

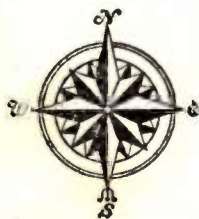
**NATIONAL
UNION
RADIO
GUIDE**



**RADIO LOG
RADIO STAR PHOTOS
and
BIOGRAPHIES**



Can You Explore The Air?



CAN you ride radio's magic carpet to distant stations? Don't blame your radio set if you can't fulfill your desires to navigate the air, and discover new talent in far away places. Ask your dealer about National Union tubes and why they have been selected by leading set manufacturers as standard equipment.

*** GUARANTEE ***
National Union
Tubes are guaran-
teed to be mechan-
ically and electric-
ally perfect

Even old radios respond to the new power and tonal refinements made possible by National Union tubes. . . Remember, one weak tube can cause distorted reception—hum, buzz and crackle.

National Union dealers will gladly give you a rating on your present tubes and show you how you can join the band of enthusiastic explorers of the air.



NATIONAL
UNION
RADIO TUBES



TABLE OF CONTENTS

Alphabetical Call Letter List Showing Location, Power, Kilo- cycles & Dial Setting.....	2-6
Behind The Scenes.....	8
Chain Broadcasting Systems.....	1
Helpful Radio Hints.....	9
List of Principal Stations of Cuba and Mexico	16

Principal Broadcasting Stations of the United States, Canada, Mexico and Cuba, Arranged by Kilocycle Allocation	10-11
Radio Star Photos and Biographies	12-15
Short-Wave Stations of the World	7
Television Stations	6

NATIONAL UNION RADIO CORPORATION OF NEW YORK

CHAIN BROADCASTING SYSTEMS

Alphabetically by Cities with Call Letters and Kilocycles

COLUMBIA

Akron, O.	WADC 1320	Montgomery, A.	WSFA 1410
Albany, N. Y.	WOKO 1440	Montreal, Can.	CKAC 730
Atlanta, Ga.	WGST 890	Nashville	WLAC 1470
Atlantic City, ..	WPG 1100	New Orleans	WDSU 1250
Baltimore Md., ..	WCAO 600	New York, N.Y.	WABC 860
Bangor, Me.	WLBZ 620	Norfolk, Va.	WTAR 780
Bay City, Mich.	WBCM 1410	Oil City, Pa.	WLBW 1260
Birmingham, A.	WBRC 930	Oklahoma City	KJEF 1480
Boston, Mass.	WAAB 1410	Orlando	WDBO 1220
Buffalo, N. Y., ..	WGR 550	Peoria, Ill.	WMBD 1440
Charlotte, N. C.	WBT 1080	Philadelphia	WCAU 1170
Chattanooga, T.	WDOD 1280		WFAN 610
Chicago, Ill.	WBBM 770		WIP 610
Cincinnati, O.	WKRC 550	Phoenix, Ariz.	KOY 1390
Cleveland, O.	WHK 1390	Pittsburgh	WJAS 1290
Colorado Springs	KVOR 1270	Portland, Ore.	KOIN 940
Columbus, O.	WCAH 1430	Providence	WEAN 780
Dallas, Tex.	KRLD 1040	Reno	KOH 1380
Denver, Colo.	KLZ 560	Roanoke, Va.	WDBJ 930
Detroit, Mich.	WXYZ 1240	Rochester	WHEC 1440
Eau Claire, Wis.	WTAQ 1330	St. Louis	KMOX 1090
Ft. Wayne, Ind.	WGL 1370	Salt Lake City	KDYL 1290
Greensboro, N.C.	WBIG 1440	San Antonio	KTSA 1290
Harrisburg, Pa.	WHP 1430	San Diego	KGB 1330
Hartford, Conn.	WDRG 1330	San Francisco	KFRC 610
Hopkinsville,	WFIW 940	Savannah	WTOC 1260
Houston, Tex.	KTRH 1120	Seattle, Wash.	KOL 1270
Indianapolis, I.	WFBM 1230	Sioux City, Ia.	KSCJ 1330
Kansas City	KMBC 950	South Bend, In.	WSBT 1230
Knoxville, Tenn.	WNOX 560	Spokane, Kan.	KFPY 1340
La Crosse, Wis.	WKBH 1380	Syracuse, N. Y.	WFBL 1360
Little Rock	KLRA 1390	Tacoma, Wash.	KVI 760
Los Angeles, C.	KHJ 900	Tampa, Fla.	WDAE 1220
Louisville, Ky.	WLAP 1200	Toledo, O.	WSPD 1340
Manchester, N. H.	WFEA 1430	Toronto, Can.	CFRB 960
Memphis, Tenn.	WREC 600	Waco, Tex.	WACO 1240
Miami	WQAM 560	Washington	WMAL 630
Milwaukee	WISN 1120	Waterloo, Ia.	WMT 600
Minneapolis	WCCO 810	Wheeling, W. Va., ..	WWVA 1160
Mobile, Ala.	WODX 1410	Wichita, Kan.	KFH 1380
		Worcester	WORC 1200
		Yankton, S. D.	WNAX 570
		Youngstown	WKBN 570

NATIONAL

Ashville, N. C.	WMNC 570	Louisville	WBAS 820
Atlanta, Ga.	WSB 740	Madison, Wis.	WIBA 1280
Baltimore, Md.	WBAL 1060	Memphis, Tenn.	WMC 780
Birmingham, A.	WBFB 1270	Miami	WIOD 1306
Bismarck, N. D., ..	WFYR 550	Milwaukee	WTMJ 620
Boston, Mass.	WBZ 990	Montreal, Can.	CFCF 1030
Butte, Mont.	KGIR 1360	Nashville, Tenn.	WSM 650
Cedar Rapids	WKCR 1310	New Orleans	WSMR 1320
Chicago, Ill.	KFKX 1020	New York	WEAF 660
Cincinnati, O.	WLW 700		WJZ 760
Clearwater, Fl.	WFLA 620	Oklahoma City	WKY 900
Cleveland, O.	WGAR 1450	Omaha, Neb.	WOW 590
Columbia, S. C.	WIS 1010	Philadelphia	WFI 560
Council Bluffs	KOIL 1260		WLIT 560
Covington, Ky.	WKY 1490	Phoenix, Ariz.	KTAR 620
Dallas, Tex.	WFAA 800	Pittsburgh	WCAE 1220
Davenport, Ia.	WOC 1000		KDKA 980
Denver, Colo.	KOA 830	Portland, Me.	WCSH 940
Des Moines	WHO 1000	Portland, Ore.	KGW 620
Detroit, Mich.	WJW 750		KEX 1180
Fargo, N. D.	WDAY 940	Providence	WJAR 890
Ft. Worth, Tex.	WBAP 800	Raleigh, N. C.	WPTF 680
Hartford, Conn.	WTIC 1060	Richmond, Va.	WRVA 1110
Honolulu	KGU 750	Rochester	WHAM 1150
Hot Springs	KTHS 1040	St. Louis, Mo.	KSD 550
Houston, Tex.	KPRC 920		KWK 1550
Jackson, Miss.	WJDX 1270	St. Paul, Minn.	KSTP 1460
Jacksonville, Fl.	WJAX 900	St. Petersburg	WSUN 620
Kansas City	WDAF 610	Salt Lake City	KSL 1130
Lawrence, Kan., ..	WREN 1220	San Antonio	WOAI 1190
Los Angeles, Cal.	KFI 640	San Diego	KFSD 600
		San Francisco	KGO 790
			KPO 680
		Schenectady	WGY 790
		Seattle, Wash.	KJR 970
			KOMO 920
		Shreveport	KTBS 1450
		Spokane, Wash.	KHQ 590
			KGA 1470
		Superior, Wis.	WEBC 1290
		Toronto, Can.	CKGW 690
		Tulsa, Okla.	KVOO 1140
		Washington	WRC 950
		Worcester	WTAG 580

Broadcasting Stations of the United States and Canada

Complete list of stations alphabetically by Call Letter, showing Kilocycle, Location and Power. This list may be used for locating any station not familiar to you by the Kilocycle allocation. Your radio dial reading may be inserted in the space provided.

Station	Kilocycles	Location	Power Watts	Dial Setting	Station	Kilocycles	Location	Power Watts	Dial Setting
CFAC	690	Calgary, Alta.	500		KABC	1420	San Antonio, Tex.	100	
CFBO	890	St. John, N. B.	500		KARK	890	Little Rock, Ark.	250	
CFCA	840	Toronto, Ont.	500		KBPS	1420	Portland, Ore.	100	
CFCF	1030	Montreal, Que.	500		KBMT	1200	Paragould, Ark.	100	
CFCH	930	North Bay, Ont.	100		KCMC	1280	Tupelo, Miss.	100	
CFCL	580	Call CKCL used	500		KCRC	1370	Enid, Okla.	100	
CFCN	985	Calgary, Alta.	10000		KCRJ	1310	Jerome, Ariz.	100	
CFCO	1210	Chatham, Ont.	100		KDB	1500	Santa Barbara, Cal.	100	
CFCT	630	Victoria, B. C.	50		KDFN	1210	Casper, Wyo.	100	
CFCY	580	Charlottetown, P.E.I.	500		KDKA	980	Pittsburgh, Pa.	50000	
CFJC	1120	Kamloops, B. C.	100		KDLR	1210	Devils Lake, N. D.	100	
CFLE	930	Prescott, Ont.	50		KDYL	1290	Salt Lake City, Utah	1000	
CFNB	1210	Fredericton, N. B.	50		KECA	1430	Los Angeles, Cal.	1000	
CFQC	910	Saskatoon, Sask.	500		KELW	780	Burbank, Cal.	500	
CFRB	960	Toronto, Ont.	4000		KERN	1200	Bakersfield, Cal.	100	
CFRC	930	Kingston, Ont.	50		KEX	1180	Portland, Ore.	5000	
CHCK	960	Charlottetown, P.E.I.	100		KFAB	770	Lincoln, Neb.	5000	
CHCS	1010	Hamilton, Ont.	500		KFAC	1300	Los Angeles, Cal.	1000	
CHGS	1120	Summerside, P.E.I.	100		KFBB	1280	Great Falls, Mont.	1000	
CHLS	730	Vancouver, B. C.	50		KFBI	1050	Milford, Kan.	5000	
CHMA	580	Edmonton, Alta.	250		KFBK	1310	Sacramento, Cal.	100	
CHML	880	Mt. Hamilton, Ont.	50		KFBL	1370	Everett, Wash.	50	
CHNS	815	Halifax, N. S.	500		KFDM	560	Beaumont, Tex.	500	
CHRC	645	Quebec, Que.	100		KFDY	550	Brookings, S. D.	500	
CHWC	960	Pilot Butte, Sask.	500		KFEL	920	Denver, Colo.	500	
CHWK	665	Chilliwack, B. C.	100		KFEQ	680	St. Joseph, Mo.	2500	
CHYC	730	Montreal, Que.	5000		KFGQ	1310	Boone, Ia.	100	
CJBC	840	Toronto, Ont.	5000		KFH	1300	Wichita, Kan.	1000	
CJBR	960	Regina, Sask.	500		KFI	640	Los Angeles, Cal.	50000	
CJCA	745	Edmonton, Alta.	500		KFIO	1120	Spokane, Wash.	100	
CJCB	880	Sidney, N. S.	50		KFIZ	1420	Fond du Lac, Wis.	100	
CJJC	690	Calgary, Alta.	500		KFJB	1200	Marshalltown, Ia.	100	
CJJC	910	London, Ont.	5000		KJFF	1480	Oklahoma City	5000	
CJGX	630	Yorktown, Sask.	500		KFJI	1210	Astoria, Ore.	100	
CJOC	1120	Lethbridge, Alta.	100		KFJM	1370	Grand Forks, N. D.	100	
CJOR	1210	Sea Island, B. C.	500		KFJR	1300	Portland, Ore.	500	
CJRM	665	Moose Jaw, Sask.	500		KFJY	1310	Ft. Dodge, Ia.	100	
CJRW	665	Fleming, Sask.	500		KFJZ	1370	Ft. Worth, Tex.	100	
CKAC	730	Montreal, Que.	5000		KKFA	880	Greeley, Colo.	500	
CKCD	730	Vancouver, B. C.	50		KFKU	1220	Lawrence, Kan.	500	
CKCI	645	Quebec, Que.	100		KFKX	1020	Chicago, Ill.	10000	
CKCK	960	Regina, Sask.	500		KFLV	1410	Rockford, Ill.	500	
CKCL	580	Toronto, Ont.	500		KFLX	1370	Galveston, Tex.	100	
CKCO	890	Ottawa, Ont.	100		KFMX	1250	Northfield, Minn.	1000	
CKCR	645	Waterloo, Ont.	100		KFNF	890	Shenandoah, Ia.	500	
CKCV	880	Quebec, Que.	50		KFOR	1210	Lincoln, Neb.	100	
CKFC	730	Vancouver, B. C.	50		KFOX	1250	Long Beach, Cal.	1000	
CKGW	690	Toronto, Ont.	5000		KFPL	1310	Dublin, Tex.	100	
CKIC	1010	Wolfville, N. S.	50		KFPM	1310	Greenville, Tex.	15	
CKLC	840	Red Deer, Alta.	1000		KFPW	1340	Ft. Smith, Ark.	50	
CKMC	1210	Cobalt, Ont.	100		KFPY	1340	Spokane, Wash.	1000	
CKMO	730	Vancouver, B. C.	100		KFQD	1230	Anchorage, Alaska	100	
CKNC	580	Toronto, Ont.	500		KFQU	1420	Holy City, Cal.	100	
CKOC	1010	Hamilton, Ont.	500		KFRG	610	San Francisco, Cal.	1000	
CKOV	1200	Kelowna, B. C.	100		KFRU	630	Columbia, Mo.	500	
CKPC	1210	Preston, Ont.	100		KFSD	600	San Diego, Cal.	500	
CKPR	890	Port Arthur, Ont.	50		KFSG	1120	Los Angeles, Cal.	500	
CKUA	580	Edmonton, Alta.	500		KFUL	1290	Galveston, Tex.	500	
CKWX	730	Vancouver, B. C.	100		KFUO	550	St. Louis, Mo.	500	
CKX	540	Brandon, Man.	500		KFUP	1310	Denver, Colo.	100	
CKY	780	Winnipeg, Man.	5000		KFVD	1000	Culver City, Cal.	250	
CNRA	630	Moncton, N. B.	500		KFVS	1210	Cape Girardeau, Mo.	100	
CNRD	840	Red Deer, Alta.	1000		KFWB	950	Hollywood, Cal.	1000	
CNRH	815	Halifax, N. S.	500		KFWF	1200	St. Louis, Mo.	100	
CNRL	910	London, Ont.	5000		KFWI	930	San Francisco, Cal.	500	
CNRM	730	Montreal, Que.	5000		KFXD	1420	Nampa, Ida.	100	
CNRO	600	Ottawa, Ont.	500		KFXF	920	Denver, Colo.	500	
CNRQ	880	Quebec, Que.	50		KFXJ	1310	Gd. Junct. Colo.	100	
CNRK	960	Regina, Sask.	500		KFXM	1210	San Bernardino, Cal.	100	
CNRS	910	Saskatoon, Sask.	500		KFXR	1310	Oklahoma City, Okla.	100	
CNRT	840	Toronto, Ont.	500		KFXZ	1420	Flagstaff, Ariz.	100	
CNRV	1030	Vancouver, B. C.	500		KFYO	1420	Abilene, Tex.	100	
CNRW	780	Winnipeg, Man.	5000		KFYR	550	Bismarck, N. D.	1000	
CNRX	960	Toronto, Ont.	4000		KGA	1470	Spokane, Wash.	5000	
CPRY	690	Toronto, Ont.	5000		KGAR	1370	Tucson, Ariz.	1000	

Arranged Alphabetically by Call Letters

Station	Kilocycles	Location	Power Watts	Dial Setting
KGB	1330	San Diego, Cal.	500	
KGBU	900	Ketchikan, Alaska ..	500	
KGBX	1310	St. Joseph, Mo.	100	
KGBZ	930	York, Neb.	500	
KGCA	1270	Decorah, Ia.	50	
KGCR	1210	Watertown, S. D. ...	100	
KGCU	1200	Mandan, N. D.	100	
KGCX	1310	Wolf Point, Mt.	180	
KGDA	1370	Mitchell, S. D.	100	
KGDE	1200	Fergus Falls, Minn. ...	100	
KGDM	1100	Stockton, Cal.	250	
KGDY	1200	Huron, S. D.	100	
KGEF	1300	Los Angeles, Cal. ...	1000	
KGEK	1200	Yuma, Colo.	50	
KGER	1360	Long Beach, Cal.	1000	
KGEW	1200	Ft. Morgan, Colo.	100	
KGEZ	1310	Kalispell, Mont.	100	
KGFF	1420	Shawnee, Okla.	100	
KGFG	1370	Oklahoma City, Okla. ...	100	
KGFI	1500	Corpus Christi, Tex. ...	100	
KGFJ	1200	Los Angeles, Cal.	100	
KGFK	1500	Moorhead, Minn.	50	
KGLF	1370	Raton, N. M.	100	
KGFW	1310	Ravenna, Neb.	100	
KGFY	630	Pierre, S. D.	200	
KGGC	1420	San Francisco, Cal.	100	
KGGF	1010	S. Coffeyville, Okla. ...	500	
KGGM	1230	Albuquerque, N. M. ...	250	
KGHI	1320	Pueblo, Colo.	250	
KGHJ	1200	Little Rock, Colo.	100	
KGHL	950	Billings, Mont.	1000	
KGIR	1360	Butte, Mont.	500	
KGIW	1420	Trinidad, Colo.	100	
KGIX	1420	Las Vegas, Nev.	100	
KGIZ	1500	Grant City, Mo.	100	
KGKB	1500	Tyler, Tex.	100	
KGKL	1370	San Angelo, Tex.	100	
KGKO	570	Wichita Falls, Tex.	250	
KGKX	1420	Sandpoint, Id.	100	
KGKY	1500	Scottsbluff, Neb.	100	
KGMB	1320	Honolulu, Hawaii	250	
KGMP	1210	Elk City, Okla.	100	
KGNF	1430	North Platte, Neb.	500	
KGNO	1210	Dodge City, Kan.	100	
KGO	790	San Francisco, Cal.	7500	
KGRS	1410	Amarillo, Tex.	1000	
KGU	750	Honolulu, Hawaii	1000	
KGVO	1420	Missoula, Mont.	100	
KGW	620	Portland, Ore.	1000	
KGY	1200	Lacey, Wash.	10	
KHJ	900	Los Angeles, Calif. ...	1000	
KHJ	590	Spokane, Wash.	1000	
KICA	1370	Clovis, N. M.	100	
KICK	1420	Red Oak, Ia.	100	
KID	1320	Idaho Falls, Id.	250	
KIDO	1250	Boise, Id.	1000	
KIT	1310	Yakima, Wash.	50	
KJBS	1070	San Francisco, Calif. ...	100	
KJR	970	Seattle, Wash.	5000	
KLCN	1290	Blytheville, Ark.	50	
KLO	1400	Ogden, Utah	500	
KLPM	1420	Minot, N. D.	250	
KLRA	1390	Little Rock	1000	
KLS	1440	Oakland, Cal.	250	
KLX	880	Oakland, Cal.	500	
KLZ	560	Denver, Colo.	1000	
KMA	930	Shenandoah, Ia.	500	
KMAC	1370	San Antonio, Tex.	100	
KMBC	950	Kansas City, Mo.	1000	
KMCS	1120	Inglewood, Cal.	500	
KMED	1310	Medford, Ore.	100	
KMJ	1210	Fresno, Cal.	100	
KMLB	1200	Monroe, La.	100	
KMMJ	740	Clay Center, Neb.	1000	
KMO	860	Tacoma, Wash.	500	
KMOX	1090	St. Louis, Mo.	5000	
KMPC	710	Beverly Hills, Cal.	500	

Station	Kilocycles	Location	Power Watts	Dial Setting
KMTR	570	Los Angeles, Cal.	500	
KNOW	1500	Austin, Tex.	100	
KNX	1050	Hollywood, Cal.	5000	
KOA	830	Denver, Colo.	12500	
KOAC	550	Corvallis, Ore.	1000	
KOB	1180	State College, N. M. ...	20000	
KOCW	1400	Chickasha, Okla.	250	
KOH	1380	Reno, Nev.	500	
KOIL	1260	Council Bluffs, Ia. ...	1000	
KOIN	940	Portland, Ore.	1000	
KOL	1270	Seattle, Wash.	1000	
KOMO	920	Seattle, Wash.	1000	
KONO	1370	San Antonio, Tex.	100	
KOOS	1370	Marshfield, Ore.	100	
KORE	1420	Eugene, Ore.	100	
KOY	1390	Phoenix, Ariz.	500	
KPCB	650	Seattle, Wash.	100	
KPJM	1500	Prescott, Ariz.	100	
KPO	680	San Francisco, Cal.	5000	
KPOF	880	Denver, Colo.	500	
KPPC	1210	Pasadena, Cal.	50	
KPQ	1500	Wenatchee, Wash.	50	
KPRC	920	Houston, Tex.	1000	
KQV	1380	Pittsburgh, Pa.	500	
KQW	1010	San Jose, Cal.	500	
KRE	1370	Berkeley, Cal.	100	
KREG	1500	Santa Ana, Cal.	100	
KRGV	1260	Harlingen, Tex.	500	
KRLD	1040	Dallas, Tex.	10000	
KRMD	1310	Shreveport, La.	50	
KROW	930	Oakland, Cal.	500	
KRSC	1120	Seattle, Wash.	50	
KSAC	580	Manhattan, Kan.	500	
KSCJ	1330	Sioux City, Ia.	1000	
KSD	550	St. Louis, Mo.	500	
KSEI	900	Pocatello, Id.	250	
KSL	1130	Salt Lake City, Utah ...	5000	
KSO	1380	Clarinda, Ia.	500	
KSOO	1110	Sioux Falls, S. D.	2500	
KSTP	1460	St. Paul, Minn.	10000	
KTAB	560	San Francisco, Cal.	1000	
KTAR	620	Phoenix, Ariz.	500	
KTAT	1240	Ft. Worth, Tex.	1000	
KTBR	1300	Portland, Ore.	500	
KTBS	1450	Shreveport, La.	1000	
KTFI	1240	Twin Falls, Ida.	250	
KTHS	1040	Hot Springs, Ark.	10000	
KTLC	1310	Houston, Tex.	100	
KTM	780	Los Angeles, Cal.	500	
KTRH	1120	Houston, Tex.	500	
KTSA	1290	San Antonio	1000	
KTSM	1310	El Paso, Tex.	100	
KTW	1220	Seattle, Wash.	1000	
KUJ	1370	Walla Walla, Wash. ...	100	
KUOA	1390	Fayetteville, Ark.	1000	
KUSD	890	Vermillion, S. D.	500	
KUT	1500	Austin, Tex.	100	
KVI	760	Tacoma, Wash.	1000	
KVL	1370	Seattle, Wash.	100	
KVOA	1260	Tucson, Ariz.	500	
KVOO	1140	Tulsa, Okla.	5000	
KVOR	1270	Colorado Spgs., Colo. ...	1000	
KVOS	1200	Bellingham, Wash.	100	
KWCR	1310	Cedar Rapids, Ia.	100	
KWEA	1210	Shreveport, La.	100	
KWG	1200	Stockton, Cal.	100	
KWJJ	1060	Portland, Ore.	500	
KWK	1350	St. Louis, Mo.	1000	
KWKC	1370	Kansas City, Mo.	100	
KWKH	850	Shreveport, La.	1000	
KWLC	1270	Decorah, Ia.	100	
KWSC	1220	Pullman, Wash.	1000	
KWWG	1260	Brownsville, Tex.	500	
KXA	570	Seattle, Wash.	500	
KXL	1420	Portland, Ore.	100	
KXO	1500	El Centro, Cal.	100	
KXRO	1310	Aberdeen, Wash.	100	
KXYZ	1420	Houston, Tex.	100	

Arranged Alphabetically by Call Letters

Station	Kilocycles	Location	Power Watts	Dial Setting	Station	Kilocycles	Location	Power Watts	Dial Setting
KYA	1230	San Francisco, Cal.	1000		WCMA	1400	Culver, Ind.	500	
KYW	1020	Chicago, Ill.	10000		WCOA	1340	Pensacola, Fla.	500	
KZRC	937.5	Cebu, P. I.	—		WCOC	880	Meridian, Miss.	500	
KZRM	618	Manila, P. I.	1000		WCOH	1200	Harrisburg, Pa.	100	
NAA	690	Arlington, Va.	1000		WCOH	1210	Yonkers, N. Y.	100	
VAS	685	Glance Bay, N. S.	2000		WCRW	1210	Chicago, Ill.	100	
WAAB	1410	Boston, Mass.	500		WCSC	1360	Charleston, S. C.	500	
WAAF	920	Chicago, Ill.	500		WCSH	940	Portland, Me.	1000	
WAAM	1250	Newark, N. J.	1000		WDAE	1220	Tampa, Fla.	1000	
WAAT	940	Jersey City, N. J.	300		WDAF	610	Kansas City, Mo.	1000	
WAAW	660	Omaha, Neb.	500		WDAG	1410	Amarillo, Tex.	1000	
WABC	860	New York, N. Y.	50000		WDAH	1310	El Paso, Tex.	100	
WABI	1200	Bangor, Me.	100		WDAS	1370	Philadelphia, Pa.	100	
WABO	1440	Rochester, N. Y.	500		WDAY	940	Fargo, N. D.	1000	
WABZ	1200	New Orleans, La.	100		WDBJ	930	Roanoke, Va.	250	
WACO	1240	Waco, Tex.	1000		WDBO	1120	Orlando, Fla.	500	
WADC	1320	Tallmadge, O.	1000		WDEL	1120	Wilmington, Del.	250	
WAGM	1420	Mars Hill, Maine	100		WDEV	1420	Waterbury, Vt.	50	
WAU	640	Columbus, O.	500		WDGY	1180	Minneapolis, Minn.	1000	
WALR	1210	Zanesville, Ohio	100		WDOD	1280	Chattanooga, Tenn.	1000	
WAPI	1140	Birmingham, Ala.	5000		WDRC	1330	Hartford, Conn.	500	
WASH	1270	Grand Rapids, Mich.	500		WDSU	1250	New Orleans, La.	1000	
WAWZ	1350	Zarepath, N. J.	250		WDZ	1070	Tuscola, Ill.	100	
WBAA	1400	W. Lafayette, Ind.	500		WEAF	660	New York, N. Y.	50000	
WBAK	1430	Harrisburg, Pa.	500		WEAI	1270	Ithaca, N. Y.	1000	
WBAL	1060	Baltimore, Md.	10000		WEAN	780	Providence, R. I.	250	
WBAM	1440	Greensboro, N. C.	500		WEAO	570	Columbus, O.	750	
WBAP	800	Ft. Worth, Tex.	10000		WEBC	1290	Superior, Wis.	1000	
WBAX	1210	Wilkes-Barre, Pa.	100		WEBQ	1210	Harrisburg, Ill.	100	
WBBC	1400	Brooklyn, N. Y.	500		WEBR	1310	Buffalo, N. Y.	100	
WBBL	1210	Richmond, Va.	100		WEDC	1210	Chicago, Ill.	100	
WBBM	770	Chicago, Ill.	25000		WEEI	590	Boston, Mass.	1000	
WBBR	1300	Brooklyn, N. Y.	1000		WEEU	830	Reading, Pa.	1000	
WBBZ	1200	Ponca City, Okla.	100		WEHC	1350	Emory, Va.	500	
WBCM	1410	Bay City, Mich.	500		WEHS	1420	Chicago, Ill.	100	
WBCN	870	Chicago, Ill.	500		WELL	1420	Battle Creek, Mich.	50	
WBEN	900	Buffalo, N. Y.	1000		WENR	870	Chicago, Ill.	50000	
WBEO	1310	Marquette, Mich.	100		WEPS	1200	Worcester, Mass.	100	
WBGF	1370	Glen Falls, N. Y.	50		WEVD	1300	New York, N. Y.	500	
WBHS	1200	Huntsville, Ala.	50		WEW	760	St. Louis, Mo.	1000	
WBIG	1440	Greensboro, N. C.	500		WEXL	1310	Royal Oak, Mich.	50	
WBIS	1230	Boston, Mass.	1000		WFAA	800	Dallas, Tex.	50000	
WBMS	1450	Hackensack, N. J.	250		WFAH	1200	South Bend, Ind.	100	
WBNX	1350	New York, N. Y.	250		WFAN	610	Philadelphia, Pa.	500	
WBOQ	860	New York, N. Y.	25000		WFBC	1200	Knoxville, Tenn.	50	
WBOW	1310	Terre Haute, Ind.	100		WFBE	1200	Cincinnati, O.	100	
WBRC	930	Birmingham, Ala.	500		WFBG	1310	Altoona, Pa.	100	
WBRE	1310	Wilkes-Barre, Pa.	100		WFBL	1360	Syracuse, N. Y.	1000	
WBSO	920	Needham, Mass.	500		WFBM	1230	Indianapolis, Ind.	1000	
WBT	1080	Charlotte, N. C.	5000		WFBH	1270	Baltimore, Md.	500	
WBTM	1370	Danville, Va.	100		WFD	1310	Flint, Mich.	100	
WBZ	990	Boston, Mass.	15000		WFDV	1310	Rome, Ga.	100	
WBZA	990	Boston, Mass.	1000		WFDW	1420	Annisston, Ala.	100	
WCAC	600	Storrs, Conn.	250		WFEA	1430	Manchester, N. H.	500	
WCAD	1220	Canton, N. Y.	500		WFI	560	Philadelphia, Pa.	500	
WCAE	1220	Pittsburgh, Pa.	1000		WFIW	940	Hopkinsville, Ky.	1000	
WCAH	1430	Columbus, O.	500		WFLC	1450	Akron, O.	500	
WCAJ	590	Lincoln, Neb.	500		WFLA	620	Clearwater, Fla.	250	
WCAL	1250	Northfield, Minn.	1000		WFOJ	1400	Brooklyn, N. Y.	500	
WCAM	1280	Camden, N. J.	500		WGAL	1310	Lancaster, Pa.	100	
WCAO	600	Baltimore, Md.	250		WGAR	1450	Cleveland, Ohio	500	
WCAP	1280	Asbury Park, N. J.	500		WGBB	1210	Freeport, N. Y.	100	
WCAT	1200	Rapid City, S. D.	100		WGBE	1430	Memphis, Tenn.	100	
WCAU	1170	Philadelphia, Pa.	10000		WGBF	630	Evansville, Ind.	500	
WCAZ	1070	Carthage, Ill.	50		WGBI	880	Scranton, Pa.	250	
WCBA	1440	Allentown, Pa.	250		WGCM	1210	Gulfport, Miss.	100	
WCBD	1080	Zion, Ill.	5000		WGCP	1250	Newark, N. J.	250	
WCBM	1370	Baltimore, Md.	100		WGES	1360	Chicago, Ill.	500	
WCBS	1210	Springfield, Ill.	100		WGH	1310	Newport News, Va.	100	
WCCO	810	Minneapolis, Minn.	5000		WGL	1370	Fort Wayne, Ind.	100	
WCDF	1350	New York, N. Y.	250		WGN	720	Chicago, Ill.	25000	
WCFL	970	Chicago, Ill.	1500		WGR	550	Buffalo, N. Y.	1000	
WCGU	1400	Brooklyn, N. Y.	500		WGST	890	Atlanta, Ga.	250	
WCHI	1490	Chicago, Ill.	5000		WGY	790	Schenectady, N. Y.	50000	
WCKY	1490	Covington, Ky.	5000		WHA	940	Madison, Wis.	750	
WCLO	1200	Janesville, Wis.	100		WHAD	1120	Milwaukee, Wis.	250	
WCLS	1310	Joliet, Ill.	100		WHAM	1150	Rochester, N. Y.	5000	

Arranged Alphabetically by Call Letters

Station	Kilocycles	Location	Power Watts	Dial Setting	Station	Kilocycles	Location	Power Watts	Dial Setting
WHAP	1300	New York, N. Y.	1000		WKBV	1500	Connerville, Ind.	100	
WHAS	820	Louisville, Ky.	10000		WKBW	1480	Buffalo, N. Y.	5000	
WHAT	1310	Philadelphia, Pa.	100		WKBZ	1500	Ludington, Mich.	50	
WHAZ	1300	Troy, N. Y.	500		WKJC	1200	Lancaster, Pa.	100	
WHB	860	Kansas City, Mo.	500		WKRC	550	Cincinnati, O.	1000	
WHBC	1200	Canton, Ohio	10		WKY	900	Oklahoma City, Okla.	1000	
WHBD	1370	Mt. Orab, Ohio	100		WKZO	590	Kalamazoo, Mich.	1000	
WHBF	1210	Rock Island, Ill.	100		WLAC	1470	Nashville, Tenn.	5000	
WHBL	1410	Sheboygan, Wis.	500		WLAP	1010	Louisville, Ky.	100	
WHBQ	1370	Memphis, Tenn.	100		WLB	1250	Minneapolis, Minn.	1000	
WHBU	1210	Anderson, Ind.	100		WLBC	1310	Muncie, Ind.	50	
WHBY	1200	Green Bay, Wis.	100		WLBF	1420	Kansas City, Kans.	100	
WHDF	1370	Calumet, Mich.	100		WLBG	1200	Petersburg, Va.	100	
WHDH	830	Boston, Mass.	1000		WLBL	900	Stevens Pt., Wis.	2000	
WHDL	1420	Tupper Lake, N. Y.	100		WLBW	1260	Oil City, Pa.	500	
WHEC	1440	Rochester, N. Y.	500		WLBX	1500	Long Isl. City, N. Y.	100	
WHFC	1420	Cicero, Ill.	100		WLBZ	620	Bangor, Me.	500	
WHIS	1410	Bluefield, W. Va.	250		WLCL	1210	Ithaca, N. Y.	50	
WHK	1390	Cleveland, O.	1000		WLEY	1370	Lexington, Mass.	100	
WHN	1010	New York, N. Y.	250		WLBI	720	Chicago, Ill.	25000	
WHO	1000	Des Moines, Ia.	5000		WLIT	560	Philadelphia, Pa.	500	
WHOM	1450	Jersey City, N. J.	250		WLOE	1500	Boston, Mass.	100	
WHP	1430	Harrisburg, Pa.	500		WLS	870	Chicago, Ill.	25000	
WIAS	1420	Ottumwa, Ia.	100		WLTH	1400	Brooklyn, N. Y.	500	
WIBA	1280	Madison, Wis.	500		WLVA	1370	Lynchburg, Va.	100	
WIBG	930	Elkins Pk., Pa.	25		WLW	700	Cincinnati, O.	50000	
WIBM	1370	Jackson, Mich.	100		WLWL	1100	New York, N. Y.	5000	
WIBO	560	Chicago, Ill.	1000		WMAC	570	Syracuse, N. Y.	250	
WIBR	1420	Steubenville, O.	100		WMAL	630	Washington, D. C.	250	
WIBU	1210	Poynette, Wis.	100		WMAZ	670	Chicago, Ill.	5000	
WIBW	580	Topeka, Kan.	1000		WMBA	1180	Macon, Ga.	500	
WIBX	1200	Utica, N. Y.	100		WMBC	1500	Newport, R. I.	100	
WICC	600	Bridgeport, Conn.	250		WMBD	1420	Detroit, Mich.	100	
WIL	1200	St. Louis, Mo.	100		WMBF	1440	Peoria, Ill.	500	
WILL	890	Urbana, Ill.	250		WMBG	1300	Miami, Fla.	1000	
WILM	1420	Wilmington, Del.	100		WMBH	1210	Richmond, Va.	100	
WINS	1180	New York, N. Y.	500		WMBI	1420	Joplin, Mo.	100	
WIOD	1300	Miami, Fla.	1000		WMBI	1080	Chicago, Ill.	5000	
WIP	610	Philadelphia, Pa.	500		WMBO	1310	Auburn, N. Y.	100	
WIS	1010	Columbia, S. C.	500		WMBQ	1500	Brooklyn, N. Y.	100	
WISJ	780	Madison, Wisc.	250		WMBR	1370	Tampa, Fla.	100	
WISN	1120	Milwaukee, Wis.	250		WMC	780	Memphis, Tenn.	500	
WJAC	1310	Johnstown, Pa.	100		WMCA	570	New York, N. Y.	500	
WJAG	1060	Norfolk, Neb.	1000		WMIL	1500	Brooklyn, N. Y.	100	
WJAK	1310	Marion, Ind.	50		WMMN	890	Fairmont, W. Va.	250	
WJAR	890	Providence, R. I.	250		WMPC	1500	Lapeer, Mich.	100	
WJAS	1290	Pittsburgh, Pa.	1000		WMRJ	1210	Jamaica, N. Y.	100	
WJAX	900	Jacksonville, Fla.	1000		WMSG	1350	New York, N. Y.	250	
WJAY	610	Cleveland, O.	500		WMT	600	Waterloo, Ia.	500	
WJBC	1200	La Salle, Ill.	100		WNAC	1230	Boston, Mass.	1000	
WJBI	1210	Red Bank, N. J.	100		WNAD	1010	Norman, Okla.	500	
WJBK	1370	Highland Park, Mich.	50		WNAX	570	Yankton, S. D.	1000	
WJBL	1200	Decatur, Ill.	100		WNSF	1500	Binghamton, N. Y.	100	
WJBO	1420	New Orleans, La.	100		WNSH	1310	New Bedford, Mass.	100	
WJBT	770	Chicago, Ill.	25000		WNBO	1200	Pittsburgh, Pa.	100	
WJBU	1210	Lewistown, Pa.	100		WNBR	1430	Memphis, Tenn.	500	
WJBW	1200	New Orleans, La.	100		WNBW	1200	Carbondale, Pa.	10	
WJBY	1210	Gadsden, Ala.	100		WNBX	1200	Springfield, Vt.	100	
WJDX	1270	Jackson, Miss.	1000		WNBZ	1290	Saranac Lake, N. Y.	50	
WJDD	1130	Moosehart, Ill.	20000		WNJ	1450	Newark, N. J.	250	
WJKS	1360	Gary, Ind.	1000		WNOX	560	Knoxville, Tenn.	1000	
WJMS	1420	Ironwood, Mich.	100		WNYC	570	New York, N. Y.	500	
WJR	760	Detroit, Mich.	5000		WOAI	1190	San Antonio, Tex.	50000	
WJSV	1460	Alexandria, Va.	10000		WOAN	600	Memphis, Tenn.	500	
WJTL	1370	Oglethorpe, Ga.	100		WOAX	1280	Trenton, N. J.	500	
WJW	1210	Mansfield, O.	100		WOBU	580	Charleston, W. Va.	250	
WJZ	760	New York, N. Y.	30000		WOC	1000	Davenport, Ia.	25000	
WKAQ	890	San Juan, P. R.	250		WOCL	1210	Jamestown, N. Y.	50	
WKAR	1040	E. Lansing, Mich.	1000		WODA	1250	Paterson, N. J.	1000	
WKAU	1310	Laconia, N. H.	100		WODX	1410	Mobile, Ala.	500	
WKBB	1310	Joliet, Ill.	100		WOI	640	Ames, Ia.	3500	
WKBC	1310	Birmingham, Ala.	100		WOKO	1440	Albany, N. Y.	500	
WKBF	1400	Indianapolis, Ind.	500		WOL	1310	Washington, D. C.	100	
WKBH	1380	LaCrosse, Wis.	1000		WOMT	1210	Manitowoc, Wis.	100	
WKBI	1420	Cicero, Ill.	100		WOOD	1270	Grand Rapids, Mich.	500	
WKBN	570	Youngstown, Ohio	500		WOPI	1500	Bristol, Tenn.	100	
WKBS	1310	Galesburg, Ill.	100		WOQ	1300	Kansas City, Mo.	1000	
					WOR	710	Newark, N. J.	5000	

Arranged Alphabetically by Call Letters

Station	Kilocycles	Location	Power Watts	Dial Setting	Station	Kilocycles	Location	Power Watts	Dial Setting
WORC	1200	Worcester, Mass.	100		WSAI	1330	Cincinnati, O.	500	
WORD	1490	Chicago, Ill.	5000		WSAJ	1310	Grove City, Pa.	100	
WORK	1000	York, Pa.	1000		WSAN	1440	Allentown, Pa.	250	
WOS	630	Jefferson City, Mo.	500		WSAR	1450	Fall River, Mass.	250	
WOV	1130	New York, N. Y.	1000		WSAZ	580	Huntington, W. Va.	250	
WOW	590	Omaha, Neb.	1000		WSB	740	Atlanta, Ga.	5000	
WOWO	1160	Fort Wayne, Ind.	10000		WSBC	1210	Chicago, Ill.	100	
WPAD	1420	Paducah, Ky.	100		WSBT	1230	South Bend, Ind.	500	
WPAP	1010	New York, N. Y.	250		WSEN	1210	Columbus, O.	100	
WPAW	1210	Pawtucket, R. I.	100		WSFA	1410	Montgomery, Ala.	500	
WPCC	560	Chicago, Ill.	500		WSIX	1210	Springfield, Tenn.	100	
WPCH	810	New York, N. Y.	500		WSJS	1310	Winston-Salem, N. C.	100	
WPEN	1500	Philadelphia, Pa.	100		WSM	650	Nashville, Tenn.	5000	
WPFB	1370	Hattiesburg, Miss.	100		WSMB	1320	New Orleans	500	
WPG	1100	Atlantic City, N. J.	5000		WSMK	1380	Dayton, O.	200	
WPOR	780	Norfolk, Va.	500		WSOC	1210	Gastonia, N. C.	100	
WPRO	1210	Providence, R. I.	100		WSPA	1420	Spartanburg, S. C.	100	
WPSC	1230	State College, Pa.	500		WSPD	1340	Toledo, O.	1000	
WPTF	680	Raleigh, N. C.	1000		WSUI	880	Iowa City, Ia.	500	
WQAM	560	Miami, Fla.	1000		WSUN	620	St. Petersburg, Fla.	250	
WQAN	880	Scranton, Pa.	250		WSVS	1370	Buffalo, N. Y.	50	
WQAO	1010	New York, N. Y.	250		WSYB	1500	Rutland, Vt.	100	
WQBC	1360	Vicksburg, Miss.	500		WSYR	570	Syracuse, N. Y.	250	
WQDM	1370	St. Albans, Vt.	100		WTAD	1440	Quincy, Ill.	500	
WQDX	1210	Thomasville, Ga.	100		WTAG	580	Worcester, Mass.	250	
WRAC	1370	Williamsport, Pa.	100		WTAM	1070	Cleveland, O.	5000	
WRAM	1370	Wilmington, N. C.	100		WTAQ	1330	Eau Claire, Wis.	1000	
WRAW	1310	Reading, Pa.	100		WTAR	780	Norfolk, Va.	500	
WRAX	1020	Philadelphia, Pa.	250		WTAW	1120	College Sta., Tex.	500	
WRBJ	1370	Hattiesburg, Miss.	10		WTAX	1210	Springfield, Ill.	100	
WRBL	1200	Columbus, Ga.	50		WTBO	1420	Cumberland, Md.	100	
WRBQ	1210	Greenville, Miss.	100		WTEL	1310	Philadelphia, Pa.	100	
WRBX	1410	Roanoke, Va.	250		WTFI	1450	Toccoa, Ga.	500	
WRC	950	Washington, D. C.	500		WTIC	1060	Hartford, Conn.	5000	
WRDO	1370	Augusta, Me.	100		WTJS	1310	Jackson, Tenn.	100	
WRDW	1500	Augusta, Ga.	100		WTMJ	620	Milwaukee, Wis.	1000	
WREC	600	Memphis, Tenn.	500		WTOC	1260	Savannah, Ga.	500	
WREN	1220	Lawrence, Kan.	1000		WWAE	1200	Hammond, Ind.	100	
WRHM	1250	Minneapolis, Minn.	1000		WWJ	920	Detroit, Mich.	1000	
WRJN	1370	Racine, Wis.	1000		WWL	850	New Orleans, La.	10000	
WRNY	1010	New York, N. Y.	250		WWNC	570	Asheville, N. C.	1000	
WROL	1310	Knoxville, Tenn.	100		WWRL	1500	Woodside, N. Y.	100	
WRR	1280	Dallas, Tex.	500		WWSW	1500	Pittsburgh, Pa.	100	
WRUF	830	Gainesville, Fla.	5000		WWVA	1160	Wheeling, W. Va.	5000	
WRVA	1110	Richmond, Va.	5000		WXYZ	1240	Detroit, Mich.	1000	

Principal Television Stations

Call	Owner	Location	Watts	Call	Owner	Location	Watts
1600-1700 KILOCYCLES							
WIXAV	Shortwave & Telev. Labs, Inc.	Boston, Mass.	1000	W3XE	Philadelphia Storage Battery Co.	Phila., Pa.	1500
W2XR	Radio Pictures, Inc., L. I. City, N. Y.		500	W9XAA	Chicago Federation of Labor	Chicago, Ill.	1000
2000-2100 KILOCYCLES							
W2XAP	Jenkins Telev. Corp. (portable)	Passaic, N. J.	250	W9XG	Purdue University	W. Lafayette, Ind.	1500
W2XCD	DeForest Radio Co., Passaic, N. J.		5000	2850-2950 KILOCYCLES			
W2XCR	Jenkins Television Corp., New York, N. Y.		5000	W2XCP	Freed-Eisemann Radio Corp.	Alwood, N. J.	2000
W3KK	Jenkins Laboratories	Silver Springs, Md.	5000	W9XR	Great Lakes Broadc. Co., Downers Gr., Ill.		5000
W3XF	WJR, Pontiac, Mich.		500	43,000-46,000 KILOCYCLES			
W6XAH	Pioneer Mercantile Co., Bakersfield, Cal.		1000	48,500-50,300 KILOCYCLES			
W9KK	State University of Iowa, Iowa City, Ia.		100	60,000-80,000 KILOCYCLES			
W9XAO	Western Television Corp., Chicago Ill.		500	W1XG	Shortwave & Television Corp., Boston Mass.		30
2100-2200 KILOCYCLES							
W2XBS	National Broadcasting Co., New York, N. Y.		5000	W2XBT	National Broadcasting Co., New York State ..		750
W2XCW	General Electric Co., Schenectady, N. Y.		20000	W2XR	Radio Pictures, Inc., L. I. City, N. Y.		1000
W3XAD	RCA Victor Co., Camden, N. J.		500	W3XAD	RCA Victor Co., Inc., Camden, N. J.		2000
W3XAK	National Broadc. Co., Bound Brook, N. J.		5000	W9XD	The Journal Co., Milwaukee, Wis.		500
W6XS	Don Lee, Inc., Gardena, Cal.		500	W10XG	DeForest Radio Co., Portable		500
W9XAV	Westinghouse E. & M. Co., E. Pittsburgh, Pa.		20000	W2XDS	Jenkins Television, Portable		2000
W9XAP	Chicago Daily News, Chicago, Ill.		1000	W2XF	National Broadcasting Co., New York City		5000
2750-2850 KILOCYCLES							
W2XAB	Atlantic Broadcasting Corp., New York, N. Y.		500	W6XAO	Don Lee Inc., Los Angeles, Cal.		150
W2XBO	United Research Corp., L. I. C., N. Y.		500	W8XL	WGAR Broadcasting Co., Ohio		200
				W3XC	Jenkins Laboratories, Wheaton, Md.		1000
				W8XF	WJR, Pontiac, Mich.		200

Principal Short-Wave Broadcast Stations of the World

Call	Location	Meters	Dial	Call	Location	Meters	Dial
AFRICA				ENGLAND			
VQ7LO	Nairobi, Kenya	49.60		GBK	Bodman ..1657, 32.4		
ARGENTINA				GaBW	Chelmsford ..25.53		
LBN	Buenos Aires,	14.15, 30.3		GBX	Rugby, ..18.56, 24.60		
LSOR	Buenos Aires	30.57		GBW	Rugby,	16.54, 20.70, 30.6	
LSX	Buenos Aires	28.98		GBU	Rugby,	16.11, 24.47, 30.15	
AUSTRALIA				GBS	Rugby,	16.38, 24.6,	
VK3LO	Melbourne	31.56		G2NM	Sonning-on-Thames	20.95	
VK3ME	Melbourne	31.55		FRANCE			
VK3UZ	Melbourne	34.00		FTM	St. Assise	15.50	
VK2ME	Sydney, 28.50, 31.28			....	Pontoise	25.20, 25.63	
AUSTRIA				GERMANY			
UOR2	Vienna	25.42		D4AFF	Coethen	43.60	
UOR2	Vienna	49.40		DOA	Doerbitz	67.65	
CANADA				DUO	Doerbitz	82.90	
VE9GW	Bowmanville	49.22		VPD	Doerbitz	95.00	
CGE-CKS	Calgary	39.74		HOLLAND			
CGA	Drummondville,	16.5, 24.79, 32.1		PCJ	Eindhoven	31.28	
VE9CS	Vancouver	48.80		PCK	Kootwijk	16.30	
VE9CL	Winnipeg	48.70		PCV	Kootwijk	16.82	
COLOMBIA				HONDURAS			
HKA	Barranquilla	48.70		HRB	Tegucigalpa	48.62	
HKO	Barranquilla	49.60		HRB	Tegucigalpa,	49.02, 49.95	
HKC	Bogota	47.81		INDIA			
HKF	Bogota	39.40		VUC	Calcutta	25.24	
HXX	Bogota	42.00		INDO CHINA			
HKO	Medillem	50.60		F31CD	Chi-Hoa (Saigon),	49.10	
COSTA RICA				ITALY			
T14	Heredia	29.30		HVJ	Vatican City (Rome),	19.83, 50.26	
DENMARK				I3RO	Rome	80.00	
O27MK	Copenhagen	32.01		JAPAN			
OXY	Skamlebank	31.51		....	Tokio	24.80	
ECUADOR				JAVA			
HC1DR	Quito	47.00		PLE	Bandoeng	15.93	
HC1FG	Rio Bamba	39.80		PMB	Bandoeng	14.55	
				PK3AN	Sourabaya	49.67	
UNITED STATES							
Call	Location	Meters	Dial	Call	Location	Meters	Dial
W2XCU	Ampere, N. J.	8.57-17.34-23.35-34.68-46.7-62.57-92.5-125.1-187		W2XAV	L. I. City, N. Y.	60.30	
W9XL	Anoka, Minn.,	17.34-23.35-46.7		W2XU	L. I. City, N. Y.	30.20-34.68	
W3XE	Baltimore, Md.	34.68		W2XV	L. I. City, N. Y.	62.50	
KEL	Bollinas, Calif.	43.70		W6XAN	Los Angeles, Calif.	105.9	
KEZ	Bollinas, Calif.	28.80		W2XBC	New Brunswick, N. J.	5.83-8.67-11.67	
W1XAZ (WBZ)	Boston, Mass.	31.35		W10XAL	New York, N. Y.	125.41	
W3XAL (WJZ)	Bound Brook, N. J.	13.95-16.87-19.88-25.60-31.35-49.18		W2XAL (WRNY)	New York, N. Y.	13.97-19.66-25.24-49.67	
W9XAA (WCFL)	Chicago, Ill.	16.87-25.34-49.34		W2XBH (WBBC, WCGU)	New York, N. Y.	54.51	
W9XAL	Chicago, Ill.	48.74-186.6		W2XBR (WAWZ)	New York, N. Y.	49.83	
W9XAQ (WMAQ)	Chicago, Ill.	49.67		W2XBT	New York, N. Y.	8.89	
W8XFW (WENR)	Chicago, Ill.	13.95-25.42-49.83		W2XCZ	New York, N. Y.	125.4	
W9XL	Chicago, Ill.	34.68-62.56-92.50-97.53-125.1		W2XE (WABC)	New York, N. Y.	19.63-25.34-49.02	
W8XAL (WLW)	Cincinnati, Ohio	49.50		W6XN (KGO)	Oakland, Calif.	23.35	
W8XJ	Columbus, Ohio	54.02		W6XAJ	Oakland, Calif.	17.34	
W2XAL	Coytesville, N. J.	13.97-19.67-25.42-49.67		W2XD0	Ocean Gate, N. J.	7.32	
W8XAG	Dayton, Ohio	34.68		W3XAU (WCAU)	Phila., Pa.	31.28-49.50	
W8XL	Dayton, Ohio	17.34		W8X1	Pittsburg, Pa.	9.68-7.32	
W81	Deal, N. J.	15.10-20.50-30.4		W8XK (KDKA)	Pittsburg, Pa.	18.92-16.87-17.72-25.34-31.35-48.83	
W8D	Deal, N. J.	32.70-44.40		W6XAF	Sacramento, Calif.	51.11-112.1	
W00	Deal, N. J.	23.35-34.74-46.05-63.13-72.87-96.03		W2XAD (WGY)	Schenectady, N. Y.	19.56-125.1-187.0	
W2XDJ	Deal N. J.	14.00		W2XAF	Schenectady, N. Y.	31.48-125.1-187.0	
W8XA (KOA)	Denver, Colo.	31.48		W2XAW	Schenectady, N. Y.	13.04-34.5	
W8XAO	Detroit, Mich.	32.00		W2XK	Schenectady, N. Y.	17.34	
W8XAM	Elgin, Ill.	62.56		W6XAL	Westminster, Calif.	13.95-19.56-49.01	
WLO	Lawrence, N. J.	18.40-28.44					

BEHIND THE SCENES

In the Daily Drama of Producing Tone Perfect
National Union Radio Tubes.

National Union Radio Tubes are the finest that science has devised. Unsurpassed for reception, reliability and long life. Double tested and proven electrically and mechanically perfect before leaving the factory.



1. Sealing in.

The girl in the foreground of this photo has been working at this delicate tube making operation for six years.

2. Mounting

This group of inspectors, monitors and mounters represent 72 years of tube making experience. Most of these girls came to National Union direct from Westinghouse Lamp Works.

3. J. H. Leggett, foreman of the stem making department, has been in the tube and lamp making game for 23 years. He has supervised operations in fields which range from vacuum tubes to giant locomotive head light lamps.

4. The operator shown working at one of the new National Union high speed stem making machines has had six years experience in tube manufacture. She was formerly with Westinghouse Lamp Works.

5. One of the test panels in the National Union testing department. A double checking system carried on by a corps of testing experts assures uniform precision in the National Union tube line.

Helpful Hints for Perfecting Radio Set Performance

1. Locate the set so that the antenna and the ground lead-in wires are as short as possible.
2. If possible, use a cold water pipe as the ground. Hot water or steam pipes may be used as a secondary choice. Be sure the ground wire is clamped solidly to the ground pipe.
3. Be sure all connections are tied up firm.
4. Be sure your antenna is properly installed—it's usually best to ask the advice of a competent service man.
5. Noise may be reduced sometimes by reversing the plug on an A.C. set. The plug on a D.C. set should never be reversed.
6. Try shielding the lead-in for elimination of objectionable noises.
7. Try placing the set in different parts of the room preferably facing a doorway or drapes.
8. For most lifelike reproduction, keep the volume at a moderate pitch.
9. Don't place the set closely against a wall.
10. Replace all tubes once a year with new National Union radio tubes.

Why You Should Have Your Tubes Tested Every Six Months

Certain delicate coatings on the intricate parts contained in a radio tube break down under use. The deterioration is so gradual that the human ear cannot readily detect it and you living with your set from month to month get used to poorer and poorer tone until finally, although you may still see a light in the tube, it may cease playing altogether. In the meantime, distortion, harsh noises, hum, buzz and crackle have stolen the beauty, harmony and strength of your radio reproduction and your set is far from perfect although you may not realize it.

The only way to assure yourself of continued first class performance is by having your tubes tested regularly every six months by your local radio dealer on highly scientific instruments, which show at a glance the actual condition of radio tube equipment.

You owe it to yourself to get the finest out of great radio entertainment continually. When you need to replace tubes be sure of getting the best—insist on National Union.

Principal Broadcasting Stations of the United States, Canada, Mexico and Cuba Arranged by Kilocycle Allocation

Kilocycles	Dial Setting	Kilocycles	Dial Setting	Kilocycles	Dial Setting	Kilocycles	Dial Setting	Kilocycles	Dial Setting	Kilocycles	Dial Setting
--550--		--620--		--690--		--800--				--965--	
KFDY		CMCJ		CFAC		WBAP		WILL			
KFUO		KGW		CFRB		WFAA		WJAR		CMBC	
KFYR		KTAR		CJCY				WKAQ		CMBD	
KOAC		WFLA		CNRX		--805--		WMMN		XED	
KSD		WLBZ		XET		XFC		XES			
WGR		WSUN		--700--		--810--		--900--		--970--	
WKRC		WTMJ		HIX		WCCO		KARK		KJR	
				WLW		WPCH		KGBU		WCFL	
--560--		--630--		--710--		--815--		KHJ		--980--	
KFDM		CJGX		KMPC		CHNS		KSEI		KDKA	
KLZ		CKOC		WOR		CNRH		WBEN		--985--	
KTAB		CKTB		XEN		XFI		WJAX		CFCN	
WFI		CNRA		--720--		--820--		WKY		--990--	
WIBO		KFRU		WGN		WHAS		WLBL		WBZ	
WLIT		KGFX		WLIB						WBZA	
WNOX		WGBF				--830--		--915--		XEK	
WPCC		WMAL		--730--		KOA		CFLC		--1000--	
WQAM		WOS		CHLS		WEEU		XFF		KFVD	
		XETF		CHYC		WHDH		--920--		WFO	
--570--		--638--		CKAC		WRUF		HHK		WOC	
KGKO		XFG		CKDO		--834--		KFEL		XEE	
KMTR				CKWX		CMGA		KFXF		XEI	
KXA		--640--		CMK		--840--		KOMO		--1010--	
WEOA		KFI		CNRM		CJBC		KPRC		CKTB	
WKBN		WAIU		XER		CKGW		WAAF		CMBW	
WMAO		WOI		--745--		CKLC		WRSO		CMBZ	
WMAA		--645--		WBS		CMC		WWJ		CMCX	
WNAI		CHRO		KMMJ		CNRD		--925--		KGFF	
WNYO		CKCI		WSB		CPRY		CMCD		KQW	
WSYR		CKCR		--745--		--850--		CMCN		WHN	
WWNO		--650--		CJCA		KWKH		--930--		WIS	
--580--		KPCB		--750--		WWL		CFCH		WNAD	
CFCY		WSM		KGU		--860--		CFRC		WQAQ	
CHMA		--660--		WJR		KMO		KFWI		WRNY	
CKCL		CMCO		XEQ		WABC		KBZ		--1020--	
CKUA		CMDC		--760--		WHB		KMA		KYW	
KSAC		WAAF		KVI		XFX		KROW		WRAX	
WIBW		WEAF		WEW		--870--		WBRC		--1030--	
WOBW		--665--		WJZ		WENR		WDBJ		CFCF	
WSAZ		CHWK		--770--		WLS		--940--		CNRV	
WTAG		CJRM		KFAB		--880--		KOIN		XEB	
--588--		CJRW		WBBM		CHRC		WAAT		--1035--	
CMW		--600--		--780--		CKPC		WCSH		CMKC	
KHQ		CNRO		CKY		KFKA		WFIW		--1040--	
WCAJ		KFSD		CNRW		KLX		WHA			
WEEI		WMAQ		KELW		KPOF		XEO		--950--	
WKZO		--670--		KTM		WCOC		--950--		CMHD	
WOW		KFEQ		WEAN		WGBI		KFWB		KRLD	
		KPO		WISJ		WQAN		KGHL		ETHS	
		WPTF		WMC		WSUI		KMBC		WKAR	
		VOWR		WTAR		--890--		WRC		--1050--	
		--680--		XEZ		CFBO		--960--		KFBI	
		--685--		--790--		CKCO		CHCK		KNX	
		VAS		CMBS		CMCF		CHWC		--1060--	
				CMBT		CMX		CJBR		KWJJ	
				CMHC		KFNF		CKCK		WBAL	
				KGO		KUSD		CKNC		WJAG	
				WGY		WGST		CNRR		WTIC	

Dial Kilocycles	Dial Setting	Dial Kilocycles	Dial Setting	Dial Kilocycles	Dial Setting	Dial Kilocycles	Dial Setting	Dial Kilocycles	Dial Setting	Dial Kilocycles	Dial Setting		
--1070--		--1200--		WSOC WTAX XEX		--1285--		--1330--		--1380--		--1430--	
CMBG CMCB KJBS WDZ WTAM		CKOV KBTM KERN KFJB KFWF KGCU KGDE KGDY KGEK KGEW KGFJ KGHI KMLB KVOS KWG WABI WABZ WBBZ WCAT WCAX WCLO WCOD WFAM WFBE WHBY WIBX WIL WJBC WJBL WJBW WKJC WLAP WLBG WNBO WORC WWAE		--1220--		CMCU		KGB KSCJ WDRC WSAI WTAQ		KOH KQV KSO WKBH WQDM WSMK		KECA KGNF WBAK WCAH WFEA WHP WNBK	
--1080--		WBT WCB WMBI		KFKU KTW KWSC WCAD WCAE WDAE WREN		--1290--		--1337--		--1390--		--1440--	
WBT WCB WMBI		KGFI KMLB KVOS KWG WABI WABZ WBBZ WCAT WCAX WCLO WCOD WFAM WFBE WHBY WIBX WIL WJBC WJBL WJBW WKJC WLAP WLBG WNBO WORC WWAE		--1225--		--1300--		CMKH		KLRA KOY KUOA WHK		KLS WBAM WBIG WCA WHEC WMBD WOKO WSAN WTAD	
--1090--		KMOX		CMBY CMCA		KFAC KFH KFJR KGEF KTBR WBBR WEVD WHAP WHAZ WIOD WOQ XEM		--1340--		KFPY WCOA WSPD		--1450--	
--1100--		WLWL WPG		--1230--		--1345--		--1350--		--1400--		--1460--	
--1110--		KSOO WRVA		KFQD KGGM KYA WFBM WGL WNAC WPSC WSBT		CMCR		KIDO KWK WAWZ WBNX WCDA WEHC WMSG		KLO KOCW WBAA WBBC WCGU WCM WFO WKB WLBH XEP		KTBS WBMS WFJC WGAR WHOM WNJ WSAR WTFI	
--1120--		CFCA CFJC CHGS CJOC CNRT KFIO KFSG KMCS KRKD KTRH WDBO WDEL WHAD WISN WTAW		--1240--		--1360--		--1410--		--1470--		--1480--	
CFCA CFJC CHGS CJOC CNRT KFIO KFSG KMCS KRKD KTRH WDBO WDEL WHAD WISN WTAW		WJBC WJBL WJBW WKJC WLAP WLBG WNBO WORC WWAE		KGCU KLPM KTAT KTPI WACO WXYZ		KGER KGIR WCSC WFBL WGES WJCS WQBC		KFLV KGRS WAAB WBC WDAG WHHL WHIS WODX WRBX WSFA		KGA WLAC		KFJF WKBW	
--1130--		KSL WJJD WVOV		--1250--		--1370--		--1420--		--1490--		--1500--	
KSL WJJD WVOV		CFCO CJOR CKMC KDFN KDLR KFJI KFOR KFVS KFYM KGR KGMP KGNO KMJ KWEA WALK WBAX WBBL WCB WCOH WCRW WEBQ WEHC WGBB WGCM WHBF WHRU WIBU WJBI WJBU WJBY WJW WMBG WMRJ WOMT WPAW WPRO WQDX WRBQ WSBC WSN WSIX		--1260--		CMGH HRB KCR KFJM KFJZ KFLX KGAR KGDA KGFG KGLL KMAC KONO KOOS KRE KUJ KVL KVKC WBTM WCBM WDAS WGL WHBD WHBQ WHDF WIBM WJTL WLEY WLVA WMBR WPF WRAC WRAM WRJN		KABC KBPS KFIZ KFQU KFSD KFXY KFYO KGFF KGGC KGIW KGIX KGXX KICK KORE KTUE KXL WAGM WEHS WERE WFDW WHD WHFC WIAS WILM WJBO WKRI WLRF WMRC WMRH WPA WSPA WTBO		KDB KGF KGIZ KGB KGKY KNOW KPJM KREG KUT KXO WKBV WLBX WLOE WMA WMBQ WML WMP WNB WPO WPEN WRDW WSYB WWRL WWSW			
--1132--		XEH		--1270--		--1380--		--1430--		--1480--		--1530--	
XEH		WJBC WJBL WJBW WKJC WLAP WLBG WNBO WORC WWAE		KOL KVOR KWLC WASH WEAI WFBR WJDX WJBY WJW WMBG WMRJ WOMT WPAW WPRO WQDX WRBQ WSBC WSN WSIX		--1390--		--1440--		--1490--		--1540--	
--1140--		KVOO WAPI XETA		--1280--		--1400--		--1450--		--1500--		--1550--	
KVOO WAPI XETA		WJBC WJBL WJBW WKJC WLAP WLBG WNBO WORC WWAE		KCMC KFBB WCAM WCAP WDOD WIBA WOAX WRR		--1410--		--1460--		--1510--		--1560--	
--1150--		CMCQ CMQ WHAM		--1290--		--1420--		--1470--		--1520--		--1570--	
CMCQ CMQ WHAM		WJBC WJBL WJBW WKJC WLAP WLBG WNBO WORC WWAE		--1300--		--1430--		--1480--		--1530--		--1580--	
--1154--		CMHA		--1310--		--1440--		--1490--		--1540--		--1590--	
CMHA		WJBC WJBL WJBW WKJC WLAP WLBG WNBO WORC WWAE		--1320--		--1450--		--1500--		--1550--		--1600--	
--1160--		WOWO WWVA		--1330--		--1460--		--1510--		--1560--		--1610--	
WOWO WWVA		WJBC WJBL WJBW WKJC WLAP WLBG WNBO WORC WWAE		--1340--		--1470--		--1520--		--1570--		--1620--	
--1170--		WCAU		--1350--		--1480--		--1530--		--1580--		--1630--	
WCAU		WJBC WJBL WJBW WKJC WLAP WLBG WNBO WORC WWAE		--1360--		--1490--		--1540--		--1590--		--1640--	
--1180--		KEX KOB WDGY WINS WMAZ		--1370--		--1500--		--1550--		--1600--		--1650--	
KEX KOB WDGY WINS WMAZ		WJBC WJBL WJBW WKJC WLAP WLBG WNBO WORC WWAE		--1380--		--1510--		--1560--		--1610--		--1660--	
--1190--		WOAI		--1390--		--1520--		--1570--		--1620--		--1670--	
WOAI		WJBC WJBL WJBW WKJC WLAP WLBG WNBO WORC WWAE		--1400--		--1530--		--1580--		--1630--		--1680--	



PHIL COOK

Phil Cook, radio's versatile one-man actor army, recently created thirteen distinct characters in one show broadcast by the National Broadcasting Company. He has acted hundreds of different parts during his career before the microphone.

Cook is known in radio as composer, comedian, humorous sketch writer, singer, guitar player and artist. He was born in Coldwater, Michigan, but has lived most of his life in New Jersey, attending school in East Orange. There he met and fell in love with Flo Helmar. She is now Mrs. Cook.

While in school, Cook studied the violin and drawing. Then he went to an art school in New York City, later going into commercial art where he gained an enviable reputation and finally became head of his department with an advertising agency. His human interest paintings were accepted for front covers of many leading magazines, including *Colliers*.

Cook played around with writing during his spare time and wrote three musical comedies which appeared on Broadway. They were "Molly Darling," "When You Smile" and "Plain Jane." The last played also in Chicago and returned profit enough to pay for his home.

Then he decided to take a chance with radio. The comedian's act attained such success that he now puts on two distinct shows each day and goes on the air three times. Each show is prepared the day of the broadcast and each requires about six hours work.

The actor is tall and solidly built, six feet in height and weighs 185 pounds. He is blond and recognized as one of the handsomest men in radio.

MORTON DOWNEY

Morton Downey should have been born in Brooklyn, where his parents lived. Actually, he first saw the light in Wallingford, Conn., where his mother happened to be visiting.

Before the accident came about that made him a singer he tried a variety of jobs, none of which proved great successes.

He sold insurance, phonographs and other things. He worked for a railroad as the engineer of a donkey engine. He was also a sort of traveling salesman; specifically, a news butcher on trains.

The "break" came when he was somehow included in a distinguished party that made a trial run in the *S. S. Leviathan* in 1923. Certain influential men aboard heard him sing, liked his voice, and helped him to secure engagements.

Since then he has appeared as soloist in night clubs here and abroad, was starred in a movie and gravitated to the Columbia network where he made an overnight and startling success. He is married to the former Barbara Bennett, sister of Constance and Joan and daughter of the actor, Richard Bennett.



JULIA SANDERSON AND FRANK CRUMIT

The Blackstone Plantation program, with Julia Sanderson and Frank Crumit, famed stage team, as the featured entertainers, is broadcast over an extensive NBC network.

The programs, each lasting a half hour, beginning at 8:00 o'clock, Eastern Standard Time, are heard each Tuesday night. In addition to the songs and comedy dialogue of Miss Sanderson and Mr. Crumit, to say nothing of the latter's guitar playing, there is music by an orchestra under the direction of Jack Shilkret.

The programs take listeners to the mythical Blackstone Plantation, in Cuba, where Captain Blackstone and Don Rodriguez hold forth as hosts to Miss Sanderson and Crumit. Alfred Swenson plays the part of Captain Blackstone, while Santos Ortega takes the role of Don Rodriguez.

In addition to the sprightly, humorous dialogue, written especially for the program, special arrangements are provided for the Skilkret orchestra.

Julia Sanderson and Frank Crumit are known to entertainment seekers all over the country for their years of work before theatrical and vaudeville audiences, to say nothing of the hundreds of phonograph records they have made. In real life they are Mr. and Mrs. Frank Crumit. They were married more than three years ago. They make their home near Springfield, Mass., and motor to New York once a week for their NBC broadcasts.

This harmonious pair is also heard on the Bond Bread program Fridays at 9:15 A. M. Eastern Standard Time, on the Columbia Broadcasting Systems.



HENRY BURBIG

All Henry Burbig cares about is making you laugh, and that has been his task on Columbia Broadcasting System for more than three years.

The earliest authentic record of his professional activities dates from his fourteenth year when he wrote "Levinsky's Wedding". This piece landed him in vaudeville but his dad insisted on his returning to school. So on until six months studying medicine at Fordham proved to be enough. Back he went to vaudeville until indigestion forced him off the road. A job as trainer in a New York City health institute put him in contact with radio. After reading some of his own compositions gratis, his popularity brought him to the Vitaphone Hour with Eddie Cantor. Thence to the CeCo Couriers and "Syncopated Histories." His



latest appearance, starting September 6th, is with the Necco program on the Columbia Chain. Henry's theory about laughter and the radio "a twist of a word does it," he says. "Just making black-eyed Susan a cockeyed blossom."



KATE SMITH

Kate Smith was born in Washington, D. C., in 1909. She abandoned Georgetown University, where she was studying nursing, to begin the vocal training which eventually brought her to national attention.

Her professional career dates back to 1925 when she sang at a benefit in the B. F. Keith Theatre in Washington, D. C. Eddie Dowling was in the audience, heard her crooning, and engaged her immediately for his show, "Honey-moon Lane". One success led to another and when the show closed she was promptly signed for a part in the musical comedy, "Hit The Deck". Her most recent stage appearance was a riotous singing and dancing act in George White's "Flying High".

During the run of that production, Kate's attention was called to the possibilities of radio work. Without complications, with no unnecessary conferences, Kate stood calmly before a microphone and sang—splendidly.

She's blonde, blue-eyed, wears no street make-up, and sings to her maid Floyd, while putting on her stage make-up. Always wears solid colors—blue, white, black, but never red. Repertoire includes concert, operatic, Irish, "blues," and negro melodies. Her speaking voice is as hearty as any one of her songs. The Theme Song of her program, "When the Moon Comes Over the Mountain," is her most prized possession—she was a co-lyricist with Howard Johnson.

"COLONEL STOOPNAGLE AND BUDD"

F. Chase Taylor, known to radio as "Colonel Lemuel Q. Stoopnagle" resigned his position as vice-president of a Buffalo stock brokerage firm in the fall of 1930 to devote his entire time to radio, following the success of the comedy act over WKBW and WMAK, Buffalo stations.

Taylor was born in Buffalo thirty-four years ago, a son of Horace F. Taylor, Buffalo business man and now president of the Buffalo Chamber of Commerce.

He appeared before the microphone over WGR, Buffalo, some ten years ago for the first time. Later, in 1926, he achieved success in "Nip and Tuck," a comedy act which was a regular feature of WMAK. Still later came several series of presentations over WGR, and finally, a year and a half ago, the "Smax" and "Smoke and Ashes" broadcasts.

Wilbur Budd Hulick, the "Budd" of "Colonel Stoopnagle and Budd", has been a college football star, a saxophone player, an orchestra leader, a crooner, an announcer, a continuity writer, a radio production man, an actor, a soda clerk and a commercial representative for a telegraph company.

Previous to his success in the "Colonel Stoopnagle and Budd" act, which had its inception at WMAK, Buffalo, on October 10, 1930, and later was transferred to WKBW, Hulick was famed chiefly as the "Don" of the "Happiness House" program. He also appeared in the "Major Bullmore Expedition" episodes.

Budd is best known for his vocal imitations of Rudy Vallee, Seth Parker, Bing Crosby, Cab Calloway, Morton Downey and other popular figures on the stage and screen.



JESSE CRAWFORD

They call him "poet of the organ."

Brought up in an orphanage at Woodland, Calif., he learned to play on an old second hand piano at the age of ten. Although he received some instruction from the Sisters, his intense desire to learn was his best teacher.

He left the asylum when he was still in his teens, worked his way north and landed his first job as piano player in a small movie house near Spokane. Salary, \$5.00 a week. Three years later when he was earning \$25.00 a week, he threw up the job for one that paid him less, but provided the opportunity to study the organ.

For the next two years, his leisure was devoted to mastering that instrument. He had no professor and no books of instruction, but the spirit of the pioneering Crawford's was strong and his victory was his own.

Several years later theatre audiences in Chicago knew the name of Jesse Crawford. His reputation was even growing beyond the boundaries of Chicago and his victrola records were being sold all over the world.

Between shows Crawford strolled into the Roosevelt Theatre nearby to study the style of a feminine rival. Six months later he married her.

They proceeded to form a merger, and now, for very special numbers, Mrs. Crawford augments Mr. Crawford's performance at the twin consoles in the New York Paramount Theatre.



NATALIE TOWERS

Natalie Towers, the first girl to be selected by a network for television broadcasting, has signed an exclusive contract with the Columbia Broadcasting System, whose television station W2XAB recently went on the air. Miss Towers was first engaged by the broadcasting company last fall.

The television beauty was born in Manhattan, where she graduated from Washington Irving High School. She then entered Wellesley, where she specialized in English and was active both in dramatics and sports. Before graduating last year, she won the Davenport Prize for the best reading and speaking voice.

Natalie Towers' mother is a painter, a violinist, and a trained singer. She started Natalie on voice lessons at an early age. Natalie also

has studied piano for twelve years and has received dancing instruction from Ottokar Bartik, ballet master of the Metropolitan Opera Company. In the summer months of her last two years at college she played in stock at Boothbay Harbor, Maine.



When Company Comes Does Your Radio Behave?



*Weak tubes
cause distortion*

**HANDY TUBE
CARRIER—FREE!**

A RADIO SET with weak tubes is like a child with indigestion—it never shows off to advantage when you want it to. Why tolerate noisy reception? Hum, buzz, and crackle can be eliminated with new National Union Tubes. National Union Dealers will gladly test your tubes without any obligation whatever and provide you with a safe carrying device for bringing them in. Ask your dealer for a Handy Tube Carrier. It's Free!

NATIONAL
UNION
RADIO TUBES

Principal Broadcasting Stations of Cuba and Mexico

CUBAN LIST AND LOG

Station	Kc.	Mtr.	Location	Power	Dial
CMBC	965	311.0	Havana	150	.....
CMBD	965	311.0	Havana	150	.....
CMBG	1070	280.2	Havana	150	.....
CMBS	790	379.5	Havana	150	.....
CMBT	790	379.5	Havana	150	.....
CMBW	1010	296.9	Marianao	150	.....
CMBY	1225	244.7	Havana	150	.....
CMBZ	1010	296.9	Havana	150	.....
CMC	840	356.9	Havana	500	.....
CMCA	1225	244.7	Havana	150	.....
CMCB	1070	280.2	Havana	150	.....
CMCD	925	323.5	Havana	250	.....
CMCF	890	336.9	Havana	250	.....
CMCJ	620	483.6	Havana	250	.....
CMCN	925	323.5	Marianao	250	.....
CMCO	660	454.3	Marianao	250	.....
CMCQ	1150	260.7	Havana	600	.....
CMCR	1345	223.5	Havana	150	.....
CMCU	1285	233.2	Havana	150	.....
CMDC	660	454.3	Marianao	500	.....
CMGA	834	360.0	Colon	100	.....
CMGH	1370	218.8	Matanzas	150	.....
CMHC	790	379.5	Tuinucu	100	.....
CMHD	950	315.6	Caibarien	250	.....
CMK	730	410.7	Havana	3150	.....
CMKC	1034	290.0	Santiago	150	.....
CMQ	1150	261.7	Havana	250	.....
CMW	588	510.0	Havana	1400	.....
CMX	890	336.9	Havana	500	.....

MEXICAN LIST AND LOG

Station	Kc.	Mtr.	Location	Power	Dial
XETB	1380	217.3	Torreon	125	.....
XETF	630	475.9	Vera Cruz	500	.....
XETZ	1500	199.9	Mexico, D. F.	100	.....
XEFD	1020	293.9	Tia Juana	300	.....
XEB	1030	291.2	Mexico, D. F.	1000	.....
XED	965	310.8	Reynosa	10000	.....
XEE	1000	299.8	Oaxaca	100	.....
XEH	1134	264.8	Monterey	1000	.....
XEI	1000	300.0	Morelia	100	.....
XEK	990	303.0	Mexico, D. F.	100	.....
XEM	1300	230.6	Tampico	250	.....
XEN	711	421.9	Mexico, D. F.	1000	.....
XEO	940	319.1	Mexico, D. F.	5000	.....
XEP	1400	214.2	Nuevo Laredo	200	.....
XEQ	750	399.8	C. Juarez	5000	.....
XER	735	407.9	Villa Acuna	75000	.....
XES	890	337.0	Tampico	500	.....
XET	690	434.5	Monterey	500	.....
XEW	910	329.6	Mexico, D. F.	5000	.....
XEX	1210	247.9	Mexico, D. F.	500	.....
XEZ	780	384.4	Mexico, D. F.	500	.....
XETA	1140	263.1	Mexico, D. F.	500	.....
XEFA	1250	240.0	Mexico, D. F.	250	.....
XFC	805	372.0	Aguascalientes	350	.....
XFF	915	325.0	Chihuahua	250	.....
XFG	638	470.0	Mexico, D. F.	2000	.....
XFI	818	366.7	Mexico, D. F.	1000	.....
XFX	860	348.8	Mexico, D. F.	500	.....

*Don't get into the habit of
time spent getting even
would be better spent getting ahead*

KEEP UP TO DATE ON CHAIN PROGRAMS

By asking your dealer for the latest edition of the National Union Chain Broadcaster, an issue of which is included as an insert in this Radio Guide, you can easily keep abreast of the times on prominent radio programs.

You will note that this handy reference table lists the programs alphabetically, gives location by network, and also gives listening time by hour and day. A special keying arrangement permits ready reference to programs by day of week if it is desirable to find them that way rather than by alphabetical listing. All time shown is Eastern Standard Time.

A page of this Broadcaster is arranged so that you may enter your favorite programs.

As program time changes warrant it new issues of the Chain Broadcaster will be printed. These will be available through your local National Union radio tube dealer.

So that you may have complete information at all times on broadcasting stations, locations, signal strength and program listings, keep the National Union Radio Guide on your radio. Remember to keep it up to date with the National Union Chain Broadcaster.

JE-DKA-98- Mon 6:15 Lady God Jesters
" 6:30 Gracie & Charo Mary
5 Star Theatre

W 60m-78-air theatre



THE STANDARD TUBE FOR STANDARD SETS