New Bedford, Mass.	1310	1-2.5
WCAC	Storrs, Conn.	600	.5	WHIS	Bluefield, W. Va.	1410	.25-5	WNBK	Memphis, Tenn.	1430	.5-1
WCAD	Canton, N. Y.	1220	.5	WHJB	Greensburg, Pa.	620	.25	WNBX	Springfield, Vt.	1260	1
WCAE	**Pittsburgh, Pa. (1-5 kw.)	1220	1	WHK	Cleveland, Ohio	1390	1-2.5	WNBZ	Saranac Lake, N. Y.	1290	.1
WCAL	Northfield, Minn.	1250	1-2.5	WHN	**New York, N. Y. (1-5 kw.)	1010	1	WNEL	San Juan, Puerto Rico	1290	.5
WCAM	Camden, N. J.	1280	.5	WHO	Des Moines, Iowa	1000	50	WNEW	Newark, N. J.	1250	1-2.5
WCAP	Baltimore, Md.	600	.5-1	WHOP	Jersey City, N. J.	1450	.25	WNOX	*Knoxville, Tenn. (560 kc.)	1010	1-2
WCAT	Aabury Park, N. J.	1280	.5	WHQ	Harrisburg, Pa.	1430	.5-1	WNRA	Sheffield, Ala.	1420	.1
WCAU	Rapid City, S. Dak.	1200	.1	WHR	**Madison, Wis. (1-5kw.)	1280	.1	WNRJ	Newport, R. I. (C.P.)	1200	1-1.25
WCAX	Philadelphia, Pa.	1170	50	WHW	Glenside, Pa.	970	.1	WNYC	New York, N. Y.	810	1
WCAY	Burlington, Vt.	1200	.1	WHX	Jackson, Mich.	1370	.1-2.5	WOAI	San Antonio, Tex.	1190	50
WCBA	Carthage, Ill.	1070	.1	WHY	Poynette, Wis.	1210	.1-2.5	WOC	Davenport, Iowa	1370	1-1.25
WCBB	Allentown, Pa.	1440	.5	WIB	Topeka, Kans.	580	1-5	WOCL	Jamestown, N. Y.	1210	.05
WCBD	Waukegan, Ill.	1080	.5	WIBX	Utica, N. Y.	1200	1-3	WOI	Ames, Iowa	640	5
WCBS	Baltimore, Md.	1370	1-1.25	WIC	Bridgeport, Conn.	600	.5-1	WOKO	Albany, N. Y.	1430	.5-1
WCCT	Springfield, Ill.	1420	.1	WICD	St. Louis, Mo.	1200	1-1.25	WOL	Washington, D. C.	1310	.1
WCDF	Minneapolis, Minn.	810	50	WIL	Urbana, Ill.	890	.25-1	WOMT	Manitowoc, Wis.	1210	.1
WCFL	Chicago, Ill.	970	.5	WILM	Wilmington, Del.	1420	.1	WOOD	Grand Rapids, Mich.	1270	.5
WCFS	Charleston, W. Va.	580	.5-1	WIN	Gary, Ind.	560	1-2.5	WOPI	Bristol, Tenn.	1500	.1
WCFT	Covington, Ky.	1490	5	WINS	New York, N. Y.	1180	1	WOR	Newark, N. J.	710	50
WCGL	Janerville, Wis.	1200	.1	WIOT				WORC	Worcester, Mass.	1280	.5
WCHE	Joliet, Ill.	1310	.1	WJBF				WORK	York, Pa.	1320	1
WCHE	Ashland, Ky.	1310	.1	WJP	Miami, Fla.	1300	1	WOS	Jefferson City, Mo.	630	.5
WCIN	Brooklyn, N. Y.	1500	1-1.25	WJQ	*Philadelphia, Pa. (1kw.)	610	.5	WOSU	Columbus, Ohio	570	.75-1
WCIO	Pensacola, Fla.	1340	.5	WJR	Indianapolis, Ind.	1400	5-1	WOV	New York, N. Y.	1130	1
WCJ	Meridian, Miss.	880	.5-1	WJS	**Columbia, S. C. (560 1-5)	1010	.5-1	WOW	**Omaha, Nebr. (1-5 kw.)	590	1
WCJL	Columbus, Ohio	1210	.1	WJW	Milwaukee, Wis.	1120	.25-1	WOWO	Ft. Wayne, Ind.	1160	10
WCJM	Boston, Mass.	1120	.5	WJX	Johnstown, Pa.	1310	.1	WPAD	Paducah, Ky.	1420	1-1.25
WCJN	Cincinnati, Ohio	1200	1-1.25	WJY	Norfolk, Nebr.	1060	1	WPAR	Parkersburg, W. Va.	1420	.1
WCJP	Chicago, Ill.	1210	.1	WJZ	**Providence, R.I. (.5kw.)	890	.25-5	WPAX	**Thomasville, Ga. (1-1.25 kw.)	1210	.1
WCJQ	Charleston, S. C.	1360	.5-1	WKA	Pittsburgh, Pa.	1290	1-2.5	WPAY	Portsmouth, Ohio	1370	.1
WCJH	Portland, Me.	940	1-2.5	WKB	**Jacksonville, Fla. (1-5 kw.)	900	1	WPEN	Philadelphia, Pa.	920	.25-5
WCJG	*Tampa, Fla. (1-2.5kw.)	1220	1	WJB	Cleveland, Ohio	610	.5	WPFB	Hattiesburg, Miss.	1370	.1
WCJF	Kansas City, Mo.	610	1-5	WJC	Bloomington, Ill.	1200	.1	WPG	Atlantic City, N. J.	1100	5
WCJE	El Paso, Tex.	1310	.1	WJD	Detroit, Mich.	1500	1-1.25	WPHR	Petersburg, Va.	880	.5
WCJH	Philadelphia, Pa.	1370	1-1.25	WJE	Decatur, Ill.	1200	.1	WPRO	Providence, R. I.	630	.25
WCJG	Fargo, N. Dak.	940	1-5	WJF	Baton Rouge, La.	1420	.1	WPRP	Ponce, Puerto Rico (C.P.)	1420	1-1.25
WCJH	Roanoke, Va.	930	1	WJG	Gastonia, N. C. (C. P.)	1420	.1	WPTF	Raleigh, N. C.	680	1-5
WCJH	*Orlando, Fla. (1 kw.)	580	.25	WJH	New Orleans, La.	1120	.1	WQAM	Miami, Fla.	560	1
WCJH	Wilmington, Del.	1200	.25-5	WJI	Gadsden, Ala.	1210	1-2.5	WQAN	Scranton, Pa.	880	.25
WCJH	Waterbury, Vt.	550	.5	WJJ	Jackson, Miss.	1270	1-2.5	WQBC	Vicksburg, Miss.	1360	.1
WCJH	Minneapolis, Minn.	1180	1-5	WJK	Hagerstown, Md.	1210	.1	WQDM	St. Albans, Vt.	1370	.1
WCJH	Durham, N. C.	1500	.1	WJM	Lansing, Mich.	1210	1-1.25	WRAC	Williamsport, Pa.	1370	1-1.25
WCJH	Chattanooga, Tenn.	1280	1-5	WJN	Chicago, Ill.	1130	20	WRAW	Reading, Pa.	1310	.1
WCJH	Hartford, Conn.	1330	1-2.5	WJO	Ironwood, Mich.	1420	.1	WRAX	Philadelphia, Pa.	920	.25-5
WCJH	New Orleans, La.	1250	1	WJP	Detroit, Mich.	750	50	WRBL	Columbus, Ga.	1200	1
WCJH	**Tuscola, Ill. (1020 .25)	1070	.1	WJQ	Alexandria, Va.	1460	10	WRBX	Roanoke, Va.	1410	.25-5
WEAF	New York, N. Y.	660	50	WJR	Oglethorpe Univ., Ga.	1370	.1	WRC	Washington, D. C.	950	.5-1
WEBC	Providence, R. I.	780	.5	WJS	Akron, Ohio	1210	1-1.25	WRDO	Augusta, Me.	1370	.1
WEBO	Superior, Wis.	1290	1-5	WJT	New York, N. Y.	760	50	WRDW	Augusta, Ga.	1500	1
WEBS	Harrisburg, Ill.	1210	1-1.25	WJU	San Juan, Puerto Rico	1240	1	WRFC	Memphis, Tenn.	600	1-2.5
WEBS	Buffalo, N. Y.	1310	1-1.25	WKQ	East Lansing, Mich.	1040	1	WRGN	Lawrence, Kans.	1220	1-5
WEBS	Chicago, Ill.	1210	.1	WKB	East Dubuque, Ill.	1500	1-1.25	WRGA	Rome, Ga.	1500	1-1.25
WEBS	Rocky Mount, N. C.	1420	.1	WKB	Indianapolis, Ind.	1400	.5-1	WRJN	Racine, Wis.	1370	.1
WEBS	Boston, Mass.	590	1	WKB	La Crosse, Wis.	1380	1	WRK	Rockford, Ill.	1410	.5
WEBS	Reading, Pa.	830	1	WKB	Cicero, Ill.	1420	.5	WROL	Knoxville, Tenn.	1310	1-1.25
WEBS	Charlottesville, Va.	1420	1-1.25	WKB	Youngstown, Ohio	570	.5	WRR	Dallas, Tex.	1280	.5
WEBS	Cicero, Ill.	1420	.1	WKB	Harrisburg, Pa.	1200	1-1.25	WRUF	Gaineville, Fla.	830	5
WEBS	New Haven, Conn.	900	.5	WKB	Richmond, Ind.	1500	1	WRVA	Richmond, Va.	1110	5
WEBS	Battle Creek, Mich.	1420	.1	WKB	Buffalo, N. Y.	1480	5	WSAI	Cincinnati, Ohio	1330	1-2.5
WEBS	Milwaukee, Wis. (C.P.)	1310	.1	WKB	Buffalo, N. Y.	1480	5	WSAJ	Grove City, Pa.	1310	.1
WEBS	Chicago, Ill.	870	50	WKB	Buffalo, N. Y.	1480	5	WSAN	Allentown, Pa.	1440	.25-5
WEBS	Elmira, N. Y.	1040	1	WKB	Buffalo, N. Y.	1480	5	WSAR	Fall River, Mass.	1450	.25
WEBS	New York, N. Y.	1300	1	WKB	Buffalo, N. Y.	1480	5	WSAZ	Huntington, W. Va.	1190	1
WEBS	St. Louis, Mo.	760	1	WKB	Buffalo, N. Y.	1480	5	WSAY	Rochester, N. Y. (C.P.)	1210	1
WEBS	Royal Oak, Mich.	1310	.05	WKB	Buffalo, N. Y.	1480	5	WSB	Atlanta, Ga.	740	50
WEBS	Dallas, Texas	800	50	WKB	Buffalo, N. Y.	1480	5	WSBC	Chicago, Ill.	1210	.1
WEBS	New York, N. Y.	1300	1	WKB	Buffalo, N. Y.	1480	5	WSBT	South Bend, Ind.	1360	.5
WEBS	South Bend, Ind.	1200	.1	WKB	Buffalo, N. Y.	1480	5	WSFA	Montgomery, Ala.	1410	.5-1
WEBS	White Plains, N. Y.	1210	.1	WKB	Buffalo, N. Y.	1480	5	WSGN	Birmingham, Ala.	1310	1-1.25
WEBS	**Greenville, S. C. (1-5 kw.)	1300	1	WKB	Buffalo, N. Y.	1480	5	WSIX	Springfield, Tenn.	1210	.1
WFBB	Altoona, Pa.	1310	.1	WKB	Buffalo, N. Y.	1480	5	WSJS	Winston-Salem, N. C.	1310	.1
WFBL	Syracuse, N. Y.	1360	1-5	WKB	Buffalo, N. Y.	1480	5	WSM	Nashville, Tenn.	650	50
WFBM	Indianapolis, Ind.	1230	1	WKB	Buffalo, N. Y.	1480	5	WSMB	New Orleans, La.	1320	1
WFBR	Baltimore, Md.	1270	.5	WKB	Buffalo, N. Y.	1480	5	WSMK	Dayton, Ohio	1380	.2
WFDF	Flint, Mich.	1310	.1	WKB	Buffalo, N. Y.	1480	5	WSOC	Charlotte, N. C.	1210	1-1.25
WFEE	Manchester, N. H.	1340	.5-1	WKB	Buffalo, N. Y.	1480	5	WSPA	Spartanburg, S. C.	920	1
WFEL	Philadelphia, Pa.	560	.5-1	WKB	Buffalo, N. Y.	1480	5	WSPD	Toledo, Ohio	1340	1-2.5
WFLA	Clearwater, Fla.	620	1-5	WKB	Buffalo, N. Y.	1480	5	WSUI	Iowa City, Iowa	880	.5-1
WFSN	Frederick, Md. (C. P.)	900	.5	WKB	Buffalo, N. Y.	1480	5	WSVA	Harrisonburg, Va.	550	.5
WFMD	Lancaster, Pa.	1500	1-1.25	WKB	Buffalo, N. Y.	1480	5	WSVS	Buffalo, N. Y.	1370	.05
WFAL	Cleveland, Ohio	1450	.5-1	WKB	Buffalo, N. Y.	1480	5	WSYB	Rutland, Vt.	1500	.1
WFBB	Freeport, N. Y.	1210	.1	WKB	Buffalo, N. Y.	1480	5	WSYR	Syracuse, N. Y.	570	.25
WFBB	Evansville, Ind.	630	.5	WKB	Buffalo, N. Y.	1480	5	WTAD	Quincy, Ill.	900	.5
WFBB	*Scranton, Pa. (5 kw.)	880	.25	WKB	Buffalo, N. Y.	1480	5	WTAG	Worcester, Mass.	580	.5
WGCM	**Gulfport, Miss. (120 .5)	1210	1-1.25	WKB	Buffalo, N. Y.	1480	5	WTAL	Tallahassee, Fla.	1310	.1
WGES	Chicago, Ill.	1360	.5-1	WKB	Buffalo, N. Y.	1480	5	WTAM	Cleveland, Ohio	1070	50
WGH	Newport News, Va.	1310	1-1.25	WKB	Buffalo, N. Y.	1480	5	WTAQ	Eau Claire, Wis.	1330	1
WGL	Ft. Wayne, Ind.	1370	.1	WKB	Buffalo, N. Y.	1480	5	WTAR	Norfolk, Va.	780	.5-1
WGN	Chicago, Ill.	720	50	WKB	Buffalo, N. Y.	1480	5	WTAW	College Station, Tex.	1120	.5
WGNV	Chester Townp., N. Y.	1210	.1	WKB	Buffalo, N. Y.	1480	5	WTAX	Springfield, Ill.	1210	.1
WGPC	Albany, Ga.	1420	.1	WKB	Buffalo, N. Y.	1480	5	WTBO	Cumberland, Md.	800	.25
WGR	Buffalo, N. Y.	550	.1	WKB	Buffalo, N. Y.	1480	5	WTCT	Minneapolis, Minn.	1250	1-5
WGST	Atlanta, Ga.	890	.5-1	WKB	Buffalo, N. Y.	1480	5	WTEL	Philadelphia, Pa.	1310	.1
WGY	Schenectady, N. Y.	790	50	WKB	Buffalo, N. Y.	1480	5	WTFI	Athens, Ga.	1450	.5
WHA	Madison, Wis.	940	2.5	WKB	Buffalo, N. Y.	1480	5	WTIC	*Hartford, Conn. (1040 kc.)	1060	50
WHAM	Rochester, N. Y.	1150	50	WKB	Buffalo, N. Y.	1480	5	WTJS	Jackson, Tenn.	1310	1-1.25
WHAS	Louisville, Ky.	820	50	WKB	Buffalo, N. Y.	1480	5	WTMJ	Milwaukee, Wis.	620	1-5
WHAT	Philadelphia, Pa.	1310	.1	WKB	Buffalo, N. Y.	1480	5	WTMV	East St. Louis, Ill.	1500	.1
WHAZ	Troy, N. Y.	1300	.5	WKB	Buffalo, N. Y.	1480	5	WTNJ	Trenton, N. J.	1280	.5
WHB	Kansas City, Mo.	860	1	WKB	Buffalo, N. Y.	1480	5	WTOT	Savannah, Ga.	1260	1
WHBB	Selma, Ala. (C.P.)	1500	.1	WKB	Buffalo, N. Y.	1480	5	WTRC	Elkhart, Ind.	1310	.05-1
WHBC	**Canton, Ohio. (1-1.25)	1200	.1	WKB	Buffalo, N. Y.	1480	5	WVFW	Brooklyn, N. Y.	1400	.5
WHBF	Rock Island, Ill.	1210	1-1.								

# BROADCAST STATIONS IN THE U. S.

(Revised by Frequency. Wavelength and Call Letters Included)

Compiled by John M. Borst

550 kc., 545.1 m. KFLO, KFVR, KOAC, KSD, WDEV, WGR, WKRC, WWSA.	940 kc., 319.0 m. KOIN, WAAT, WAVE, WCSH, WDAY, WHA.	1280 kc., 234.2 m. KFIB, WCAM, WCAP, WDOJ, WIBA, WORC, WRR, WTNJ.
560 kc., 535.4 m. KFDN, KIZ, KSFO, KWTO, WFIL, WIND, WLIT, *WNOX, WQAM.	950 kc., 315.6 m. KFWB, KGHL, KMBC, KHSL, WRC.	1290 kc., 232.4 m. KDYL, KLCN, *KTRH, WEBC, WJAS, WNBZ, WNEL.
570 kc., 526.0 m. KGKO, KMTR, KYI, WKBN, WMCA, WNAX, WOSU, WSYR, WSYU, WWCN.	960 kc., 312.3 m. - (Reserved for Canadian Stations)	1300 kc., 230.6 m. KALE, KFAC, KFH, KFJR, WBBR, WEVD, WFAB, WFBC, WHAZ, WIOD, WMBF.
580 kc., 516.9 m. KMJ, KSAC, WCHS, WDBO, WIBW, WTAG.	970 kc., 309.1 m. KJR, WCFL, WIBG.	1310 kc., 228.9 m. KCRJ, KFBK, KFPL, KFPN, KFRR, KFYO, KGBX, KGCC, KGEZ, KGFV, KINY, KIT, KIUF, KMED, KRMD, KROC, KTSN, KVOL, KXRO, WAML, WBOE, WBOW, WBRF, WCLS, WDAH, WEBR, **WEMP, WEKL, WFBG, WFDL, WGH, WHAT, WIAC, WLBC, WLNH, WMBO, WMFF, WNBH, WOL, WRAP, WROL, WSAJ, WSGN, WSJS, WTAL, WTEL, WJTS, WTRC.
590 kc., 508.2 m. KHQ, WEEI, WKZO, WOW.	980 kc., 305.9 m. KDKA.	1320 kc., 227.1 m. KGHE, KGMB, KID, KRNT, WADC, WORK, WSMB.
600 kc., 499.7 m. KFSD, WCAC, WCAO, WICC, WMT, WREC.	990 kc., 302.8 m. WBZ, WBZA.	1330 kc., 225.4 m. KGB, KMO, KSCJ, KTRH, WDRC, WSAI, WTAQ.
610 kc., 491.5 m. KFRC, WDAF, WIP, WJAY.	1000 kc., 299.8 m. KFVD, WHO.	1340 kc., 233.7 m. KGDY, KGNO, KGIR, WCOA, WEAJ, WSPD.
620 kc., 483.6 m. KGW, KTAR, WFLA, WSUN, WHJB, WLBZ, WTMJ.	1010 kc., 296.9 m. KGGF, KQW, WHN, WIS, WNAD, WNOX.	1350 kc., 222.1 m. KIDO, KWK, WAWZ, WBNX.
630 kc., 475.9 m. KFRU, KGFY, WGBF, WMAL, WOS, WPRO.	1020 kc., 293.9 m. KYW, **WDZ.	1360 kc., 220.4 m. KGER, WCSC, WFBL, WGES, WQBC, WSBT.
640 kc., 468.5 m. KFI, WAIU, WOJ.	1030 kc., 291.1 m. - (Reserved for Canadian Stations)	1370 kc., 218.8 m. KAST, KCRC, KELD, KERN, KFGO, KFJM, KFJZ, KFRO, KGAR, KGFG, KGFL, KGKL, KICA, KIUP, KLUF, KMAC, KONO, KRE, KRKO, KSLM, KUJ, KVL, KWKC, KWYO, WABY, WAGF, **WBNY, WBTM, WCBM, W DAS, WGL, WHBQ, WHDF, WIBM, WJTL, WLLH, WMBR, WMFD, WMFO, WOC, WPF, WQDM, WRAK, WRDO, WRJN, WSVS.
650 kc., 461.3 m. KIRO, WSM.	1040 kc., 288.3 m. KRLD, KTHS, *KWJJ, WESG, WKAR, *WTIC.	1380 kc., 217.3 m. KOH, KQV, WALA, WKBH, WNBC, WSMK.
660 kc., 454.3 m. WAAW, WEAJ.	1050 kc., 285.5 m. KFBI, KNX.	1390 kc., 215.7 m. KLRA, KOY, WHK.
670 kc., 447.5 m. WNAQ.	1060 kc., 282.8 m. KWJJ, WBAL, WJAG, WTIC.	1400 kc., 214.2 m. KLO, KTUL, WARD, WBBC, WIRE, WKBK, WLTH, WVFV.
680 kc., 440.9 m. KFEQ, KPO, WPTF.	1070 kc., 280.2 m. KJBS, WCAZ, WZD, WTAM.	1410 kc., 212.6 m. KGNC, WAAB, WBCM, WHBL, WHIS, WRBX, WRWK, WSFA.
690 kc., 434.5 m. - (Reserved for Canadian Stations)	1080 kc., 277.6 m. WBT, WCB, WMBI.	1420 kc., 211.1 m. KABC, KABR, KALB, KBPS, KCMC, KFIZ, KGFF, KGCC, KGIW, **KHBK, KIDW, KIUN, **KNET, KORE, KRLC, **KRLH, KUMA, KWBG, KXL, WACO, WAGM, WAZL, WCB, WEED, WEHC, WEHS, WELL, WGPC, WHDL, WHFC, WILM, WJBO, **WJBR, WJMS, WKBI, WLAP, WLB, WLEU, WMAS, WMBK, WMBH, WMFJ, WNRA, WPAD, WPAR, **WPRP.
700 kc., 428.3 m. WLW.	1090 kc., 275.1 m. KMOX.	1430 kc., 209.7 m. KECA, KGNF, KSO, WBNS, WHEC, WHP, WNBR, WOKO.
710 kc., 422.3 m. *KIRO, KMPC, WOR.	1100 kc., 272.6 m. KGDN, WLWL, WPG.	1440 kc., 208.2 m. KDFN, KLS, KXYZ, WBIG, WCBK, WMBD, WSA.
720 kc., 416.4 m. WGN.	1110 kc., 270.1 m. KSOO, WRVA.	1450 kc., 206.9 m. KTBS, WGAR, WHOM, WSAR, WTEI.
730 kc., 410.7 m. - (Reserved for Canadian Stations)	1120 kc., 267.7 m. KFIO, KFSG, KRKD, KRSC, WCOP, WDEL, **WGCM, WISN, WTAJ.	1460 kc., 205.4 m. KSTP, WJSV.
740 kc., 405.2 m. KMMJ, KTRB, WHEB, WSB.	1130 kc., 265.3 m. KSL, WJJD, WOV.	1470 kc., 204.0 m. KGA, WLAC.
750 kc., 399.8 m. KGU, WJR.	1140 kc., 263.0 m. KVOO, WAPI.	1480 kc., 202.6 m. KOMA, WKBW.
760 kc., 394.5 m. KXA, *WBAL, WEW, WJZ.	1150 kc., 260.7 m. WHAM.	1490 kc., 201.2 m. **KFBK, WCKY.
770 kc., 389.4 m. KFAB, WBBM.	1160 kc., 258.5 m. WOWO, WWVA.	1500 kc., 199.9 m. KDB, KGF, KGFK, KGB, KGKY, KNEL, KNOW, KOTN, KPJM, KPJC, KPO, KREG, **KRN, KXO, WCNW, WDNC, W GAL, **WHBB, WHEF, WJBK, WKBB, WKRV, WKZ, WKEU, WMBQ, WMEX, WNB, WOP, WRDW, WRGA, WSYB, WTMV, WWRL, WWSW.
780 kc., 384.4 m. KEHE, KELW, KFDY, KFQD, *KGHL, WEAN, WMC, WTAJ.	1170 kc., 256.3 m. WCAU.	
790 kc., 379.5 m. KGO, WGY.	1180 kc., 254.1 m. KEX, KOB, W DGY, WINS, WMAZ.	
800 kc., 374.8 m. WBAP, WFAA, WTBO.	1190 kc., 252.0 m. WATR, WQAI, WSAZ.	
810 kc., 370.1 m. WCCO, WNYC.	1200 kc., 249.9 m. KADA, KBTM, KFJB, KFXD, KFXJ, KGDE, KGEK, KGFJ, KGH, KMLB, KOOS, KSUN, KVOO, KWG, WABJ, WAIM, WBBZ, WBHS, WBNO, WCAT, WCAX, WCLO, WFAM, WHBC, WHBY, WIBX, WIL, WJBC, WJBL, WJBW, WKBO, WKJC, WLYA, WMFR, WMPK, **WNRI, WRBL, WAAE.	
820 kc., 365.6 m. WHAS.	1210 kc., 247.8 m. KASA, KDLR, **KDON, KFJI, KFOR, KFPV, KFS, KFXM, KGY, KIEM, KIUL, KPCC, KVSQ, KWEA, KWTN, WALR, WBAX, WBL, WBR, WCOL, WCRW, WEBQ, WEDC, WEAS, WGBB, WGMN, WGNV, WHBF, WHBU, WIBU, WJBY, WJEL, WJMI, WJW, WKOK, WMBG, WOL, WOMT, WPAX, WPAY, **WSAY, WSBC, WSIN, WSOC, WTAX.	
830 kc., 361.2 m. KOA, WEEU, WHDH, WRUF.	1220 kc., 245.8 m. KFKU, KTW, KWSC, WCAD, WCAE, WDAE, WREN.	
840 kc., 356.9 m. - (Reserved for Canadian Stations)	1230 kc., 243.8 m. *KGBX, KGGM, KYA, WFBM, WNAC.	
850 kc., 352.7 m. KIEV, KWKH, WWL.	1240 kc., 241.8 m. KGC, KLPM, KTAT, KTFI, WKAQ, WXYZ.	
860 kc., 348.6 m. WABC, WBOQ, WHB.	1250 kc., 239.8 m. KFOX, WCAL, WDSU, WHBI, WLB, WNEW, WTCN.	
870 kc., 344.6 m. WENR, WLS.	1260 kc., 238.0 m. KGO, KOIL, KPAC, KRGV, KUOA, KVOA, WHIO, WNBX, WTOC.	
880 kc., 340.7 m. KFKA, KIX, KPOF, WCOC, WGBI, WPHR, WQAN, WSUI.	1270 kc., 236.1 m. KGA, KOL, KFOR, KWLC, WASH, WFBR, WJDX, WOOD.	
890 kc., 336.9 m. KARK, KFNF, KFPY, KSEI, KUSD, WBAA, WGST, WILL, WJAR, WMMN.		
900 kc., 333.1 m. KGBU, KHJ, KSEI, WREN, WELI, **WFMD, WJAX, WKY, WLBI, WTAD.		
910 kc., 329.5 m. - (Reserved for Canadian Stations)		
920 kc., 325.9 m. KFEL, KOMO, KPRC, KVOD, WAAF, WBSO, WPN, WRAX, WSPA, WWJ.		
930 kc., 322.4 m. KGBZ, KMA, KROW, WBRC, WDBJ.		

\* By special authorization.  
\*\* Construction permit.

# SHORT-WAVE STATION LIST

(Wavelength, Frequency, Call, Location, Power and Service)

All Time is Eastern Standard Time

Meters	Kc.	Call	Location	Kw.	Service, etc.	Meters	Kc.	Call	Location	Kw.	Service, etc.
0.75	400,000		Storrs, Conn.	0.5	Exp.	16.23	18,480	HBH.	Prangins, Switzerland	20.0	Phone
3.49	86,000					16.27	18,440	HJY	Bogota, Colombia	....	Phone to CEC, LSR, OCL, WNC
3.49	86,000	W2XDV	New York, N. Y.	....	Exp.	16.30	18,400	PCK	Kootwijk, Holland	40.0	Phone to Bandoeng
4.88	61,500	W1XAV	Boston, Mass.	....	Exp.; relays WNAC	16.36	18,340	ZLW	Wellington, New Zealand	....	Phone to VK2ME, irr.
4.96	60,500		Chicopee Falls, Mass.	0.5	Exp.	16.38	18,310	PZS	Saigon, French Indo-China	15.0	Phone to Ste. Assise
5.41	55,500		Chicopee Falls, Mass.	0.5	Exp.	16.36	18,340	WLA	Lawrenceville, N. J.	20.0	Phone to WAS
5.41	55,500	W3XKA	Philadelphia, Pa.	....	Exp.; relays KYW	16.39	18,304	GAS	Rugby, England	....	Phone to GSA
5.41	55,500	W8XKA	Pittsburgh, Pa.	....	Exp.; relays KDKA	16.40	18,296	YVR	Maracay, Venezuela	....	Tests with DFB
6.08	49,500	KGXK	Waikiki, T. H.	0.2	Phone	16.42	18,270	ETA	Addis Ababa, Ethiopia	3.5	Phone; occ. bc.
6.20	48,400	KGXH	Ulupalakua, T. H.	0.2	Phone	16.44	18,240	PRO-FRE	Ste. Assise, France	30.0	Phone
6.34	47,300	KGXB	Manawahua, T. H.	0.2	Phone	16.46	18,220	KUS	Manila, P. I.	10.0	Phone
6.49	46,200	KGXO	Kalepa, T. H.	0.2	Phone	16.48	18,200	GAW	Rugby, England	15.0	Phone
7.25	41,400	LQL	Monte Grande, Argentina	0.1	Exp.	16.49	18,190	JVB	Nasaki, Japan	10.0	Phone to Java, P. I.; bc
7.31	41,040	LQL	Monte Grande, Argentina	0.1	Exp.	16.50	18,180	CGA	Drummondville, Canada	....	Phone to Rugby
7.32	41,000	W8XH	Buffalo, N. Y.	0.1	Exp.	16.55	18,135	PMC	Bandoeng, Java	40.0	Phone; sometimes bc.
7.32	41,000	W2XDV	New York, N. Y.	....	Exp.	16.56	18,115	LSY3	Buenos Aires, Argentina	10.0	Phone; sometimes bc.
7.37	40,700	KGXJ	Ulupalakua, T. H.	0.2	Phone	16.63	18,040	KQR	Bolinas, Calif.	40.0	Phone
7.40	40,600	W10XFPZ	Los Angeles, Calif.	0.1	Exp.	16.65	18,020	KQJ	Bolinas, Calif.	40.0	Transpacific phone
7.58	39,800	KGXA	Manawahua, T. H.	0.2	Phone	16.67	18,000	KQG	Bolinas, Calif.	40.0	Phone
7.60	39,473	TY4	La Turbie, France	0.1	Exp.	16.69	17,980	KQZ	Bolinas, Calif.	40.0	Phone
7.77	38,600		Chicopee Falls, Mass.	0.5	Exp.	16.72	17,940	WQB-			
7.77	38,600	W8XK	Buffalo, N. Y.	0.1	Exp.			W2XBJ	Rocky Point, N. Y.	40.0	Phone
7.77	38,600	W2XDV	New York, N. Y.	....	Exp.; relays WABC	16.74	17,920	WQF	Rocky Point, N. Y.	40.0	Phone
8.02	37,400	KGXC	Manawahua, T. H.	0.2	Phone	16.76	17,900	WLL	Rocky Point, N. Y.	20.0	Phone
9.30	36,144	TYZ	Calensana, France	0.1	Exp.	16.79	17,870	OEV	Vienna, Austria	....	Phone
8.43	35,600	W8XK	Buffalo, N. Y.	0.1	Exp.	16.85	17,800	PCV	Kootwijk, Holland	40.0	Phone to Java
8.43	35,600		Chicopee Falls, Mass.	0.5	Exp.	16.86	17,790	XGBB	Shanghai, China	....	Phone
8.43	35,600	W2XDV	New York, N. Y.	....	Exp.; relays WABC	16.85	17,790	GSQ	Daventry, England	15.0	Broadcast
8.43	35,600	W6XKG	Los Angeles, Calif.	....	Exp.; relays KGfJ	16.87	17,780	W3XAL	Bound Brook, N. J.	15.0	Broadcast
8.67	34,600	W10XFPZ	Los Angeles, Calif.	0.1	Exp.	16.87	17,780	W9XAA	Chicago, Ill.	0.5	Exp.
9.50	31,600		Chicopee Falls, Mass.	0.5	Exp.	16.87	17,780	W8XK	Pittsburgh, Pa.	40.0	Be.; relays KDKA
9.50	31,600	W9XPD	St. Louis, Mo.	0.1	Exp.; relays KSD	16.88	17,775	PHI	Huisen, Holland	23.6	Broadcast
9.50	31,600	W2XDV	New York, N. Y.	....	Exp.; relays WABC	16.89	17,760	DJE	Zeesen, Germany	8.0	Broadcast
9.50	31,600	W8XK	Buffalo, N. Y.	0.1	Exp.; relays W8EN	16.89	17,760	W2XE	Wayne, N. J.	....	Be.; relays WABC
9.50	31,600	W8XAI	Rochester, N. Y.	....	Exp.; relays WHAM	16.90	17,750	IAC	Coltano, Italy	14.0	Phone; early mornings
9.50	31,600	W8XAZ	Milwaukee, Wis.	....	Exp.; relays WTMJ	16.91	17,740	HSP	Bangkok, Siam	20.0	Phone to JVG
9.50	31,600	W8XWJ	Detroit, Mich.	0.1	Exp.	17.00	17,640	GFVV-	S.S. Majestic	....	Phone
9.65	31,100	W10XFPZ	Los Angeles, Calif.	0.1	Exp.			GLSQ	S. S. Olympic	....	Phone
9.68	31,000		Chicopee Falls, Mass.	0.5	Exp.			GDLJ	S. S. Homeric	....	Phone
9.80	30,610	IAG	Golfo Aranci, Sardinia	....	Exp.			GTSB	S. S. Monarch of Bermuda	....	Phone
10.06	29,820	IAF	Fumicino, Italy	5.0	Exp.			GMBJ	S. S. Empress of Britain	....	Phone
11.49	28,100	GSK	Daventry, England	....	Broadcast	17.12	17,520	DFB	Nauen, Germany	7.2	Phone to YVH
13.45	22,300	GBU	Rugby, England	....	Phone	17.16	17,480	VWY	Kirkee, India	....	Phone to Rugby
13.82	21,550	XGBA	Shanghai, China	18.5	Broadcast	17.33	17,310	W3XAL	Bound Brook, N. J.	20.0	Exp.
13.93	21,540	W8XK	Pittsburgh, Pa.	40.0	Be.; relays KDKA	17.33	17,310	CZA	Drummondville, Canada	4.0	Phone to ships
13.93	21,540	VK3LR	Lyndhurst, Victoria, Australia	0.6	Broadcast	17.34	17,300	VF9BY	London, Ont., Canada	....	Exp.; irr.
13.93	21,530	GSJ	Daventry, England	15.0	Broadcast	17.38	17,260	DAF	Norddeich, Germany	5.0	Phone
13.94	21,520	W2XE	Wayne, N. J.	....	Be.; relays WABC	17.51	17,130	HAS5	Szekesfehervar, Hungary	20.0	Broadcast
13.97	21,470	GSH	Daventry, England	20.0	Broadcast	17.56	17,080	GBC	Ocean Gate, N. J.	20.0	Phone
13.98	21,460	W1XAL	Boston, Mass.	5.0	Broadcast	17.74	16,910	JZD	Rugby, England	5.0	Phone
14.01	21,420	WKK	Lawrenceville, N. J.	20.0	Phone to LSN	18.00	16,665	DAN	Nasaki, Japan	10.0	Phone to ships
14.19	21,140	KBI	Manila, P. I.	10.0	Phone	18.07	16,600	DOAI	Norddeich, Germany	....	Tests with ships
14.20	21,130	LSM	Buenos Aires, Argentina	....	Phone, broadcast	18.23	16,460	DHEY	S. S. Europa	....	Phone to DAF & WOO
14.24	21,070	PSA	Marapicu, Brazil	10.0	Phone to WKK	18.37	16,330	VLK	S. S. Deutschland	....	Phone to DAF & WOO
14.25	21,060	WKA	Lawrenceville, N. J.	20.0	Phone to England	18.40	16,305	PCL	Sydney, Australia	18.0	Phone
14.25	21,060	KWN	Dixon, Calif.	20.0	Phone	18.44	16,270	WLK	Kootwijk, Holland	....	Phone to Bandoeng
14.27	21,020	LSN	Hurlingham, Argentina	....	Phone, broadcast	18.47	16,240	KTO	Lawrenceville, N. J.	20.0	Phone to Rugby
14.37	20,860	EHY	Madrid, Spain	7.5	Phone to Buenos Aires	18.50	16,214	F2R3	Manila, P. I.	40.0	Phone to Dixon
14.41	20,820	KSS	Bolinas, Calif.	40.0	Phone	18.56	16,182	PSA	Saigon, French Indo-China	15.0	Phone to Ste. Assise
14.44	20,780	KMM	Bolinas, Calif.	40.0	Phone	18.61	16,150	GBX	Marapicu, Brazil	10.0	Broadcast
14.47	20,730	LSY	Monte Grande, Argentina	10.0	Phone	18.61	16,120	IRY	Rugby, England	....	Phone to Sydney
14.51	20,680	LSX	Monte Grande, Argentina	12.0	Phone to U. S. A.; occ. bc.	18.71	16,080	KKP	Rome, Italy	20.0	Phone
			Hurlingham, Argentina	....	Phone to Europe; occ. bc.	18.77	15,985	KQH	Kahuku, T. H.	40.0	Phone to KWO
14.51	20,680	LSN	Hurlingham, Argentina	....	Phone to Europe; occ. bc.	18.81	15,950	PLG	Kahuku, T. H.	40.0	Phone
14.56	20,610	PMB	Bandoeng, Java	60.0	Phone to PCK	18.89	15,900	FTK	Bandoeng, Java	....	Phone; afternoons
14.72	20,380	GBA	Rugby, England	15.0	Phone to ships & LSN	18.92	15,855	CEC	Ste. Assise, France	30.0	Phone to Saigon
14.90	20,140	DWG	Nauen, Germany	7.2	Phone	18.93	15,860	JVD	La Granja, Chile	0.8	Phone
14.92	20,100	WQY	Rocky Point, N. Y.	40.0	Phone	19.04	15,780	JYT	Nasaki, Japan	....	Phone to Shanghai
14.97	20,040	OPL	Leopoldville, Belgian Congo	9.0	Phone to ORG. mornings	19.05	15,750	JJA	Kemikawa-Cho, Japan	5.0	Be.; exp.
					Phone to S. America	19.13	15,680	ZIA	Tyureki, Formosa	10.0	Phone to Nazaki
					Phone to Calif.	19.16	15,660	JVE	Tanjoehi, Manchukuo	20.0	Phone to Nazaki
14.99	20,020	DHO	Nauen, Germany	7.2	Phone to S. America				Nasaki, Japan	10.0	Phone to PLE, P.I.; occ. bc.
15.02	19,980	KAX	Manila, P. I.	20.0	Phone	19.21	15,620	JVF	Nasaki, Japan	20.0	Phone to KWU; occ. bc.
15.04	19,950	DIH	Nauen, Germany	7.2	Phone	19.35	15,508	CMA3	Havana, Cuba	....	Tests, irr.
15.08	19,900	LSG	Monte Grande, Argentina	7.0	Phone	19.37	15,490	KEM	Bolinas, Calif.	40.0	Phone
15.11	19,850	WMI	Deal, N. J.	....	Phone	19.39	15,475	KEL	Bolinas, Calif.	40.0	Phone
15.12	19,840	FTD	Ste. Assise, France	....	Phone	19.40	15,460	KKR	Bolinas, Calif.	40.0	Phone
15.14	19,820	WKN	Lawrenceville, N. J.	20.0	Phone to England	19.43	15,440	PRADO	Bolinas, Calif.	40.0	Phone
15.21	19,720	EAQ	Madrid, Spain	10.0	Phone to Latin America	19.44	15,430	KWE	Riobamba, Ecuador	....	Phone; bc.
15.24	19,680	CEC	La Granja, Chile	4.0	Phone to LSR, HJY	19.45	15,420	KWO	Bolinas, Calif.	40.0	Phone
15.31	19,600	LSF	Monte Grande, Argentina	7.0	Phone				Dixon, Calif.	20.0	Phone to Hawaii and Manila
15.37	19,520	IRW	Rome, Italy	20.0	Phone to S. America	19.52	15,370	HAS3	Szekesfehervar, Hungary	20.0	Broadcast
15.50	19,355	FTM	Ste. Assise, France	30.0	Phone	19.53	15,360	DJT	Zeesen, Germany	....	Exp.
15.51	19,345	PMA	Bandoeng, Java	40.0	Phone; sometimes bc.	19.54	15,355	KWU	Dixon, Calif.	20.0	Phone to Hawaii
15.58	19,260	PPU	Sepetiba, Brazil	13.5	Phone to Ste. Assise	19.56	15,340	DJR	Zeesen, Germany	50.0	Broadcast
15.61	19,220	WKF	Lawrenceville, N. J.	20.0	Phone to England	19.58	15,340	CT1AA	Lisbon, Portugal	2.0	Broadcast
15.62	19,200	ORG	Ruyselede, Belgium	8.0	Phone	19.57	15,330	W2KAD	Schenectady, N. Y.	20.0	Broadcast; relays WGY
15.75	19,050	JVC	Nasaki, Japan	....	Phone; sometimes bc.	19.60	15,310	GSP	Daventry, England	....	Broadcast
15.77	19,020	WKW-				19.61	15,300	OXY	Skamlebaek, Denmark	....	Exp.
		W2XBJ	Rocky Point, N. Y.	....	Exp., mornings	19.60	15,300	CP7	La Paz, Bolivia	1.0	Phone
15.83	18,950	HBF	Prangins, Switzerland	20.0	Phone	19.62	15,290	LRU	Buenos Aires, Argentina	7.5	Be.; relays LR1
15.86	18,910	JVA	Nasaki, Japan	20.0	Phone to Europe; occ. bc.	19.63	15,280	DIQ	Zeesen, Germany	50.0	Broadcast
						19.65	15,270	WXE	Wayne, N. J.	15.0	Broadcast; relays WABC
15.87	18,900	WDS	Rocky Point, N. Y.	....	Phone	19.66	15,260	GSI	Daventry, England	15.0	Broadcast
15.88	18,890	ZSS	Klippevel, S. Africa	5.0	Phone to Rugby	19.67	15,250	RIM	Tashkent, U. S. S. R.	....	Phone
15.91	18,860	WKM	Rocky Point, N. Y.	40.0	Phone	19.67	15,250	W1XAL	Boston, Mass.	5.0	Broadcast
15.93	18,830	PLE	Bandoeng, Java	40.0	Phone to Dixon & Namki	19.68	15,243	FVA	Pontoise, France	12.0	Broadcast
16.08	18,670	OCI	Lima, Peru	....	Phone	19.71	15,220	FCV	Huisen, Holland	20.0	Exp.
16.11	18,620	GAU	Rugby, England	15.0	Phone to WMI, VWY	19.72	15,210	W9XK	Pittsburgh, Pa.	40.0	Be.; relays KDKA
16.11	18,620	GBJ	Bodmin, England	....	Phone to Montreal	19.74	15,200	DJE	Zeesen, Germany	8.0	Broadcast
16.13	18,600	PDM	Kootwijk, Holland	40.0	Phone	19.75	15,190	VEBBA	Montreal, Que.	....	Broadcast
16.18	18,545	PCM	Kootwijk, Holland	40.0	Phone	19.76	15,180	GSO	Daventry, England	....	Broadcast

Meters	Kc.	Call	Location	Kw.	Service, etc.	Meters	Kc.	Call	Location	Kw.	Service, etc.
19.81	15,140	GSF	Daventry, England	15.0	Broadcast	25.38	11,820	GSN	Daventry, England	....	Broadcast
19.83	15,130	VE9DN	Montreal, Que.	....	Broadcast	25.40	11,810	I2R04	Rome, Italy	....	Broadcast
19.84	15,123	HVJ	Rome, Italy	10.0	Broadcast	25.40	11,810	CRCX	Toronto, Canada	....	Broadcast
19.85	15,110	DJL	Zeesen, Germany	5.0	Broadcast	25.42	11,801	OER3	Vienna, Austria	....	Broadcast
19.86	15,104	RAU	Tashkent, U. S. S. R.	20.0	Phone	25.42	11,800	CO6WR	Sancti Spiritus, Cuba	....	Broadcast
19.91	15,070	PSD	Maripicu, Brazil	12.0	Phone	25.43	11,795	DJO	Zeesen, Germany	....	Exp.
19.93	15,055	WNC	Hialeah, Florida	0.4	Phone	25.45	11,790	HH2T	Port-au-Prince, Haiti	....	Tests, irr.
19.95	15,040	RKI	Moscow, U. S. S. R.	20.0	Phone to WQG, mornings	25.45	11,790	TITR	San Jose, Costa Rica	....	Broadcast
20.00	15,000	WVW	Beltville, Md.	1.0	Freq; standard	25.46	11,790	W1XAL	Boston, Mass.	....	Broadcast
20.03	14,980	KAY	Manila, P. I.	40.0	Phone to Dixon	25.46	11,780	VE9DR	Montreal, Canada	....	Broadcast
20.08	14,940	HJA3	Barranquilla, Colombia	....	Phone to Colombia, Panama, Costa Rica	25.49	11,770	DJD	Zeesen, Germany	....	Exp.
20.09	14,930	HJB	Bogota, Colombia	....	Phone	25.51	11,760	XDA	Mexico, D. F., Mexico	....	Broadcast
20.12	14,910	JVG	Nasaki, Japan	10.0	Phone to Formosa; also bc.	25.53	11,750	GSD	Daventry, England	....	Broadcast
20.23	14,830	WKU-W2XBJ	Rocky Point, N. Y.	40.0	Tests, daytime	25.58	11,730	CJRX	Winnipeg, Canada	....	Exp.
20.55	14,800	JVH	Nasaki, Japan	....	Phone to Europe; bc. to N. America & Hawaii	25.57	11,730	PHI	Huisen, Holland	....	Broadcast
20.56	14,590	WMN	Lawrenceville, N. J.	20.0	Phone to England; daylight	25.60	11,720	FYA	Pontoise, France	....	Broadcast
20.64	14,535	HBJ	Prangins, Switzerland	20.0	Phone	25.63	11,710	HJ4ABA	Medellin, Colombia	....	Broadcast
20.65	14,530	LSN	Hurlingham, Argentina	....	Phone	25.68	11,680	KIO	Kahuku, T. H.	....	Phone to Bolinas
20.69	14,500	HPF	Panama City, Panama	0.25	Phone to WNC	25.65	11,695	YV2RC	Caracas, Venezuela	....	Broadcast
20.69	14,500	TGF	Guatemala City, Guat.	....	Phone to WNC	25.71	11,670	PPQ	Sepetiba, Brazil	....	Exp; irr., evenings
20.69	14,500	TIN	Cartago, Costa Rica	....	Phone, irr.	25.73	11,660	JVL	Nasaki, Japan	....	Phone to Formosa; bc.
20.72	14,480	LSN	Hurlingham, Argentina	....	Phone to WNC	25.88	11,595	VR4	Stony Hill, Jamaica	....	....
20.72	14,480	YNA	Managua, Nicaragua	....	Exp.	26.10	11,495	VIZ3	Fiakville, Australia	....	Phone to Drummondville
20.75	14,460	DZH	Zeesen, Germany	....	Phone to WNC	26.00	11,540	XGR	Shanghai, China	....	Phone
20.78	14,440	GBW	Rugby, England	15.0	Exp.	26.11	11,490	GBK	Bodmin, England	....	Phone
20.83	14,410	DIP	Zeesen, Germany	7.2	Exp.	26.15	11,470	IBDK	S. S. Elettra, Marconi's Yacht	....	Exp.
21.25	14,120	HJSABE	Calif, Colombia	....	Broadcast	26.46	11,340	DAN	Norden, Germany	....	Time signals; 7 a.m., 7 p.m.
21.54	13,950	YOI	Bucharest, Roumania	....	Broadcast	26.80	11,187	XAM	Merida, Yucatan	....	Phone
21.58	13,900	WQP	Rocky Point, N. Y.	....	Phone to RNE	26.83	11,180	CT3AQ	Funchal, Madeira	....	Broadcast
21.63	13,870	WYI	Rocky Point, N. Y.	....	Tests, irr.	27.17	11,040	HRW	Tegucigalpa, Honduras	....	Tests with HRY
21.72	13,811	SUZ	Abu Zabal, Egypt	10.0	Phone	27.27	11,000	PLP	Bandoeng, Java	....	Phone; occ. bc.
21.82	13,740	KKW	Bolinas, Calif.	....	Phone	27.27	11,000	XBQJ	Mexico, D. F., Mexico	....	Phone; works Hams, irr.
21.82	13,740	CGA	Drummondville, Que.	....	Phone	27.30	10,990	ZLT	Wellington, N. Z.	....	Phone to Australia, mornings
21.91	13,690	KKZ	Bolinas, Calif.	40.0	Phone	27.50	10,910	KTR	Manila, P. I.	....	Phone
21.92	13,685	HAT	Szekefehervar, Hungary	20.0	Broadcast	27.43	10,850	DFL	Nauen, Germany	....	Phone
22.00	13,635	SPW	Warsaw, Poland	20.0	Broadcast	27.68	10,840	KWV	Dixon, Calif.	....	Phone to Hawaii
22.04	13,610	JYK	Kemikawa-Cho, Japan	....	Bc. and tests	27.88	10,770	GBP	Rugby, England	....	Phone
22.08	13,591	GBC	Rugby, England	....	Phone to CGA & ships	27.93	10,740	JVM	Nasaki, Japan	....	Phone to U. S. A.; bc.; relays JOAK
22.08	13,585	GBB	Rugby, England	15.0	Phone	28.10	10,675	WNB	Lawrenceville, N. J.	....	Phone to Bermuda
22.12	13,560	JVI	Nasaki, Japan	10.0	Phone to Manchukuo; bc.	28.12	10,670	CBC	La Granja, Chile	....	Phone; also bc.
22.36	13,420	TIEP	San Jose, Costa Rica	....	Broadcast	28.14	10,660	JVN	Nasaki, Japan	....	Bc.; relays JOAK; phone
22.40	13,390	WMA	Lawrenceville, N. J.	20.0	Phone	28.25	10,620	WEF	Rocky Point, N. Y.	....	Phone to Europe
22.47	13,350	YVQ	Maracay, Venezuela	20.0	Phone	28.28	10,610	WEA	Rocky Point, N. Y.	....	Exp.
22.49	13,340	CGA	Drummondville, Canada	....	Phone	28.36	10,578	FYB	Paris, France	....	Time signals; 5:26 a.m., 6:26 p.m.
22.58	13,285	CGA3	Drummondville, Canada	15.0	Phone to ships	28.44	10,550	WOK	Lawrenceville, N. J.	....	Phone
22.66	13,240	KBJ	Manila, P. I.	40.0	Phone	28.48	10,535	JIB	Tyureki, Formosa	....	Phone to Japan
22.68	13,220	GFVW	S. S. Majestic	....	Phone	28.50	10,525	VLK	Sydney, Australia	....	Phone
		GLSQ	S. S. Olympic	....	Phone	28.76	10,430	YBG	Medan, Sumatra	....	Phone; occ. bc.
		GDL	S. S. Homeric	....	Phone	28.79	10,420	XGW	Shanghai, China	....	Phone
		GTSJ	S. S. Monarch of Bermuda	....	Phone	28.82	10,410	PDK	Kootwijk, Holland	....	Phone
		GMBJ	S. S. Empress of Britain	....	Phone	28.82	10,410	LSY	Monte Grande, Argentina	....	Phone
		GLRZ	S. S. Aquitania	....	Phone	28.82	10,410	KES	Bolinas, Calif.	....	Phone
		GBZW	S. S. Berengaria	....	Phone	28.85	10,400	KEZ	Dixon, Calif.	....	Phone
22.71	13,210	FNSK	S. S. Normandie	....	Phone	28.87	10,390	KER	Bolinas, Calif.	....	Phone
22.83	13,140	CWH	Cerrito, Uruguay	1.5	Phone	28.87	10,390	GBX	Rugby, England	....	Phone
22.89	13,105	IRJ	Rome, Italy	20.0	Phone	28.90	10,380	WCG	Rocky Point, N. Y.	....	Phone; Exp.
22.93	13,075	VP1A	Suva, Fiji Islands	....	Broadcast	28.92	10,375	JVO	Nasaki, Japan	....	Phone to Manchukuo; also bc.
22.99	13,050	IBEJ	S. S. Conte Rosso	....	Phone	28.98	10,350	LSX	Monte Grande; Argentina	....	Phone
		IBGI	S. S. Conte Verde	....	Phone	29.03	10,335	ZFD	St. George, Bermuda	....	Phone; mostly telegraph
		IBLI	S. S. Conte di Savoia	....	Phone	29.03	10,330	ORK	Ruyselede, Belgium	....	Broadcast
23.09	13,040	ICEJ	S. S. Rex	....	Phone	29.13	10,300	LSL3	Hurlingham, Argentina	....	Phone to Europe
		DOAI	S. S. Europa	....	Phone	29.16	10,290	DZC	Nauen, Germany	....	Exp.
		DOAH	S. S. Bremen	....	Phone	29.16	10,290	HPC	Panama City, Panama	....	Phone
		DDBR	S. S. Berlin	....	Phone	29.24	10,260	FSH	Bandoeng, Java	....	Phone; occ. bc.
		DDCP	S. S. Cap Polonio	....	Phone	29.34	10,220	PSN	Marapicu, Brazil	....	Phone
		DHEY	S. S. Deutschland	....	Phone	29.48	10,170	RIO	Baku, U. S. S. R.	....	Phone
		DHJZ	S. S. Hamburg	....	Phone	29.50	10,163	DOAI	S. S. Europa	....	Phone
		DHDL	S. S. Cap Arcona	....	Phone			DDBR	S. S. Bremen	....	Phone
		DHRL	S. S. New York	....	Phone			DDCP	S. S. Berlin	....	Phone
		DDFF	S. S. Reliance	....	Phone			DHEY	S. S. Cap Polonio	....	Phone
		DDFT	S. S. Oceana	....	Phone			DHJZ	S. S. Deutschland	....	Phone
23.04	13,020	JZE	Nasaki, Japan	10.0	Phone to ships	29.59	10,140	OPM	S. S. Hamburg	....	Phone
23.36	12,840	WOO	Ocean Gate, N. J.	20.0	Phone to ships	29.76	10,080	RIR	S. S. New York	....	Phone
23.38	12,830	CNR	Rabat, Morocco	12.0	Bc., Sundays	29.79	10,070	EHY	Madrid, Spain	....	Exp.
23.44	12,795	IAC	Coltano, Italy	52.0	Phone	29.81	10,065	JZB (TDE)	Kanjoshi, Manchukuo	....	Phone to JVO
23.47	12,780	GBC	Rugby, England	5.0	Phone	29.84	10,055	ZFB	St. George, Bermuda	....	Phone to WNB, day
23.54	12,745	DAF	Norddeich, Germany	5.0	Phone to ships	29.84	10,055	SUV	Abu Zabal, Egypt	....	Phone to GAA
23.66	12,680	YNE	Puerto Cabezas, Nic.	....	Tests	29.88	10,042	DZB (DJJ)	Zeesen, Germany	....	Exp.
24.20	12,396	CT1GO	Faredo, Portugal	7.0	Broadcast	30.00	10,000	WVW	Beltville, Md.	....	Standard frequency
24.33	12,300	ZLT	Wellington, N. Z.	....	Phone	30.01	9,990	KAZ	Manila, P. I.	....	Phone to PLV, mornings
24.40	12,295	ZWU	Wellington, N. Z.	15.0	Phone to Australia	30.09	9,964	LSL	Hurlingham, Argentina	....	Phone
24.41	12,290	GBU	Rugby, England	....	Phone	30.12	9,960	IRS	Rome, Italy	....	Phone
24.45	12,270	RKK	Moscow, U. S. S. R.	20.0	Phone	30.15	9,950	GCU	Rugby, England	....	Phone to U. S. A.
24.47	12,260	FTN	Ste. Assise, France	....	Phone	30.21	9,930	YBF	Medan, Sumatra	....	Phone
24.49	12,250	TYB	Pontoise, France	....	Phone to JVH & ships	30.21	9,930	HJY	Bogota, Colombia	....	Phone to OCI, CEC
24.49	12,250	GBS	Rugby, England	....	Phone	30.23	9,925	JDY	Dairen, Manchuria	....	Phone to Nasaki
24.52	12,235	TFJ	Reykjavik, Iceland	....	Broadcast	30.26	9,905	CGA5	Drummondville, Canada	....	Tests with Rugby
24.56	12,215	TYA	Paris, France	15.0	Phone	30.32	9,890	LSN2	Hurlingham, Argentina	....	Phone
24.61	12,190	YBJ	Medan, Sumatra	2.5	Phone	30.40	9,870	WON	Lawrenceville, N. J.	....	Phone to England
24.69	12,150	FQO, FQE	Ste. Assise, France	....	Phone	30.43	9,860	EAQ	Madrid, Spain	....	Broadcast
24.69	12,150	GBS	Rugby, England	15.0	Phone to U. S. A.	30.49	9,840	FTI	Ste. Assise, France	....	Phone
24.73	12,130	DZS	Zeesen, Germany	....	Phone	30.49	9,840	JYS	Kemikawa-Cho, Japan	....	Bc. and tests
24.73	12,130	DZE	Zeesen, Germany	....	Phone	30.50	9,830	LSI	Buenos Aires, Argentina	....	Phone
24.79	12,100	CJA6	Drummondville, Canada	15.0	Tests with VIY-VK3ME	30.52	9,830	IRM	Rome, Italy	....	Phone
24.83	12,082	CT1CT	Lisbon, Portugal	0.5	Broadcast	30.61	9,800	GCW	Rugby, England	....	Phone
24.88	12,060	PDV	Kootwijk, Holland	60.0	Phone	30.74	9,760	V1J	Sydney, Australia	....	Phone
24.93	12,035	DJK	Zeesen, Germany	7.2	Exp.	30.77	9,750	WOF	Lawrenceville, N. J.	....	Phone
24.94	12,030	HBO	Prangins, Switzerland	20.0	Phone	30.90	9,710	GCA	Rugby, England	....	Phone
24.96	12,020	VIY-VK3ME	Melbourne, Australia	....	Tests with Drummondville	31.00	9,677	CT1CT	Lisbon, Portugal	....	Broadcast
25.00	12,000	RW50	Moscow, U. S. S. R.	20.0	Broadcast	31.01	9,675	DZA (DJJ)	Zeesen, Germany	....	Phone
25.02	11,991	FZS2	Saigon, French Indo-China	15.0	Phone to FTK	31.06	9,660	CT1AA	Lisbon, Portugal	....	Broadcast
25.09	11,955	ETB	Addis Ababa, Ethiopia	3.5	Phone, c.w., bc.	31.12	9,640	YDB	Sourabaya, Java	....	Phone to GAA
25.11	11,950	KKQ	Bolinas, Calif.	40.0	Phone	31.12	9,635	HSP2	Bangkok, Siam	....	Broadcast
25.11	11,950	FTA	Ste. Assise, France	30.0	Phone to Saigon	31.18	9,620	DGU	Rome, Italy	....	Broadcast
25.26	11,880	FYA	Pontoise, France	....	Broadcast	31.25	9,600	CB960	Nauen, Germany	....	Phone to Egypt
25.26	11,880	W9XF	Chicago, Ill.	....	Bc.; relays WENR	31.25	9,600	XEFT	Santiago, Chile	....	Broadcast
25.27	11,870	W8XC	Pittsburgh, Pa.	40.0	Bc.; relays KDKA	31.25	9,600	LQA	Veracruz, Mexico	....	Broadcast
25.30	11,860	VE8CA	Calgary, Canada	....	Broadcast	31.25	9,600	LQA	Buenos Aires, Argentina	....	Phone
25.30	11,860	GSE	Daventry, England	20.0	Broadcast						
25.31	11,855	DJP	Zeesen, Germany	50.0	Broadcast						
25.34	11,840	KZRM	Manila, P. I.	6.0	Broadcast						
25.36	11,835	CHNX	Halifax, N. S.	....	Broadcast						
25.36	11,830	W2XE	Wayne, N. J.	5.0	Bc.; relays WABC						
25.36	11,330	W9XAA	Chicago, Ill.	0.5	Bc.; relays WCFL						

Meters	Kc.	Call	Location	Kw.	Service, etc.	Meters	Kc.	Call	Location	Kw.	Service, etc.
31.25	8,600	.....	Cartagena, Colombia	0.7		36.95	8,120	KTP	Manila, P. I.	40.0	Phone to Dixon, Calif.
31.27	8,565	HH3W	Port-au-Prince, Haiti	0.03	Broadcast	36.95	8,120	KAZ	Manila, P. I.	20.0	Phone to Dixon, Calif.
31.27	8,565	HBL	Geneva, Switzerland	18.0	Broadcast	37.14	8,078	TYB2	Paris, France	.....	Phone
31.28	8,590	VK2ME	Sydney, Australia	20.0	Bc., Sundays	37.41	8,035	CNR	Rabat, Morocco	12.0	Bc., Sundays
31.28	8,590	PCJ	Huisen, Holland	20.0	Broadcast	37.41	8,020	HSL	Bangkok, Siam	20.0	Phone
31.28	8,590	HPJ	Panama, Panama	0.16	Broadcast	37.59	7,980	VJL	Sydney, Australia	3.5	Phone to Java
31.28	8,590	W3XAU	Philadelphia, Pa.	1.0	Bc.; relays WCAU	37.59	7,980	VLZ	Sydney, Australia	3.5	Phone
31.31	8,580	GSC	Davertry, England	20.0	Broadcast	38.07	7,890	VPD	Suva, Fiji Islands	0.15	Phone
31.31	8,580	VE9DR	Montreal, Canada	.....	Exp.	38.07	7,890	JYR	Kemikawa-Cho, Japan	5.0	Broadcast
31.31	8,580	VK3LR	Lyndhurst, Victoria, Australia	20.0	Broadcast	38.10	7,870	RXC	Panama City, Panama	.....	Phone HJP, afternoons, irr.
31.31	8,580	LRX	Buenos Aires, Argentina	7.5	Bc.; relays LR1	38.13	7,867	SUX	Abu Zabal, Egypt	10.0	Phone
31.31	8,580	XGBD	Shanghai, China	18.5	Broadcast	38.20	7,854	HC2JSB	Guayaquil, Ecuador	0.5	Broadcast
31.35	8,570	W1XK	Millis, Mass.	10.0	Bc.; relays WBZ, WBZA	38.31	7,830	PGA	Kootwijk, Holland	60.0	Phone
31.36	8,565	VUY (VUB)	Bombay, India	4.5	Broadcast	38.48	7,797	HBP	Geneva, Switzerland	20.0	Broadcast
31.38	8,560	DJA	Zeesen, Germany	5.0	Broadcast	38.89	7,715	KEE	Boinas, Calif.	40.0	Phone; relays programs to KGMB
31.40	8,555	VE9DN	Montreal, Canada	.....	Broadcast	39.28	7,632	OEJ	Vienna, Austria	.....	Phone
31.43	8,545	HH2R	Port-au-Prince, Haiti	0.1	Tests	39.32	7,630	ZHJ	Penang, F. M. S.	.....	Broadcast
31.43	8,545	CEC	La Granja, Chile	4.0	Broadcast	39.34	7,626	RIM	Tashkent, U.S.S.R.	20.0	Phone to RKI
31.47	8,540	DJN	Zeesen, Germany	50.0	Broadcast	39.37	7,620	ETD	Addis Ababa, Ethiopia	3.5	Phone
31.47	8,540	CQN	Macao, Asia	0.5	Broadcast	39.42	7,610	KWX	Dixon, Calif.	20.0	Phone to Hawaii
31.47	8,540	CB954	Santiago, Chile	5.0	Broadcast	39.58	7,580	XGO	Shanghai, China	.....	Tests; phone
31.48	8,530	W2XAF	Schenectady, N. Y.	40.0	Bc.; relays WGY	39.66	7,565	KWY	Dixon, Calif.	20.0	Phone
31.48	8,530	LKJ1	Jeloy, Norway	25.0	Exp.	39.68	7,560	E8A8B	Tenerife, Canary Islands	.....	Broadcast
31.51	8,520	FJICD	Saigon, French Indo-China	.....	Phone	39.74	7,550	T18W8	Puntarenas, Costa Rica	0.12	Broadcast
31.51	8,520	XEDQ	Guadalajara, Mexico	.....	Bc.; relays XED	39.88	7,522	HJA3	Barranquilla, Colombia	.....	Phone
31.51	8,520	OXY	Skamlethek, Denmark	0.5	Broadcast	39.89	7,520	KKH	Kahuku, T. H.	40.0	Phone
31.55	8,510	YV3RC	Caracas, Venezuela	0.25	Broadcast	39.95	7,510	JVP	Tokyo, Japan	20.0	Phone
31.55	8,510	GSB	Davertry, England	20.0	Broadcast	40.00	7,500	RKI	Moscow, U.S.S.R.	20.0	Phone to RIM
31.58	8,501	PRF5	Rio de Janeiro, Brazil	60.0	Broadcast	40.16	7,470	JVQ	Nasaki, Japan	10.0	Phone to Java, P. I.; also bc.
31.58	8,500	HJU	Buenaventura, Colombia	.....	Broadcast	40.16	7,470	JVO	Nasaki, Japan	10.0	Phone to Java & P. I.
31.58	8,500	XGOX	Nanking, China	.....	Broadcast	40.16	7,470	HJA3	Barranquilla, Colombia	.....	Phone
31.58	8,500	HSP2	Bangkok, Siam	2.5	Broadcast	40.19	7,465	HJP	Bogota, Colombia	.....	Bc.; phone to WNC, C. A. & Vene.
31.61	8,490	WEP	Rocky Point, N. Y.	40.0	Phone	40.27	7,450	HJC	Bogota, Colombia	.....	Phone
31.61	8,490	KEK1	Melbourne, Australia	5.0	Bc., Wed., Sat.	40.30	7,444	HBQ	Geneva, Switzerland	.....	Broadcast
31.61	8,490	KEI	Boinas, Calif.	20.0	Phone	40.45	7,415	WEG	Rocky Point, N. Y.	40.0	Phone
31.65	8,480	KET	Boinas, Calif.	40.0	Phone	40.50	7,407	WEN	Rocky Point, N. Y.	40.0	Phone
31.68	8,470	WET	Rocky Point, N. Y.	.....	Exp.	40.54	7,400	WEM	Rocky Point, N. Y.	40.0	Phone
31.75	8,450	WES-W2XBJ	Rocky Point, N. Y.	40.0	Exp.	40.54	7,400	WEM	Rocky Point, N. Y.	40.0	Phone; exp.
31.75	8,450	TGIX	Guatemala City, Guat.	.....	Exp.	40.54	7,400	WEM	Bogota, Colombia	.....	Phone to Quito
31.82	8,428	COCH	Havana, Cuba	0.4	Broadcast	40.60	7,390	ZLT2	Wellington, N. Z.	1.0	Phone to Sydney, morning
31.86	8,415	PLV	Bandoeng, Java	80.0	Phone; sometimes bc.	40.65	7,380	XECR	Mexico D. F., Mexico	20.0	Broadcast
31.92	8,400	XDC	Mexico City, Mexico	.....	Exp.	40.71	7,370	KEQ	Kahuku, T. H.	40.0	Phone
32.00	8,375	XDA	Mexico D. F., Mexico	.....	Phone	41.10	7,300	VK3ZX	Caulfield, Australia	.....	Broadcast
32.15	8,332	CGA4	Drummondville, Canada	15.0	Phone to England	41.21	7,281	HJ1ABD	Cartagena, Colombia	.....	Broadcast
32.27	8,300	YNGU	Managua, Nicaragua	.....	Broadcast	41.55	7,220	VP3BG	Georgetown, Brit. Guiana	.....	Broadcast
32.33	8,280	GCB	Rugby, England	15.0	Phone	41.55	7,220	HAT2	Saekesfehervar, Hungary	20.0	Broadcast
32.43	8,260	GBK	Bodmin, England	.....	Phone to Drummondville	41.80	7,177	CR6AA	Lobita, Angola, Port W. Africa	0.5	Broadcast; phone, C.W.
32.72	8,170	WNA	Lawrenceville, N. J.	20.0	Phone to England	41.96	7,150	X1CB	Mexico City, Mexico	.....	Broadcast
32.76	8,168	YVR	Maraçay, Venezuela	.....	Phone to Europe	42.02	7,140	PZH	Paramaribo, Dutch Guiana	.....	Broadcast
32.87	8,125	HAT4	Budapest, Hungary	20.0	Broadcast	42.02	7,140	OA4R	Lima, Peru	.....	Broadcast
32.89	8,120	CP6	La Paz, Bolivia	.....	Broadcast	42.02	7,130	HKE	Bogota, Colombia	0.138	Broadcast
32.89	8,120	JBK	Kagoshima, Japan	.....	Phone	42.13	7,120	.....	Papeete, Tahiti	.....	Broadcast
33.15	8,050	TFK	Reykjavik, Iceland	7.0	Broadcast	42.15	7,115	HB9B	Basle, Switzerland	.....	Broadcast
33.19	8,037	TYA2	Pontoise, France	15.0	Phone to Algeria	42.25	7,100	HJ1ABE	Sinelejo, Colombia	0.1	Broadcast
33.26	8,020	GCS	England	15.0	Phone	42.25	7,100	HJ4ABG	Medellin, Colombia	.....	Broadcast
33.30	8,010	KEJ	Boinas, Calif.	40.0	Phone; relays programs for KGMB	42.31	7,090	SM5SD	Stockholm, Sweden	0.03	Broadcast
33.43	8,975	VWY	Kirkee, India	.....	Phone to England, mornings	42.36	7,082	PI1J	Dordrecht, Holland	.....	Amateur; sometimes bc.
33.52	8,950	WEL-W2XBJ	Rocky Point, N. Y.	.....	Exp.	42.37	7,080	VP3MR	Georgetown, Brit. Guiana	0.05	Amateur; bc.
33.60	8,930	WEC	Rocky Point, N. Y.	.....	Exp.	42.37	7,080	LSUCZ	Buenos Aires, Argentina	.....	Amateur; sometimes bc.
33.71	8,900	ZLT 1	Wellington, N. Z.	1.0	Phone to Sydney	42.46	7,074	HJ1ABK	Barranquilla, Colombia	.....	Broadcast
33.82	8,870	NPC	Manila, P. I.	.....	Time signals, 10 p. m.	42.74	7,020	EAR125	Madrid, Spain	.....	Broadcast
33.96	8,850	DDBR	S.S. Berlin	.....	Phone	42.92	6,990	LKJ1	Jeloy, Norway	1.0	Broadcast
		DDCP	S.S. Cap Polonia	.....	Phone	42.98	6,980	I2R02	Rome, Italy	9.0	Broadcast
		DDFF	S.S. Reliance	.....	Phone	43.45	6,905	GDS	Rugby, England	15.0	Phone
		DDFT	S.S. Oceana	.....	Phone	43.48	6,900	H13C	La Romana, D. R.	.....	Broadcast
		DHAO	S.S. Hansa	.....	Phone	43.78	6,860	KEL	Boinas, Calif.	40.0	Phone
		DHDL	S.S. Cap Arcona	.....	Phone	43.86	6,840	CFA	Drummondville, Canada	.....	Phone
		DHEY	S.S. Deutschland	.....	Phone	44.05	6,810	H1H	San Pedro de Macoris, D.R.	.....	Broadcast
		DHLZ	S.S. Hamburg	.....	Phone	44.12	6,800	HCETC	Quito, Ecuador	0.03	Broadcast
		DHRL	S.S. New York	.....	Phone	44.12	6,800	H17P	Trujillo, D. R.	.....	Broadcast
		DOAH	S.S. Bremen	.....	Phone	44.41	6,755	WOA	Lawrenceville, N. J.	20.0	Phone
		DOAI	S.S. Europa	.....	Phone	44.44	6,750	JVT	Nasaki, Japan	20.0	Phone to U. S. A.; bc. relays JOAK
		FNSK	S.S. Normandie	.....	Phone	44.51	6,740	WEJ-W2XBJ	Rocky Point, N. Y.	.....	Exp.
		FNSM	S.S. Paris	.....	Phone	44.61	6,725	WQO	Rocky Point, N. Y.	.....	Phone
		FNTQ	S.S. Ile de France	.....	Phone	44.66	6,718	KBK	Manila, P. I.	40.0	Phone
		GBZV	S.S. Borengaria	.....	Phone	44.71	6,710	TIEP	San Jose, Costa Rica	.....	Broadcast
		GDLJ	S.S. Homerie	.....	Phone	44.71	6,710	KEF	Boinas, Calif.	40.0	Phone
		GFWJ	S.S. Majestic	.....	Phone	44.81	6,680	DKK	Nauen, Germany	.....	Phone
		GLRZ	S.S. Aquitania	.....	Phone	44.94	6,675	YV4RB	Caracas, Venezuela	.....	Broadcast
		GMBJ	S.S. Empress of Britain	.....	Phone	44.96	6,672	YVQ	Managua, Nicaragua	.....	Phone
		VQJM	S.S. Monarch of Bermuda	.....	Phone	45.00	6,667	HC2RL	Guayaquil, Ecuador	0.15	Broadcast
		VQJP	S.S. Queen of Bermuda	.....	Phone	45.11	6,650	IAC	Coltano, Italy	14.0	Phone
34.00	8,623	YNVA	Managua, Nicaragua	.....	Broadcast	45.11	6,650	TYFE	San Jose, Costa Rica	.....	Broadcast
34.14	8,790	HJ3	Barranquilla, Colombia	.....	Phone	35.25	6,630	HIT	Trujillo, D. R.	.....	.....
34.14	8,790	TIA	Cartago, Costa Rica	.....	Phone to TGA, HJB, WNC, afternoons	45.34	6,618	PRADO	Riobamba, Ecuador	.....	Broadcast
34.18	8,775	HCJB	Quito, Ecuador	0.5	Broadcast	45.38	6,611	REN (RW72)	Moscow, U.S.S.R.	10.0	Bc.; phone
34.18	8,775	PNI	Malinasar, Celebes	0.3	Phone; occ. bc.	45.46	6,600	XFA2	Vera Cruz, Mexico	.....	Phone
34.21	8,770	RSZ	Irkutsk, U.S.S.R.	.....	Phone	45.52	6,590	ZEB	Bulawayo, S. Rhodesia	0.5	Phone to ZEA
34.29	8,750	ZCK	Hong Kong, China	0.25	Bc.; relays ZBW	45.52	6,590	ZEA	Salisbury, S. Rhodesia	0.5	Phone to ZEB
34.44	8,710	KBB	Manila, P. I.	.....	Phone	45.80	6,550	H14D	Trujillo, D. R.	.....	.....
34.56	8,680	GBC	Rugby, England	5.0	Phone to ships	45.80	6,550	TIRC	San Jose, Costa Rica	.....	Broadcast
34.62	8,665	COJQ	Camaguey, Cuba	0.2	Broadcast	46.01	6,520	YV6RV	Valencia, Venezuela	.....	Broadcast
34.80	8,620	VVD	Seattle, Wash.	.....	Tests with Juneau, Alas.	46.08	6,510	HIL	Trujillo, D. R.	.....	Broadcast
34.80	8,620	HKV	Bogota, Colombia	.....	Broadcast	46.23	6,490	HJ5ABD	Cali, Colombia	0.25	Broadcast
34.88	8,600	YNVA	Managua, Nicaragua	.....	Broadcast	46.50	6,451	HJ4ABC	Ibague, Colombia	.....	Broadcast
35.00	8,570	RW15	Khabarovsk, Siberia	15.0	Broadcast	46.51	6,450	H14V	Trujillo, D. R.	.....	Broadcast
35.03	8,565	HAT3	Saekesfehervar, Hungary	20.0	Broadcast	46.51	6,450	HJ1ABB	Barranquilla, Colombia	0.1	Broadcast
35.05	8,560	WOO	Ocean Gate, N. J.	20.0	Phone to ships, irr.	46.51	6,450	YNIGG	Managua, Nicaragua	0.1	Broadcast
35.29	8,500	JZF	Nasaki, Japan	10.0	Phone to ships	46.66	6,430	H11S	Puerto Plato, D. R.	0.045	Broadcast
35.42	8,470	DAF	Norddeich, Germany	.....	Phone to ships	46.69	6,425	VF9AS	Fredericton, N. B., Canada	.....	Broadcast
35.73	8,404	HC2CW	Guayaquil, Ecuador	.....	Broadcast	46.99	6,425	WQXBS	Chicago, Ill.	2.5	Exp.
35.80	8,380	IAC	Coltano, Italy	14.0	Phone	46.99	6,425	VE9BY	London, Ont., Canada	.....	Broadcast
36											



★ ★ ★ ★ RADIO STARS ★ ★ ★ ★



LANNY ROSS  
NBC



GEORGE BURNS & GRACIE ALLEN



MARLYN STUART  
Vocalist, CBS



ETHEL BLUM  
Is Heard on the CBS  
"News of Youth" Programs



LEE WILEY  
Singer of Ballads



MAJOR BOWES — NBC



RICHARD HIMBER, NBC  
Composer & Orchestra Leader



PAUL WHITEMAN  
NBC



LYSBETH HUGHES  
Singing Harpist — CBS



VIRGINIA CLARR



EVE ARDEN  
CBS Comedienne

★ ★ ★ ★ RADIO STARS ★ ★ ★ ★



**MARGARET McCRAE**  
CBS—Songstress



**KEN MURRAY & EVE ARDEN**  
CBS



**JOAN MARSH**  
Hollywood Screen Star



**PHIL REGAN**  
Tenor



**FORD BOND**  
NBC Announcer



**ALFRED WALLENSTEIN**  
Mutual's Symphonic Conductor



**BETTY and BOB**  
Lester Tremayne and  
Elizabeth Reller



**TIM RYAN & IRENE NOZLETTE**  
Jello Comedy Team



**ELINOR SHERRY**  
WOR—Singer



**ED WYNN & GRAHAM McNAMEE**  
NBC



**ALOIS HAVRILLA**  
NBC Announcer

★ ★ ★ ★ RADIO STARS ★ ★ ★ ★



**NAT SHILKRET &  
RUPERT HUGHES**



**JESSICA DRAGONETTE**  
NBC Songstress



**CAST OF WITCHES TALE**



**CORINNA MURA**  
WOR Songstress



**JULIA SANDERSON &  
FRANK CRUMIT**  
Musical Comedy—CBS



**AMOS & ANDY NBC**



**PATSY KANE**  
Soloist with  
Don Bestor's Orchestra



**FRANK FAY**  
NBC Comedian



**BENAY VENUTA**  
CBS Vocalist



**AUDREY McGRATH—CBS Actress**



**CHARLES HENDERSON & PAT BOLLARD**

★ ★ ★ ★ RADIO STARS ★ ★ ★ ★



**GERTRUDE BOGARD**  
in Phil Spitalny's All-Girl Orchestra  
CBS



**DORIS KERR**, Singing Star  
on CBS  
"Manhattan Matinee" Broadcasts



"HONEY CHILE" (Margaret Johnson)



**KAY THOMSON**  
CBS  
Featured Singer



**FRED ALLEN**  
NBC



**JOAN BLAINE**  
CBS  
Dramatic Star



**BEN BERNIE**  
NBC



**JACK BENNY**



**DOLLY DAWN**  
Soloist  
with George Hall's  
Orchestra



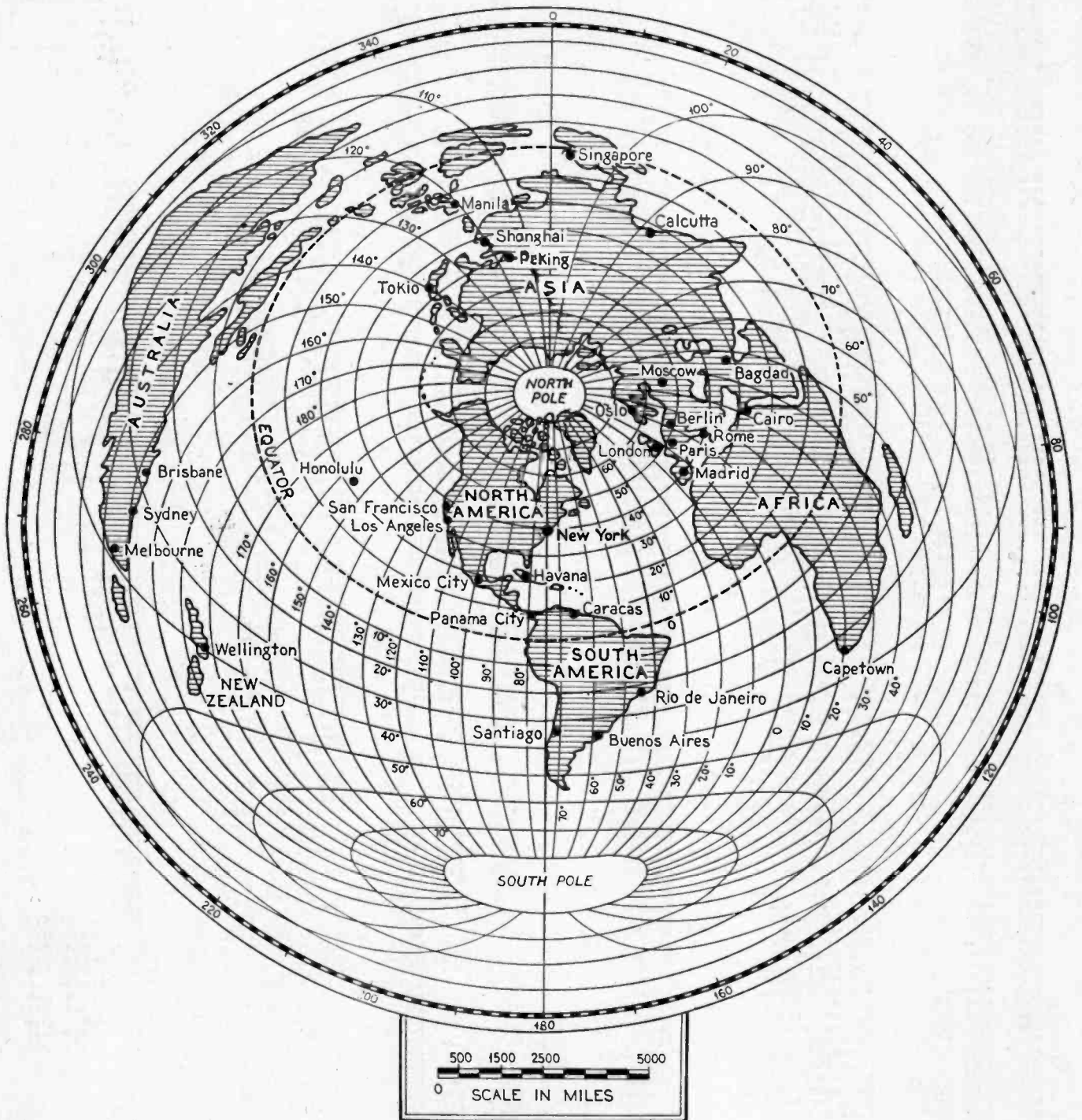
**ELIZABETH DAY**  
plays "Sally Jones" in  
"Five Star Jones" Dramatic



**FRANCES LANGFORD**  
CBS Singing Star

Meters	Kc.	Call	Location	Kw.	Service, etc.	Meters	Kc.	Call	Location	Kw.	Service, etc.
47.77	6.290	HIG	Trujillo, D. R.	....	Broadcast	51.46	5.830	CWD	Montevideo, Uruguay	1.5	Phone
47.85	6.270	COSWR	Sancti Spiritus, Cuba	....	Broadcast	51.50	5.825	HJA2	Bogota, Colombia	....	Phone
48.00	6.250	OCI	Lima, Peru	....	Phone	51.50	5.825	KZGG	Cebu, Isl of Cebu, P. I.	....	Phone
48.09	6.240	HRV	La Ceiba, Honduras	....	Broadcast	51.50	5.825	WQN	Rocky Point, N. Y.	40.0	Exp.
48.15	6.230	OAXAG	Lima, Peru	....	Broadcast	51.52	5.823	TIGPH	San Jose, Costa Rica	....	Broadcast
48.19	6.225	HJ1ABH	Cienega, Colombia	....	Broadcast	51.63	5.810	YV7RMO	Maracaibo, Venezuela	....	Broadcast
48.23	6.220	HJ2ABA	Tunja, Colombia	....	Broadcast	51.72	5.800	KZGF	Manila, P. I.	....	Phone; occ. bc.
48.40	6.198	CTTGO	Farede, Portugal	0.7	Broadcast	51.72	5.800	YV2RC	Caracas, Venezuela	1.0	Broadcast
48.50	6.185	H11A	Santiago de los Caballeros, D. R.	0.05	Broadcast	51.77	5.795	KZGH	Hoilo, P. I.	....	Inter-island phone
48.54	6.180	HJ3ABF	Bogota, Colombia	0.1	Broadcast	51.81	5.790	JVU	Nasaki, Japan	10.0	Phone to Manchukuo also bc. to JZA-B-C
84.54	6.180	XEXA	Mexico City, Mexico	....	Broadcast	51.90	5.780	CMB2	Havana, Cuba	....	Tests with Riverhead
48.70	6.160	CJRO	Winnipeg, Man., Canada	....	Bc.; relays CJRC	51.90	5.780	OAX4D	Lima, Peru	20.0	Broadcast
48.78	6.150	COKG	Santiago, Cuba	2.4	Bc.; relays CMKB	52.08	5.760	HJ4ABD	Medellin, Colombia	....	Broadcast
48.78	6.150	CB615	Santiago, Chile	0.15	Broadcast	52.26	5.740	TGS	Guatemala City, Guat.	0.2	Broadcast
48.78	6.150	YV3RC	Caracas, Venezuela	0.25	Broadcast	52.36	5.730	JVU	Nasaki, Japan	10.0	Phone to Formosa; bc.
48.78	6.150	HJ5ABC	Calif., Colombia	0.1	Broadcast	52.45	5.720	YV10RSC	San Cristobal, Venezuela	....	Broadcast
48.78	6.150	H15M	Santiago de los Caballeros, D. R.	....	Broadcast	52.54	5.710	JDZ	Dairen, Manchuria	....	Phone to Nasaki
48.78	6.150	VE9CL	Winnipeg, Man., Canada	....	Broadcast	52.58	5.705	CFU	Rosland, B. C., Canada	....	Phone; bc.
48.78	6.150	CSL	Lisbon, Portugal	....	Broadcast	53.00	5.660	CFD	Kenora, Ont., Canada	0.15	Phone
48.78	6.150	H15N	Trujillo, D. R.	....	Broadcast	53.00	5.660	CFN	Slate Creek, B. C., Canada	....	Phone
48.86	6.140	KZRM	Manila, P. I.	6.0	Broadcast	53.00	5.660	CFJ	Red Lake, Ont., Canada	....	Phone
48.86	6.140	W8XK	Pittsburgh, Pa.	40.0	Bc.; relays KDKA	54.05	5.550	I2RO	Shanghai, China	....	Broadcast
48.89	6.136	CR7AA	Lourenco Marques, Mozambique	....	Broadcast	54.15	5.540	VXV	Rome, Italy	....	Broadcast
48.92	6.132	ZGE	Kuala Lumpur, F. M. S.	0.18	Broadcast	54.15	5.540	VXU	Hudson Bay Junction, Sask., Canada	....	Phone
48.94	6.130	VE9BA	Montreal, Canada	....	Broadcast	54.30	5.525	T15HH	Regina, Sask., Canada	....	Phone
48.94	6.130	COCD	Havana, Cuba	0.2	Bc.; relays CMCD	54.64	5.490	ROI	San Ramon, Costa Rica	0.2	Broadcast
48.94	6.130	H16Z	Trujillo, D. R.	....	Broadcast	55.15	5.440	RSN	Sverdlovsk, U.S.S.R.	15.0	Phone
48.94	6.130	LKJ1	Jeloy, Norway	1.0	Broadcast	55.19	5.435	LSH	Sverdlovsk, U.S.S.R.	10.0	Phone
48.94	6.130	TGXA	Guatemala City, Guat.	0.02	Broadcast	55.40	5.415	IAF	Monte Grande, Argentina	....	Phone
48.96	6.128	YV11RMO	Maracaibo, Venezuela	....	Broadcast	55.45	5.410	ZCK	Fiumicino, Italy	5.0	Phone
49.02	6.120	XEFT	Vera Cruz, Mexico	0.02	Broadcast	55.50	5.405	VXX	Hong-Kong, China	....	Bc.; relays ZBW
49.02	6.120	VE9HK	Halifax, N. S., Canada	....	Broadcast	55.56	5.400	CGP	Sage Creek, B. C., Canada	....	Phone
49.02	6.120	ZEB	Bulawayo, S. Rhodesia	....	Phone	55.56	5.400	CGP	Prince Rupert, B. C., Canada	....	Phone
49.02	6.120	W2XE	Wayne, N. J.	5.0	Bc.; relays WABC	55.56	5.400	CZQ	Anvor, B. C., Canada	....	Phone
49.02	6.120	YDA5	Bandoeng, Java	1.5	Broadcast	55.56	5.400	HJA7	Cuzco, Colombia	0.4	Phone
49.06	6.115	HJ1ABE	Cartagena, Colombia	0.05	Broadcast	55.56	5.400	HAT	Budapest, Hungary	20.0	Broadcast
49.10	6.110	CHNX	Halifax, N. S., Canada	0.2	Bc.; relays CHNS	55.81	5.375	RSB	Stalinsk, U. S. S. R.	2.0	Phone
49.10	6.110	HJ4ABB	Manizales, Colombia	....	Broadcast	56.60	5.300	ZFO	Cat Cay, Bahamas	0.05	Phone
49.10	6.110	GSL	Daventry, England	....	Broadcast	57.03	5.280	YDU3	Medan, Sumatra	....	Broadcast
49.10	6.110	VUC	Calcutta, India	0.5	Broadcast	58.03	5.170	PNY	Bandoeng, Java	2.0	Broadcast
49.10	6.110	VE9CO	Calgary, Alberta, Canada	....	Broadcast	58.71	5.110	KIKB	Bolinas, Calif.	40.0	Phone
49.18	6.100	W9XF	Chicago, Ill.	5.0	Bc.; relays WENR	58.76	5.105	KFC	Bolinas, Calif.	40.0	Phone
49.18	6.100	W3XAL	Bound Brook, N. J.	35.0	Bc.; relays WJZ	58.94	5.090	TFL	Reykjavik, Iceland	....	Broadcast
49.18	6.100	VE9CF	Halifax, N. S., Canada	....	Broadcast	59.07	5.077	WCN	Lawrenceville, N. J.	20.0	Phone to England
49.20	6.098	ZTJ	Johannesburg, S. Africa	5.0	Broadcast	59.54	5.040	RIR	Tiflis, U. S. S. R.	4.0	Phone to RIM
49.26	6.090	VE9BJ	St. John, N. B., Canada	0.5	Bc.; relays CFBO	59.70	5.025	ZFA	St. Georges, Bermuda	1.5	Phone
49.26	6.090	....	Colombo, Ceylon	....	Broadcast	60.00	5.000	WWV	Beltville, Md.	1.0	Frequency standard
49.26	6.090	CRCX	Toronto, Ont., Canada	0.5	Broadcast	60.30	4.975	GBC	Rugby, England	5.0	Phone to ships
49.30	6.085	I2RO1	Rome, Italy	....	Broadcast	60.97	4.920	LKJ1	Jeloy, Norway	1.0	Exp.
49.32	6.083	VQ7LO	Nairobi, Kenya, Africa	1.25	Broadcast	61.54	4.875	RKF	Moscow, U. S. S. R.	20.0	Phone
49.34	6.080	VE9EH	Charlottetown, P. E. I.	....	Broadcast	61.66	4.865	CGT	Campbell River, B. C., Can	....	Phone
49.34	6.080	HJ4ABC	Pereira, Colombia	....	Broadcast	61.66	4.865	VDO	Vancouver, B. C., Canada	....	Phone
49.34	6.080	HP5F	Colon, Panama	....	Broadcast	61.66	4.865	HJA3	Barranquilla, Colombia	....	Phone
49.34	6.080	CP5	La Paz, Bolivia	....	Broadcast	61.98	4.840	CZV	Waterloo Mines, B. C., Can	....	Phone
49.34	6.080	ZHJ	Penang, Straits Settlements	0.05	Broadcast	62.24	4.820	GDW	Rugby, England	15.0	Phone to U. S. A.
49.34	6.080	W9XAA	Chicago, Ill.	0.5	Bc.; relays WCFL	62.63	4.790	VE9BK	Vancouver, B. C., Canada	0.25	Phone to ships
49.35	6.079	DJM	Zeesen, Germany	....	Exp.	62.70	4.785	CZA	Drummondville, Canada	4.0	Phone to ships
49.41	6.072	OKR2	Vienna, Austria	1.5	Broadcast	63.11	4.753	WOO	Ocean Gate, N. J.	20.0	Phone
49.42	6.070	HP5H	Colon, Panama	0.3	Broadcast	63.11	4.753	WOY	Lawrenceville, N. J.	20.0	Phone to England
49.43	6.070	HJ1ABF	Barranquilla, Colombia	....	Broadcast	63.69	4.710	YDU2	Medan, Sumatra	....	Broadcast
49.43	6.070	VE9CS	Vancouver, B. C., Canada	0.01	Broadcast	65.21	4.600	HC2ET	Guayaquil, Ecuador	....	Broadcast
49.46	6.065	HJ4ABL	Manizales, Colombia	0.2	Broadcast	65.50	4.580	DJG	Zeesen, Germany	....	Exp.
49.50	6.060	OXY	Skamlebaek, Denmark	0.5	Broadcast	65.93	4.550	WDN	Rocky Point, N. Y.	40.0	Phone
49.50	6.060	W3XAU	Philadelphia, Pa.	1.0	Bc.; relays WCAU	66.15	4.535	WDG	Rocky Point, N. Y.	40.0	Phone
49.50	6.060	W8XAL	Cincinnati, Ohio	10.0	Bc.; relays WLW	66.40	4.512	ZFS	Nassau, Bahamas	....	Phone
49.57	6.050	HJ3ABD	Bogota, Colombia	0.2	Broadcast	66.59	4.505	CGO	Ocean Falls, B. C., Canada	0.4	Phone
49.57	6.050	GSA	Daventry, England	....	Broadcast	66.59	4.505	CZO	Prince George, B. C., Can.	0.05	Phone
49.57	6.050	H19B	Santiago de los Caballeros, D. R.	....	Broadcast	66.59	4.505	CZP	Claydon Bay, B. C., Can.	0.1	Phone
49.62	6.045	HJ3ABI	Bogota, Colombia	0.05	Broadcast	66.81	4.490	VDV	Two Brothers Lake, B. C., Canada	....	Phone
49.65	6.042	HJ1ABG	Barranquilla, Colombia	0.15	Broadcast	66.81	4.490	VDC	Calgary, Alta., Canada	....	Phone
49.67	6.040	YDA	Tandjonepriok, Java	10.0	Broadcast	67.11	4.470	YID	Bagdad, Iraq	....	Broadcast
49.67	6.040	W4XB	Miami Beach, Fla.	2.5	Broadcast	67.19	4.465	CGA4	Drummondville, Canada	15.0	Phone
49.67	6.040	W1XAL	Boston, Mass.	5.0	Broadcast	67.63	4.436	VDO	Vancouver, B. C., Canada	0.4	Phone
49.75	6.030	HP5B	Panama, Panama	0.1	Broadcast	67.72	4.430	VQJM	S. S. Monarch of Bermuda	....	Phone
49.75	6.030	VE9CA	Calgary, Alberta, Canada	0.1	Bc.; relays CFCN	67.72	4.430	VJQM	S. S. Queen of Bermuda	....	Phone
49.77	6.028	PRAS	Pernambuco, Brazil	3.0	Broadcast	67.72	4.430	DOA	Doerbits, Germany	....	Phone
49.83	6.020	DKUW	Vera Cruz, Mexico	0.05	Broadcast	67.72	4.430	GBC	Rugby, England	....	Phone to ships
49.83	6.020	ZHI	Zeesen, Germany	8.0	Broadcast	67.72	4.430	GDLJ	S. S. Homeric	....	Phone
49.85	6.018	HJ3ABH	Singapore, F. M. S.	0.09	Broadcast	67.98	4.413	GBZW	S. S. Berengaria	....	Phone
49.90	6.012	HJ3ABH	Bogota, Colombia	1.2	Broadcast	67.98	4.413	GLRZ	S. S. Aquitania	....	Phone
49.92	6.010	COCO	Havana, Cuba	0.25	Broadcast	67.98	4.413	GBVW	S. S. Majestic	....	Phone
49.95	6.006	HJ1ARJ	Santa Maria, Colombia	0.025	Broadcast	67.98	4.413	GMBJ	S. S. Empress of Britain	....	Phone
49.98	6.005	VE9DN	Montreal, Canada	4.0	Broadcast	67.98	4.413	DBBR	S. S. Berlin	....	Phone to WOO, DAF
49.98	6.005	VE9DR	Montreal, Canada	0.05	Bc.; relays CFCF	67.98	4.413	DDCP	S. S. Cap Polonio	....	Phone to WOO, DAF
50.00	6.000	X1BT	Mexico D. F., Mexico	1.0	Bc.; relays XEB	67.98	4.413	DDFF	S. S. Reliance	....	Phone to WOO, DAF
50.00	6.000	YV4BSG	Caracas, Venezuela	....	Broadcast	67.98	4.413	DDFT	S. S. Oceana	....	Phone to WOO, DAF
50.00	6.000	TGWA	Guatemala City, Guat.	0.2	Broadcast	67.98	4.413	DHAO	S. S. Hansa	....	Phone to WOO, DAF
50.00	6.000	YOI	Bucharest, Roumania	0.3	Broadcast	67.98	4.413	DHDI	S. S. Cap Arcona	....	Phone to WOO, DAF
50.00	6.000	ZIC	Salisbury, S. Rhodesia	....	Broadcast	67.98	4.413	DHEY	S. S. Deutschland	....	Phone to WOO, DAF
50.00	6.000	RW59	Moscow, U.S.S.R.	1.0	Phone	67.98	4.413	DHJZ	S. S. Hamburg	....	Phone to WOO, DAF
50.04	5.995	RPT	Tashkent, U.S.S.R.	1.0	Phone	67.98	4.413	DHRI	S. S. New York	....	Phone to WOO, DAF
50.04	5.995	WXE	Anchorage, Alaska	0.5	Phone	67.98	4.413	DOAH	S. S. Bremen	....	Phone to WOO, DAF
50.04	5.995	WVD	Seattle, Wash.	0.5	Phone to Alaska	67.98	4.413	DOAI	S. S. Europa	....	Phone to WOO, DAF
50.12	5.994	TGX	Guatemala City, Guat.	....	Broadcast	67.98	4.413	FNSM	S. S. Paris	....	Phone
50.17	5.980	CT1AA	Lisbon, Portugal	....	Broadcast	67.98	4.413	FTNQ	S. S. Ile de France	....	Phone
50.17	5.980	H1X	Trujillo, D. R.	0.2	Broadcast	67.98	4.413	FNSK	S. S. Normandic	....	Phone
50.17	5.980	HJ2ABD	Bucaramanga, Colombia	0.1	Broadcast	68.19	4.400	RRZ	Moscow, U. S. S. R.	1.0	Phone
50.17	5.980	XEVI	Mexico City, Mexico	....	Broadcast	68.34	4.390	FNSK	S. S. Normandic	....	Phone to Paris
50.21	5.975	XECW	Xantocan, Mexico	0.01	Broadcast	68.39	4.355	IAC	Collano, Italy	36.0	Phone to ships
50.21	5.975	HJ2ABC									

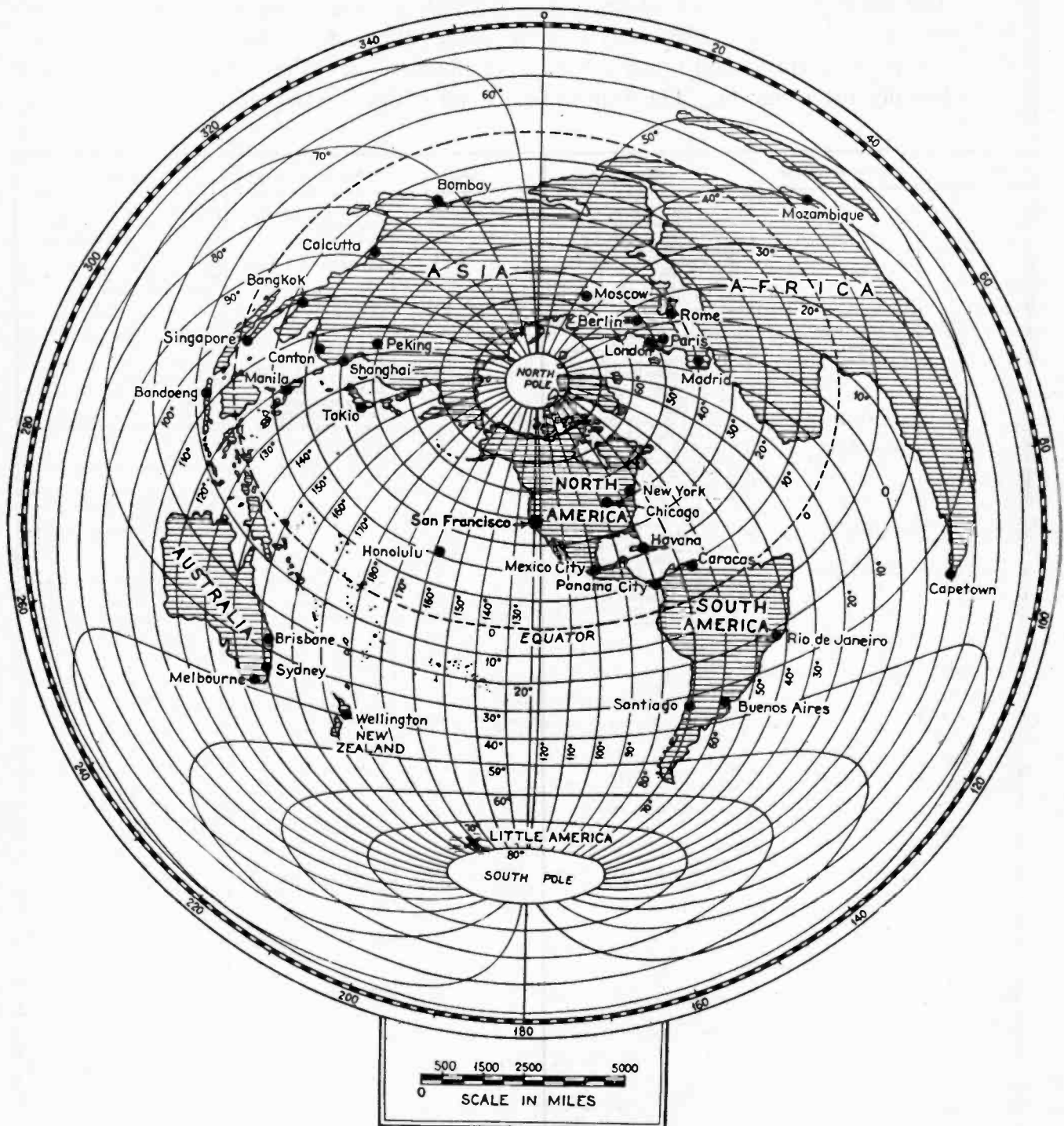
# WORLD DISTANCE CHART No. 1



## HOW TO USE THE WORLD DISTANCE CHART

*To use the map first find the distance in inches between New York and the desired point, multiply this by the miles per inch shown on the scale on the chart and the answer will be a close approximation to the air line distance between the two points.*

# WORLD DISTANCE CHART No. 2



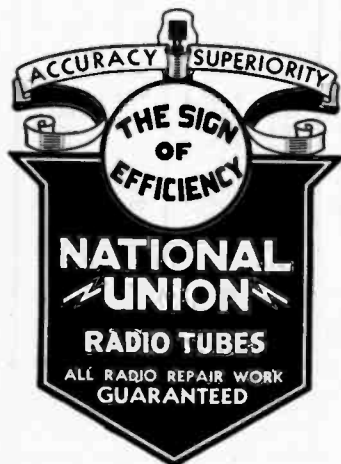
## WORLD DISTANCE MAP FOR AMERICAN WEST COAST

Here is the azimuthal map centered on San Francisco for reckoning distances from there to any other location in the world. To use the map find the distance between San Francisco and the desired location and refer this to the scale in miles printed above to find the actual distance.





Call	Name or Slogan	Address	Call	Name or Slogan	Address
KAX, KB1, etc. Manila stations		Radio Corp. of the Philippines Plaza Moraga, Manila, P. I.	VK3ME		Amalgamated Wireless (Australasia) Ltd., Box 1272 L, Elizabeth St. P.O., Melbourne, Australia
KEB, KEC, etc., Bolinas Stations		RCA Communications, Inc., Pacific Division, 29 Geary St., San Francisco, Calif.	VK3XX		501 Royal Parade, Rockville N-2, Melbourne, Australia
KWN, KWO, etc. Dixon stations		Transpacific Communication Co. Ltd., 140 Monthomery St., San Francisco, Calif.	VK3ZX	"Radio Suva"	33 Saturn St., Caulfield, Australia
KZGH, KZGF, etc.		Philippine Long Distance Telephone Co., Manila, P. I.	VP1A, VPD		Amalgamated Wireless (Australasia) Ltd., Suva, Fiji Islands
LKJ1		Dept. of Commerce, Division of Radio Telegraphy, Oslo, Norway	VP3BG		1 Wellington St., Georgetown, Brit. Guiana
LRL, LRX	"Radio El Mundo"	Maipu 555, Buenos Aires, Argentina	VP3MR	"The Voice of Guiana"	Georgetown, Brit. Guiana
LSL, LSM, all Hurlingham stations		Compania Internacional de Radio, Defensa 143, Buenos Aires, Argentina	VQ7LO		Cable and Wireless, Ltd., P. O. Box 777, Nairobi, Kenya, Africa
LSF, LSX, LSY, Monte Grande Stations		Transradio Internacional, San Martin 329, Buenos Aires, Argentina	VUB, VUY		Indian State Broadcasting Service, Irwin House, Sprout Road, Ballard Estate, Bombay, India
OAX4D	"Radio DUSA", "The Voice of Peru"	All American Cables, Casilla 2336, Lima, Peru	VXX		North West Telephone Co., 768 Seymour St., Vancouver, B. C., Canada
OAX4G		Robert Orellaud & Cia., Apartado 1242, Lima, Peru	WMI, WOO, etc. Stations at Deal, Lawrenceville and Ocean Gate, N. J.		American Telephone and Telegraph Co., Long Lines Dept., 32 Sixth Ave., New York, N. Y.
OER2, OER3		Oesterr. Radioverkehrs A. G., Johannesgasse 46, Vienna, Austria	WAJ, WEF, stations at Rocky Point		R.C.A. Central Frequency Bureau, 66 Broad St., New York, N. Y.
ORG, ORK, ORP	"Betradio"	Direction des Radiocommunications, Brussels, Belgium	WVD		Alaskan Telephone Co., 517 Federal Office Bldg., Seattle, Wash.
OPY		Statsradiofonien, Heibergsgade 7, Copenhagen, Denmark	W1XAL		World Wide Broadcasting Co., 70 Brookline Ave., Boston, Mass.
PCJ		Philips Radio, Emmasingel, Eindhoven, Holland	W1XK		Westinghouse Radio Stations in New England, Hotel Bradford, Boston, Mass.
PHI		PHOHI Studios, Hilversum, Holland	W2XAD, W2XAF	"The Voice of Electricity"	General Electric Co., 1 River Road, Schenectady, N. Y.
PIJ		Middelbare Technische School, Oranjestaan 12, Dordrecht, Holland	W2XE		Columbia Broadcasting System, 485 Madison Ave., New York, N. Y.
PLV and other Bandoeng stations		Mr. H. Van der Veen, Engineer-in-Charge, Java Radio Stations, Bandoeng, Java, N. E. I.	W3XAL, W3XL		National Broadcasting Co., 30 Rockefeller Plaza, New York, N. Y.
PPQ, PSH, all Sepetiba and Maripue stations		Compania Telegraphica Brasileira, Caixa Postal 500, Rio de Janeiro, Brazil	W3XAU		WCAU Bldg., 1622 Chestnut St., Philadelphia, Pa.
PRADO	"El Prado"	Apartado de correos 98, Riobamba, Ecuador	W4XB	"The Nation's Station"	c/o WIOD, News Tower, Miami, Fla.
PRA8	"A Voz do Norte"	Avenida Cruz Cabuga 394, Pernambuco, Brazil	WBXAL	"Voice of Farmer and Labor"	Crosley Radio Corp., Cincinnati, Ohio
RV15	"Far East Radio Station"	Radio Committee, Khabarovsk, Siberia	W9XAA		Chicago Federation of Labor, 666 Lake Shore Drive, Chicago, Ill.
RV59, RNE		Radio Centre, Solianka 12, Moscow, U.S.S.R.	W9XBS, W9XF		National Broadcasting Co., Merchandise Mart, Chicago, Ill.
SM5SD		Lumas Kortvageandare, Stockholm 20, Sweden	XBJQ		P.O. Box 2825, Mexico, D.F., Mexico
SPW		Polskie Radio S.A., Kredytowa 1, Warsaw, Poland	XEBT	"El Buen Tono"	Apartado 79-44, Mexico D.F., Mexico
SUV, SUX		Marconi Radio Telegraph Co. of Egypt, Box 795, Cairo, Egypt	XECW	"Del Caballero Xantocam"	Calle del Bajio, 120, Xantocam, Mex. Cia. Radiofonografía, Apartado 197, Guadalupe, Jalisco, Mexico
TFE, TFJ, TEL		Icelandic State Broadcasting, Box 457, Reykjavik, Iceland	XEDQ		Ave. Independencia 28, Veracruz, Vera., Mexico
TGS		Radiotransmisora de la Casa Presidencial, Guatemala City, Guatemala	XEFT	"La Voz de Veracruz"	Ave. Independencia 98, Veracruz, Vera., Mexico
TGW, TGWA, TG1X	"Radiodifusora Nacional"	Guatemala City, Guatemala	XEUW	"El Eco de Sotavente desde Veracruz"	Apartado 2874, Mexico, D.F., Mexico
TG1A	"Ministerio de Fomento"	Guatemala City, Guatemala	XEVI	"The Voice of the World"	Secretary of Public Education, Mexico, D.F., Mexico
TG2X	"La Voz de Policia Nacional"	Guatemala City, Guatemala	XEXA		80 Love Lane, Shanghai, China
TIEP	"La Voz del Tropico"	Apartado 257, San Jose, Costa Rica	XQAJ		Liga Mexicana de Radio experimentadores, Mexico, D.F., Mexico
TIGPH	"Alma Tica"	P. O. Box 775, San Jose, Costa Rica	XICB		Chief Engineer, 6th District, Post Telegraph and Telephone Service, Medan, Sumatra, N. E. I.
TIPG	"La Voz de la Victor"	Apartado 225, San Jose, Costa Rica	YBJ		Box 830, New Orleans, La.
TIRCC	"Radioemisora Catolica Costarricense"	Apartado 40, San Jose, Costa Rica	YNE		Calle 15 de Septiembre 205, Managua, Nicaragua
TJSHH	"La Voz de San Ramon"	San Ramon, Costa Rica	YNLF	"La Voz de Nicaragua"	Managua, Nicaragua
VE9AS		University of New Brunswick, Fredericton, N. B., Canada	YNIGG	"La Voz de los Lagos"	Managua, Nicaragua
VE9BJ		C. A. Munro, Ltd., 16 Simonds St., St. Johns, N. B.	YVQ	"Estacion Nacional de Radio"	Maracay, Venezuela
VE9BK		Radio Sales and Service, Ltd., 780 Beatty St., Vancouver, B. C., Canada	YV2RC	"Radio Caracas"	Apartado 2009, Caracas, Venezuela
VE9CA	"The Voice of the Prairies"	Western Broadcasting Co., Toronto General Trusts Bldg., Calgary, Alberta, Canada	YV3RC	"Radiodifusora Venezuela"	Paseo Ramella, Caracas, Venezuela
VE9CS		Radio Service Engineers, 734 Davie St., Vancouver, B. C., Canada	YV4RB	"Ecos del Caribe"	P. O. Box 983, Caracas, Venezuela
VE9DN, VE9DR		Canadian Marconi Co., P. O. Box 1690, Montreal, Que., Canada	YV5RMO	"La Voz de Caribobo"	Apartado de Correos 214, Maracaibo, Venezuela
VE9EH		The Island Radio Broadcasting Co., Ltd., Charlottetown, P. E. I., Canada	YV6RV	"Radiodifusora Maracaibo"	Valencia, Venezuela
VK2ME		Amalgamated Wireless (Australasia) Ltd., 47 York St., Sydney, Australia	YV7RMO	"La Voz de Lara"	P. O. Box 100, Maracaibo, Venezuela
VK3LR		Postmaster General's Dept., Treasury Gardens, Melbourne C2, Australia	YV8RB	"Emisora 12 de Julio"	Barquisimeto, Venezuela
			ZCK		Maracay, Venezuela
			ZGE		P. O. Box 200, Hong Kong, China
			ZHI		Malayan Amateur Radio Society, Kuala Lumpur, F. M. S.
			ZHJ		Radio Service of Malaya, 2 Orchard Road, Singapore, F. M. S.
			ZP10	"Rueda del Oeste"	Penang Wireless Society, 40 Park Road, Penang, Straits Settlements
					Asuncion, Paraguay



...the dealer who displays this emblem is cooperating with the National Union plan for efficient radio service through use of better instruments and equipment and more complete technical data on all types of radio sets. He guarantees and accepts full responsibility for his workmanship.

# WAVELENGTH-FREQUENCY CHART

M.	KC.	M.	KC.	M.	KC.	M.	KC.	M.	KC.	M.	KC.	M.	KC.	M.	KC.	M.	KC.
10.1	29,703	20.1	14,925	30.1	9,966.7	40.1	7,481.3	50.1	5,988.0	60.1	4,991.7	70.1	4,279.6	80.1	3,745.3	90.1	3,329.7
10.2	29,411	20.2	14,851	30.2	9,933.7	40.2	7,462.6	50.2	5,976.1	60.2	4,983.3	70.2	4,273.5	80.2	3,740.7	90.2	3,326.0
10.3	29,126	20.3	14,778	30.3	9,901.0	40.3	7,444.0	50.3	5,964.1	60.3	4,975.1	70.3	4,267.4	80.3	3,735.9	90.3	3,322.2
10.4	28,846	20.4	14,706	30.4	9,868.5	40.4	7,425.8	50.4	5,953.7	60.4	4,966.9	70.4	4,261.4	80.4	3,731.2	90.4	3,318.5
10.5	28,571	20.5	14,634	30.5	9,836.0	40.5	7,407.3	50.5	5,943.6	60.5	4,958.6	70.5	4,255.3	80.5	3,726.7	90.5	3,314.9
10.6	28,301	20.6	14,563	30.6	9,804.0	40.6	7,390.0	50.6	5,928.9	60.6	4,950.5	70.6	4,249.3	80.6	3,722.0	90.6	3,311.2
10.7	28,037	20.7	14,493	30.7	9,772.0	40.7	7,371.0	50.7	5,917.1	60.7	4,942.3	70.7	4,243.3	80.7	3,717.5	90.7	3,307.6
10.8	27,778	20.8	14,423	30.8	9,740.2	40.8	7,353.0	50.8	5,905.6	60.8	4,934.2	70.8	4,237.3	80.8	3,712.9	90.8	3,303.9
10.9	27,522	20.9	14,353	30.9	9,708.7	40.9	7,335.0	50.9	5,893.9	60.9	4,926.1	70.9	4,231.3	80.9	3,708.3	90.9	3,300.3
11.0	27,273	21.0	14,285	31.0	9,677.4	41.0	7,317.5	51.0	5,882.5	61.0	4,918.0	71.0	4,225.3	81.0	3,703.7	91.0	3,296.7
11.1	27,027	21.1	14,218	31.1	9,646.2	41.1	7,299.3	51.1	5,870.9	61.1	4,910.0	71.1	4,219.4	81.1	3,699.2	91.1	3,293.1
11.2	26,786	21.2	14,151	31.2	9,615.5	41.2	7,281.5	51.2	5,859.4	61.2	4,902.0	71.2	4,213.5	81.2	3,694.6	91.2	3,289.4
11.3	26,549	21.3	14,085	31.3	9,584.7	41.3	7,263.8	51.3	5,847.9	61.3	4,894.0	71.3	4,207.6	81.3	3,690.0	91.3	3,285.8
11.4	26,316	21.4	14,019	31.4	9,554.0	41.4	7,246.3	51.4	5,838.0	61.4	4,886.0	71.4	4,201.7	81.4	3,685.5	91.4	3,282.2
11.5	26,087	21.5	13,954	31.5	9,523.8	41.5	7,228.8	51.5	5,825.1	61.5	4,878.0	71.5	4,195.7	81.5	3,680.9	91.5	3,278.7
11.6	25,862	21.6	13,889	31.6	9,493.6	41.6	7,211.5	51.6	5,813.9	61.6	4,870.1	71.6	4,190.0	81.6	3,676.5	91.6	3,275.1
11.7	25,641	21.7	13,825	31.7	9,463.7	41.7	7,194.2	51.7	5,802.7	61.7	4,862.2	71.7	4,184.1	81.7	3,672.0	91.7	3,271.5
11.8	25,424	21.8	13,761	31.8	9,433.8	41.8	7,177.0	51.8	5,791.6	61.8	4,854.3	71.8	4,178.3	81.8	3,667.5	91.8	3,268.0
11.9	25,210	21.9	13,699	31.9	9,404.4	41.9	7,160.0	51.9	5,780.3	61.9	4,846.6	71.9	4,172.5	81.9	3,663.0	91.9	3,264.4
12.0	25,000	22.0	13,636	32.0	9,375.0	42.0	7,142.8	52.0	5,769.0	62.0	4,838.7	72.0	4,166.7	82.0	3,658.6	92.0	3,260.8
12.1	24,793	22.1	13,575	32.1	9,345.6	42.1	7,125.9	52.1	5,758.1	62.1	4,830.9	72.1	4,160.8	82.1	3,654.1	92.1	3,257.3
12.2	24,590	22.2	13,514	32.2	9,316.6	42.2	7,109.0	52.2	5,747.1	62.2	4,823.1	72.2	4,155.1	82.2	3,649.7	92.2	3,253.8
12.3	24,390	22.3	13,453	32.3	9,288.0	42.3	7,092.2	52.3	5,736.1	62.3	4,815.3	72.3	4,149.4	82.3	3,645.2	92.3	3,250.3
12.4	24,193	22.4	13,393	32.4	9,259.2	42.4	7,075.3	52.4	5,725.2	62.4	4,807.8	72.4	4,143.6	82.4	3,640.8	92.4	3,246.8
12.5	24,000	22.5	13,333	32.5	9,230.8	42.5	7,058.8	52.5	5,714.2	62.5	4,800.0	72.5	4,137.9	82.5	3,636.4	92.5	3,243.2
12.6	23,809	22.6	13,274	32.6	9,202.4	42.6	7,042.2	52.6	5,703.4	62.6	4,792.3	72.6	4,132.2	82.6	3,631.9	92.6	3,239.7
12.7	23,622	22.7	13,216	32.7	9,174.2	42.7	7,025.7	52.7	5,692.6	62.7	4,784.7	72.7	4,126.6	82.7	3,627.5	92.7	3,236.2
12.8	23,437	22.8	13,158	32.8	9,146.4	42.8	7,009.3	52.8	5,682.1	62.8	4,777.0	72.8	4,120.9	82.8	3,623.2	92.8	3,232.7
12.9	23,256	22.9	13,100	32.9	9,118.4	42.9	6,993.0	52.9	5,671.0	62.9	4,769.4	72.9	4,115.2	82.9	3,618.8	92.9	3,229.2
13.0	23,077	23.0	13,043	33.0	9,091.0	43.0	6,976.7	53.0	5,660.0	63.0	4,761.9	73.0	4,109.6	83.0	3,614.4	93.0	3,225.8
13.1	22,901	23.1	12,987	33.1	9,063.4	43.1	6,960.5	53.1	5,649.7	63.1	4,754.3	73.1	4,103.9	83.1	3,610.1	93.1	3,222.3
13.2	22,722	23.2	12,931	33.2	9,036.0	43.2	6,944.4	53.2	5,639.1	63.2	4,746.8	73.2	4,098.4	83.2	3,605.7	93.2	3,218.8
13.3	22,556	23.3	12,875	33.3	9,009.0	43.3	6,928.3	53.3	5,628.5	63.3	4,739.3	73.3	4,092.8	83.3	3,601.4	93.3	3,215.4
13.4	22,388	23.4	12,820	33.4	8,982.0	43.4	6,912.4	53.4	5,618.0	63.4	4,731.9	73.4	4,087.2	83.4	3,597.1	93.4	3,211.9
13.5	22,224	23.5	12,766	33.5	8,955.2	43.5	6,896.5	53.5	5,607.5	63.5	4,724.4	73.5	4,081.6	83.5	3,592.7	93.5	3,208.6
13.6	22,059	23.6	12,712	33.6	8,928.6	43.6	6,880.7	53.6	5,597.0	63.6	4,716.9	73.6	4,076.1	83.6	3,588.5	93.6	3,205.1
13.7	21,898	23.7	12,658	33.7	8,902.0	43.7	6,865.0	53.7	5,586.4	63.7	4,709.5	73.7	4,070.6	83.7	3,584.2	93.7	3,201.7
13.8	21,739	23.8	12,605	33.8	8,875.4	43.8	6,849.3	53.8	5,576.2	63.8	4,702.2	73.8	4,065.0	83.8	3,580.0	93.8	3,198.3
13.9	21,583	23.9	12,553	33.9	8,849.6	43.9	6,833.8	53.9	5,565.9	63.9	4,694.8	73.9	4,059.5	83.9	3,575.7	93.9	3,194.8
14.0	21,429	24.0	12,500	34.0	8,823.4	44.0	6,818.2	54.0	5,555.6	64.0	4,687.5	74.0	4,054.1	84.0	3,571.4	94.0	3,191.5
14.1	21,277	24.1	12,448	34.1	8,797.8	44.1	6,802.7	54.1	5,545.3	64.1	4,680.1	74.1	4,048.5	84.1	3,567.2	94.1	3,188.1
14.2	21,127	24.2	12,397	34.2	8,771.8	44.2	6,787.3	54.2	5,535.0	64.2	4,672.8	74.2	4,042.9	84.2	3,562.9	94.2	3,184.7
14.3	20,979	24.3	12,345	34.3	8,746.4	44.3	6,772.0	54.3	5,524.9	64.3	4,665.7	74.3	4,037.6	84.3	3,558.7	94.3	3,181.4
14.4	20,833	24.4	12,295	34.4	8,720.8	44.4	6,756.8	54.4	5,514.6	64.4	4,658.3	74.4	4,032.3	84.4	3,554.5	94.4	3,178.0
14.5	20,690	24.5	12,245	34.5	8,695.6	44.5	6,741.6	54.5	5,504.5	64.5	4,651.1	74.5	4,026.8	84.5	3,550.3	94.5	3,174.6
14.6	20,548	24.6	12,194	34.6	8,670.4	44.6	6,726.5	54.6	5,494.5	64.6	4,644.0	74.6	4,021.5	84.6	3,546.1	94.6	3,171.2
14.7	20,408	24.7	12,146	34.7	8,645.6	44.7	6,711.3	54.7	5,484.4	64.7	4,636.8	74.7	4,016.1	84.7	3,541.9	94.7	3,167.9
14.8	20,270	24.8	12,097	34.8	8,620.6	44.8	6,696.3	54.8	5,474.5	64.8	4,629.6	74.8	4,010.7	84.8	3,537.7	94.8	3,164.5
14.9	20,134	24.9	12,048	34.9	8,595.8	44.9	6,681.3	54.9	5,464.5	64.9	4,622.6	74.9	4,005.4	84.9	3,533.5	94.9	3,161.2
15.0	20,000	25.0	12,000	35.0	8,571.4	45.0	6,666.7	55.0	5,454.6	65.0	4,615.4	75.0	4,000.0	85.0	3,529.4	95.0	3,157.9
15.1	19,867	25.1	11,952	35.1	8,547.0	45.1	6,652.1	55.1	5,444.7	65.1	4,608.3	75.1	3,994.6	85.1	3,525.2	95.1	3,154.6
15.2	19,737	25.2	11,905	35.2	8,522.8	45.2	6,637.1	55.2	5,434.7	65.2	4,601.2	75.2	3,989.4	85.2	3,521.1	95.2	3,151.2
15.3	19,608	25.3	11,858	35.3	8,498.6	45.3	6,622.5	55.3	5,424.9	65.3	4,594.3	75.3	3,984.1	85.3	3,517.0	95.3	3,148.0
15.4	19,480	25.4	11,811	35.4	8,474.6	45.4	6,608.1	55.4	5,415.1	65.4	4,587.1	75.4	3,978.8	85.4	3,512.8	95.4	3,144.6
15.5	19,355	25.5	11,765	35.5	8,450.6	45.5	6,593.4	55.5	5,405.4	65.5	4,580.1	75.5	3,973.5	85.5	3,508.7	95.5	3,141.4
15.6	19,231	25.6	11,719	35.6	8,427.0	45.6	6,579.0	55.6	5,395.7	65.6	4,573.2	75.6	3,968.3	85.6	3,504.7	95.6	3,138.1
15.7	19,108	25.7	11,673	35.7	8,403.4	45.7	6,564.5	55.7	5,385.9	65.7	4,566.1	75.7	3,963.0	85.7	3,500.5	95.7	3,134.8
15.8	18,987	25.8	11,628	35.8	8,380.0	45.8	6,550.1	55.8	5,376.4	65.8	4,559.2	75.8	3,957.7	85.8	3,496.5	95.8	3,131.5
15.9	18,868	25.9	11,583	35.9	8,356.6	45.9	6,536.0	55.9	5,366.7	65.9	4,552.3	75.9	3,952.5	85.9	3,492.5	95.9	3,128.2
16.0	18,750	26.0	11,538	36.0	8,333.3	46.0	6,521.5	56.0	5,357.1	66.0	4,545.5	76.0	3,947.4	86.0	3,488.3	96.0	3,125.0
16.1	18,633	26.1	11,494	36.1	8,310.2	46.1	6,507.6	56.1	5,347.6	66.1	4,538.6	76.1	3,942.2	86.1	3,484.3	96.1	3,121.8
16.2	18,518	26.2	11,450	36.2	8,287.2	46.2	6,493.5	56.2	5,338.0	66.2	4,531.7	76.2	3,937.0	86.2	3,480.2	96.2	3,118.4
16.3	18,405	26.3	11,407	36.3	8,264.4	46.3	6,479.4	56.3	5,328.6	66.3	4,524.9	76.3	3,931.9	86.3	3,476.2	96.3	3,115.2
16.4	18,293	26.4	11,364	36.4	8,241.6	46.4	6,465.4										



**USE NATIONAL UNION RADIO TUBES FOR  
OUTSTANDING RADIO PERFORMANCE**

**GUARAN-  
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**LONGER LIFE  
CLEARER  
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MORE  
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FOR  
LONG WAVE  
SHORT WAVE  
AND HIGH  
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SETS**

We're Equipped to Repair **YOUR RADIO!**

**Our skilled technicians use latest scientific methods to analyze trouble in any make radio.**



**All work guaranteed.  
Quality parts used.  
Rely on us.**

Over emphasis on radio tube testing as a cure all for radio ills has proven costly to thousands of set owners. While tube testing is imperative to maintain the fine performance of your radio, it is not the only test of importance. Consider the importance of other checks and tests as outlined below. Remember the forgotten 5/6 in radio testing *if you'd guard* your radio investment.

**1** *If a filter condenser blows.* This defect will ruin the rectifier tube and is very likely to burn out the power transformer. That means a high cost for repairs and replacements of ruined parts. *Depend on your service man* to check the condition of condensers *before* damage is done. He has test equipment to do this. You have no other way of knowing.

**2** *If wires come loose or short circuit.* Fire or serious damage to the set may result from loosening of soldered joints, wearing of wiring insulation and corrosion. *Depend on your service man* when he inspects your complete set to tighten and resolder loose joints and replace defective insulation. He knows where to look for these hazards.

**3** *If resistors are defective.* Damage to other parts of the set or premature failure of tubes may result from defective resistors. They change value with age. *Depend on your service man* to check resistors. He is equipped to accurately check resistor condition.

**4** *If the loudspeaker gets out of adjustment.* Damage beyond repair and necessity of buying a new speaker may result if the set is operated with a poorly adjusted speaker. During life of the set, absorption of moisture and other factors cause slight warping of the speaker cone. This throws mechanical clearance between speaker parts out of adjustment. *Depend on your service man* to adjust the speaker before damage occurs. He knows how and has the proper tools.

**5** *If volume is weak — tone distorted.* You can't pick up stations you used to get or tune as sharply and the tone sounds harsh and unpleasant, when adjustments are needed. Remember your radio is a complicated scientific instrument. When it comes from the factory a myriad of accurate adjustments have been made on it. After you've used it for a period of time—vibration, moisture absorption, etc., change these adjustments. *Depend on your service man* to keep it at peak operating efficiency. He has instruments to check it and he knows what to do when he spots weaknesses. Let your service man inspect your radio at least once a year, preferably once every six months.

#### **GREATER ECONOMY**

It's always more economical to replace parts before they fail. When one part in your radio fails it usually causes damage to other parts.

#### **GREATER SATISFACTION**

It is obvious that only testing radio tubes will not restore a radio to the condition in which it left the factory. A complete check by your service man is the only way to assure full satisfaction.