



RADIO SERVICE BULLETIN

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ABBREVIATIONS AND SYMBOLS

The necessary corrections to the List of Commercial and Government Radio Stations of the United States and to the International Lists of Radio Stations appearing in this bulletin under the heading "Alterations and Corrections," are published after the stations affected in the following order:

- Name = Name of station.
- Loc. = Geographical location: W = west longitude, N = north latitude, S = south latitude, E = east longitude.
- Call = Call signal (letters) assigned.
- Type = Type of wave classified as follows: A1 = continuous wave (tube), A arc = continuous wave, A2 = interrupted continuous wave, A3 = phone, B = spark.
- Fy. = Frequency in kilocycles; normal frequency in italics; wave length in meters in parentheses.
- Power = Height (meters) of antenna and intensity of current (meter-amperes) at its base (sample of manner in which published—100/100) or the normal radiated power expressed in meter-amperes (sample of manner in which published—100m amp.).
- Service = Nature of service maintained: PG = general public (ship to shore), PR = limited public (limited to public correspondence between fixed stations), P = private (limited commercial and special), O = Government business exclusively.
- Class = FX = fixed station (point-to-point service), RG = radio-compass station, FA = aeronautical station, AB = aviation beacon, RF = circular radiobeacon, B = ship station, FC = coastal station, A = aircraft.
- Hours = Hours of operation: N = continuous service, X = no regular hour, Y = sunrise to sunset.
- Accts. = Message accounts settled by.
- M. R. T. Co. = Mackay Radio & Telegraph Co.
- R. C. A. = Radio Corporation of America.
- R. M. C. A. = Radiomarine Corporation of America.
- T. R. T. Co. = Tropical Radio Telegraph Co.
- C. w. = Continuous wave.
- I. c. w. = Interrupted continuous wave.
- A. C. = Alternating current.
- V. t. = Vacuum tube.
- M. A. = Meter-amperes.
- U. S. L. = Applies only to the list of Commercial and Government Radio Stations of the United States.
= Equipped with a radio compass (direction finder).

Beginning in January, the frequencies which ship stations may be licensed to use will be indicated as follows:

For telegraph communication primarily with coastal telegraph stations: Class L (kilocycles-meters in parentheses, followed by symbol designating type of emission) =

- | | |
|----------------------------------------------------------|------------------------------------------------------------------------|
| 143 (2,100), A-1, primarily for calling. | 400 (750), A-1, A-2, working (other than Great Lakes). |
| 152 (1,975), A-1, A-2, working (other than Great Lakes). | 410 (730), A-1, A-2, B, working (other than Great Lakes). |
| 153 (1,960), A-1, A-2, working. | 410 (730), A-1, A-2, B, calling and distress (Great Lakes only). |
| 154 (1,950), A-1, A-2, working. | 425 (705), A-1, A-2, B, working. |
| 155 (1,935), A-1, A-2, working. | 454 (660), A-1, A-2, B, working (other than Great Lakes). |
| 156 (1,925), A-1, A-2, working. | 468 (640), A-1, A-2, working (other than Great Lakes). |
| 157 (1,910), A-1, A-2, working. | 500 (600), A-1, A-2, B, calling and distress (other than Great Lakes). |
| 158 (1,900), A-1, A-2, working (other than Great Lakes). | |
| 160 (1,875), A-1, A-2, working (other than Great Lakes). | |
| 375 (800), A-1, A-2, B, direction finding only. | |
| 394 (760), A-1, A-2, working (Great Lakes only). | |

In addition to the frequencies designated hereinabove, this station may transmit on a frequency below 550 kc (545) used by a coastal telegraph station when directed to do so by the coastal telegraph station to which the frequency is assigned, provided that on frequencies below 150 kc (2,000) the emission shall be A-1 only.

Class H (kilocycles in parentheses, on the following frequencies above 3,000 kc. with A-1 or A-2 emission) =

3,160 (96.02)	5,530 (54.25)	8,260 (36.32)	12,360 (24.27)	16,580 (18.094)
3,115 (96.04)		*8,280 (36.23)	12,375 (24.24)	16,660 (18.007)
*4,140 (72.46)	6,170 (48.62)	8,290 (36.19)	12,390 (24.21)	16,680 (17.986)
4,145 (72.38)	6,180 (48.54)	8,300 (36.14)	*12,420 (24.15)	
4,150 (72.29)	6,190 (48.47)	8,320 (36.06)	12,435 (24.13)	22,025 (13.621)
4,160 (72.12)	*6,210 (48.31)	8,330 (36.01)	12,450 (24.11)	*22,050 (13.605)
4,165 (72.03)	6,220 (48.23)			*22,080 (13.587)
	6,230 (48.15)	11,025 (27.21)	16,460 (18.226)	22,100 (13.575)
5,515 (54.40)		*11,040 (27.17)	16,480 (18.204)	22,125 (13.559)
*5,520 (54.35)	8,240 (36.41)	11,055 (27.135)	16,500 (18.182)	22,150 (13.544)
5,525 (54.30)	8,250 (36.36)	11,070 (27.10)	16,520 (18.160)	
		11,085 (27.065)	*16,560 (18.116)	

In addition to the frequencies hereinabove designated this station may transmit on a frequency above 3,000 kc (100) used by a coastal telegraph station when directed to do so by the coastal telegraph station to which the frequency is assigned.

For telephone communications primarily with coastal telephone stations, for telephone or telegraph communication with coastal harbor stations, and for telephone or telegraph communication primarily between ship-harbor stations, the specific frequency or frequencies for which a station is licensed to use will be indicated.

ADDITIONS

Commercial land stations, alphabetically, by names of stations

[Additions to the List of Commercial and Government Radio Stations of the United States, edition of June 30, 1931, and to the International List of Fixed and Land Stations, published by the Berne bureau]

Station	Class	Call signal	Frequency in kilocycles, meters in parentheses	Service	Hours	Licensee
Brookline, Mass. (police station). ¹	FX	WPEJ	1,712 (175.23)-----	P	N	Town of Brookline, police department.
Chignik, Alaska. ²	FX	KICH	246 (1,220), 252 (1,190), 274 (1,095).	PR	X	Alaska Packers Association.
Dixon, Calif. ³	FX	KWN	21,060 (14.245)-----	PR	N	Trans-Pacific Communications Co. (Ltd.).
East Providence, R. I. (police station). ⁴	FX	WPEI	1,712 (175.23)-----	P	N	East Providence police department.
Hialeah, Fla. ⁵	FX	WAB	6,777.5 (44.264)-----	PR	N	T. R. T. Co.
Do	FX	WAF	10,460 (28.68)-----	PR	N	Do.
Do	FX	WAM	12,955 (23.16)-----	PR	N	Do.
Hidden Inlet, Alaska. ⁶	FC	KICB	2,320 (129.3)-----	P	X	Nakai Packing Corporation.
Hingham, Mass. ⁷	FX	WBO	6,777.5 (44.264)-----	PR	N	T. R. T. Co.
Do	FX	WBY	10,460 (28.68)-----	PR	N	Do.
Do	FX	WCE	12,955 (23.16)-----	PR	N	Do.
Honolulu, Hawaii. ⁸	FX	KICI	2,854 (105.12)-----	PR	X	Libby, McNeill & Libby.
Indianapolis, Ind. (municipal airport) ⁹	FA FX	WSDZ	2,316 (129.53), 2,356 (127.33), 3,222.5 (93.09), 3,232.5 (92.8), 3,242.5 (92.52), 3,257.5 (92.09), 3,447.5 (87.02), 3,457.5 (86.77), 3,467.5 (86.52), 3,485 (86.06), 4,115 (72.9), 4,917.5 (61), 5,602.5 (53.55), 5,612.5 (53.45), 5,632.5 (54.26), 6,540 (45.87), 6,550 (45.8), 6,560 (45.73), 8,015 (37.43).	P	X	Aeronautical Radio (Inc.).
Mauna Loa, Hawaii. ¹⁰	FX	KICJ	2,854 (105.12)-----	PR	X	Libby, McNeill & Libby.

¹ Loc. 71° 06' 21" W., 42° 20' 39" N.; type, A3.
² Loc. 158° 24' 18" W., 56° 17' 50" N.
³ Loc. (approximate) 121° 47' 00" W., 38° 25' 00" N.; type, A1, A2, A3.
⁴ Loc. (approximate) 71° 22' 40" W., 41° 49' 15" N.; type, A3.
⁵ Loc. 80° 16' 54" W., 25° 58' 06" N.; type, A1.
⁶ Loc. (approximate) 130° 20' 30" W., 54° 52' 10" N.; type, A3.
⁷ Loc. (approximate) 70° 51' 30" W., 42° 11' 30" N.; type, A1.
⁸ Loc. (approximate) 157° 53' 00" W., 21° 19' 30" N.; type, A3.
⁹ Loc. (approximate) 86° 16' 00" W., 39° 43' 00" N.; type, A1, A2, A3.
¹⁰ Loc. (approximate) 137° 13' 00" W., 21° 08' 20" N.; type, A3.

Commercial land stations, alphabetically, by names of stations—Continued

Station	Class	Call signal	Frequency in kilocycles, meters in parentheses	Service	Hours	Licensee
Nakeen, Alaska (Bristol Bay) ¹¹	FC	KICD	2,320 (129.3)	P	X	Nakat Packing Corporation.
Do	FX	KICE	3,265 (91.88)	PR	X	Do.
New Orleans, La. ¹²	FX	WFF	6,777.5 (44.264)	PR	N	T. R. T. Co.
Do	FX	WFL	10,460 (28.68)	PR	N	Do.
Do	FX	WFO	12,955 (23.16)	PR	N	Do.
New Orleans, La. (police station). ¹³	FX	WPEK	2,430 (123.5)	P	N	City of New Orleans, police department.
Port Armstrong, Alaska radiotelephone. ¹⁴	FX	KGXU	3,178 (94.39)	P	X	Buchan & Heinen Packing Co.
San Diego, Calif. (Lindbergh Field) ¹⁵	FA, FX	KGTF	2,316 (129.53), 2,356 (127.33), 3,232.5 (92.8), 3,242.5 (92.52), 3,257.5 (92.09), 3,447.5 (87.02), 3,457.5 (86.77), 3,467.5 (86.52), 3,485 (86.08), 4,115 (72.9), 5,602.5 (53.55), 5,612.5 (53.45), 5,632.5 (53.26), 6,540 (45.87), 6,550 (45.8), 6,560 (45.73), 8,015 (37.43).	P	N	Aeronautical Radio (Inc.)
San Diego, Calif. ¹⁶	FX	KGZD	2,430 (123.5)	P	N	City of San Diego police department.
Texarkana, Ark. (municipal airport). ¹⁷	FA, FX	KGTB	2,316 (129.53), 2,356 (127.33), 3,222.5 (93.09), 3,232.5 (92.8), 3,242.5 (92.52), 3,257.5 (92.09), 3,447.5 (87.02), 3,457.5 (86.77), 3,467.5 (86.52), 3,485 (86.08), 4,115 (72.9), 5,602.5 (53.55), 5,612.5 (53.45), 5,632.5 (53.26), 6,450 (45.87), 6,550 (45.8), 6,560 (45.73), 8,015 (37.43).	P	X	Aeronautical Radio (Inc.)
Topeka, Kans. (police station). ¹⁸	FX	KGZC	2,422 (123.86)	P	N	City of Topeka.
Union Bay, Alaska ¹⁹	FC	KIBW	2,320 (129.3)	P	X	Nakat Packing Corporation.
Do	FX	KICG	3,265 (89.15)	PR	X	Do.
Waterfall, Alaska ²⁰	FC	KIBY	2,320 (129.3)	P	X	Do.
Watertown, S. Dak. ²¹	FA	KGTC	3,162.5 (94.86), 3,172.5 (94.56), 3,182.5 (94.26), 5,572.5 (53.835), 5,582.5 (53.74), 5,662.5 (52.98).			

¹¹ Loc. 155° 47' 22" W., 58° 50' 17" N.; type, A3.¹² Loc. 90° 06' 12" W., 29° 59' 30" N.; type, A1.¹³ Loc. 90° 05' 30" W., 29° 57' 42" N.; type, A3.¹⁴ Loc. (approximate) 135° 10' 00" W., 57° 50' 00" N.; type, A3.¹⁵ Loc. (approximate) 117° 12' 00" W., 32° 45' 00" N.; type, A1, A2, A3.¹⁶ Loc. (approximate) 117° 10' 00" W., 32° 43' 00" N.; type, A3.¹⁷ Loc. (approximate) 94° 00' 00" W., 33° 27' 00" N.; type, A1, A2, A3.¹⁸ Loc. (approximate) 95° 41' 00" W., 39° 00' 00" N.; type, A3.¹⁹ Loc. (approximate) 132° 08' 40" W., 55° 39' 30" N.; type, A3.²⁰ Loc. (approximate) 133° 32' 40" W., 55° 47' 15" N.; type, A3.²¹ Loc. 97° 09' 02" W., 44° 54' 58" N.; type, A1, A2, A3.

Commercial ship stations, alphabetically, by names of vessels

[Additions to the List of Commercial and Government Radio Stations of the United States, edition of June 30, 1931, and to the International List of Ship Stations, published by the Berne bureau]

Name of vessel	Call signal	Rates all services (cents)	Service	Hours	Owner	Message account settled by—
Antigua.....	WHEG	8	PG	N	United Mail S. S. Co.....	Owner.
Barlow ¹	WLAE	-----	PG	X	Ford Motor Co.....	Do.
Cascadian.....	WGEZ	-----	P	X	A. S. Kolstad.....	R. M. C. A.
Galaxy ²	WGEZ	8	PG	X	R. R. M. Carpenter.....	Owner.
Gertrude S.....	WGEY	8	PG	X	Sebastian-Stuart Fish Co.....	Do.
Hermon F. Whiton ³	KOML	8	PG	X	Union Sulphur Co.....	Do.
Matthew J. Boyle.....	KFPB	-----	P	-----	Boston Fire Department.....	Do.
Monterey.....	WHEX	8	PG	N	Oceanic S. S. Co. (Inc.).....	R. M. C. A.
Monterey Lifeboat No. 1.....	WHEY	8	PG	N	Matson Navigation Co. (Inc.).....	Do.
Monterey Lifeboat No. 2.....	WHEZ	8	PG	N	-----do.....	Do.
Seatrain New Orleans.....	WHEA	-----	PG	-----	Seatrain Lines (Inc.).....	-----
Wallele ⁴	WGER	-----	P	X	Paul W. Wood.....	Owner.

¹ Type, A2; fy., class L; power, 16/10; rates, Great Lakes service, 4 cents per word, North and South American and transoceanic, 8 cents per word.

² Type, A1; fy., class H.

³ Type, A1, A2; fy., class L & H; power, 30/6.

⁴ Type, A3; fy., 2,322 (129.2), 2,350 (127.7), 2,362 (127.01), 2,738 (109.57).

Commercial aircraft stations, alphabetically, by names of craft

[Additions to the List of Radio Stations of the United States, edition of June 30, 1931, and to the International List of Aircraft Stations, published by the Berne bureau]

Station	Call signal	Frequency, in kilocycles; meters in parentheses	Service	Hours	Licensee
NC-7-A (Puritan).....	KHIWD	-----	P	X	Goodyear Tire & Rubber Co. (Inc.)
NC-9-A (Pilgrim) ¹	KHIKP	3,105 (96.62)	P	X	Do.
NC-134-E (No. 23).....	KHVQJ	-----	P	X	Northwest Airways (Inc.)
NC-447-W (Travel-air) ¹	KHNOX	-----	P	X	National Construction Co.
NC-537-E (No. 22).....	KHVPK	-----	P	X	Northwest Airways (Inc.)
NC-854-E (No. 25).....	KHVRI	-----	P	X	Do.
NC-1003 ¹	KHBFU	3,105 (96.62), 3,162.5 (94.86), 3,172.5 (94.56), 3,182.5 (94.26), 5,572.5 (53.835), 5,582.5 (53.74), 5,662.5 (52.98)	P	X	Boeing Air Transport (Inc.)
NC-1649 ¹	KHLZA	do	P	X	Pacific Air Transport (Inc.)
NC-7991 (No. 21).....	KHVOL	-----	P	X	Northwest Airways (Inc.)
NC-10822.....	KHUCX	-----	P	X	Pennsylvania Airlines (Inc.)
NC-10823.....	KHUDW	-----	P	X	Do.
NC-10871.....	KHUEV	-----	P	X	Do.

¹ Type, A3.

Government land stations, alphabetically, by names of stations

[Addition to the List of Commercial and Government Radio Stations of the United States, edition of June 30, 1931, and to the International List of Fixed and Land Stations published by the Berne bureau]

Station	Class	Call signal	Frequency, in kilocycles; meters in parentheses	Service	Hours	Owner
Cristobal, Canal Zone (fifteenth district U. S. N. R.).	FX	NRQ	-----	O	N	U. S. Navy.
Big Spring, Tex. ¹ -----	FA, FX	KCAP	224 (1,340), 326 (920), 3,370 (89), 3,410 (87.98), 5,940 (50.51), 5,955 (50.37).	O	N	Department of Commerce, Bureau of Lighthouses, Airways Division.
El Paso, Tex.-----	FA, FX	KCAO	209 (1,435), 314 (955), 3,370 (89), 3,410 (87.98), 5,940 (50.51), 5,955 (50.37).	O	N	Do.
Jackson, Miss. ² -----	FA	WVAQ	224 (1,340), 260 (1,155), 3,370 (89), 3,385 (88.62), 5,920 (50.68), 5,940 (50.51).	O	N	Do.

¹ Loc., 101° 20' 30" W., 33° 13' 15" N.

² Loc. (approximate), 90° 12' 00" W., 32° 21' 00" N.

Government ship stations, alphabetically, by names of stations

[Additions to the List of Commercial and Government Radio Stations of the United States, edition of June 30, 1931, and to the International List of Fixed and Land Stations published by the Berne bureau]

Station	Call signal	Frequency in kilocycles, meters in parentheses	Service	Hours	Owner
Guyandot-----	WYDC	396 (760)-----	O	Y	U. S. Army.
H. G. Wright-----	WYDA	do-----	O	Y	Do.

Marine radiobeacon stations

[Addition to the List of Commercial and Government Radio Stations of the United States, edition of June 30, 1931, and to the International List of Stations Performing Special Services, published by the Berne bureau]

WEST QUODDY HEAD LIGHT STATION, ME.—Loc., 66° 57' 04" W., 44° 48' 55" N.; transmits every 180 seconds, groups of 1 dash, 1 dot and 2 dashes for 60 seconds, silent 120 seconds, thus:



Fy., 292 (1,025); hours, operates daily in clear weather during the third 15 minutes of each hour, and continuously during thick or foggy weather.

CAPE DECISION LIGHT STATION, ALASKA.—Loc., 134° 08' 05" W., 56° 00' 05" N.; the radiobeacon will be operated on intermediate power and will transmit on a frequency of 285 kilocycles (1,055 meters) the following characteristic:

• • • • • — — — — — etc.

For distance-finding purposes the air typhoon fog signal may be used. This fog signal will sound blast 5 seconds, silent 1 second, blast 1 second, silent 53 seconds every third minute. In fog or low visibility the characteristic will be transmitted 60 seconds on, 120 seconds off. During each minute of operation a long dash (3 seconds) will be transmitted for distance-finding purposes, the end of the dash coinciding with the beginning of the long (5-second) blast of the sound-in-air signal. The number of seconds elapsing between the termination of the long radio dash and the end of the blast of the sound-in-air signal divided by 5 will give the approximate distance in miles from the light station. The distance thus derived may have a possible maximum error of 10 per cent. Masters of vessels equipped with a radio receiver capable of receiving at about 300 kilocycles may utilize these signals for distance-finding purposes. The distance to which this method may be used will vary with atmospheric conditions. In clear weather the radiobeacon will transmit its characteristic continuously from 0 to 10 minutes and from 30 to 40 minutes past each hour:

Commercial and Government land, ship, aircraft, radiobeacon, and direction-finding stations, alphabetically by call signals

Call signal	Name of station	Call signal	Name of station
KCAO	El Paso, Tex. fa, fx	KICJ	Mauna Loa, Hawaii fx
KCAP	Big Spring, Tex. fa, fx	KOML	Herman F. Whiton b
KFPB	Matthew J. Boyle b	NEQ	Cristobal, Canal Zone (fifteenth district U. S. N. R.) fx
KGTB	Texarkana, Ark. (municipal airport) fa, fx	WAB	Hialeah, Fla. fx
KGTC	Watertown, S. Dak. fa	WAF	do. fx
KGTF	San Diego, Calif. (Lindbergh Field) fa, fx	WAM	do. fx
KGXU	Port Armstrong, Alaska, radiotelephone fx	WBO	Hingham, Mass. fx
KGZC	Topeka, Kans. fx	WBY	do. fx
KGZD	San Diego, Calif. fx	WCE	do. fx
KHBFU	NC-1003 a	WFF	New Orleans, La. fx
KHIKP	NC-9-A (Pilgrim) a	WFL	do. fx
KHIWD	NC-7-A (Puritan) a	WFO	do. fx
KHLZA	NC-1649 a	WGER	Waialeale b
KHNCX	NC-447-W (Travel-aire) a	WGEX	Galaxy b
KHUCX	NC-10822 a	WGEY	Gertrude S. b
KHUDW	NC-10823 a	WGEZ	Cascadian b
KHUEV	NC-10871 a	WHEA	Seatrain New Orleans b
KHVOL	NC-7991 (No. 21) a	WHEG	Antigua b
KHVPK	NC-537-E (No. 22) a	WHEX	Monterey b
KHVQJ	NC-134-E (No. 23) a	WHEY	Monterey Lifeboat No. 1 b
KHVRI	NC-854-E (No. 25) a	WHEZ	Monterey Lifeboat No. 2 b
KIBW	Union Bay, Alaska fc	WLAE	Barlow b
KIBY	Waterfall, Alaska fc	WPEI	East Providence, R. I. fx
KICB	Hidden Inlet, Alaska fc	WPEJ	Brookline, Mass. fx
KICD	Nakeen, Alaska (Bristol Bay) fc	WPEK	New Orleans, La. fx
KICE	do. fx	WSDZ	Indianapolis, Ind. (municipal airport) fa, fx
KICG	Union Bay, Alaska fx	WVAQ	Jackson, Miss. fa, fx
KICH	Chignik, Alaska fx	WYDA	H. G. Wright b
KICI	Honolulu, Hawaii fx	WYDC	Guyandot b

Broadcasting stations, by name of State and city

[Addition to the List of Radio Stations of the United States, edition of June 30, 1931]

State and city (Transmitter location; studio location in parentheses)	Call signal	Frequency, in kilocycles; meters in parentheses	Power (watts)
Georgia: Americus	WENC	1,420 (211.3)	50

Broadcasting stations, by call signals

Call signal	Location of transmitter, studio location in parentheses (mail address)	Licensee	Frequency, in kilocycles; meters in parentheses	Power (watts)
WENC	Americus, Ga.	Americus Broadcast Co. (H. P. Everett, Linwood Morris, and R. T. Crabb).	1420 (211.3)	50

Experimental stations, alphabetically, by names of stations

[Additions to the List of Commercial and Government Radio Stations of the United States, edition of June 30, 1931]

Station	Call signal	Frequency in kilocycles, meters in parentheses	Power (watts)	License and post-office address
California: San Francisco.	W6XM	23,100 (12.99), 25,700 (11.67), 26,000 (11.54), 27,100 (11.07), 34,600 (8.67), 41,000 (7.32), 51,400 (5.83), 60,000 (5).	50	M. R. T. Co.
New York: New York.	W2XBG	1,594 (188.21), 2,398 (125.1), 3,492.5 (85.9), 4,797.5 (62.53), 6,425 (46.69), 8,655 (34.66), 12,862.5 (23.325), 17,310 (17.331), 23,100 (12.99), 25,700 (11.67), 26,000 (11.54), 27,100 (11.07), 34,600 (8.67), 41,000 (7.32), 51,400 (5.83), 60,000 (5) to 400,000 (.75).	350	R. M. C. A.

Experimental, relay broadcasting, broadcasting pick-up, and visual broadcasting stations grouped by districts, alphabetically, by call signals

Call signal	District and station	Call signal	District and station
W2XBG	Second district: New York, N. Y.	W6XM	Sixth district: San Francisco, Calif.

ALTERATIONS AND CORRECTIONS

COMMERCIAL LAND STATIONS

[Alterations and corrections to be made to the List of Commercial and Government Radio Stations of the United States, edition of June 30, 1931, and to the International List of Fixed and Land Stations published by the Berne bureau]

- ABILENE, TEX.—Fy., 3,232.5 (92.8), 3,242.5 (92.52), 3,257.5 (92.09), 3,447.5 (87.02), 3,457.5 (86.77), 3,467.5 (86.52), 3,485 (86.08), 5,602.5 (53.55), 5,612.5 (53.45), 5,632.5 (53.26).
- ADDISON TOWNSHIP, ILL.—Loc., changed to Chicago, Ill.; service, strike out P, add PR.
- AKRON, OHIO, WTF.—Fy., strike out 19,780 (15.167).
- ALAMEDA, CALIF.—Fy., 2,720 (110.29), 2,732 (109.81), 2,906 (103.24), 3,072.5 (97.64), 3,082.5 (97.32), 3,088 (97.15), 4,110 (72.99), 5,672.5 (52.89), 5,692.5 (52.71), 6,510 (46.08), 6,520 (46.01), 6,530 (45.94), 8,015 (37.43).
- AUBURN, N. Y.—Type, strike out A1; hours, strike out X, add N.
- BAKERSFIELD, CALIF. (Kern County Airport).—Loc., 119° 03' 30" W., 35° 25' 00" N.; type, add A1, A2; fy., 3,162.5 (94.86), 3,172.5 (94.56), 3,182.5 (94.26), 5,572.5 (53.835), 5,582.5 (53.74), 5,662.5 (52.98).
- BARTLESVILLE, OKLA.—Service, strike out P, add PR.
- BELLEFONTE, PA.—Fy., see Bakersfield, Calif.
- BIRMINGHAM, ALA.—Fy., 3,222.5 (93.09), 3,232.5 (92.8), 3,242.5 (92.52), 3,257.5 (86.77), 3,447.5 (87.02), 3,457.5 (86.77), 3,467.5 (86.52), 3,485 (86.08), 4,917.5 (61.006), 5,602.5 (53.55), 5,612.5 (53.45), 5,632.5 (53.26).
- BLUE ASH, OHIO (CINCINNATI) radio.—Fy., 3,105 (96.61), 3,120 (96.15), 4,140 (72.46), 4,790 (62.63), 5,520 (54.35), 6,210 (48.31), 6,330 (47.39), 8,280 (36.23), 8,570 (35.01).
- BLYTHE, CALIF.—Fy., 2,316 (129.54), 2,356 (127.33), 4,115 (72.9), 6,540 (45.87), 6,550 (45.8), 6,560 (45.73), 8,015 (37.43).
- BOISE, IDAHO (municipal airport).—Fy., see Bakersfield, Calif.
- BOLINAS, CALIF.—Type, strike out A3 from all Bolinas, Calif., stations.
- BORGER, TEX. (near).—Service, strike out P, add PR.
- BOSTON, MASS., WSDD.—Fy., same as Birmingham, Ala., except does not have 3,222.5 (93.09).
- BRECKENRIDGE, TEX.—Loc., 98° 54' 00" W., 32° 45' 00" N.; service, strike out P, add PR.
- BROWNSVILLE, TEX. (municipal airport).—Fy., 2,648 (113.29), 2,870 (104.5), 3,082.5 (97.32), 4,125 (72.72), 5,405 (55.5), 5,692.5 (52.7), 6,570 (45.66), 6,580 (45.59), 8,015 (37.43), 8,220 (36.5), 12,330 (24.33), 16,240 (18.473), 16,440 (18.248).
- BURBANK, CALIF. (Los Angeles).—Loc., change latitude to 34° 15' 56" N.; fy., see Bakersfield, Calif.
- BURKBURNETT, TEX.—Loc. (approximate), 98° 35' 00" W., 34° 07' 00" N.; service, strike out P, add PR.
- CAMDEN, N. J.—Class, strike out FX; loc., 75° 04' 54" W., 39° 55' 44" N.; fy., 2,906 (103.24), 3,072.5 (97.64), 3,082.5 (97.32), 3,088 (97.15), 5,672.5 (52.89), 5,692.5 (52.70).
- CARLSTADT, N. J., WAL.—Loc. (approximate), 74° 05' 00" W., 40° 45' 10" N.
- CARLSTADT, N. J., WEEW.—Service, strike out P, add PR.
- CHARLESTON, S. C.—Class, strike out FX; fy., see Greensboro, N. C.
- CHEYENNE, WYO. (municipal airport).—Loc., 104° 50' 00" W., 41° 09' 24" N.; type, add A1, A2; fy., see Bakersfield, Calif.
- CHICAGO, ILL., WUCG.—Fy., see Bakersfield, Calif.
- CLEARWATER, CALIF. (Los Angeles) KNR.—Fy., 55.36 (5,420), 79.32 (3,782), 92.76 (32.34), 4,405 (68.1), 7,752.5 (38.7).
- CLEVELAND, OHIO, WNAK.—Fy., see Bakersfield, Calif.

- CLEVELAND, OHIO, WRBH.—Loc., 81° 40' 36'' W., 41° 30' 00'' N.; fy., strike out 2,452 (122.84), add 2,458 (122.05); hours, strike out X, add N.
- CRESSON, PA.—Fy., see Camden, N. J.
- DALLAS, TEX., KNAT.—Fy., see Bakersfield, Calif.
- DENVER, COLO., KGSP.—Loc., 104° 52' 50'' W., 39° 46' 10'' N.; fy., see Alameda, Calif.
- DES MOINES, IOWA (municipal airport).—Loc., 93° 32' 17'' W., 41° 36' 45'' N.; type, add A1, A2; fy., see Bakersfield, Calif.
- DIXON, CALIF., KWO.—Type, add A1; fy., 15,415 (19.461) only.
- DOUGLAS, ARIZ.—Fy., 2,316 (129.54), 2,356 (127.33), 3,232.5 (92.8), 3,242.5 (92.52), 3,257.5 (92.09), 3,447.5 (87.02), 3,457.5 (86.77), 3,467.5 (86.52), 3,485 (86.08), 4,115 (72.9), 5,602.5 (53.55), 5,612.5 (53.45), 5,632.5 (53.26), 6,540 (45.87), 6,550 (45.8), 6,560 (45.73), 8,015 (37.43).
- DULUTH, MINN.—Fy., 2,668 (112.44), 2,672 (112.28), 2,854 (105.12), 3,005 (99.83), 5,377.5 (55.8).
- EDMONDS, WASH., KGR.—Type, add A1; fy., 7,430 (40.38) only.
- ELDORADO, KANS.—Service, strike out P, add PR.
- ELKO, NEV.—Loc. (approximate), 115° 45' 00'' W., 40° 55' 00'' N.; type, add A1, A2; fy., see Bakersfield, Calif.
- EL PASO, TEX.—Loc., 106° 24' 48'' W., 31° 50' 50'' N.; type, add A2, A3; fy., 2,316 (129.54), 2,356 (127.33), 3,232.5 (92.8), 3,242.5 (92.52), 3,257.5 (92.09), 3,447.5 (87.02), 3,457.5 (86.77), 3,467.5 (86.52), 3,485 (86.08), 4,115 (72.9), 5,602.5 (53.55), 5,612.5 (53.45), 5,632.5 (53.26), 6,540 (45.87), 6,550 (45.8), 6,560 (45.73), 8,015 (37.43).
- FARGO, N. DAK. (Hector municipal airport).—Fy., see Duluth, Minn.
- FORT WORTH, TEX. (Meacham Field).—Class, strike out FX; fy., see Bakersfield, Calif.
- FRIJOLE, TEX.—Fy., see Douglas, Ariz.
- GARDEN CITY, N. Y., WGA.—Loc., 73° 36' 57'' W., 40° 43' 46'' N.; fy., 7,430 (40.38) only.
- GREENSBORO, N. C.—Type, add A2; fy., 2,380 (126.05), 2,922 (102.67), 2,946 (101.83), 2,986 (100.47), 4,130 (72.64), 5,652.5 (53.35), 5,840 (53.07), 6,590 (45.52), 6,600 (45.45).
- GUAM, GUAM, KFQ.—Fy., 7,445 (40.29), only; service, strike out P, add PR; hours, strike out X, add N.
- HARRISBURG, PA., WAED.—Fy., see Camden, N. J.
- HICKSVILLE, N. Y., WJO.—Loc., 73° 34' 35'' W., 40° 45' 28'' N.; service, strike out P, add PR.
- HICKSVILLE, N. Y., WJS.—Loc., 73° 34' 35'' W., 40° 45' 28'' N.; service, strike out P, add PR.
- HILO, HAWAII.—Fy., strike out 3,196 (93.86), 3,226 (92.99), add 3,195 (93.89), 3,225 (93.02).
- HILLSBORO, OREG., KGH.—Fy., 8,700 (34.5), 6,316 (47.5), 4,210, (71.26) 4,415 (87.95), 7,662.5 (39.15), 8,980 (33.41).
- HILLSBORO, OREG., radio.—Loc. (approximate), 122° 59' 00'' W., 45° 31' 00'' N.; fy., strike out 4,755 (63.091), 5,525 (54.3), 6,560 (45.73), 11,050 (27.15), 11,320 (26.5), 16,580 (18.094), 21,660 (13.85), 22,100 (13.575), add 5,520 (54.35).
- HONOLULU, HAWAII (Kaena Point-Oahu Island), KGS.—Fy., 7,430 (40.38) only; licensee, Globe Wireless (Ltd.).
- HONOLULU, HAWAII, radio KHX.—Loc. (approximate), 157° 53' 00'' W., 21° 19' 30'' N.; type, A1; hours, X.
- HONOLULU, HAWAII, KOG.—Fy., 442 (680), 3,195 (93.89), 3,225 (93.02), 5,720 (52.45), 5,750 (52.17).
- HOUSTON, TEX. (municipal airport).—Fy., see Blythe, Calif.
- HYDER, ALASKA.—Read Hyder, Alaska radio, class, add FC; fy., strike out 180 (1,665), 445 (675), add 425 (705); service, add PG.
- INDIANAPOLIS, IND., WHM.—Loc. (approximate) 86° 14' 00'' W., 39° 44' 00'' N.; fy., see Camden, N. J.
- INDIO, CALIF., KGUQ.—Type, add A2, A3; fy., see Douglas, Ariz.
- IOWA CITY, IOWA.—Loc. (approximate) 91° 30' 00'' W., 41° 50' 00'' N.; fy., see Bakersfield, Calif.
- ISLAND OF OAHU, HAWAII, radio.—Read Honolulu, Hawaii; class, strike out FC; type, strike out A3, add A1; fy., strike out 2,596 (115.55); service, strike out PG; hours, strike out X, add N; rates, strike out.
- JACKSON, MISS.—Fy., 2,316 (129.54), 2,356 (127.33), 3,222.5 (93.09), 3,232.5 (92.8), 3,242.5 (92.52), 3,257.5 (92.09), 3,447.5 (87.02), 3,457.5 (86.77), 3,467.5 (86.52), 3,485 (86.08), 4,115 (72.9), 4,917.5 (61.006), 5,602.5 (53.55), 5,612.5 (53.45), 5,632.5 (53.26), 6,540 (45.87), 6,550 (45.8), 6,560 (45.73), 8,015 (37.43).

- JACKSONVILLE, FLA.—Type, add A2; fy., see Greensboro, N. C.
- KAHUKU, HAWAII, KEQ.—Fy., strike out 6,732.5 (44.56), add 6,890 (43.54).
- KAHUKU, HAWAII, KIO.—Type, strike out A3 from all Kahuku, Hawaii stations.
- KAILUA, HAWAII, KNN.—Fy., 4,410 (68.03), 17,420 (17.222) only.
- KANSAS CITY, MO., KNAS.—Fy., see Bakersfield, Calif.
- KANSAS CITY, MO., KST.—Fy., see Alameda, Calif.
- KAUNAKAKAI, HAWAII (Molokai Island), KHO.—Fy., strike out 3,196 (93.86), 3,236 (92.99), add 3,195 (93.89), 3,225 (93.02).
- KINGMAN, ARIZ.—Fy., see Kansas City, Mo., KST.
- KINGS MILL, TEX.—Service, strike out P, add PR.
- LANAI, HAWAII, KHN.—Fy., strike out 3,196 (93.86), 3,226 (92.99), add 3,195 (93.89), 3,225 (93.02).
- LAS VEGAS, NEV.—Fy., see Alameda, Calif.
- LIHUE, HAWAII (Island of Kauai).—Class, strike out FC; fy., see Lanai, Hawaii KHN.
- LINCOLN, NEBR.—Loc., 96° 45' 36" W., 40° 51' 20" N.; type, add A1, A2; fy., see Bakersfield, Calif.
- LINDEN, N. J. (near).—Fy., see Greensboro, N. C.
- LINDEN, N. J., WMU.—Fy., strike out 19,780 (15.167).
- LITTLE ROCK, ARK.—Fy., see Jackson, Miss.
- LOS ANGELES, CALIF., KOS.—Loc., 118° 15' 14.1" W., 34° 03' 1.75" N.; service, strike out P, add PR.
- LOS ANGELES, CALIF., KPG.—Loc., 118° 15' 14.1" W., 34° 03' 1.75" N.; service, strike out P, add PR.
- LOS ANGELES, CALIF. (portable).—Fy., 1,526 (196.59) only.
- LOUISVILLE, KY., WSDP.—Fy., 2,316 (129.53), 2,356 (127.33), 3,222.5 (93.09), 3,232.5 (92.8), 3,242.5 (92.52), 3,257.5 (92.09), 3,447.5 (87.02), 3,457.5 (86.77), 3,467.5 (86.52), 3,485 (86.08), 4,115 (72.9), 5,602.5 (53.55), 5,612.5 (53.45), 5,632.5 (53.26), 6,540 (45.87), 6,550 (45.8), 6,560 (45.73), 8,015 (37.43).
- MARION, MASS., WSO.—Fy., strike out 25.8 (11.628), add 25.82 (11.620).
- MARLAND CAMP, TEX. (Borger).—Service, strike out P, add PR.
- MAUNA LOA, HAWAII, radio KHY.—Loc., 137° 13' 00" W., 21° 08' 20" N.; hours, X.
- MAUNA LOA, HAWAII (Island of Molokai), radio.—Read Mauna Loa, Hawaii (Island of Molokai); class, strike out FC; type, strike out A3, add A1; fy., strike out 2,596 (115.55), service, strike out PG; hours, strike out X, add N; rates, strike out.
- MCCAMEY, TEX.—Loc. (approximate) 102° 15' 00" W., 31° 06' 00" N.; service, strike out P, add PR.
- MCRAE, GA. (airport).—Fy., see Greensboro, N. C.
- MEDFORD, OREG.—Loc., 122° 51' 21" W., 42° 20' 42" N.; type, add A2; fy., see Bakersfield, Calif.
- MEMPHIS, TENN. (municipal airport).—Fy., see Jackson, Miss.
- MIAMI, FLA., WEEM.—Fy., see Greensboro, N. C.
- MIAMI, FLA., WKDL.—Fy., 2,648 (113.29), 2,870 (104.5), 3,082.5 (97.32), 4,125 (72.72), 5,405 (55.5), 5,692.5 (52.7), 6,570 (45.66), 6,580 (45.59), 8,015 (37.43), 8,220 (36.5), 12,330 (24.33), 16,240 (18.473), 16,440 (18.248).
- MOLINE, Ill.—Fy., see Bakersfield, Calif.
- MUSSEL ROCK, CALIF., KGQ.—Fy., 14,890 (20.15) only.
- MUSSEL ROCK, CALIF., radio KTK.—Fy., 460 (650), 500 (600), 3,105 (96.61), 3,120 (96.15), 5,520 (54.35), 6,210 (48.31), 6,400 (46.88), 8,280 (36.23), 8,680 (34.56), 11,040 (27.17), 11,280 (26.6), 12,420 (24.15), 12,495 (24.01), 16,560 (18.116), 16,740 (17.921), 21,650 (13.857), 22,080 (13.587).
- NASHVILLE, TENN.—Fy., see Jackson, Miss.
- NEEDHAM, MASS., WJK.—Fy., 4,715 (63.63), 5,345 (56.12), 7,340 (40.87), 7,835 (38.29), 8,810 (34.05), 10,010 (29.97), 15,580 (19.255), 15,670 (19.145), 15,880 (18.892).
- NEWARK, N. J., WAEF.—Loc., 79° 09' 34" W., 40° 42' 40" N.; class, strike out FX; fy., see Camden, N. J.
- NEWARK, N. J., WNAO.—Fy., see Bakersfield, Calif.
- NEWARK, N. J., WSDC.—Class, strike out FX; type, add A2; fy., see Birmingham, Ala.
- NEW BRUNSWICK, N. J.—Type, strike out A3 from all New Brunswick, N. J. stations.
- NEW ORLEANS, La. (Menefee airport).—Fy., see Jackson, Miss.
- NEW YORK, N. Y., WKDX.—Loc., 74° 03' 35" W., 40° 42' 22" N.; fy., strike out 1,684 (178.15), add 2,738 (109.57).

- NORTH PLATTE, NEBR.—Loc., 100° 42' 10'' W., 41° 07' 52'' N.; type, add A1, A2; fy., see Bakersfield, Calif.
- OAKLAND, CALIF. (Oakland airport) KFO.—Class, strike out FX; loc. (approximate) 122° 13' 00'' W., 37° 43' 00'' N.; type, add A2; fy., 3,162.5 (94.86), 3,172.5 (94.56), 3,182.5 (94.26), 3,262.5 (91.95), 5,572.5 (33.835), 5,582.5 (53.74), 5,662.5 (52.98).
- OKLAHOMA CITY, OKLA., KGSC.—Fy., see Camden, N. J.
- OKLAHOMA CITY, OKLA., KNAV.—Fy., see Bakersfield, Calif.
- OMAHA, NEBR. (Fort Crook Air Mail Field).—Read Omaha, Nebr. (municipal airport); class, strike out FX; loc., 95° 53' 37'' W., 41° 17' 44'' N.; fy., see Bakersfield, Calif.
- PALO ALTO, CALIF. (near), KNK.—Fy., 6,815 (44.02) only.
- PALO ALTO, CALIF. (near), KNW.—Fy., 13,960 (21.49) only.
- PALO ALTO, CALIF., KWT.—Type, strike out A arc; fy., 13,750 (21.82) only.
- PASCO, WASH.—Read Pasco, Wash. (Franklin County airport); fy., see Bakersfield, Calif.
- PEMBINA, N. DAK. (Fort Pembina municipal airport).—Fy., see Duluth, Minn.
- PHOENIX, ARIZ.—Read Phoenix, Ariz. (Sky Harbor airport), loc. (approximate) 122° 02' 45'' W., 33° 26' 30'' N.; fy., see Douglas, Ariz.
- PITTSBURGH, PA., WAEC.—Class, strike out FX; fy., see Camden, N. J.
- PONCA CITY, OKLA.—Loc. (approximate) 96° 57' 00'' W., 36° 42' 00'' N.; service, strike out P, add PR.
- PONCA CITY, OKLA. (municipal airport).—Fy., see Bakersfield, Calif.
- PORTLAND, OREG. (Swan Island airport).—Loc. (approximate) 122° 43' 00'' W., 45° 33' 50'' N.; type, add A1, A2; fy., see Bakersfield, Calif.
- PUEBLO, COLO.—Fy., see Alameda, Calif.
- RADIOVILLE, ALASKA, radio.—Type, strike out B, add A2; fy., strike out 429 (700), add 178 (1,685), 425 (705); hours, strike out X, add 9.45 a. m., and 5.45 p. m.
- REDDING, CALIF. (municipal airport).—Loc., 122° 24' 16'' W., 40° 34' 20'' N.; fy., see Bakersfield, Calif.
- RENO, NEV. (Hubbard Field).—Loc. (approximate) 119° 49' 00'' W., 39° 30' 00'' N.; type, add A1, A2; fy., see Bakersfield, Calif.
- RICHMOND, VA.—Read Richmond, Va., near R. E. Byrd Flying Field; class, add FX; type, add A1, A2; fy., see Greensboro, N. C.
- ROBERTSON, MO. (St. Louis), KGTR.—Read Robertson, Mo. (Lambert-St. Louis airport); class, strike out FX; fy., see Camden, N. J.
- ROBERTSON, MO. (St. Louis), KGUT.—Read Robertson, Mo. (Lambert-St. Louis airport); type, add A2; fy., see Jackson, Miss.
- ROCK SPRINGS, WYO. (municipal airport).—Loc. (approximate) 109° 15' 00'' W., 41° 52' 00'' N.; type, add A1, A2; fy., see Bakersfield, Calif.
- ROCKY POINT, N. Y.—Type, strike out A3 from all Rocky Point, N. Y. stations.
- ROCKY POINT, N. Y., WQK.—Fy., strike out 18,220 (16,465), add 18.2 (16,480).
- SACRAMENTO, CALIF. (Mather Field).—Read Sacramento, Calif. (new municipal airport); loc. (approximate) 121° 30' 00'' W., 38° 35' 00'' N.; type, add A2; fy., see Bakersfield, Calif.
- ST. PAUL, MINN. (municipal airport).—Fy., see Duluth, Minn.
- SALT LAKE CITY, UTAH (airport), KGTH.—Loc. (approximate) 111° 58' 00'' W., 40° 45' 00'' N.; fy., see Alameda, Calif.
- SALT LAKE CITY, UTAH (municipal airport), KQD.—Read Salt Lake City, Utah (Woodward Field); class, strike out FX; loc. (approximate) 111° 58' 00'' W., 40° 45' 00'' N.; type, add A1, A2; fy., see Bakersfield, Calif.
- SAN ANTONIO, TEX. (Winburn Field).—Fy., see Douglas, Ariz.
- SAN DIEGO, CALIF., KGQZ.—Loc., 117° 10' 38'' W., 32° 44' 33'' N.; fy., see Bakersfield, Calif.
- SAN FRANCISCO, CALIF., KOP.—Fy., 4,745 (63.22), 5,335 (56.23), 7,340 (40.87), 7,820 (38.36), 15,640 (19.182), 15,730 (19.072).
- SAN FRANCISCO, CALIF., KOQ.—Loc., 122° 28' 01'' W., 37° 47' 00'' N.; fy., add 7,850 (38.22).
- SAN JUAN, P. R. (Pan American Airport), WMDU.—Fy., 2,648 (113.29), 2,870 (104.5), 3,082.5 (97.32), 4,125 (72.72), 5,405 (55.5), 5,692.5 (52.7), 6,570 (45.66), 6,580 (45.59), 8,015 (37.43), 8,220 (36.5), 12,330 (24.33), 16,240 (18.473), 16,440 (18.248).
- SAN JUAN, P. R., WGT.—Type, strike out A3 from all San Juan, P. R. stations.
- SAN PEDRO, CALIF. (near) radiotelephone.—Fy., strike out 2,590 (115.83), add 2,530 (118.6).
- SAYVILLE, N. Y., WKI.—Fy., 14,710 (20.39) only.
- SAYVILLE, N. Y., WML.—Fy., 14,740 (20.35) only.

- SEATTLE, WASH. (Boeing Field).—Loc., 122° 11' 22'' W., 47° 24' 45'' N.; type, add A2, A3; fy., see Bakersfield, Calif.
- SHREVEPORT, LA., KGUK.—*Read* Shreveport, La. (municipal airport); fy., see Jackson, Miss.
- SKELLYTOWN, TEX.—Service, strike out P, add PR.
- SPARTANBURG, S. C.—Loc., 81° 56' 35'' W., 34° 57' 54'' N.; type, add A2; fy., see Greensboro, N. C.
- SPRINGFIELD, Mo.—Class, strike out FX; loc. (approximate) 93° 30' 00'' W., 37° 30' 00'' N.; fy., see Camden, N. J.
- TINLEY PARK, ILL., WAK.—Loc. (approximate) 87° 50' 00'' W., 41° 05' 10'' N.
- TOLEDO, OHIO, WNAJ.—Fy., see Bakersfield, Calif.
- TUCKERTON, N. J., radio WSC.—Fy., 111 (2,705), 125 (2,400), 133 (2,255), 137 (2,190), 143 (2,100), 170 (1,765), 462 (650), 500 (600), 3,105 (96.61), 3,120 (96.15), 5,520 (54.35), 5,550 (54.05), 6,210 (48.31), 6,340 (47.32), 6,350 (47.24), 8,280 (36.23), 8,430 (35.59), 11,040 (27.17), 11,175 (26.84), 11,205 (26.775), 12,420 (24.15), 12,675 (23.67), 13,050 (22.99), 16,560 (18.116), 16,860 (17.794), 21,700 (13.825), 21,900 (13.699), 22,080 (13.587), 22,350 (13.423).
- TUCSON, ARIZ.—Fy., see Abilene, Tex.
- TULSA, OKLA. (municipal airport) KNAU.—Fy., see Bakersfield, Calif.
- TULSA, OKLA., KSY.—*Read* Tulsa, Okla. (municipal airport); loc., 95° 54' 00'' W., 36° 11' 26'' N.; fy., see Alameda, Calif.
- TULSA, OKLA., WEH.—Service, strike out P, add PR.
- WACO, TEX. (municipal airport).—Fy., see Douglas, Ariz.
- WAHIAWA, HAWAII (Island of Oahu), radio.—Fy., strike out 5,525 (54.3), 6,515 (46.04), 16,580 (18.094), 16,900 (17.751), add 3,105 (96.61), 3,120 (96.2), 5,520 (54.35), 6,210 (48.31), 6,330 (47.02), 16,560 (18.116), 16,920 (17.73).
- WAILUKU, HAWAII.—Fy., strike out 3,196 (93.86), 3,226 (92.99), add 3,195 (93.89), 3,225 (93.02).
- WASHINGTON, D. C., WPDW.—Fy., 2,422 (123.86).
- WICHITA, KANS., KGTD.—*Read* Wichita, Kans. (municipal airport); fy., see Alameda, Calif.
- WICHITA, KANS., KGTE.—*Read* Wichita, Kans. (municipal airport); fy., see Bakersfield, Calif.
- WINSLOW, ARIZ.—*Read* Winslow, Ariz. (TAT-Maddux airport); type, add A2; fy., see Alameda, Calif.

PORTABLE

- No. 1 KJO, No. 2 KJN, No. 3 KJT, No. 4 KJW, No. 5 KJY.—Fy., 1,602 (187.27), 1,628 (184.28), 1,652 (181.6), 1,676 (178.99), 1,700 (176.47).
- Southwestern United States KGXS, KGXT, KGXY.—Fy., 1,602 (187.27), 1,628 (184.28), 1,652 (181.6), 1,676 (178.99), 1,700 (176.47).
- Texas and Louisiana No. 16.—Call changed to KGKZ.
- United States—throughout.—Fy., see Bakersfield, Calif.
- Strike out all particulars of the following-named stations: Kahuku, Hawaii, KDK; Midway Island, Hawaii, KYN; Passaic, N. J.; Scarboro, Me.

COMMERCIAL SHIP STATIONS, ALPHABETICALLY, BY NAMES OF VESSELS

[Alterations and corrections to be made to the List of Commercial and Government Radio Stations of the United States, edition of June 30, 1931, and to the International List of Ship Stations, published by the Berne bureau]

- A. & P. NAKEN No. 7.—Type, strike out A1, add A3; fy., strike out 2,320 (129.3), add 1,660 (180.7), 2,566 (116.91).
- ADMIRAL COLE.—Fy., class L.
- ADMIRAL DAY.—Fy., class L.
- ADMIRAL DEWEY.—Type, add A2; fy., class L.
- ADMIRAL GOVE.—Fy., class L.
- ADMIRAL LAWS.—Fy., class L.
- ADMIRAL MOSER.—Fy., class L.
- ADMIRAL PEARY.—Type, add A2; fy., class L.
- ADMIRAL SENN.—Fy., class L.
- ADMIRAL WATSON.—Type, strike out A arc, add A1; fy., class L.
- ADMIRAL WOOD.—Fy., class L.
- ADVENTURER.—Type, A1, A2; fy., class H.
- ADVENTRESS.—Type, add A1, A2; fy., strike out 2,560 (117.2), add 2,322 (129.2), 2,350 (127.7), 2,362 (127.01), 2,738 (109.57).
- AGWIDALE.—Fy., class L.
- AJAX.—Fy., class L and H.

- ALABAMA WRAE.—Fy., class L; power, 24/4.
 ALASKA STANDARD.—Type, strike out A1; fy., class L.
 ALDER.—Fy., class L.
 ALGONQUIN KGDL.—Type, strike out A arc, add A1; fy., class L.
 ALTAIR.—Type, strike out A1; fy., class L.
 ALVA.—Fy., class L and H.
 AMASA STONE.—Fy., class L.
 AMBRIDGE.—Owner, U. S. S. B.
 AMERICA KGQE.—Fy., class L and 2,738 (109.57).
 AMERICAN BANKER.—Fy., class L.
 AMERICAN FARMER.—Fy., class L.
 AMERICAN IMPORTER.—Fy., class L and H.
 AMERICAN MERCHANT.—Fy., class L.
 AMERICAN TRAVELER.—Fy., class L and H.
 AMHERST.—Type, add A1; fy., class L.
 AMIDA.—Fy., class L and H.
 ANACONDA.—Fy., class L.
 ANSONIA.—Fy., strike out 3,112 (96.40), 5,525 (54.3), 5,615 (53.42), add 1,540 (194.8), 2,566 (116.91), 2,738 (109.57).
 ANTARES.—Fy., class L and H.
 ARAS.—Fy., class L and H.
 ARDEN.—Type, add A2; fy., class L.
 ARGOSY KDHL.—Fy., class L.
 ARGOSY WCEO.—Fy., class L and H.
 ASAMA.—Fy., class H.
 ASHTABULA.—Type, strike out A1; fy., class L.
 ATLANTIC KGMP.—Type, strike out A2; fy., class H.
 ATLANTIC WQBG.—Fy., class L.
 AVALON.—Type, strike out B, add A1, A2, A3; fy., strike out class L, add 2,362 (127.01), 2,738 (109.57); accts., Wilmington Transportation Co.
 BABS.—Type, add A1, A2; fy., add 2,322 (129.2), 2,362 (127.01), 2,738 (109.57).
 BAFSHE.—Fy., class L.
 BAINBRIDGE.—Fy., class L.
 BALSAM.—Fy., class L.
 BANGU.—Power, 26/8 and 12.
 BARRON F.—Fy., strike out 2,320 (129.3), add 1,660 (180.7), 2,566 (116.91).
 BARRYTON.—Fy., class L.
 BASCOBEL.—Fy., class L.
 BATON ROUGE.—Power, 15/11.
 BEACON.—Fy., class L.
 BEACONOIL.—Fy., class L.
 BEACONSTAR.—Fy., class L.
 BELFAST.—Power, 30/4.
 BELLE ISLE.—Type, strike out A2; fy., class H.
 BELLINGHAM.—Fy., class L.
 BERYL E.—Fy., strike out 2,320 (129.3), add 2,512 (119.43), 2,566 (116.91); power, 10/2.
 BETTY R.—Fy., class L and H.
 BIBCO.—Type, add A arc; fy., class L; power, 26/9 and 12.
 BIRMINGHAM.—Power, 12/8.
 BIRMINGHAM CITY.—Fy., class L.
 BLUEFIN.—Type, strike out A2; fy., class L and H.
 BOLIVAR.—Fy., class L.
 BONNIE BROOK.—Fy., class L.
 BRANT KGNT.—Type, strike out A2; fy., strike out 2,320 (129.3), 5,525 (54.3), 5,615 (53.42), add 1,540 (194.8), 2,566 (116.91), 2,738 (109.57).
 BRAZOS.—Fy., class L.
 BRIDGETOWN.—Fy., class L.
 BROAD ARROW.—Type, strike out A1; fy., class L.
 BROOKLINE.—Type, strike out A1; fy., class L.
 BYLAYL.—Fy., class L.
 CABRILLO.—Type, strike out B, add A1, A2, A3; fy., strike out class L, add 2,362 (127.01), 2,738 (109.57); accts., Wilmington Transportation Co.
 C. A. CANFIELD.—Fy., class L.
 CAIRO.—Power, 15/11.
 CALAMARES.—Fy., class L.
 CALICHE.—Type, strike out A arc; fy., class L.

- CALIFORNIA KGQU.—Fy., class H.
 CALIFORNIA KUKV.—Type, strike out A1; fy., class L and H.
 CALIFORNIA WGD L.—Type, add A1, A2; fy., add 2,350 (127.7), 2,362 (127.01).
 CALIFORNIA WMCM.—Type, strike out A arc; fy., class L and H.
 CALORIA.—Power, 20/15.
 CAMARGO.—Fy., class L and H.
 CAMDEN KDKL.—Fy., class L and H.
 CAPAC.—Fy., class L.
 CAPILLO.—Fy., class L.
 CAPT. JOHN W. MCKIE.—Power, 12/3.
 CARACAS.—Type, strike out A2; fy., class H.
 CAROLINA.—Type, strike out A1; fy., class L.
 CARRILLO.—Fy., class L.
 CARRISO.—Fy., class L.
 CAROLINE WDEC.—Fy., class L and H.
 CATAHOULA.—Fy., class L.
 CATHWOOD.—Fy., class L.
 C. C. WEBBER.—Power, 13/12.
 CELILO.—Fy., class L; owner, Claudine C. Gillespie.
 CHARCAS.—Fy., class L.
 CHARLIE WATSON.—Type, strike out A1; fy., class L.
 CHARLES M. SCHWAB.—Fy., class L.
 CHARLES PRATT.—Type, strike out A1; fy., class L.
 CHEROKEE.—Type, strike out A arc; fy., class L.
 CHESTER SUN.—Power, 23/15.
 CHICKEN OF THE SEA.—Fy., class H.
 CHILBAR.—Fy., class L.
 CHILKAT.—Fy., class L.
 CHILSCO.—Fy., class L.
 CHINA ARROW.—Type, strike out A1; fy., class L.
 CHRISTOPHER COLUMBUS.—Fy., class L.
 CIPANGO.—Fy., class L.
 CITY OF BALTIMORE.—Fy., class L and H.
 CITY OF BENTON HARBOR, CITY OF CLEVELAND III, CITY OF DETROIT III, CITY OF FAIRBURY, CITY OF FLINT.—Fy., class L.
 CITY OF GRAND RAPIDS.—Type, strike out A1; fy., class L.
 CITY OF HAMBURG.—Fy., class L and H.
 CITY OF HAVRE.—Fy., class L and H.
 CITY OF HOLLAND, CITY OF LOS ANGELES.—Fy., class L.
 CITY OF NEWPORT NEWS.—Fy., class L and H.
 CITY OF NEW YORK WQDC.—Fy., class L.
 CITY OF NORFOLK.—Fy., class L and H.
 CITY OF OMAHA, CITY OF SAUGATUCK, CITY OF SAVANNAH, CITY OF ST. JOSEPH, CITY OF ST. LOUIS, CLETUS SCHNEIDER.—Fy., class L.
 COAMO.—Power, 24/7 and 10.
 COAXET.—Fy., class L.
 COLOMBUS.—Type, strike out A2; fy., class H.
 COLONEL JAMES PICKANDS, COMAL.—Fy., class L.
 COMET.—Type, strike out A1; fy., class L.
 COMMERCIAL BOSTONIAN, COMMODORE.—Fy., class L.
 CONTINENTAL.—Fy., class H.
 COOT, COQUINA, CORINTO.—Fy., class L.
 CORMORANT.—Type, strike out A1; fy., class L.
 CORNORE.—Fy., class L.
 CORSAIR.—Fy., class L and H.
 COVENA, COYA, CREOLE WICB.—Fy., class L.
 CRESCENT CITY.—Type, strike out A1; fy., class L.
 CRESSIDA.—Type, add A1; fy., class L and H.
 CROWN CITY.—Type, add A2; fy., class L.
 CUBORE.—Type, strike out A1; fy., class L.
 CURLEW WRBV.—Fy., strike out 3,112 (96.40), 5,525 (54.3), 5,615 (53.42), add 1,540 (194.8), 2,566 (116.91), 2,738 (109.57).
 DARTMOUTH, DAVENPORT.—Fy., class L.
 DAVID B.—Fy., strike out 3,184 (94.22), add 3,190 (94).
 DAVID MCKELVY.—Type, strike out A1; fy., class L.
 DAYLIGHT.—Fy., class L.
 DEAN EMERY.—Type, strike out A1; fy., class L.

- D. E. CALLENDER, DEFACTO.—Fy., class L.
 DEFENDER.—Fy., class H.
 DELAWARE SUN.—Power, 26/10.
 DELECTO.—Type, strike out A1; fy., class L.
 DELFINA.—Power, 20/10.
 DELPHINE, DEROCHE.—Fy., class L.
 DIAMOND HEAD.—Type, strike out A2; fy., class L.
 DICKENSON.—Power, 30/10; accts., M. R. T. Co.
 DIXIE ARROW.—Fy., class L; power, 28/10.
 DOMINO.—Power, 26/12.
 DORA WEEMS.—*Read Dora*.
 DORCHESTER KGBG.—Fy., class L.
 DORIS E.—Fy., strike out 2,320 (129.31), 2,428 (123.55), add 2,512 (119.43), 2,566 (116.91); power, 10/2.
 DORIS KELLOGG.—Power, 28/15.
 DOYLESTOWN.—Fy., class L.
 DRYDEN.—Type, strike out A etc, add A1, A2; fy., class L.
 DUCUESNE.—Fy., class L.
 EASTERN STATES.—Fy., class L; power, 15/5.
 EAST INDIAN, EAST SIDE.—Fy., class L.
 EDOUARD JERAMEC.—Fy., class L and H.
 EDWARD L. DOHENY.—Fy., class L.
 EDWARD LUCKENBACH.—Fy., class L; power, 28/12.
 EDWIN CHRISTENSON, EFFNA, E. G. MATHIOTT, EL ALBA, EL CAPITAN, EL CEDRO, ELDA WQDS, EL DIA, ELEANOR CHRISTENSON.—Fy., class L.
 ELKHORN.—Power, 27/10 and 8.
 EL OCEANO, EL SEGUNDO, EL SIGLO.—Fy., class L.
 ELTON HOYT II.—Fy., class L; power, 18/7.
 EL VALLE.—Fy., class L.
 EMMA R. S.—Fy., class H.
 ENSLEY CITY, ESPARTA.—Fy., class L.
 ETHAN ALLEN.—Type, add A2; fy., class L.
 EUROPA.—Type, strike out A2; fy., class L and H.
 EVERETT KINN.—Fy., class L.
 EVERETT WJCQ.—Power, 30/5.
 E. W. SINCLAIR.—Type, strike out A1; fy., class L.
 EXAMINER, EXARCH, EXBROOK.—Fy., class L.
 EXCALIBUR, EXCAMBION.—Fy., class L and H.
 EXCELLO.—Fy., class L.
 EXCHANGE.—Type, add A1; fy., class L and H.
 EXETER.—Fy., class L and H.
 EXHIBITOR.—Fy., class L.
 EXIRIA.—Power, 28/14.
 EXOCHORDA.—Fy., class L and H.
 EXPLORER WJEX.—Type, A1; fy., class H.
 FALCON.—Type, strike out A1; fy., class L.
 FAVORITE KIFG.—Fy., class L and H.
 FAYETTE BROWN.—Fy., class L; power, 18/8.
 FIREBOAT ENGINE No. 31, FIREBOAT ENGINE No. 44, FIRE BOAT ENGINE No. 47.—Fy., strike out 1,596 (187.9), add 1,558 (192.55).
 FIRMORE.—Type, strike out A1; fy., class L.
 FISH HAWK.—Fy., strike out 2,428 (123.55), add 2,538 (118.2).
 FISHING FLOAT No. 3.—Fy., class L.
 FLOMAR.—Type, strike out A1; fy., class L.
 FLOW.—Type, strike out A1; power, 15/8, fy., class L.
 FLUOR SPAR.—Type, strike out A1; fy., class L.
 FOAM.—Fy., class L.
 FOLLY.—Type, add A1, A2; fy., add 2,322 (129.2), 2,362 (127.01), 2,738 (109.57).
 FONTANA, FORBES HAUPTMAN.—Fy., class L.
 FORTITUDE.—Type, strike out A3, B; fy., class H.
 FOUR WINDS.—Type, strike out A2; fy., class L and H.
 F. P. C. No. 2.—Fy., class L and H.
 F. Q. BARSTOW.—Type, strike out A1; fy., class L.
 FRANCES WEEMS.—*Read Frances*; power, 22.571/7.
 FRANK LYNCH.—Fy., class L.
 FREDERICK C.—Type, strike out A1; fy., strike out 2,320 (129.3), add 1,660 (180.7), 2,566 (116.91).

- FRED W. GREEN.—Fy., class L and H.
 FREEMAN.—Fy., class L.
 FREEPORT SULPHUR No. 5.—Type, strike out A1; fy., class L.
 GADFLY II.—Fy., class L and H.
 GARGOYLE.—Type, strike out A1; fy., class L.
 GEMMA.—Fy., class L; power, 15/5.
 GENE CRAWLEY.—Type strike out A1; fy., class L.
 GENERAL ASHBURN.—Power, 13/12.
 GEORGEANNA WEEMS.—Read Georgeanna.
 GLADYS II.—Type, strike out A1; fy., class H.
 GLENN MAYNE.—Fy., class H.
 GLENPOOL.—Type, strike out A1; fy., class L.
 GLORIA DALTON.—Fy., strike out 2,320 (129.3), add 2,362 (127.01), 2,738 (109.57).
 GOLDEN BEAR, GOLDEN RIVER, GOLDEN ROD.—Fy., class L.
 GOLDEN SUN.—Type, add A2; fy., class L.
 GOLDEN TIDE.—Fy., class L.
 GOOD WILL.—Power, 35/3.
 GRACIE S.—Type, add A1, A2; fy., strike out 2,560 (117.2), add 2,322 (129.2), 2,350 (127.7), 2,362 (127.01), 2,738 (109.57).
 GRAHAM C. WOODRUFF.—Fy., class L; power, 10/7.
 GRAMPUS.—Type, strike out A2; fy., class H.
 GREATER BUFFALO, GREATER DETROIT, GRECIAN.—Fy., class L.
 GREYLOCK.—Type, add A2; fy., class L.
 GUARDIAN.—Type, strike out B, add A1, A2; fy., class L and H.
 GULFBREEZE.—Type, strike out A1; fy., class L.
 GULFHAWK.—Fy., class L.
 GULFPORT.—Power, 12/8.
 GULFTRADE.—Fy., class L.
 HAIDA.—Fy., class L and H.
 HAMLIN F. McCORMICK, HANOVER.—Fy., class L.
 HAPPY DAYS.—Fy., class L and H.
 HAROLD WALKER, HARRIET, HARRY COULBY, HARRY F. SINCLAIR, Jr.—Fy., class L.
 HARRY W. CROFT.—Fy., class L; power, 15/7.
 HARVEY H. BROWN.—Fy., class L; power, 18/7.
 HAZEL ROBB.—Fy., strike out 2,320 (129.3), add 1,660 (180.7), 2,566 (116.91).
 H. C. FOLGER, HENRY G. DALTON, HENRY R. MALLORY.—Fy., class L.
 HEREDIA.—Fy., class L and H.
 HERMOSEA.—Fy., class H.
 HERON.—Fy., class L.
 H. H. ROGERS.—Power, 28/10 and 2.5.
 H. M. FLAGLER, HORACE X. BAXTER, HOWARD P. EELLS, Jr., HUGENOT, HULVER.—Fy., class L.
 HUSSAR.—Fy., class L and H.
 HYADES.—Fy., class L.
 ILLINOIS KFMC.—Power, 15/15.
 ILLINOIS WPCY.—Type, strike out A1; fy., class L.
 INDIANA.—Fy., class H.
 INDIA ARROW.—Type, strike out A1; fy., class L.
 INFANTA.—Fy., class L and H.
 INTERNATIONAL.—Power, 24/13 and 1.
 INVADER KDWR.—Type, A1, A2; fy., class L and H.
 INVADER WBEM.—Fy., class H.
 IOWA KFLT.—Power, 15/15.
 IRENE L.—Fy., class H.
 IROQUOIS KGFD.—Fy., class L.
 ISOBEL WEEMS.—Read Isobel; fy., class L.
 IVANEO.—Type, strike out A2; fy., class H and 2,738 (109.57).
 JACOX, J. A. MOFFETT.—Fy., class L.
 J. A. MOFFETT, Jr.—Power, 24/10 and 3.
 JANIDORE.—Fy., class L.
 JAPAN ARROW.—Type, strike out A1; fy., class L.
 J. C. FITZSIMMONS.—Fy., class L.
 JEANNE.—Fy., class L, H and 2,738 (109.57).
 J. E. SAVAGE, J. FLOYD MASSEY, Jr.—Fy., class L.
 J. F. SCHOELLKOPF, Jr.—Power, 25/6.
 J. N. PEW, JOHN ANDERSON.—Fy., class L.

- JOHN D. ARCHBOLD.—Power, 26/10 and 2.
 JOHN F. CUSHING.—Type, strike out A1; fy., class L.
 JOHN MCCARTNEY KENNEDY.—Fy., class L.
 JOHN PURROY MITCHELL.—Fy., strike out 1,596 (187.97), add 1,558 (192.55).
 JOHN WORTHINGTON.—Type, strike out A1.
 JOLEE.—Fy., class L.
 JOLIET.—Power, 15/6; accts., Cleveland Cliffs S. S. Co.
 JONANCY.—Fy., class L.
 JOSEPH BLOCK.—Power, 16/10.
 JOSEPH H. FRANTZ.—Fy., class L power, 16/2.5.
 JUNIATA WADM, K-22813, Kansan.—Fy., class L.
 KATHERINE.—Fy., class L and 2,350 (127.7), 2,566 (116.91), 2,738 (109.57).
 KATRINA LUCKENBACH.—Power, 28/10.
 KEKOSKEE.—Fy., class L.
 KIENA.—Fy., class L and H.
 KINGFISHER, K. R. KINGSBURY, LABETTE, LAGONDA.—Fy., class L.
 LAKE BENBOW.—Fy., class L; power, 17/4.
 LAKE ELLITHORPE.—Fy., class L.
 LAKE GORIN.—Type, strike out A1; fy., class L.
 LAKE INGLENOOK.—Fy., class L.
 LAKE ORMOC.—Fy., class L and H.
 LANIKAI.—Type, add A1; fy., class L.
 LA PERLA.—Fy., class L and H.
 LEBORE.—Fy., class L.
 LEONINE.—Fy., strike out 2,320 (129.3), add 2,512 (119.43); power, 10/2.
 LEVANT ARROW.—Type, strike out A1; fy., class L.
 LEVIATHAN.—Fy., class L, H, and 3,127.5 (95.9), 4,177.5 (71.8), 8,830 (33.98),
 13,210 (22.71), 17,640 (17.007).
 LEWIS K. THURLOW.—Power, 25/4.5.
 LIBERTY WBEZ.—Type, add A1; fy., strike out 2,536 (118.29), add 2,322 (129.2)
 2,738 (109.57).
 LIBERTY WCOO.—Power, 22/14.
 LIBERTY GLO.—Type, strike out A1; fy., class L.
 LIEBRE.—Fy., class L.
 LILLIAN LUCKENBACH.—Power, 24/14.
 LIMON.—Fy., class L.
 LOUISIANA KGRK.—Fy., class H.
 LOUIS R. DAVIDSON.—Name changed to Diamond Alkali.
 LUMBERMAN.—Fy., class L.
 LUSITANIA.—Type, strike out A2; fy., class H.
 LYNDONIA.—Fy., class L.
 MACOM.—Fy., class L and 2,362 (127.01), 2,738 (127.01).
 MAGMERIC.—Type, strike out A1; fy., class L.
 MAINE.—Fy., class L.
 MAITLAND No. 1.—Type, strike out A1; fy., class L.
 MAKAWAO.—Fy., class L.
 MAKUA.—Fy., class L.
 MALOLO.—Type, strike out A3; fy., class L and H.
 MALOLO LIFEBOAT No. 1, MALOLO LIFEBOAT No. 2.—Fy., class L.
 MALTRAN.—Power, 28/14 and 2.
 MANOA.—Fy., class L; accts., Matson Navigation Co.
 MANUKAI, MANULANI.—Fy., class L.
 MARIPOSA LIFEBOAT No. 1, MARIPOSA LIFEBOAT No. 2.—Type, strike out A1;
 fy., class L and H.
 MARJORY WEEMS.—READ Marjory; power, 20/7.
 MARJ III.—Fy., class L and H.
 MARQUETTE & BESSEMER No. 2.—Fy., class L.
 MARTIN MULLEN.—Fy., class L; power, 12/10.
 MATSONIA.—Fy., class L; accts., Matson Navigation Co.
 MAURICE TRACY.—Power, 13/4.5.
 MAYFLOWER.—Type, add A2; fy., class H.
 MEDINA.—Fy., class L.
 MELODIE.—Fy., class L and H.
 MELROSE.—Power, 25/3.
 MEMPHIS.—Power, 15/11.
 MEMPHIS CITY.—Fy., class L.
 MERCURY SUN.—Type, A1, A2; fy., class L.

- MESSENGER.—Fy., class H.
 METAPAN.—Fy., class L.
 MEVANIA.—Type, strike out A arc and B, add A1, A2; fy., class L.
 M. F. ELLIOTT.—Fy., class L.
 MICHAEL GALLAHER.—Fy., class L; power, 14/11.
 MICHAEL TRACY.—Fy., class L.
 MICHIGAN KEGS.—Type, strike out A1; fy., class L and H.
 MIGRANT.—Fy., class L and H.
 MIMI.—Fy., strike out 2,740 (109.48), add 2,738 (109.57).
 MINEOLA.—Fy., class L.
 MINNESOTA.—Power, 16/12.
 MISSOULA.—Fy., class L.
 MISSOURI WFDT.—Power, 15/15.
 MISSOURI WQDK.—Type, strike out A1; fy., class L.
 MOBILE.—Power, 12/8.
 MOHAWK.—Type, strike out A arc, add A1; fy., class L.
 MONTANA.—Type, strike out A1; fy., class L.
 MONTAUK.—Type, add A2; fy., class L.
 MONTGOMERY CITY, MOUNT BAKER.—Fy., class L.
 MOUNT EVANS.—Fy., class L; power, 20/9.
 MUNAMAR.—Fy., class L.
 MUNARGO.—Fy., class L and H; power, 30/5.
 MUNEOVE, MUNDIXIE, MUNISLA, MUNLOYAL.—Fy., class L.
 MUNRIO.—Type, strike out A1; fy., class L.
 MUSKETEER.—Type, add A2; fy., class H.
 NAKEN.—Fy., strike out 2,320 (129.3), add 1,660 (180.7), 2,566 (116.91).
 NASHABA.—Fy., class L.
 NATCHEZ.—Power, 15/11.
 NATIRAR.—Power, 19.8/10 and 9.
 NAVIGATOR.—Fy., class H.
 NELSON, NEMAHA, NEVADAN.—Fy., class L.
 NEW HAVEN.—Type, strike out A1; fy., class L.
 NEW JERSEY.—Power, 28/2.5 and 5.
 NEW YORK WBCG.—Fy., class L.
 N. F. LEOPOLD.—Power, 16/10.
 NORMA.—Fy., class L.
 NORTH AMERICAN.—Fy., class L; power, 26/4.
 NORTHERN LIGHT.—Type, strike out A2; fy., L and H.
 NORTHERN SUN.—Fy., class L.
 NORTHWESTERN KGRL.—Type, strike out A2; fy., class H; accts., R. M. C. A.; power, 14.8/2.
 NOSA CHIEF.—Fy., class L.
 NOURMAHAL.—Power, 20/12.
 OAKLEY L. ALEXANDER, OAKMAN.—Fy., class L.
 OAKMAR.—Type, strike out A1; fy., class L.
 OCTORARA.—Fy., class L.
 OHIO.—Fy., class H.
 OLIVE K.—Fy., class L and H.
 OLYMPIA.—Fy., class L.
 OLYMPIC WEEZ.—Fy., class H.
 ONEIDA, ONONDAGA, OREGON KUJZ, Oregonian.—Fy., class L.
 ORION.—Type, add B; fy., class L.
 ORIZABA, O. S., McFarland.—Fy., class L.
 OSSINING.—Power, 30/16.
 PACIFIC.—Type, strike out A1; fy., class L.
 PACIFIC FIR, PACIFIC HEMLOCK, PACIFIC PINE, PACIFIC REDWOOD, PACIFIC SUN.—Fy., class L.
 PANAMA.—Type, add A2; fy., class H.
 PANUCO, PASTORES.—Fy., class L.
 PATRIA.—Fy., class H.
 PATRICK J. HURLEY.—Power, 15/12.
 PECOS.—Fy., class L.
 PENNSYLVANIA WMDS.—Fy., class L and H.
 PENNSYLVANIA SUN, PENOBSCOT KGQR, PENOBSCOT WXOI.—Fy., class L.
 PETREL.—Fy., strike out 2,320 (129.3), add 1,660 (180.7), 2,566 (116.91).
 PHILIP D. BLOCK.—Fy., class L.

- PILOT.—Type, add A1; fy., strike out 2,536 (118.29), add 2,322 (129.2), 2,738 (109.57).
- POINT ARENA.—Power, 20/12; accts., M. R. T. Co.
- POINT BONITA, POINT BRAVA, POINT CALETA, POINT GORDA.—Fy., class L.
- POINT MONTARA.—Accts., M. R. T. Co.
- POINT PALMAS.—Fy., class L.
- POINT REYES.—Fy., class L; power, 20/12; accts., M. R. T. Co.
- POINT SAN PABLO, POINT SAN PEDRO.—Power, 25/10.
- PRESIDENT ADAMS.—Type, strike out A arc; fy., class L and H.
- PRESIDENT CLEVELAND.—Type, strike out A arc; fy., class L and H.
- PRESIDENT COOLIDGE, PRESIDENT FILLMORE, PRESIDENT GARFIELD.—Fy., class L and H.
- PRESIDENT GRANT.—Type, strike out A arc, add A1, A2; fy., class L and H.
- PRESIDENT HARDING.—Power, 28/11 and 10.
- PRESIDENT HARRISON, PRESIDENT HAYES, PRESIDENT HOOVER.—Fy., class L and H.
- PRESIDENT JACKSON, PRESIDENT JEFFERSON, PRESIDENT LINCOLN, PRESIDENT MADISON, PRESIDENT MCKINLEY.—Type, strike out A arc; fy., class L and H.
- PRESIDENT MONROE.—Fy., class L and H.
- PRESIDENT PIERCE, PRESIDENT POLK.—Type, strike out A arc; fy., class L and H.
- PRESIDENT ROOSEVELT.—Power, 30/14 and 12.
- PRESIDENT TAFT.—Type, strike out A arc; fy., class L and H.
- PRESIDENT VAN BUREN.—Type, add A1, A2; fy., class L and H.
- PRESIDENT WILSON.—Type, strike out A arc; fy., class L and H.
- PRINCETON KDLU.—Fy., class L.
- PUEBLO.—Type, strike out A1; fy., class L.
- QUEEN ANNE, QUISTCONCK.—Fy., class L.
- RELIANCE, RENE.—Fy., class H.
- RICHMOND WOCF.—Type, strike out A1.
- RIPPLE KFLF.—Fy., class L and H.
- R. J. HANNA.—Type, strike out A1; fy., class L.
- ROANOKE.—Fy., class L.
- ROBERT E. HOPKINS.—Type, strike out A1; fy., class L.
- ROBERT E. LEE.—Power, 24/12.
- ROBERT HOBSON, ROBERT LUCKENBACH, ROBIN GRAY.—Fy., class L.
- ROCHESTER.—Type, strike out A1; fy., class L.
- RUDOLPH N.—Type, strike out A1; fy., strike out 2,320 (129.3), add 1,660 (180.7), 2,566 (116.91).
- RUJETA.—Fy., class L and H.
- RUTH L.—Fy., class H.
- RUTH LYKES.—Type, strike out B, add A1, A2; fy., class L.
- SACCARAPPA.—Type, strike out A1; fy., class L.
- SACCO.—Fy., strike out 2,320 (129.3), add 1,660 (180.7), 2,566 (116.91).
- SAGUACHE.—Fy., class L.
- St. LOUIS.—Power, 15/11.
- St. VERONICA.—Fy., class L and H.
- SALLY S.—Fy., strike out 2,300 (129.3), add 2,512 (119.43), 2,566 (116.91); power, 10/2.
- SAMONA II.—Fy., class L and H.
- SAMUEL MATHER, SAN ANSELMO, SAN JOSE, SAN LORENZO.—Fy., class L.
- SAN LUCAS WFEU.—Type, A1; fy., class H.
- SAN MATEO.—Fy., class L.
- SAN SALVADOR.—Type, strike out A2; fy., class H.
- SANTA ANA.—Fy., class L and H; power, 24/11 only.
- SANTA CATALINA.—Fy., class L and H.
- SANTA CECILIA.—Fy., class L; power, 26/7.5.
- SANTA CLARA.—Power, 28/14 and 2.
- SANTA ISABEL WNCB.—Fy., class L and H.
- SANTA MARGARITA.—Fy., class H.
- SANTA MARIA WPBW.—Type, add A1; fy., class L and H; power, 28/10.
- SANTA MARTA.—Fy., class L.
- SANTA MONICA.—Fy., class L and H.
- SANTOAMARO.—Type, strike out A2; fy., class H.
- SANTA OLIVIA.—Fy., class L and H.
- SANTA VERONICA.—Fy., class L.
- SÃO JOÃO.—Fy., class H.
- S. A. PERKINS.—Power, 23.5/10.

- SARAMAR III, SARCOXIE.—Fy., class L.
 SATOCO.—Power, 15/8.
 SAVARONA.—Fy., class L and H.
 SAWOKLA.—Fy., class L.
 S. B. COOLIDGE.—Fy., class L; power, 12/10.
 S. B. WAY, SCHENECTADY.—Fy., class L.
 SEABORN.—Fy., class L and H.
 SEA KING, SEA LION, SEA RANGER, SEA SALVOR, SEA SCOUT, SEATTLE.—Fy., class L.
 SEMINOLE KUGP.—Power, 24/8 and 14.
 SEMINOLE WNCX.—Fy., class L.
 SEQUOIA.—Fy., class H.
 SEWALLS POINT.—Power, 25/10.
 SHADOW K.—Type, add A2; fy., class L and H.
 SHASTA WMDJ.—Fy., class H.
 SHAWNEE, SHENANGO WJDB, SHOOTERS ISLAND.—Fy., class L.
 SIERRA WDDR.—Type, strike out A arc; fy., class L and H.
 SILVER OAK.—Fy., class L.
 SIXAOALA.—Fy., class L and H.
 S. O. Co. No. 3.—Type, strike out A2, add A3; fy., class L and 2,738 (109.57).
 SOLITAIRE.—Type, add A2; fy., class L.
 SOMERSET, SONORA, SOUTH AMERICAN.—Fy., class L.
 SOUTHERN STAR.—Type, add A2; fy., strike out 2,322 (129.19), add 2,738 (109.57).
 SPRAY III.—Type, add A2; fy., strike out 2,740 (109.5), add 2,738 (109.57).
 S. S. THORPE.—Power, 13/12.
 STANDARD ARROW.—Fy., class L.
 STEEL CHEMIST.—Type, add A1; fy., class L.
 STEEL ELECTRICIAN.—Fy., class L.
 STEELMOTOR.—Type, strike out B, add A2; fy., class L.
 STEEL NAVIGATOR.—Power, 25/12.5.
 STEEL TRAVELER.—Power, 22/14.
 STEELVENDOR.—Fy., class L.
 STELLA LYKES.—Power, 28/8.
 STEPHEN R. JONES.—Fy., class L.
 STRANGER.—Type, A1, A2; fy., class L and H.
 SUE-J.—Type, A1; fy., class H.
 SULTANA.—Fy., class L.
 SUNDANCE.—Type, strike out A1; fy., class L.
 SUSAN A. MORAN.—Power, 15/7.
 SWIFARROW.—Power, 28/10 and 2.5.
 SWIFTEAGLE.—Fy., class L.
 SWIFTWIND.—Power, 28/10 and 2.5.
 SYLVAN ARROW.—Type strike out A1; fy., class L.
 SYROS.—Fy., class L.
 TALAMANCA.—Type A1, A2; fy., class L and H.
 TAMPA.—Power, 24/8 and 15.
 TAPPAWINGA II.—Type, add A1, A2; fy., add 2,322 (129.2), 2,362 (127.01), 2,738 (109.57).
 TATOOSH.—Fy., strike out 2,320 (129.3), 2,560 (117.2), add 1,708 (175.64), 2,566 (116.91).
 TENNESSEE.—Fy., class H.
 TERN.—Type, strike out A1; fy., class L.
 TEXAN.—Fy., class L.
 TEXAS KEFZ.—Type, add A1; fy., class L and H.
 THALIA.—Type, strike out A2; fy., class H.
 THE ANGELES, THE HARVESTER.—Fy., class L.
 THEODORE H. WICKWIRE, Jr.—Name changed to Thunder Bay Quarries.
 THEODORE ROOSEVELT, THERMO, THOMAS BRITT.—Fy., class L.
 THOMAS TRACY.—Power, 15/5.
 TIGER.—Fy., class L.
 TILLIE LYKES.—Type, strike out B, add A1, A2; fy., class L.
 TIONESTA.—Fy., class L.
 TIVIVES.—Fy., class L and H.
 T. J. WILLIAMS.—Type, strike out A1; fy., class L.
 T. L. DUROCHER, TOLOA, TOPILA, TRACY BROTHERS, TRIMOUNTAIN, TRUDIONE.—Fy., class L.

- TULSA.—Type, strike out A1; fy., class L.
 TUSCALOOSA.—Power, 12/8.
 TUSITALA.—Power, 35/10.
 TUSTEM, ULUA.—Fy., class L.
 UPSHUR.—Power, 26/8.
 VELERO III.—Fy., class L and H.
 VENTURA, VENUS WPBI.—Fy., class L.
 VICKSBURG.—Power, 15/11.
 VILEEHI.—Fy., class L and H.
 VINCENT.—Fy., class L.
 VIRGINIA WSBW.—Fy., class L and H.
 VIRGINIAN.—Fy., class L.
 VOLUSIA.—Power, 28/8.
 WABAN, WALTER JENNINGS.—Fy., class L.
 WALTER MILLER.—Type, add A1; fy. class L.
 WARRIOR KFSX.—Fy., class L and H.
 WASHINGTON KDCB.—Fy., class L.
 WAVE.—Power, 15/4.
 W. C. TEAGLE.—Power, 24/10 and 2.5.
 W. E. FITZGERALD.—Fy., class L.
 W. E. HUTTON.—Power, 28/16.
 WELHART, WEST CELERON, WEST CHATALA, WEST CHESWALD, WEST DURFEE,
 WEST ELCASCO.—Fy., class L.
 WESTERN ENTERPRISE.—Fy., class H.
 WESTERN OCEAN, WESTERN STATES.—Fy., class L.
 WEST GRAMA.—Type, add A2; fy., class L.
 WEST HARSHAW, WEST HEMATITE.—Fy., class L.
 WEST HOBOMAC.—Power, 27/16.
 WEST HONAKER.—Fy., class L.
 WEST IMBODEN.—Power, 28/8.
 WEST IRA, WEST IRMO.—Fy., class L.
 WEST KEBAR.—Power, 24/8 and 10.
 WEST KEENE, WEST MODUS.—Fy., class L.
 WEST NOHNO.—Fy., class L; owner, U. S. S. B.
 WEST NOSSKA, WEST NOTUS, WESTPOOL, WEST QUECHEE, WEST SELENE, WEST
 TACOOK, WEST TOTANT, WESTWARD HO, WEST ZEDA, W. G. POLLOCK, W. H.
 BECKER.—Fy., class L.
 WHITE STAR.—Type, strike out A2; fy., class H.
 WILDWOOD.—Type, strike out A1; fy., class L.
 WILLIAM G. MATHER.—Type, strike out B; fy., class L.
 WILLIAM GREEN.—Type, strike out A1; fy., class L.
 WILLIAM J. GAYNOR.—Fy., strike out 1,596 (187.9), add 1,558 (192.55).
 WILLIAM J. O'BRIEN, WILLIAM McLAUHLAN, WILLIAM NELSON, WILLIAM PENN.—
 Fy., class L.
 WILLIAM P. SNYDER, Jr.—Type, strike out A1; fy., class L.
 WILLIAM T. MUIR.—Fy., strike out 2,820 (129.3), add 2,512 (119.43), 2,566
 (116.91), power, 10/2.
 WINSTON-SALEM, WINTHROP.—Fy., class L.
 W. L. STEED.—Type, strike out A1; fy., class L.
 WM. A. LYDON.—Type, strike out A1; fy., class L; power, 5/2.5.
 W. S. MILLER.—Type, strike out A1; fy., class L.
 W. S. RHEEM.—Fy., class L.
 WYNOKA.—Power, 14/11.
 YANKEE.—Fy., class L.
 YANKEE ARROW.—Type, add A1; fy., class L.
 YES BAY.—Fy., strike out 2,320 (129.3), add 2,512 (119.43), 2,566 (116.91);
 power, 10/2.
 YOMACHICHI.—Fy., class L.
 YOREDA.—Type, add A1; fy., class L.
 YOUNGSTOWN KIFX, YOUNGSTOWN WPBH.—Fy., class L.
 ZACA.—Fy., class L and H.
 ZACAPA, ZELDA.—Fy., class L.
 Strike out all particulars of the following-named stations: Charles E. Harwood,
 Nautilus, Raven, Salmon King, San Isidro, Thrasher.

COMMERCIAL AIRCRAFT STATIONS, ALPHABETICALLY, BY NAMES OF CRAFT

[Alterations and corrections to be made to the List of Radio Stations of the United States, edition of June 30, 1931, and to the International List of Aircraft Stations, published by the Berne bureau]

- C-178-E, C-741-K, *read* NC-741-K.—Fy., 3,105 (96.62), 3,162.5 (94.86), 3,172.5 (94.56), 3,182.5 (94.26), 5,572.5 (53.835), 5,582.5 (53.74), 5,662.5 (52.98).
- NC-4-V (Molokai).—Type, A1; fy., 5,375 (55.81), 6,610 (45.39).
- NC-11-Y (NAT 97).—*read* NC-11-Y; fy., 2,906 (103.24), 3,072.5 (97.64), 3,105 (96.62), 3,082.5 (97.32), 3,088 (97.15), 5,672.5 (52.89), 5,692.5 (52.71).
- NC-12-A (Defender).—Fy., 3,105 (96.62) only.
- NC-69-E.—Fy., 2,854 (105.11), 3,005 (99.83), 5,377.5 (55.788); hours, strike out N, add X.
- NC-100-K.—Fy., see NC-12-A.
- NC-111-M (Hawaii), NC-112-M (Maui).—Fy., see NC-4-V (Molokai).
- NC-129-M.—Fy., 2,906 (103.23), 3,072.5 (97.63), 3,082.5 (97.32), 3,088 (97.15), 5,672.5 (52.88), 5,692.5 (52.7).
- NC-144-M.—Fy., 333 (900), 500 (600), 1,708 (175.64), 2,870 (104.5), 3,082.5 (97.32), 5,405 (55.5), 5,692.5 (52.7), 8,220 (36.5), 12,330 (24.33), 16,440 (18.248).
- NC-185-H.—Fy., 2,922 (102.66), 2,946 (101.83), 2,986 (100.46), 5,652.5 (53.074), 5,840 (51.37).
- NC-191-E (NAT No. 83).—Fy., see C-178-E.
- NC-215-M.—Fy., see NC-129-M.
- NC-233-M.—Fy., see C-178-E.
- NC-300-N.—Fy., see NC-144-M.
- NC-303-N.—Fy., see NC-69-E.
- NC-328-N (No. 401 W. A. E.), NC-331-N (No. 402 W. A. E.), NC-333-N (Fokker 2), NC-334-N (Fokker 3), NC-392-E (F-109).—Fy., see NC-129-M.
- NC-397-H, NC-400-H, NC-402-H, NC-403-H.—Fy., see NC-144-M.
- NC-408-H.—Fy., 3,222.5 (93.09), 3,232.5 (92.8), 3,242.5 (92.52), 3,257.5 (92.09), 3,447.5 (87.02), 3,457.5 (86.771), 3,467.5 (86.52), 3,485 (86.08), 4,917.5 (61), 5,602.5 (53.55), 5,612.5 (53.45), 5,632.5 (53.26).
- NC-411-H (Nat. No. 90), NC-417-H.—Fy., see C-178-E.
- NC-421-E (No. 52 W. A. E.), NC-422-E (No. 53 W. A. E.).—Fy., see NC-129-M.
- NC-422-H.—Fy., see C-178-E.
- NC-430-H.—Fy., see NC-12-A.
- NC-455-E (F-110), NC-456-E (F-111), 528-M (No. 121) *read* NC-528-M.—Fy., see NC-129-M.
- NC-581-K.—Fy., see NC-408-H.
- NC-528-K (F-114), NC-583-K (F-115), NC-584-K.—Fy., see NC-129-M.
- NC-585-N, NC-586-N, NC-588-N, NC-589-N, NC-600-V, NC-601-V, NC-602-V, NC-620-V, NC-621-V, NC-622-V, NC-626-V, NC-628-V, NC-629-V.—Fy., see NC-185-H.
- NC-651-E, NC-652-E, NC-707-Y, NC-714-Y.—Fy., see NC-408-H.
- NC-725-K, NC-726-K, NC-727-K, NC-728-K.—Fy., see NC-185-H.
- NC-740-M, NC-742-K (No. 54).—Fy., see NC-129-M.
- NC-784-Y.—Fy., see NC-144-M.
- NC-800-E, NC-801-E, NC-802-E, NC-804-E, NC-805-E.—Fy., see NC-408-H.
- NC-841-M.—Fy., see NC-12-A.
- NC-843-M (No. 55).—Fy., see NC-129-M.
- NC-880-E, NC-881-E.—Fy., see NC-408-H.
- NC-933-Y.—Fy., see NC-129-M.
- NC-945-M.—Fy., see NC-144-M.
- NC-947-Y.—Fy., see NC-129-M.
- NC-952-V.—Fy., see NC-12-A.
- NC-961-Y, NC-966-Y.—Fy., see NC-129-M.
- NC-985-V.—Fy., see NC-185-H.
- NC-985-Y, NC-986-Y, NC-992-Y, NC-993-Y, NC-994-Y.—Fy., see NC-129-M.
- NC-997-V.—Fy., see NC-408-H.
- NC-999-Y.—Fy., see NC-129-M.
- NC-3041.—Fy., see NC-12-A.
- NC-5999.—Fy., see NC-12-A.
- NC-6853, NC-7455.—Fy., see NC-144-M.

- NC-7523.—Type, A3; fy., 2,854 (105.11), 3,005 (99.83), 3,105 (96.62), 5,377.5 (55.788).
 NC-7770.—Fy., see NC-12-A.
 NC-8039.—Fy., see NC-144-M.
 NC-8047, NC-8048, NC-8411, NC-8413.—Fy., see NC-129-M.
 NC-8416, NC-8417.—Fy., see NC-144-M.
 NC-8485.—Fy., see NC-408-H.
 NC-8486.—Fy., see NC-408-H; service, P; hours, X.
 NC-9157.—Fy., see NC-12-A.
 NC-9166, NC-9167, NC-9169.—Fy., see NC-408-H.
 NC-9193.—Fy., 3, 190 (94), 5,602.5 (53.55).
 NC-9424.—Fy., see NC-144-M.
 NC-9606 (The City of New York), NC-9607 (The Kansas City), NC-9638, NC-9639, NC-9640, NC-9641, NC-9643 (City of Albuquerque), NC-9645 (City of Wichita), NC-9646 (City of Los Angeles), NC-9647 (City of Indianapolis), NC-9648 (City of Columbus), NC-9650 (City of St. Louis), NC-9651 (City of Philadelphia).—Fy., see NC-129-M.
 NC-9662.—Fy., see NC-408-H.
 NC-9663 (Naugatuck).—Fy., see NC-408-H; service, P; hours, X.
 NC-9666.—Fy., see NC-129-M.
 NC-9667.—Fy., see NC-408-H.
 NC-9673.—Type, A1; fy., see NC-144-M.
 NC-9677 (Nonawtum).—Fy., see NC-408-H; service, P; hours, X.
 NC-9681 (Nemissa), NC-9682, NC-9683.—Fy., see NC-408-H.
 NC-9686.—Fy., see NC-129-M.
 NC-9687, NC-9690.—Fy., see NC-408-H.
 NC-9715.—Fy., see NC-144-M.
 NC-9716.—Fy., see NC-408-H.
 NC-9717, NC-9723.—Fy., see NC-144-M.
 NC-9779.—Fy., see NC-129-M.
 NC-9784.—Fy., see NC-12-A.
 NC-9798.—Fy., see NC-144-M.
 NC-11118.—Fy., see NC-12-A.
 39-N (No. 117).—*Read* NC-39-N; fy., see NC-129-M.
 X-982-M.—Fy., see NC-408-H.

Strike out all particulars of the following-named stations: C-286, C-290, NC-5170 (F-102), NC-585-K, NC-632-M, NC-633-M, NC-634-M, NC-833-M, NC-942-Y, NC-10347 (No. 1428).

GOVERNMENT LAND STATIONS, ALPHABETICALLY, BY NAMES OF STATIONS

[Alterations and corrections to be made to the List of Commercial and Government Radio Stations of the United States, edition of June 30, 1931, and to the International List of Fixed and Land Stations, published by the Berne bureau]

- ANCHORAGE, ALASKA.—Fy., strike out 86 (3,490), 476 (630), 8,170 (36.72), add 120 (2,500), 153 (1,960), 4,090 (73.35), 8,180 (36.67).
 BELLEVUE, PA.—Fy., strike out 196 (1,530), add 230 (1,305).
 BELLEVUE, NEBR. (Omaha).—Fy., strike out 190 (1,580), add 204 (1,470).
 BIRMINGHAM, ALA.—Fy., strike out 190 (1,580), 284 (1,055), add 206 (1,455), 350 (855).
 BOSTON, MASS., WSX.—Loc., 72° 00' 43" W., 42° 20' 12" N.
 CHEYENNE, WYO.—Fy., strike out 8,110 (36.99), 12,165 (24.66).
 CINCINNATI, OHIO.—Fy., strike out 214 (1,400), 338 (88.8), add 196 (1,530), 3,395 (88.36).
 FRESNO, CALIF.—Fy., strike out 201 (1,495), add 196 (1,530).
 GUILFORD, N. C. (Greensboro).—Fy., strike out 190 (1,580), add 206 (1,455).
 HAPEVILLE, GA. (Atlanta).—Fy., strike out 190 (1,580), add 206 (1,455).
 IDAHO FALLS, IDAHO.—Fy., strike out 338 (890), add 350 (855).
 IOWA CITY, IOWA.—Fy., strike out 326 (920), add 272 (1,105).
 JACKSON, MICH.—Fy., strike out 5,930 (50.59), add 5,955 (50.37).
 KEY WEST, FLA.—Fy., strike out 190 (1,580), add 206 (1,455).
 KINGMAN, ARIZ.—Fy., strike out 209 (1,435), add 196 (1,530).
 KODIAK, ALASKA, RADIO.—Fy., strike out 187 (1,605), add 192 (1,565).
 LA CROSSE, WIS.—Fy., strike out 224 (1,340), add 204 (1,470).
 MEDFORD, OREG.—Loc., 122° 51' 05" W., 42° 22' 04" N.
 MEMPHIS, TENN.—Fy., strike out 218 (1,375), add 196 (1,530).
 NASHVILLE, TENN.—Fy., strike out 190 (1,580), add 206 (1,455).
 PARKVILLE, MO. (Kansas City).—Fy., strike out 218 (1,375), add 196 (1,530).

ROBERTSON, MO. (St. Louis).—Loc., 90° 22' 15'' W., 38° 44' 30'' N.
 ROCK SPRINGS, WYO.—Fy., strike out 350 (855), add 290 (1,035).
 SALT LAKE CITY, UTAH.—Fy., strike out 290 (1,035), add 338 (890).
 SANDSTON, VA. (Richmond).—Fy., strike out 190 (1,580), add 206 (1,455).
 SEATTLE, WASH., KCZ.—Fy., strike out 344 (870), add 260 (1,155).
 SEWARD, ALASKA RADIO.—Fy., strike out 120 (2,500), add 4,085 (73.44), 8,170 (36.72).
 SPARTANBURG, S. C.—Fy., strike out 190 (1,580), add 206 (1,455).
 STREVELL, IDAHO.—Fy., add 218 (1,375).
 WINNEMUCCA, NEBR. (Pleasant Valley).—Fy., add 218 (1,375).

GOVERNMENT SHIP STATIONS, ALPHABETICALLY, BY NAMES OF STATIONS

[Alterations and corrections to be made to the List of Commercial and Government Radio Stations of the United States, edition of June 30, 1931, and to the International List of Ship Stations, published by the Berne bureau]

JOHN EWENS.—Name changed to Chisca.
 MENDOTA.—Name changed to Muscotah.
 Strike out all particulars of the following-named station: Tecumseh.

MARINE RADIOBEACON STATIONS

[Alterations and corrections to be made to the List of Commercial and Government Radio Stations of the United States, edition of June 30, 1931, and to the International List of Stations Performing Special Services, published by the Berne bureau]

MOUNT DESERT LIGHT STATION, ME.—Fy., strike out 305 (985), add 292 (1,025).
 PORTLAND LIGHTSHIP, ME.—Fy., strike out 284 (1,056), add 292 (1,025).
 COLUMBIA RIVER LIGHT STATION, OREG.—Characteristic signal changed to transmits groups of two dashes and two dots, thus:

— — . . etc.	Silent
60 seconds	120 seconds

UMATILLA REEF LIGHT STATION, WASH.—Fy., strike out 305 (984), add 320 (940); hours, operates continuously during thick or foggy weather and daily in clear weather for the second 15 minutes of each hour.
 MARY ISLAND LIGHT STATION, ALASKA.—Hours, operates continuously from 20 to 30 and 50 to 60 minutes after each hour during clear weather.

AIRWAY RADIOBEACON STATIONS

[Alterations and corrections to be made to the List of Commercial and Government Radio Stations of the United States, edition of June 30, 1931, and to the International List of Stations Performing Special Services, published by the Berne bureau]

BELLEFONTE, PA. (visual beacon).—Fy., strike out 314 (955), add 326 (920).
 CHEYENNE, WYO.—Identifying signal changed to — — . .
 COLUMBUS, OHIO (Port Columbus).—Fy., strike out 332 (905), add 240 (1,250).
 FERNLEY, NEV.—Fy., strike out 296 (1,015), add 254 (1,180).
 GOSHEN, IND.—Type, add A3.
 MEDICINE BOW, WYO.—Fy., strike out 296 (1,015), add 278 (1,080); hours, operates upon request.
 ROCK SPRINGS, WYO.—Fy., strike out 350 (855), add 290 (1,035).
 SALT LAKE CITY, UTAH.—Fy., strike out 290 (1,035), add 338 (890).
 SAUGUS, CALIF.—Fy., strike out 266 (1,130), add 260 (1,155).
 SIDNEY, NEBR.—Type, add A3; fy., strike out 326 (920), add 278 (1,080); hours, operates upon request.
 SUMMIT, CALIF.—Read Donner Summit, Calif.
 Strike out all particulars of the following-named stations: Auburn, Calif.; Detroit, Mich. (visual radiobeacon); Fort Madison, Iowa.

AIRWAY MARKER RADIOBEACONS

[Alterations and corrections to be made to the List of Commercial and Government Radio Stations of the United States, edition of June 30, 1931, and to the International List of Stations Performing Special Services, published by the Berne bureau]

CHEROKEE, WYO.—Fy., strike out 296 (1,014), 350 (857), add 290 (1,035);
GRANGER, WYO.—Fy., strike out 350 (857), add 290 (1,035).
PINE BLUFF, WYO.—*Read* Pine Bluffs, Wyo.; fy., struck out 284 (1,056).

COMMERCIAL AND GOVERNMENT LAND, SHIP, AIRCRAFT, RADIOBEACON, AND
RADIOCOMPASS STATIONS, ALPHABETICALLY BY CALL SIGNALS

KDF, *read* Hyder, Alaska radio; KDUH, *read* Diamond Alkali; KDUU, *read* Thunder Bay Quarries; KEVS, *read* Isabel; KFM, *read* Sacramento, Calif. (New municipal airport); KGO8, *read* Honolulu, Hawaii; KGOT, *read* Mauna Loa, Hawaii (Island of Molokai); KGTA, *read* Winslow, Ariz. (TAT-Maddux airport); KGTD, *read* Wichita, Kans. (municipal airport); KGTE, *read* Wichita, Kans. (municipal airport); KGTR, *read* Robertson, Mo. (Lambert-St. Louis airport); KGUK, *read* Shreveport, La. (municipal airport); KGUP, *read* Phoenix, Ariz. (Sky Harbor airport); KGUT, *read* Robertson, Mo. (Lambert-St. Louis airport); KHLDW, *read* NC-741-K; KHOX, *read* NC-39-N; KHODW, *read* NC-528-M; KHSSH, *read* NC-11-Y; KMP, *read* Omaha, Nebr. (municipal airport); KQD, *read* Salt Lake City, Utah (Woodward Field); KR D, *read* Pasco, Wash. (Franklin County Airport); KSY, *read* Tulsa, Okla. (municipal airport); NATM, *read* Muscotah; WACZ, *read* Dora; WEER, *read* Richmond, Va. (near R. E. Byrd Flying Field); WJC, *read* Chicago, Ill.; WODM, *read* Frances; WODP, *read* Georgeanna; WODR, *read* Marjory; WYCK, *read* Chisca; strike out all particulars following the call signals KDK, KHAGT, KHBPK, KHBTG, KHKFU, KHKGT, KHKHS, KHLMN, KHLRI, KHMIR, KHPDW, KGBA, KGNU, KGNV, KYN, KZCC, WBC, WPCB, WPDJ, WSEA, WYDC.

BROADCASTING STATIONS, BY CALL SIGNALS

[Alterations and corrections to be made to the List of Commercial and Government Radio Stations of the United States, edition of June 30, 1931, and the International List of Broadcasting Stations, published by the Berne bureau]

KERN (Santa Maria, Calif.).—Loc., transmitter, studio and post-office address changed to Seventeenth and Eye Sts., Elks Building, Bakersfield, Calif., 119° 00' 00" W., 35° 22' 30" N.; licensee, The Bee Bakersfield Broadcasting Co.
KGBU (Ketchikan, Alaska).—Power, 100 watts temporarily.
KGFV (Ravenna, Nebr.).—Notice of change in RADIO SERVICE BULLETIN for January incorrectly cited call as KGEW.
KGFX (Pierre, S. Dak.).—Fy., 630 (476).
KGKB (Tyler, Tex.).—Licensee, East Texas Broadcasting Co.
KGU (Honolulu, Hawaii).—Fy., 750 (400).
KTFI (Twin Falls, Idaho).—Fy., 1,240 (241.9).
WBOW (Terre Haute, Ind.).—Loc., 87° 22' 18" W., 39° 27' 16" N.
WCSH (Scarboro, Me.).—Power, 1,000 night, 2,500 day.
WDBO (Orlando, Fla.).—Power, 250.
WGBC (Memphis, Tenn.).—Loc., 90° 02' 40" W., 35° 06' 20" N.
WGEO (York, Pa.).—Call changed to WORK.
WGST (Atlanta, Ga.).—Loc., 84° 24' 09" W., 33° 46' 11" N.
WHBF (Rock Island, Ill.).—Loc., 90° 34' 27" W., 41° 30' 45" N.
WJMS (Ironwood, Mich.).—Post-office address, 215 Suffolk St.
WJR (Sylvan Lake-Pontiac, Mich.).—Power, 10,000.
WNBR (Memphis, Tenn.).—Loc., 90° 02' 40" W., 35° 06' 20" N.
WPAW (Pawtucket, R. I.).—Consolidated with WPRO, Providence, R. I.—both calls to be used. Strike out all particulars of the following-named stations: KFJY (Fort Dodge-Riverdale, Iowa); WKBO (Jersey City, N. J.); WMAK (Grand Island, N. Y.); WPAW (Pawtucket, R. I.).

EXPERIMENTAL STATIONS, ALPHABETICALLY, BY NAMES OF STATIONS

[Alterations and corrections to be made to the List of Radio Stations of the United States, edition of June 30, 1931]

CALIFORNIA:

Palo Alto W6XD.—Fy., 23,100 (12.987), 25,700 (11.673), 26,000 (11.538), 27,100 (11.07), 34,600 (8.67), 41,000 (7.32), 51,400 (5.83), 60,000 (5).

San Francisco W6XAD.—Fy., 2,398 (125.1), 3,492.5 (85.9), 4,797.5 (62.53), 8,655 (34.66).

San Francisco W6XU.—Fy., 153 (1,960), 157 (1,910), 160 (1,875), 400 (750), 410 (790), 454 (660), 468 (640), 5,525 (54.3), 6,200 (48.39), 8,290 (36.19), 8,330 (36.01), 11,055 (27.14), 12,375 (24.24), 16,580 (18.094).

ILLINOIS: Chicago W9XP.—Loc., changed to Elgin, Ill.; fy., 23,100 (12.99), 25,700 (11.67), 26,000 (11.54), 27,100 (11.07), 34,600 (8.67), 41,000 (7.32), 51,400 (5.83), 60,000 (5) to 400,000 (.75).

MASSACHUSETTS: Chicopee Falls W1XAK.—Fy., 990 (305) only.

MINNESOTA: Minneapolis W9XI.—Fy., 1,594 (188.21), 2,398 (125.1), 3,492.5 (85.9), 4,797.5 (62.53), 6,425 (46.69), 8,655 (34.66), 12,862.5 (23.325), 17,310 (17.331), 23,100 (12.99), 25,700 (11.67), 26,000 (11.54), 27,100 (11.07), 34,600 (8.67), 41,000 (7.32), 60,000 (5) to 400,000 (.75), 401,000 (.74) and above.

NEW JERSEY:

Lawrenceville W3XT.—Strike out all particulars.

Passaic W2XCD.—Fy., 1,594 (188.21), 2,398 (125.1), 3,492.5 (85.9), 4,797.5 (62.53), 6,425 (46.7), 8,655 (34.66), 12,862.5 (23.325), 17,310 (17.331).

NEW YORK:

Garden City W2XBG.—Strike out all particulars.

Hicksville W2XAC.—Fy., 11,640 (25.77), 12,862.5 (23.325), 17,310 (17.331), 19,340 (15.512); W2XAJ.—Fy.

Little Neck W2XCK.—Loc., changed to Hicksville, N. Y.; fy., 23,100 (12.987), 25,700 (11.673), 26,000 (11.583), 27,100 (11.070), 34,600 (8.67), 41,000 (7.32), 51,400 (5.83), 60,000 (5) to 400,000 (.75).

Rocky Point W2XA.—Fy., 45 (7,000) to 75 (4,000) except 46, 48, 51, 54, 56, 58, 64, 72, and 75 kilocycles.

Rocky Point W2XBC.—Now portable; fy., 1,594 (188.21), 2,398 (125.1), 3,492.5 (85.9), 4,797.5 (62.53), 6,425 (46.69), 8,655 (34.66), 12,862.5 (23.325), 17,310 (17.331), 25,700 (11.673), 34,600 (8.67), 51,400 (5.83), 60,000 (5) to 400,000 (.75), 401,000 (.74) and above.

Rocky Point W2XBI.—Fy., add 25,700 (11.673), 34,600 (8.67).

Rocky Point W2XBJ.—Fy., 6,725 (44.68), 6,740 (44.51), 6,935 (43.26), 6,950 (43.17), 7,400 (40.54), 7,415 (40.46), 8,830 (33.59), 8,950 (33.52), 9,460 (31.71), 9,490 (31.61), 10,610 (28.28), 10,620 (28.25), 13,450 (22.30), 13,480 (22.26), 13,840 (21.68), 13,900 (21.58), 14,800 (20.27), 15,040 (19.947), 15,970 (18.785), 16,015 (18.733), 17,860 (16.797), 17,900 (16.760), 17,940 (16.722), 18,860 (15.907), 18,900 (15.873), 18,980 (15.806), 20,260 (14.808), 21,220 (14.138), 21,260 (14.111).

Rocky Point W2XBP.—Strike out all particulars.

OHIO:

Suffield (Wingfoot Lake) W8XA.—Fy., 3,082.5 (97.32), 3,105 (96.62), 3,182.5 (94.268), 5,540 (54.15), 5,572.5 (53.835), 5,662.5 (52.98).

West Dover W8XJ.—Fy., 3,105 (96.62), 3,082.5 (97.32), 3,088 (97.15), 3,162.5 (94.86), 3,172.5 (94.56), 3,182.5 (94.268), 5,540 (54.15), 5,572.5 (53.835), 5,662.5 (52.98).

PENNSYLVANIA: Lansdale W3XA.—Fy., 6,425 (46.7), 12,862.5 (23.325), 25,700 (11.673).

VIRGINIA:

Alexandria W3XD.—Strike out all particulars.

Fredericksburg W3XF, W3XG.—Strike out all particulars.

Richmond W3XH.—Strike out all particulars.

Portable

NEW JERSEY: Ocean Township W2XAV.—Fy., 1,594 (188.21), 2,398 (125.1), 3,492.5 (85.9), 4,797.5 (62.53), 6,425 (46.69), 8,655 (34.66), 12,862.5 (23.325), 17,310 (17.331), 18,310 (16.384), 23,100 (12.99).

NEW YORK: Rocky Point W2XCQ.—Strike out all particulars.

¹ W2XDK.—Fy., 4,797.5 (62.53) only.

¹ Portable transmitter to be used as a part of a telemetric radio indicating device cooperating with a receiving device in a plane.

UNITED STATES—throughout W10XAT.—Loc., changed to Passaic, N. J.—*now stationary*; call changed to W2XAT; fy., 1,594 (188.21), 2,398 (125.1), 3,492.5 (85.9), 4,797.5 (62.53), 6,425 (46.69), 8,655 (34.66), 12,862.5 (23.325), 17,310 (17.331), 23,100 (12.99), 25,700 (11.67), 26,000 (11.54), 27,100 (11.07).

Aircraft

NC-9779 W10XL.—Fy., 333 (900), 375 (800), 500 (600), 1,594 (188.21), 1,706 (175.85), 2,316 (129.53), 2,398 (125.1), 3,082.5 (97.32), 3,105 (96.62), 3,492.5 (85.9), 4,797.5 (62.53), 4,917.5 (61.006), 5,520 (54.35), 5,692.5 (52.7), 6,425 (46.69), 8,220 (36.5), 8,655 (34.66), 12,330 (24.33), 12,862.5 (23.325), 17,310 (17.331).

No. 1928 (NC-5211) W10XAQ.—Fy., add 1,594 (188.21), 4,797.5 (62.53), 8,655 (34.66), 17,310 (17.331), 23,100 (12.987), 25,700 (11.673), 26,000 (11.538), 27,100 (11.070), 34,600 (8.67), 41,000 (7.32), 51,400 (5.83), 60,000 (5) to 400,000 (.75), 401,000 (.74) and above.

RELAY BROADCASTING AND BROADCASTING PICK-UP STATIONS, ALPHABETICALLY, BY NAMES OF STATIONS

[Alterations and corrections to be made to the List of Radio Stations of the United States, edition of June 30, 1931]

NEW YORK: South Schenectady W2XAD.—Fy., strike out 15,340 (19.557), add 15,330 (19.569).

PENNSYLVANIA: East Pittsburgh W8XK.—Fy., strike out 11,880 (25.25), add 11,870 (25.27).

Portable

ILLINOIS: Chicago W9XAB.—Fy., strike out 1,564 (191.82), 2,368 (126.68), add 1,518 (197.63), 2,342 (128.10).

NEW YORK:

New York W2XCZ.—Fy., 1,566 (191.57), 2,390 (125.52).

New York W2XDA.—Fy., strike out 1,544 (194.30), add 1,542 (194.55).

New York W10XAC.—Fy., strike out 2,476 (121.16), add 2,478 (121.07).

VISUAL BROADCASTING STATIONS BY NAMES OF STATIONS

[Alterations and corrections to be made to the List of Radio Stations of the United States, edition of June 30, 1931]

MASSACHUSETTS: Boston W1XAV.—Fy., 1,600 (187.5) to 1,700 (176.5).

NEW YORK: Long Island City W2XR.—Fy., strike out 2,100 (142.9), to 2,200 (136.4), 2,850 (105.3) to 2,950 (101.69), add 1,600 (187.5) to 1,700 (176.5).

MISCELLANEOUS

NEW INTERNATIONAL LISTS OF STATIONS AVAILABLE FOR DISTRIBUTION

The International Bureau of the Telegraph Union, Radiotelegraph Service, Berne, Switzerland, now has available for distribution to the general public the following-named new lists of stations: Performing special services, \$1.74; aircraft, \$1.22; and broadcasting, \$1.55. These prices include subscription to all monthly supplements up to the issuance of the next edition, and postage. All remittances should be forwarded direct to the Berne Bureau by international money order.

BROADCASTING FREQUENCY MEASUREMENTS FOR JANUARY

According to the list of honor-roll broadcasting stations just released by the Radio Division for January, over one-half of the stations measured deviated less than 50 cycles. Out of the 449 stations measured, 230, or 51.2 per cent, deviated less than 50 cycles; 94, or 20.9 per cent, deviated less than 100 cycles; 63, or 14 per cent, stayed under the 200-cycle mark; while the remaining 62, or 13.9 per cent, went over that mark. This record is the best for any month since these monthly lists were first issued, December, 1930.

The following table gives the figures for the months December, 1930, to January, 1932, inclusive:

Month	Number stations measured	Less than 50 cycles	Less than 100 cycles	Less than 200 cycles	Over 200 cycles
December 1930	339		35 (13.5%)	66 (16.5%)	238 (70%)
January 1931	363		54 (15%)	102 (27%)	207 (58%)
February	367		99 (27%)	55 (15%)	213 (58%)
March	337	65 (19.3%)	63 (18.8%)	77 (22.8%)	132 (39.1%)
April	314	72 (22.9%)	54 (17.2%)	92 (29.3%)	96 (30.6%)
May	326	78 (23.9%)	89 (27.3%)	68 (20.9%)	91 (27.9%)
June	330	97 (29.4%)	71 (21.5%)	69 (20.9%)	93 (28.2%)
July	294	94 (32%)	70 (23.8%)	60 (20.4%)	70 (23.8%)
August	304	117 (38.5%)	64 (21%)	73 (22%)	56 (18.5%)
September	328	115 (35%)	72 (22%)	68 (21%)	73 (22%)
October	381	136 (35.7%)	97 (25.4%)	72 (18.9%)	76 (20%)
November	383	153 (40%)	86 (22.5%)	76 (20%)	88 (17.5%)
December	422	190 (45%)	98 (23.2%)	64 (15.2%)	70 (16.6%)
January 1932	449	230 (51.2%)	94 (20.9%)	63 (14%)	62 (13.9%)

LESS THAN 50 CYCLES

Call signal	Transmitter location, studio location in parentheses	Call signal	Transmitter location, studio location in parentheses
KCRC	Enid, Okla.	KLS	Oakland, Calif.
KELW	Burbank, Calif.	KLX	Do.
KEX	Portland, Oreg.	KLZ	Denver, Colo.
KFAB	Lincoln, Nebr.	KMBC	Independence, Mo. (Kansas City).
KFAC	Los Angeles, Calif.	KMJ	Fresno, Calif.
KFBI	Milford, Kans.	KMO	Tacoma, Wash.
KFBK	Sacramento, Calif.	KMOX	St. Louis, Mo.
KFDM	Beaumont, Tex.	KMPC	Beverly Hills, Calif.
KFEQ	St. Joseph, Mo.	KMTR	Los Angeles, Calif.
KFGQ	Boone, Iowa.	KNX	Los Angeles, Calif. (Hollywood).
KFI	Buena Park, Calif. near (Los Angeles).	KOA	Denver, Colo.
KFJB	Marshalltown, Iowa.	KOAC	Corvallis, Oreg.
KFJR	Portland, Oreg.	KOH	Reno, Nev.
KFLV	Rockford, Ill.	KOIL	Council Bluffs, Iowa.
KFOR	Lincoln, Nebr.	KOL	Seattle, Wash.
KFPM	Greenville, Tex.	KOMO	Harbor Island, Wash. (Seattle).
KFPY	Spokane, Wash.	KOY	Phoenix, Ariz.
KFRU	Columbia, Mo.	KRE	Berkeley, Calif.
KFSD	San Diego, Calif.	KRGV	Harlingen, Tex.
KFUO	Clayton, Mo.	KRLD	Dallas, Tex.
KFVE	Cape Girardeau, Mo.	KSAC	Manhattan, Kans.
KFWI	San Francisco, Calif.	KSD	St. Louis, Mo.
KFYR	Bismarck, N. Dak.	KSO	Clarinda, Iowa.
KGBX	St. Joseph, Mo.	KSOO	Sioux Falls, S. Dak.
KGCA	Decorah, Iowa.	KSTP	Radio Center, Minn. (St. Paul).
KGDA	Mitchell, S. Dak.	KTAB	Oakland, Calif. (San Francisco).
KGDM	Stockton, Calif.	KTAR	Phoenix, Ariz.
KGDY	Huron, S. Dak.	KTAT	Birdville, Tex. (Fort Worth).
KGER	Long Beach, Calif.	KTBS	Shreveport, La.
KGFJ	Los Angeles, Calif.	KTFI	Twin Falls, Idaho.
KGGC	San Francisco, Calif.	KTHS	Hot Springs, Ark.
KGHI	Little Rock, Ark.	KTM	Santa Monica, Calif. (Los Angeles).
KGIZ	Grant City, Mo.	KTRH	Houston, Tex.
KGKO	Wichita Falls, Tex.	KTSM	El Paso, Tex.
KGY	Scottsbluff, Nebr.	KVI	Des Moines, Wash. (Tacoma).
KGNF	North Platte, Nebr.	KVOO	Tulsa, Okla.
KGO	Oakland, Calif. (San Francisco).	KVOR	Colorado Springs, Colo.
KGU	Honolulu, Hawaii.	KVOS	Bellingham, Wash.
KGW	Faloma, Oreg. (Portland).	KWG	Stockton, Calif.
KHQ	Spokane, Wash.	KWJJ	Portland, Oreg.
KIT	Yakima, Wash.	KWK	Kirkwood, Mo. (St. Louis).
KJBS	San Francisco, Calif.	KWLC	Decorah, Iowa.
KJR	Seattle, Wash.	KXA	Seattle, Wash.
KLRA	Little Rock, Ark.	KXRO	Aberdeen, Wash.

LESS THAN 50 CYCLES—Continued

Call signal	Transmitter location, studio location in parentheses	Call signal	Transmitter location, studio location in parentheses
KXYZ	Houston, Tex.	WJBL	Decatur, Ill.
KYA	San Francisco, Calif.	WJMS	Ironwood, Mich.
WAAB	Quincy, Mass. (Boston).	WJSV	Mount Vernon Hills, Va. (Alexandria)
WAAM	Newark, N. J.	WJBL	Atlanta, Ga. (Oglethorpe University).
WAAW	Omaha, Nebr.	WJZ	Bound Brook, N. J. (New York, N. Y.).
WAWZ	Zarepath, N. J.	WKBI	Cicero, Ill.
WBAA	West Lafayette, Ind.	WKBV	Connersville, Ind.
WBAL	Glen Morris, Md. (Baltimore).	WKBW	Amherst, N. Y. (Buffalo).
WBRC	Brooklyn, N. Y.	WKJC	Lancaster, Pa.
WBBM	Glenview, Ill. (Chicago).	WKRC	Cincinnati, Ohio.
WJBT	Martinsville, N. Y. (Buffalo).	WKY	Oklahoma City, Okla.
WBEN	Marquette, Mich.	WLBF	Kansas City, Kans.
WBEO	Charlotte, N. C.	WLCH	Ithaca, N. Y.
WBT	Danville, Va.	WLIT	Philadelphia, Pa.
WBTM	Baltimore, Md.	WLOE	Chelsea, Mass. (Boston).
WCAO	Zion, Ill.	WLS	Downers Grove, Ill. (Chicago).
WCB D	Baltimore, Md.	WLVA	Lynchburg, Va.
WCBM	Anoka, Minn. (Minneapolis).	WMAC	Syracuse, N. Y.
WCCO	Chicago, Ill.	WSYR	Washington, D. C.
WCFL	Crescent Springs, Ky. (Covington).	WMAL	Addison, Ill. (Chicago).
WCKY	Joliet, Ill.	WMAQ	Richmond, Va.
WCLS	Scarboro, Me. (Portland).	WMBG	Brooklyn, N. Y.
WCSE	Tampa, Fla.	WMBQ	Peoria Heights, Ill.
WDAE	Kansas City, Mo.	WMBD	Brooklyn, N. Y.
WDAF	Roanoke, Va.	WMIL	Fairmont, W. Va.
WDBJ	Bralnerd, Tenn. (Chattanooga).	WMMN	Waterloo, Iowa.
WDOD	Ithaca, N. Y.	WMT	Yankton, S. Dak.
WEAI	Providence, R. I.	WNAX	Fairhaven, Mass. (New Bedford).
WEAN	Superior, Wis.	WNBH	New York, N. Y.
WEBC	Harrisburg, Ill.	WNYC	Selma, Tex. (San Antonio).
WEBQ	Chicago, Ill.	WOAI	Trenton, N. J.
WEDC	Weymouth, Mass. (Boston).	WOAK	Charlestown, W. Va.
WEEI	Spring Township, Pa. (Reading).	WOBW	Davenport, Iowa.
WEUU	Downers Grove, Pa. (Chicago).	WOC	Paterson, N. J.
WENR	Auburn, Mass. (Worcester).	WODA	Ames, Iowa.
WEPS	Erie, Pa.	WOI	Albany, N. Y.
WERC	Forest Hills, N. Y. (New York).	WOKO	Washington, D. C.
WERE	Grapevine, Tex. (Dallas).	WOL	Manitowoc, Wis.
WEVD	Philadelphia, Pa.	WOMT	Jefferson City, Mo.
WFAA	Collamer, N. Y. (Syracuse).	WOS	Paducah, Ky.
WFAN	Flint, Mich.	WPAD	Philadelphia, Pa.
WFBL	Merrimac, N. H. (Manchester).	WPEN	Atlantic City, N. J.
WFDF	Philadelphia, Pa.	WPG	Norfolk, Va.
WFEA	Hopkinsville, Ky.	WPOR	Raleigh, N. C.
WFI	Lancaster, Pa.	WPTF	Vicksburg, Miss.
WFIW	Mississippi City, Miss. (Gulfport).	WQBC	Reading, Pa.
WGAL	Chicago, Ill.	WRAW	Philadelphia, Pa.
WGCM	Chicago, Ill.	WRX	Washington, D. C.
WGES	Newport News, Va.	WRC	Augusta, Me.
WGH	Elgin, Ill. (Chicago).	WRDO	Fridley, Minn. (Minneapolis).
WGN	Amherst, N. Y. (Buffalo).	WRHM	Racine, Wis.
WLIB	Madison, Wis.	WRJN	Dallas, Tex.
WGR	Milwaukee, Wis.	WRB	Gainesville, Fla.
WHA	Carlstadt, N. J. (New York).	WRUF	Mechanicsville, Va. (Richmond).
WHAD	Troy, N. Y.	WRVA	Allentown, Pa.
WHAP	Kansas City, Mo.	WSAN	Fall River, Mass.
WHAZ	Canton, Ohio.	WSAR	Huntington, W. Va.
WHB	Sheboygan, Wis.	WSAZ	Atlanta, Ga.
WHBC	Calumet, Mich.	WSB	South Bend, Ind.
WHBL	Rochester, N. Y.	WSBT	Nashville, Tenn.
WHDF	Cicero, Ill.	WSM	New Orleans, La.
WHED	Bluefield, W. Va.	WSMB	Iowa City, Iowa.
WHFC	New York, N. Y.	WSUI	Rutland, Vt.
WHIS	Des Moines, Iowa.	WSYB	Worcester, Mass.
WHN	Lemoyne, Pa. (Harrisburg).	WTAG	Brecksville Village, Ohio (Cleveland).
WHO	Elkins Park, Pa.	WTAM	Washington, Wis. (Eau Claire).
WHP	Desplaines, Ill. (Chicago).	WTAQ	College Station, Tex.
WIBG	Topeka, Kans.	WTAW	Mount Avon, Conn. (Hartford).
WIBW	Asteria, N. Y. (New York).	WTIC	Brookfield, Wis. (Milwaukee).
WINS	Milwaukee, Wis.	WTMJ	Hammond, Ind.
WISN	Norfolk, Nebr.	WWAE	Detroit, Mich.
WJAG		WWJ	Do.
		WXYZ	

LESS THAN 100 CYCLES

Call signal	Transmitter location, studio location in parentheses	Call signal	Transmitter location, studio location in parentheses
KABC	San Antonio, Tex.	WCBS	Springfield, Ill.
KARK	Little Rock, Ark.	WCDA	Cliffside Park, N. J. (New York, N. Y.).
KDB	Santa Barbara, Calif.	WCHI	Deerfield, Ill. (Chicago).
KDKA	Saxonburg, Pa. (Pittsburgh).	Culver, Ind.	
KECA	Los Angeles, Calif.	WCRW	Chicago, Ill.
KFKX	Bloomington Township, Ill. (Chicago).	WDAW	Amarillo, Tex.
KYW		WDBO	Orlando, Fla.
KFMX	Northfield, Minn.	WDRG	Bloomfield, Conn. (Hartford).
KNFN	Shenandoah, Iowa.	WDSU	Gretna, La. (New Orleans).
KFOX	Long Beach, Calif.	WDZ	Tuscola, Ill.
KFRC	San Francisco, Calif.	WEAF	Baltimore, N. Y. (New York, N. Y.).
KFVD	Culver City, Calif.	WEBR	Buffalo, N. Y.
KFWO	Hollywood, Calif.	WGBF	Evansville, Ind.
KGB	San Diego, Calif.	WGAR	Cuyahoga Heights, Ohio (Cleveland).
KGBZ	York, Nebr.	WHAM	Rochester, N. Y.
KGEZ	Kalispell, Mont.	WHAS	Louisville, Ky.
KGFG	Oklahoma City, Okla.	WIAS	Ottumwa, Iowa (Des Moines).
KGGF	South Coffeyville, Okla.	WIBA	Madison, Wis.
KGRS	Amarillo, Tex.	WILL	Urbana, Ill. (Champaign, Ill.).
KHJ	Los Angeles, Calif.	WJAX	Jacksonville, Fla.
KLO	Ogden, Utah.	WJBC	La Salle, Ill.
KLPM	Minot, N. Dak.	WJBO	New Orleans, La.
KMA	Shenandoah, Iowa.	WJBW	Do.
KMAC	San Antonio, Tex.	WJKS	Gary, Ind.
KMOS	Inglewood, Calif.	WJR	Sylvan Lake Village, Mich. (Detroit).
KMLB	Monroe, La.	WKBF	Clermont, Ind. (Indianapolis).
KOOS	Marshfield, Oreg.	WKBN	Youngstown, Ohio.
KPCB	Seattle, Wash.	WKBO	Jersey City, N. J.
KPO	San Francisco, Calif.	WKZO	Kalamazoo, Mich.
KPOF	Denver, Colo.	WLAC	Nashville, Tenn.
KPPC	Pasadena, Calif.	WLBO	Muncie, Ind.
KREG	Santa Ana, Calif.	WLBZ	Bangor, Me.
KRMD	Shreveport, La.	WLEY	Lexington, Mass.
WAAF	Chicago, Ill.	WMBC	Detroit, Mich.
WABC	Wayne, N. J. (New York, N. Y.).	WMBI	Addison, Ill. (Chicago).
WBOQ		WMPG	Lapeer, Mich.
WAIU	Columbus, Ohio.	WMSG	New York, N. Y.
WBAK	Harrisburg, Pa.	WOWD	Fort Wayne, Ind.
WBBL	Richmond, Va.	WPAP	Cliffside, N. J. (New York, N. Y.).
WBBZ	Ponca City, Okla.	WQAO	
WBCM	Hampton Township, Mich. (Bay City).	WPRO	Cranston, R. I. (Providence).
WBIS	Quincy, Mass. (Boston).	WREN	Lawrence, Kans.
WNAC		New York, N. Y.	WRNY
WBNX	Needham, Mass.	WSAI	Mason, Ohio (Cincinnati).
WBSO	Millis Township, Mass. (Boston).	WSBC	Chicago, Ill.
WBZ		WSPD	Toledo, Ohio.
WBZA	Lincoln, Nebr.	WTBO	Cumberland, Md.
WCAJ	Byberry, Pa. (Philadelphia).	WWL	New Orleans, La.
WCAU	Burlington, Vt.	WVVA	Wheeling, W. Va.

LESS THAN 200 CYCLES

KBTM	Paragould, Ark.	WCBA	Allentown, Pa.
KDYL	Salt Lake City, Utah.	WCLO	Janesville, Wis.
KFBB	Great Falls, Mont.	WCOC	Meridian, Miss.
KFDY	Brookings, S. Dak.	WCOD	Harrisburg, Pa.
KFJI	Klamath Falls, Oreg.	WDAS	Philadelphia, Pa.
KFSG	Los Angeles, Calif.	WDGY	Minneapolis, Minn.
KGA	Spokane, Wash.	WEHC	Emory, Va.
KGOR	Watertown, S. Dak.	WELK	Philadelphia, Pa.
KGEK	Yuma, Colo.	WEXL	Royal Oak, Mich.
KGNO	Dodge City, Kans.	WFBR	Baltimore, Md.
KID	Idaho Falls, Idaho.	WGBC	Memphis, Tenn.
KMED	Medford, Oreg.	WNBR	Newark, N. J.
KOIN	Portland, Oreg.	WGCP	Philadelphia, Pa.
KPRC	Houston, Tex.	WHAT	Gloucester, Mass. (Boston).
KQW	San Jose, Calif.	WHDH	Edge Moor-Carrcroft, Del. (Wilmington).
KROW	Richmond, Calif. (Oakland).	WILM	
KSCJ	Sioux Falls, Iowa.	WJAR	Providence, R. I.
KSEI	Pocatello, Idaho.	WJAS	Pittsburgh, Pa. (near).
KTBR	Portland, Oreg.	WJFD	Mooseheart, Ill.
KTW	Seattle, Wash.	WJDX	Jackson, Miss.
KWKH	Kennonwood, La. (Shreveport).	WLAP	Louisville, Ky.
WAPI	Birmingham, Ala.	WLBX	Long Island City, N. Y.
WBAP	Grapevine, Tex. (Fort Worth).	WLW	Mason, Ohio (Cincinnati).
WCAD	Canton, N. Y.	WMC	Bartlett, Tenn. (Memphis).
WCAM	Camden, N. J.	WMCA	Hoboken, N. J. (New York, N. Y.).
WCAZ	Carthage, Ill.		

LESS THAN 200 CYCLES—Continued

Call signal	Transmitter location, studio location in parentheses	Call signal	Transmitter location, studio location in parentheses
WNJ	Newark, N. J.	WOW	Omaha, Nebr.
WOCL	Jamestown, N. Y.	WPAW	Pawtucket, R. I.
WODX	Springhill, Ala. (Mobile).	WPCH	Hoboken, N. J. (New York, N. Y.).
WOOD	Furnwood, Mich. (Grand Rapids).	WRBX	Roanoke, Va.
WOQ	Kansas City, Mo.	WSPA	Spartanburg, S. C.
WOR	Kearny, N. J. (Newark).	WWRL	Woodside, N. Y.
WOV	Secaucus, N. J. (New York).		

AVIATION AND MARINE WEATHER BULLETINS BY ARLINGTON AND ANNAPOLIS
NAVAL STATIONS

(Effective Mar. 1, 1932)

The United States Weather Bureau, through the Naval Radio Station NAA, at Arlington, Va., or NSS, at Annapolis, Md., broadcasts early reports of weather observations taken at about 200 stations in the United States, Canada, and Alaska; also, pilot-balloon, upper-air reports and airplane-aerograph observations from selected stations. The observations taken at land and aerological stations are in the Weather Bureau word codes applying to these types of stations, and are easily decoded.

All broadcasts described herein are made daily throughout the year, including Sundays and holidays. The time of broadcasting is given in eastern standard time and its equivalent in Greenwich civil time (G. C. T.)

Broadcasting schedules

At 8.05 a. m., 75th meridian time (1305 G. C. T.), on frequencies of 4,015, 8,030, and 12,225 kilocycles (74.7, 37.4, and 24.5 meters, respectively), simultaneously.

At 8.05 p. m., 75th meridian time (0105 G. C. T.), on a frequency of 4,015 kilocycles (74.7 meters); also during winter months on 113 kilocycles (2,655 meters).

All observations in the foregoing broadcasts are of current date, taken at 8 a. m. and 8 p. m., 75th meridian time (1300 and 0100 G. C. T.), except as hereafter indicated, and they contain coded weather information in a group of words arranged for each station as follows:

- (a) Sea-level barometric pressure.
Current temperature.
- (b) Wind direction.
State of weather.
Wind velocity.
- (c) Pressure-change characteristic and amount.
Temperature (minimum in the a. m. broadcast and maximum in the p. m. broadcast).
Another word (K) follows when amount of change exceeds 0.09 inch.
- (d) Time and character of precipitation.
Amount of precipitation.
- (e) Thunderstorms.
- (f) Clouds (kind, direction, and rate of movement).
- (g) Maximum wind velocity and direction.

Reports from Alaska are observations taken approximately at 7 a. m. and 7 p. m., 75th meridian time.

Aerological (pilot-balloon, upper-air) observations of current date made at a selected list of Weather Bureau Stations are also included in this broadcast. These reports are based on readings which give the wind velocity and direction at the surface, the maximum altitude reached, and at various levels aloft, using sea level as a reference plane. Readings are reported for such of the following heights above sea level that are more than 200 meters above the level of the station: 500, 1,000, 1,500, 2,000, 2,500, 3,000, and 4,000 meters, and also maximum altitude reached. For example, if the elevation of the station is 1,600 meters above sea level, readings are reported for surface, 2,000, 2,500, 3,000, and 4,000 meters above sea level, followed by data for the maximum altitude reached. Data for visibility and clouds are also included.

Notes

Code books for translating the foregoing broadcasts are necessary. Regular observations (8 a. m. and 8 p. m.) are in the Weather Code, 1931, except that the word for relative humidity and maximum temperature is omitted in the a. m. broadcast. Aerological (pilot-balloon, upper-air) observations are in the Aerological Code, 1930. Information regarding the procuring of these separate codes may be obtained by addressing the Weather Bureau Office at Washington, D. C.

No forecasts of any kind are included in this broadcast. Forecasts for the benefit of marine interests are broadcast from the same radio station (NAA) in the daily Major Marine Bulletin, which is described in the Weather Bureau Radio Circular No. 13 (third edition—revised).

The Major Marine Bulletin begins at 10 a. m. and 10 p. m., 75th meridian time. (1500 and 0300 G. C. T.), and usually occupies between 40 and 50 minutes in the morning and between 35 and 45 minutes at night. Listeners desiring the forecasts, and who do not wish to copy the entire Major Bulletin, may easily adjust their schedules to the reception of the forecasts only.

Bulletin broadcast for the benefit of European meteorological services

BROADCASTING SCHEDULES

At 11 a. m., 75th meridian time (1600 G. C. T.), on a frequency of 16,060 kilocycles (18.7 meters).

At 11 p. m., 75th meridian time (0400 G. C. T.), on a frequency of 8,030 kilocycles (37.4 meters).

The 11 a. m. and 11 p. m. broadcasts are in the international number code and are primarily intended for the benefit of European meteorological services. It forms a part of the system of international exchange of weather information. The broadcasts are repeated from the radio station on the Eiffel Tower in Paris. They consist, respectively, of 8 a. m. and 8 p. m. observations of current date from selected stations, and indicate the name of the station, state of weather, wind direction, wind force (Beaufort scale), barometric pressure in millibars, and current temperature; also, reports from ships in the Universal Groups of the International Code: PQLLL IIGG DDFww BBVTT. Information concerning the code used in these bulletins may be obtained upon application to the Weather Bureau at Washington, D. C.

NOTE.—In accordance with article 17, paragraph 2, of the General Regulations of the International Radiotelegraphic Convention of 1927, the 3-minute silent intervals are observed in connection with all broadcasts described herein.

RADIO TRANSMISSIONS OF STANDARD FREQUENCY

The Bureau of Standards transmits standard frequencies from its station WWV, Washington, D. C., every Tuesday. The transmissions are on 5,000 kilocycles, and are given continuously from 2 to 4 p. m. and from 10 p. m. to 12 midnight, Eastern Standard Time. (From October, 1931, to March, 1932, inclusive, the evening schedule was two hours earlier.) This service may be used by transmitting stations in adjusting their transmitters to exact frequency, and by the public in calibrating frequency standards and transmitting and receiving apparatus. The transmissions can be heard and utilized by stations equipped for continuous-wave reception throughout the United States, although not with certainty in some places. The accuracy of the frequency is at all times better than 1 cycle (1 in 5,000,000).

From the 5,000 kilocycles any frequency may be checked by the method of harmonics. Information on how to receive and utilize the signals is given in pamphlets obtainable on request addressed to Bureau of Standards, Washington, D. C.

The transmissions consist mainly of continuous, unkeyed carrier frequency, giving a continuous whistle in the phones when received with an oscillatory receiving set. For the first 5 minutes there are transmitted the general call (CQ de WWV) and announcement of the frequency. The frequency and the call letters of the station (WWV) are given every 10 minutes thereafter.

Supplementary experimental transmissions are made at other times. Some of these are made with modulated waves, at various modulation frequencies. Information regarding proposed supplementary transmissions is given by radio during the regular transmissions, and also announced in the newspapers.

The bureau desires to receive reports on the transmissions, especially because radio transmission phenomena change with the season of the year. The data desired are approximate field intensity, fading characteristics, and the suitability of the transmissions for frequency measurements. It is suggested that in reporting on intensities, the following designations be used where field intensity measurement apparatus is not used: (1) Hardly perceptible, unreadable; (2) weak, readable now and then; (3) fairly good, readable with difficulty; (4) good, readable; (5) very good, perfectly readable. A statement as to whether fading is present or not is desired, and if so, its characteristics, such as time between peaks of signal intensity. Statements as to type of receiving set and type of antenna used are also desired. The bureau would also appreciate reports on the use of the transmissions for purposes of frequency measurement or control.

All reports and letters regarding the transmissions should be addressed Bureau of Standards, Washington, D. C.