

**U. S. DEPARTMENT OF COMMERCE  
RADIO DIVISION**

# RADIO SERVICE BULLETIN

ISSUED MONTHLY

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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 Type** = Call signal (letters) assigned.  
 = 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 Service** = Height of antenna (meters) and intensity of current at its base (meters-amperes).  
 = 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=coast station, A=aircraft.  
**Hours Accounts** = Hours of operation: N=continuous service, X=no regular hour, Y=sunrise to sunset.  
 = 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.** = Meters-amperes.  
**U. S. L.** = Applies only to the List of Commercial and Government Radio Stations of the United States.  
**Δ** = Equipped with a radio compass (direction finder).

## NEW STATIONS

*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, 1930, 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
Denver, Colo. <sup>1</sup>	FX	KGRU	95 (3,160), 99 (3,030)	PR	X	American Radio News Corporation.
Sacramento, Calif. <sup>2</sup>	FX	KWO	6,755 (44.41), 9,170 (32.72), 9,870 (30.40), 14,590 (20.56), 19,820 (15.136), 21,060 (14.245).	PR	X	American Telephone & Telegraph Co.
<i>Portable</i>						
Louisiana and Texas: No. 13. <sup>3</sup>	FX	KGVF	1,600 (187.5), 1,652 (181.6), 1,664 (180.39), 1,680 (178.6), 1,704 (176.06).	P	X	Interstate Geophysical Exploration Co.
Louisiana and Texas: No. 14. <sup>3</sup>	FX	KGVG	do	P	X	Do.
Louisiana and Texas: No. 15. <sup>3</sup>	FX	KGVE	do	P	X	Do.
Louisiana and Texas: No. 16. <sup>3</sup>	FX	KGVI	do	P	X	Do.
Louisiana and Texas: No. 17. <sup>3</sup>	FX	KGVI	do	P	X	Do.
Louisiana and Texas: No. 18. <sup>3</sup>	FX	KGVK	do	P	X	Do.

<sup>1</sup> Type, A1.

<sup>2</sup> Type, A2, A3.

<sup>3</sup> Type, A1, A2.

*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, 1930, 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 accounts settled by
Adventurers	KGRW		P	X	San Francisco Bar Pilots Benevolent & Protective Association.	Owner.
Defender <sup>1</sup>	KGRX	8	PG	X	Manuel S. Monise	Do.
Edward G. Suerbert.	WRDY		PG	X	Standard Oil Co. of Indiana	
Elda <sup>2</sup>	WVAU	8	PG	X	Edla Shipping Co. (Inc.)	R. M. C. A.
G. Harrison Smith. <sup>3</sup>	KGRY	8	PG	X	Standard Shipping Co.	Do.
Gielow	KGWJ				Joseph A. MacDonald.	
Gracie S.	KGRV		P	X	San Francisco Bar Pilots Benevolent & Protective Association.	Owner.
Parthenia <sup>4</sup>	KGRT	8	PG	X	Parthenia Corporation	R. M. C. A.
W. S. Farish	KGWI	8	PG	X	Standard Shipping Co.	Do.

<sup>1</sup> Type, A1; fy., 5,525 (54.3), 5,555 (54), 8,290 (36.19), 8,450 (35.50); power, M/amp. 12/3.

<sup>2</sup> Type, A2; fy., 375 (800), 425 (705), 468 (640), 500 (600); power, M/amp. 28/6.

<sup>3</sup> Type, A1, A2; fy., 143 (2,100), 151 (1,985), 153 (1,960), 157 (1,910), 159 (1,885), 160 (1,875), 375 (800), 400 (750), 425 (705), 468 (640), 500 (600); power, M/amp. 28/10.

<sup>4</sup> Type, A1, A2; fy., 5,525 (54.3), 5,555 (54), 6,590 (45.52), 6,620 (45.32), 8,290 (36.19), 8,330 (36.01), 8,440 (35.55), 11,050 (29.85), 11,110 (27), 11,230 (26.71); power, M/amp. 15/5.

*Commercial aircraft stations, alphabetically, by names of craft*

[Additions to the List of Radio Stations of the United States, edition of June 30, 1930, 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-801E.....	KHNKP	-----	P	X	Universal Aviation Corporation. Pan American Airways (Inc.). Loren W. Mendell.
NR-41V.....	KHALO	-----	P	X	
Pride of Hollywood.	KHNJQ	-----	P	X	

*Government ship station, alphabetically, by name of station*

[Addition to the List of Commercial and Government Radio Stations of the United States, edition of June 30, 1930, 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
S. C. 252.....	NOQR	-----	O	-----	U. S. Navy.

*Commercial and Government land, ship, aircraft, radiobeacon, and radiocompass stations, alphabetically by call signals*

Call signal	Name of station	Call signal	Name of station
KGRT	Parthenia.....b	KGVJ	Louisiana and Texas No. 17 (portable).....fx
KGRU	Denver, Colo.....fx	KGVK	Louisiana and Texas No. 18 (portable).....fx
KGRV	Gracie S.....b	KGWI	W. S. Farish.....b
KGRW	Adventuress.....b	KGWJ	Gielow.....b
KGRX	Defender.....b	KWO	Sacramento, Calif.....fx
KGRY	G. Harrison Smith.....b	WRDY	Edward G. Suebert.....b
KGVF	Louisiana and Texas No. 13 (portable).....fx	WVAU	Elda.....b
KGVG	Louisiana and Texas No. 14 (portable).....fx	KHALO	NR-41V.....a
KGVH	Louisiana and Texas No. 15 (portable).....fx	KHNJQ	Pride of Hollywood.....a
KGVI	Louisiana and Texas No. 16 (portable).....fx	KHNKP	NC-801E.....a
		NOQR	S. C. 252.....b

*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, 1930]

Station	Call signal	Frequency in kilocycles, meters in parentheses	Power (watts)	License.
Missouri: Carterville	W9XX	1,604 (187.03)-----	100	Rev. Lannie W. Stewart, 203 North Tennessee Street, American Telephone & Telegraph Co.
New Jersey: Ocean Gate.	W2XDO	4,752.5 (63.13), 8,630 (34.76), 12,840 (23.36), 17,120 (17.523).	20,000	
Oregon: Portland...	W7XAV	2,452 (122.34)-----	25	
Pennsylvania: Sax- onburg.	W8XAR	980 (305)-----	400,000	City of Portland, Oreg., Bureau of Police, Second and Oak Streets. Westinghouse Electric & Manufacturing Co., 700 Braddock Avenue, East Pittsburgh, Pa.
Texas: Dallas.....	W6XN	1,604 (187.03)-----	1,000	Sun Oil Co., 1501 Caruth Street.
<i>Portable</i>				
California: San Francisco Bay.	W6XC	375 (800)-----	10	R. M. C. A.
New Jersey.....	W2XDD	1,604 (187.03), 2,398 (125.1), 3,256 (92.5), 4,795 (62.57).	400	Bell Telephone Laboratories (Inc.), 463 West Street, New York, N. Y.

## 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, 1930, and to the International List of Fixed and Land Stations, published by the Berne bureau]

- AKRON, OHIO (WTF).**—Loc. (approximate)  $41^{\circ} 07' 00''$  W.,  $80^{\circ} 30' 00''$  N.  
**ATLANTA, GA. (Candler Field).**—Power, M/amp. 20/3.  
**AURORA, ILL.**—Licensee, Aeronautical Radio (Inc.).  
**BAKERSFIELD, CALIF. (Kern County airport).**—Type, strike out A1.  
**BARTLESVILLE, OKLA.**—Loc.,  $95^{\circ} 57' 00''$  W.,  $36^{\circ} 46' 42''$  N.; fy., strike out 169 (1,775), add 168.9 (1,775).  
**CHATHAM, MASS. Radio.**—Fy., add 111 (2,705), 117 (2,565), 125 (2,400), 129 (2,325), 137 (2,190), 141 (2,130), 143 (2,100).  
**DES MOINES, IOWA (municipal airport).**—Licensee, Aeronautical Radio (Inc.).  
**DETOUR, MICH., Radio (WAA).**—Fy., strike out 5,525 (54.3).  
**EDMONDS, WASH. (KGR).**—Power, M/amp. 21.54/2.  
**FRESNO, CALIF. (aviation field).**—Loc., changed to Fresno, Calif. (Chandler Field); type, strike out A1.  
**HIACLEAH, FLA., Radio.**—Power, M/amp. 37/3.  
**HOOD BAY, ALASKA.**—Power, M/amp. 24/2.5.  
**IKATAN, ALASKA, Radio.**—Loc.,  $163^{\circ} 18' 54''$  W.,  $54^{\circ} 45' 15''$  N.; power, M/amp. 30/3.  
**INGHAM, MICH.**—Hours, strike out X, add N.  
**IOWA CITY, IOWA (municipal airport).**—Licensee, Aeronautical Radio (Inc.).  
**ISLAND OF OAHU, Hawaii, Radio.**—Rates, coast charge 10 cents (52 centimes) per word.  
**KAILUA, HAWAII (Honolulu).**—Loc.,  $157^{\circ} 45' 00''$  W.,  $21^{\circ} 23' 43''$  N.  
**KING COVE, ALASKA, Radio.**—Loc. (approximate),  $162^{\circ} 19' 00''$  W.,  $55^{\circ} 03' 40''$  N.; power, M/amp. 24/3.  
**LAWRENCEVILLE, N. J. (WLO).**—Type, add A1, A2.  
**LITTLE NECK, N. Y. (WJP).**—Loc., changed to Cantiguage Village, N. Y. (Oyster Bay),  $73^{\circ} 34' 35''$  W.,  $40^{\circ} 45' 28''$  N.; service, strike out P, add PR.  
**LOS ANGELES, CALIF. (KEU).**—Loc., changed to Burbank, Calif. (Los Angeles); licensee, Aeronautical Radio (Inc.).  
**MARION, MASS., Radio (WCC).**—Fy., strike out 21,860 (13.724), 21,900 (13.699); power, M/amp. 18/2.  
**MARY ISLAND LIGHTHOUSE, ALASKA.**—Type, A1; fy., 274 (1,095), 460 (650), 500 (600).  
**MAUNA LOA, HAWAII, Radio (Island of Molokai).**—Rates, coast charge 10 cents (52 centimes) per work.  
**MEDFORD, OREG. (municipal airport).**—Licensee, Aeronautical Radio (Inc.).  
**MUSSEL ROCK, CALIF. (KGQ).**—Type, strike out A3; licensee, Globe Wireless (Ltd.).  
**MUSSEL ROCK, CALIF. (KTK).**—Type, strike out A3; power, M/amp. 100/4.  
**NEW YORK, N. Y. (WGE).**—Read Sheepshead Bay, N. Y.; fy., strike out 6,200 (48.39), 12,180 (24.63).  
**OAKLAND, CALIF. (KGSB).**—Loc., changed to Alameda, Calif.; type, add A2.  
**OKLAHOMA CITY, OKLA.**—Power, M/amp. 12.31/3.  
**PALO ALTO, CALIF. (near-KNK).**—Type, strike out A2.  
**PALO ALTO, CALIF. (near-KNW).**—Loc.,  $122^{\circ} 16' 15''$  W.,  $37^{\circ} 26' 37''$  N.  
**PHILADELPHIA, PA. (WJV).**—Type, strike out A2, A3; fy., strike out 3,160 (94.9), 3,166 (94.8), 3,172 (94.6), 3,178 (94.4), 3,238 (92.65), 3,244 (92.5).  
**RENO, NEV. (Hubbard Field).**—Licensee, Aeronautical Radio (Inc.).  
**ROCKLAND, ME. (near).**—Fy., add 143 (2,100); power, M/amp. 68.6/25.  
**ROCKY POINT, N. Y. (WIR).**—Fy., strike out 4,054 (74), add 4,276 (70.15).  
**SAN JUAN, P. R. (WJT).**—Fy., strike out 4,276 (70.15), add 4,050 (74.07).  
**SYRACUSE, N. Y.**—Fy., strike out 3,452 (86.90); power, M/amp. 13.5/3.1.  
**TULSA, OKLA. (KGSF).**—Power, M/amp. 12.31/3.  
**WICHITA FALLS, TEX. (KGSV).**—Power, M/amp. 12.31/3.  
**ZACHAR BAY, ALASKA.**—Power, M/amp. 18/4.  
 Strike out all particulars of the following-named stations: Abilene, Tex.; Charle-roi, Pa.; Connellsville, Pa.; San Jose, Calif.; Sebastopol, Calif.; Springdale, Pa.

## 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, 1930, and to the International List of Ship Stations, published by the Berne bureau]

- AFOGNAK.**—Accounts, R. M. C. A.  
**ALADDIN.**—Power, M/amp. 30/12.  
**ALEUTIAN.**—Fy., strike out 400 (750), 460 (650), add 5,525 (54.3), 8,450 (35.50), 11,230 (26.71); accounts, Alaska S. S. Co.  
**AMIDA.**—Fy., strike out 5,555 (54), 11,110 (27), add 425 (705).  
**ANCON.**—Fy., strike out 155 (1,935); power, M/amp. 32/10.  
**ARAS.**—Name change to Valiant; owner, Charles S. Howard.  
**ARCADIA.**—Fy., strike out 137 (2,190), 141 (2,130), add 157 (1,910), 400 (750); power, M/amp. 25/10.  
**ARIO.**—Power, M/amp. 30/12.  
**ARIZONA (WPCU).**—Power, M/amp. 15/6.  
**AUSTRALIA.**—Power, M/amp. 25/8 and 5.  
**BALLANTRAE.**—Fy., strike out 2,740 (109.5); power, M/amp. 10/1.  
**BALLENAS.**—Type, strike out A1; fy., add 500 (600); power, M/amp. 12/4; rates, trans-oceanic service 8 cents per word; accounts, R. C. A.  
**BARBARA.**—Power, M/amp. 24/12; accounts, A. H. Bull S. S. Co.  
**BAYOU CHICO.**—Accounts, R. M. C. A. (U. S. L.).  
**BAYPORT.**—Owner, W. G. Coyle & Co.  
**BEACONSTAR.**—Owner, Colonial Beacon Oil Co. (Inc.).  
**BELHAVEN.**—Power, M/amp. 24/14; hours, strike out N.  
**BERWINDVALE.**—Fy., strike out 155 (1,935); power, M/amp. 30/10.  
**BIRKENHEAD.**—Type, add A1; power, M/amp. 21.4/8.  
**BRANDYWINE.**—Power, M/amp. 28/14.  
**BROOKS-SCANLON.**—Power, M/amp. 29/2.5; service, strike out PG, add P; rates, strike out.  
**C. A. CANFIELD.**—Power, M/amp. 27/7.  
**CADDOPEAK.**—Power, M/amp. 20/6.  
**CALIFORNIA (KGQU).**—Fy., add 5,525 (54.3), 5,555 (54), 8,450 (35.50); power, M/amp. 14/2; service, strike out P, add PG; rates, 8 cents per word.  
**CARLTON.**—Power, M/amp. 23/18; owner, Tampa Inter-Ocean S. S. Co.  
**CASCADE.**—Power, M/amp. 20/8.  
**CHARLES L. WHEELER.**—Correct orthography, Charles L. Wheeler, jr.; fy., strike out 410 (730), 454 (660); power, M/amp. 20/8.  
**CHARLES PRATT.**—Type, strike out A1, B; power, M/amp. 29/12.  
**CHESTER O. SWAIN.**—Type, strike out A1, B.  
**CHICKASAW CITY.**—Owner, Isthmian S. S. Co.  
**CHIPPEWA.**—Type, strike out B, add A2; fy., strike out 410 (730), add 400 (750), 468 (640); power, M/amp. 15/8; accounts, R. M. C. A.  
**CITY OF ELWOOD.**—Type, add B; fy., strike out 155 (1,935); power, M/amp. 27/10; hours, strike out X.  
**CITY OF NEW YORK (WFBT).**—Type, add A1; fy., strike out 400 (750), 3,290 (91.2), 4,405 (68.1), 5,650 (53.1), 6,580 (45.59), 8,810 (34.05), 11,200 (26.78), 11,300 (26.55), 13,187 (22.75), 16,717 (17.945), 16,800 (17.857), 21,805 (13.758), add 5,525 (54.3), 5,555 (54), 6,635 (45.21), 8,330 (36.01), 11,050 (27.15), 11,110 (27), 13,240 (22.66); power, M/amp. 18/7; hours, strike out N.; owner, Byrd Antarctic Expedition.  
**COASTWISE.**—Power, M/amp. 20/5.  
**CODY.**—Power, M/amp. 20/18.  
**COLUMBIAN.**—Power, M/amp. 20/4.  
**COMMERCIAL ORLEANIAN.**—Power, M/amp. 18/8.  
**COMMERCIAL TRADER.**—Fy., strike out 400 (750), 468 (640); power, M/amp. 30/6.  
**COMMISSIONER.**—Type, strike out B, add A2; fy., add 468 (640); power, M/amp. 18/2.5.  
**CUBA.**—Hours, N.  
**DORA WEEMS.**—Power, M/amp. 13.63/11.  
**EDWARD PEIRCE.**—Type, strike out B, add A1, A2; fy., add 400 (750), 468 (640); power, M/amp. 25/5.  
**EL ESTERO.**—Power, M/amp. 15.25/7.  
**EL LAGO.**—Power, M/amp. 12.25/7.  
**EL MUNDO.**—Power, M/amp. 21.35/8.  
**EMERGENCY AID.**—Owner, Pacific Argentine Brazil Line.

- E. T. BEDFORD.—Type, add A1; fy., strike out 143 (2,100), 151 (1,985), 157 (1,910), 160 (1,875), 400 (750).
- FAIRFIELD CITY.—Owner, Isthmian S. S. Co.
- FAITH.—Fy., strike out 454 (660), add 468 (640); power, M/amp. 14/5.
- FOREST KING.—Owner, Todd Dry Docks (Inc.).
- F. Q. BARSTOW.—Type, strike out A1, B.
- FREDERIC R. KELLOGG.—Power, M/amp. 30/10.
- GEO. H. JONES.—Power, M/amp. 31.8/10.
- GEORGE PEIRCE.—Accounts, R. M. C. A. (U. S. L.).
- GEORGETOWN.—Power, M/amp. 15/5.
- GEORGIAN (WACY).—Power, M/amp. 24/12; accounts, Williams S. S. Corporation.
- GERTRUDE KELLOGG.—Owner, New York & Philippine S. S. Corporation.
- GUAYAQUIL.—Power, M/amp. 28/8.
- GULFWAX.—Fy., strike out 468 (640).
- GUINEVERE.—Fy., add 425 (705); power, M/amp. 42/6; service, strike out P, add PG; rates, 8 cents per word.
- HARRIET.—Power, M/amp. 5/1.
- HARRY BOWEN.—Type, strike out B, add A1, A2; fy., add 454 (660); power, M/amp. 20/6.
- HERMAN FRASCH.—Power, M/amp. 21/10.
- HI-ESMARO.—Fy., strike out 155 (1,935), 159 (1,885); power, M/amp. 27/12.
- HUMBOLDT.—Power, M/amp. 20/3.
- ILLYRIA.—Fy., strike out 155 (1,935); power, M/amp. 20/10.
- JAMES MCGEE.—Type, strike out A1.
- JANELEW.—Accounts, R. M. C. A. (U. S. L.).
- JANIDORE.—Type, A1, A2; fy., 375 (800), 410 (730), 425 (705), 454 (660), 500 (600); service, PG; hours, X; rates, transoceanic service, 8 cents per word, Great Lakes service, 4 cents per word; accounts, R. C. A.
- J. L. LUCKENBACH.—Hours, strike out X, add N.
- JOHN D. ARCHBOLD.—Type, add A1; power, M/amp. 26/12.
- JOHN WORTHINGTON.—Type, strike out A1.
- JOMAR.—Owner, Tampa Inter-Ocean S. S. Co.
- KENTUCKIAN.—Power, M/amp. 20/5.
- LABETTE.—Accounts, R. M. C. A. (U. S. L.).
- LAFOMO.—Owner, Tampa Inter-Ocean S. S. Co.
- LAKE GALEWOOD.—Fy., strike out 410 (730), 454 (660), add 375 (800); power, M/amp. 15/8; accounts, Robert C. Sudden.
- LAKE MIRAFLORES.—Owner, Santa Cruz Oil Co. (Inc.).
- LEVIATHAN.—Fy., strike out 8,450 (35.50), 11,230 (26.71), 13,240 (22.66), add 400 (750), 8,330 (36.01), 16,580 (18.094), 16,660 (18.007).
- MAKUA.—Accounts, Matson Nav. Co.
- MALABAR.—Type, strike out B, add A1; fy., strike out 153 (1,960), 157 (1,910); power, M/amp. 28/12.
- MANINI.—Accounts, Matson Nav. Co.
- MARGARET LYKES.—Type, add A1; fy., strike out 155 (1,935), 159 (1,885), 410 (730); power, M/amp. 21.16/12.5.
- MARORE.—Power, M/amp. 30/12.
- MAUNA ALA.—Accounts, Matson Nav. Co.
- MEANTICUT.—Accounts, R. M. C. A. (U. S. L.).
- MEDDO.—Type, strike out B, add A2; power, M/amp. 21.3/6.
- MEMPHIS CITY.—Owner, Isthmian S. S. Co. (Inc.).
- METON.—Fy., strike out 151 (1,985), 155 (1,935), 157 (1,910), 159 (1,885); power, M/amp. 28/10.
- MIGRANT.—Fy., strike out 155 (1,935), 157 (1,910), 159 (1,885); power, M/amp. 21/10.
- MINNESOTAN.—Power, M/amp. 23/11.
- MONTGOMERY CITY.—Owner, Isthmian S. S. Co. (Inc.).
- MORRO CASTLE.—Type, strike out A3; power, M/amp. 28/12.
- MUNSOMO.—Power, M/amp. 28/8.
- MUNTROPIC.—Power, M/amp. 29/17.
- NARCISSUS.—Type, strike out B; fy., strike out 155 (1,935); power, M/amp. 31/10.
- NISHMAHA.—Accounts, R. M. C. A. (U. S. L.).
- NORA.—Power, M/amp. 32/12.
- NORTH KING.—M/amp. 31/8; hours, strike out X.
- NOSA PRINCE.—Power, M/amp. 27/3.5.
- NOSA QUEEN.—Power, M/amp. 26/3.5.

- NOTRE DAME.—Type A2; fy., 375 (800), 400 (750), 425 (705), 468 (640), 500 (600); power, M/amp. 15/7.
- NOYO.—Power, M/amp. 25/4.
- OGONTZ.—Power, M/amp. 26/16; owner, Tampa Inter-Ocean S. S. Co.; accounts R. M. C. A. (U. S. L.).
- OLDHAM.—Fy., strike out 155 (1,935); power, M/amp. 24/8.
- ORMES.—Power, M/amp. 30/5.
- OSCAR D. BENNETT.—Power, M/amp. 28/10.
- PATRICK J. O'HARA.—Power, M/amp. 20/6.
- PENNSYLVANIAN.—Power, M/amp. 20/7.
- PIPESTONE COUNTY.—Power, M/amp. 29/13.
- POTTER.—Fy., strike out 155 (1,935), 159 (1,885); power, M/amp. 23/8; hours, strike out X.
- PRESIDENT GARFIELD.—Type, add A1, A2; fy., add 410 (730), 454 (660), 5,525 (54.3), 5,555 (54), 6,590 (45.52), 8,330 (36.01), 11,050 (27.15), 11,230 (26.71), 16,580 (18.094), 16,660 (18.007), 22,100 (13.575); power, M/amp. 13/3.
- PRESIDENT HARRISON.—Fy., strike out 143 (2,100), 151 (1,985), 153 (1,960), 155 (1,935), 157 (1,910), 159 (1,885), 160 (1,875.)
- PROVIDENCE (KUTV).—Power, M/amp. 9/15.
- ROYAL ARROW.—Fy., strike out 155 (1,935); power, M/amp. 30/10.
- SAGE BRUSH.—Power, M/amp. 22/14.
- SAHALE.—Power, M/amp. 26/16; owner, Tampa Inter-Ocean S. S. Co., accounts, R. M. C. A. (U. S. L.).
- SAMUEL Q. BROWN.—Type, add A1; power, M/amp. 30/10.
- SAN ANGELO.—Fy., add 410 (730); power, M/amp. 22.5/11.
- SAN FRANCISCO.—Owner, Isthmian S. S. Co. (Inc.).
- SAN RAFAEL.—Fy., add 410 (730); power, M/amp. 25/16.
- SAN SIMEON.—Power, M/amp. 29.9/11.
- SANTA ANA.—Owner, Charles H. Dickson.
- SANTA ELISA.—Power, M/amp. 24/10.
- SANTA RITA.—Fy., strike out 155 (1,935); power, M/amp. 31/10.
- SANTA TERESA.—Power, M/amp. 32/7.
- SANTOAMARO.—Type, A1, A2; fy., 5,525 (54.3), 5,555 (54), 8,290 (36.19).
- SANTORE.—Power, M/amp. 27.2/10.
- SAPINERO.—Power, M/amp. 20/18; owner, Tampa Inter-Ocean S. S. Co.; accounts, R. M. C. A. (U. S. L.).
- SEAFORTH.—Fy., add 410 (730).
- SEA ROVER.—Power, M/amp. 15/6.
- SEA THRUSH.—Accounts, M. R. T. Co.
- SHASTA (WMDJ).—Fy., strike out 5,525 (54.3), 5,555 (54); power, M/amp. 10/1.
- STEEL AGE.—Owner, Isthmian S. S. Co. (Inc.)
- STEEL ENGINEER.—Owner, Isthmian S. S. Co. (Inc.)
- STEEL MARINER.—Owner, Isthmian S. S. Co. (Inc.)
- STEEL RANGER.—Owner, Isthmian S. S. Co. (Inc.)
- THALIA.—Type, A1, A2; fy., 143 (2,100), 151 (1,985), 157 (1,910), 375 (800), 410 (730), 425 (705), 454 (660), 500 (600); service, PG; hours, X; rates, Great Lakes service, 4 cents per word, trans-oceanic service, 8 cents per word; accounts, R. C. A.
- THRASHER.—Rates, strike out 8 cents.
- TIDEWATER (WJDN).—Name changed to Tydol No. 2.
- TUSCALOOSA CITY.—Owner, Isthmian S. S. Co. (Inc.)
- TYDOL No. 2.—Type, strike out A1; power, M/amp. 7/6.
- ULYSSES.—Owner, American Tankers Corporation.
- VAGABONDIA.—Fy., strike out 155 (1,935); power, M/amp. 20/10.
- VALIANT.—Fy., add 5,555 (54), 16,580 (18.094).
- VEGA.—Power, M/amp. 24/3.8; accounts, Nelson B. Worden.
- WARD.—Fy., strike out 155 (1,935); power, M/amp. 31/10; hours, strike out X.
- W. C. TEAGLE.—Type, add A1; fy., strike out 157 (1,910), 159 (1,885), add 153 (1,960); power, M/amp. 24/10.
- WEST COBALT.—Power, M/amp. 30/12.
- WEST JAFFREY.—Accounts, R. M. C. A. (U. S. L.).
- WEST NOHNO.—Accounts, R. M. C. A. (U. S. L.).
- WEST POCASSET.—Power, M/amp. 28/12.
- W. H. LIBBY.—Power, M/amp. 30/7.
- WILLFARO.—Power, M/amp. 24/15.
- WILLKENO.—Power, M/amp. 23/13.
- WILLMOTO.—Power, M/amp. 34/15.
- WIND RUSH.—Power, M/amp. 21.5/9; accounts, M. R. T. Co.

W. J. HANNA.—Type, strike out A1.

YORBA LINDA.—Power, M/amp. 25/10 and 8.

YORK.—Power, M/amp. 30.3/18.

Strike out all particulars of the following-named vessels: Maracaibo, President Warfield, Santa Cecelia.

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, 1930, and to the International List of Aircraft Stations, published by the Berne bureau]

AF-32.—Type, A3; fy., 3,106 (96.58); service, P; hours, X.

CREOLE.—Fy., add 393 (765).

HAVANA.—Fy., add 393 (765).

NC-23V.—Fy., add 393 (765).

NC-106N.—Fy., add 393 (765).

NC-142M.—Fy., add 393 (765).

NC-144M.—Fy., add 393 (765).

NC-145M.—Fy., add 393 (765).

NC-146M.—Fy., add 393 (765).

NC-231E.—Fy., add 393 (765).

NC-306N.—Fy., add 393 (765).

NC-309N.—Fy., add 393 (765).

NC-395E.—Fy., add 393 (765).

NC-396E.—Fy., add 393 (765).

NC-454E.—F., add 393 (765).

NC-810H.—Fy., add 393 (765).

NC-813H.—Fy., add 393 (765).

NC-814H.—Fy., add 393 (765).

NC-945M.—Fy., add 393 (765).

NC-1612.—Fy., add 393 (765).

NC-3314.—Fy., add 393 (765).

NC-5192.—Fy., add 393 (765).

NC-7117.—Licensee, Maddux Air Lines.

NC-7119.—Licensee, Maddux Air Lines.

NC-7120.—Type, A1, A2, A3; fy., 3,106 (96.58), 5,660 (53); service, P; hours, X; licensee, R. C. A.

NC-7582.—Licensee, Maddux Air Lines.

NC-8000.—Fy., add 393 (765).

NC-8020.—Fy., add 393 (765).

NC-8044.—Fy., add 393 (765).

NC-8413.—Licensee, Maddux Air Lines.

NC-9107.—Fy., add 393 (765).

NC-9137.—Type, strike out A2, A3; fy., strike out 375 (800), add 8,015 (37.43).

NC-9151.—Fy., add 393 (765).

NC-9638.—Licensee, Maddux Air Lines.

NC-9639.—Licensee, Maddux Air Lines.

NC-9640.—Licensee, Maddux Air Lines.

NC-9641.—Licensee, Maddux Air Lines.

NC-9664.—Fy., add 393 (765).

NC-9670.—Fy., add 393 (765).

NC-9685.—Fy., add 393 (765).

NC-9686.—Licensee, Maddux Air Lines.

NC-9688.—Fy., add 393 (765).

NC-9701.—Fy., add 393 (765).

NC-9775.—Fy., add 393 (765).

NC-9776.—Fy., add 393 (765).

No. 54.—Type, A1, A2, A3; fy., 3,070 (97.7), 3,106 (96.58), 3,460 (86.70), 6,350 (47.24).

No. 55.—Type, A1, A2, A3; fy., 3,070 (97.7), 3,106 (96.58), 3,460 (86.70), 6,350 (47.24).

No. 502 W. A. E.—Type, A1, A2, A3; fy., 3,070 (97.7), 3,106 (96.58), 3,460 (86.70), 6,350 (47.24).

No. 503 W. A. E.—Type, A1, A2, A3; fy., 3,070 (97.7), 3,106 (96.58), 3,460 (86.70), 6,350 (47.24).

No. 504 W. A. E.—Type, A1, A2, A3; fy., 3,070 (97.7), 3,106 (96.58), 3,460 (86.70), 6,350 (47.24).



NR-496M.—Fy., strike out 333 (900), 375 (800), 393 (765), 400 (750), 414 (725), 420 (715), 457 (655), 500 (600), add 3,106 (96.58); licensee, Crosley Radio Corporation.

PORT OF SPAIN.—Fy., add 393 (765).

RIO DE LA PLATA.—Fy., add 393 (765).

SITKA.—Type, A3; fy., 3,106 (96.58).

Strike out all particulars of the following-named stations: NC-411H, NR-971W, NR-972W, NR-973W.

#### 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, 1930, and to the International List of Fixed and Land Stations, published by the Berne bureau]

CAMDEN, N. J. (fourth district U. S. N. R.).—Loc., changed to Philadelphia, Pa. (fourth district U. S. N. R.).

#### 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, 1930, and to the International List of Ship Stations, published by the Berne bureau]

Strike out all particulars of the following-named vessels: T-1, T-2, T-3.

#### 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, 1930, and to the International List of Stations Performing Special Services, published by the Berne bureau]

FIVE FATHOM BANK LIGHTSHIP, N. J.—Hours changed to first 15 minutes of each hour from 8 a. m. to 9.15 p. m. in clear weather.

KEWAUNEE PIERHEAD LIGHT STATION, WIS.—Fy., 294 (1,020).

HURON ISLAND LIGHT STATION, MICH.—Air diaphone has been synchronized with radiobeacon for distance-finding purposes. When both signals are being operated for fog or thick weather, a long dash will be transmitted at some time during each minute of radiobeacon transmission, so timed that the end of this dash marks the beginning of each repetition of the diaphone characteristic, which recurs at minute intervals. This dash in the radiobeacon code is approximately three seconds long, much longer than any element of the radiobeacon code, so that identification is easy. Masters of vessels equipped with a radio receiver capable of receiving at approximately 300 kilocycles (wave length 1,000 meters), such as the receiver of a radiocompass, may listen to the radiobeacon and, with a watch, note the time interval in seconds which elapses from the end of the long dash until the first sound of the diaphone is heard. Divide this interval by five and the result will be the approximate distance of the ship from the lighthouse in miles. This computation is based on the fact that radio transmission is practically instantaneous and the speed of sound in air is approximately 1 mile in five seconds. The error will usually not be more than 10 per cent of the total distance.

EAGLE HARBOR LIGHT STATION, MICH.—Air diaphone has been synchronized with radiobeacon for distance-finding purposes. The method of synchronizing and of taking observations in this case will be exactly the same as in the case of the Huron Island Light Station, shown above.

DEVILS ISLAND LIGHT STATION, WIS.—Air diaphone has been synchronized with radiobeacon for distance-finding purposes. The method of synchronizing and of taking observations in this case is exactly the same as in the case of the Huron Island Light Station, shown above.

DULUTH RANGE LIGHT STATION, MINN.—Air diaphone has been synchronized with radiobeacon for distance-finding purposes. The method of synchronizing and of taking observations in this case is exactly the same as in the case of the Huron Island Light Station, shown above.

*Commercial and Government land, ship, aircraft, radiobeacon and radiocompass stations, alphabetically, by call signals*

**KEU**, read Burbank, Calif. (Los Angeles); **KGAA**, read Valiant; **KGSB**, read Alameda, Calif.; **KGT**, read Fresno, Calif. (Chandler Field); **KPAA**, read Charles L. Wheeler, Jr.; **NDM**, read Philadelphia, Pa. (fourth district U. S. N. R.); **WGE**, read Sheephead Bay, N. Y.; **WJDN**, read Tydol No. 2; **WJP**, read Cantigue Village, N. Y. (Oyster Bay); **WMCP**, read Barbara—notice in Bulletin for last month erroneously gave call as **WMCF**; strike out all particulars following the call signals **KGQC**, **KGSA**, **KHIZA**, **KHNBY**, **KHNCX**, **KHNDW**, **KRD**, **KRH**, **NABB**, **NABZ**, **NILB**, **WBDW**, **WBV**, **WOB**, **WOY**, **WQCB**.

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, 1930, and the International List of Broadcasting Stations published by the Berne bureau]

**KFHA** (Gunnison, Colo.).—Licensee, Hawkins-Craig Syndicate (Waldo L. Hawkins and Dr. A. R. Craig).  
**KFKX** (Bloomington, Ill.).—Loc., 88° 04' 00'' W., 39° 58' 00'' N.  
**KFPW** (Siloam Springs, Ark.).—Loc., transmitter and studio changed to Fort Smith, Ark., 94° 24' 00'' W., 35° 22' 00'' N.; post-office address 1213 Garrison Street, Fort Smith, Ark.  
**KGDY** (Oldham, S. Dak.).—Loc., transmitter and studio changed to Huron, S. Dak.; post-office address 347 Dakota Avenue, S.; power, 100.  
**KGFG** (Oklahoma City, Okla.).—Licensee, Oklahoma Broadcasting Co. (Inc.).  
**KGFI** (Corpus Christi, Tex.).—Power, 100 night, 250 day.  
**KGFK** (Moorhead, Minn.).—Licensee, Red River Broadcasting Co. (Inc.).  
**KMOX** (Kirkwood, Mo.).—Loc., transmitter changed to St. Louis, Mo.; power, 25,000 normally, 50,000 experimentally.  
**KRMD** (Shreveport, La.).—Loc., 93° 44' 06'' W., 32° 27' 57'' N.; post-office address, 1445 Claiborne Street.  
**KTAP** (San Antonio, Tex.).—Loc., 98° 29' 24'' W., 29° 25' 34'' N.; post-office address, 220 East Houston Street.  
**KWWG** (Brownsville, Tex.).—Licensee, Brownsville Herald Publishing Co.  
**KXO** (El Centro, Calif.).—Fy., 1,500 (200).  
**KYW** (Bloomington, Ill.).—Loc., 88° 04' 00'' W., 39° 58' 00'' N.  
**WAGM** (Royal Oak, Mich.).—Call changed to **WEXL**.  
**WCAZ** (Carthage, Ill.).—Licensee, Superior Broadcasting Service (Inc.).  
**WCSC** (Charleston, S. C.).—Fy., 1,360 (220.6); power, 500.  
**WGBF** (Glens Falls, N. Y.).—Loc., 73° 42' 00'' W., 43° 20' 00'' N.  
**WJBK** (Ypsilanti, Mich.).—Loc., transmitter and studio changed to Highland Park, Mich., 83° 05' 35'' W., 42° 24' 01'' N.; post-office address, 12987 Woodward Avenue.  
**WKBI** (Chicago, Ill.).—Power, 100 w.  
**WKZO** (Berrien Springs, Mich.).—Licensee, **WKZO** (Inc.).  
**WLAP** (Louisville, Ky.).—Loc., 85° 44' 25'' W., 38° 11' 36'' N.; power, 100 night, 250 day.  
**WMAN** (Columbus, Ohio).—Call changed to **WSEN**.  
**WNBK** (Knoxville, Tenn.).—Call changed to **WROL**.  
**WNRC** (Greensboro, N. C.).—Call changed to **WBAM**; licensee, North Carolina Broadcasting Co. (Inc.).  
**WOAI** (San Antonio, Tex.).—Loc., transmitter changed to Selma, Tex., 98° 18' 33'' W., 29° 34' 45'' N.; power, 25,000 normally, 50,000 experimentally.

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, 1930]

CALIFORNIA:

Los Angeles (**W6XBO**).—Strike out all particulars.

Oakland (**W6XW**).—Strike out all particulars.

HAWAII:

Honolulu (**K6XS**).—Strike out all particulars.

Lahaina (**K6XX**).—Strike out all particulars.

MASSACHUSETTS: Wianno (**W1XA**).—Fy., strike out 28,200 (10.638), add 27,100 (11.070).

MISSOURI: Carterville (**W9XV**).—Licensee, Ozark Radio Corporation of Carterville, Mo.

**NEW JERSEY:**

Bound Brook (W3XAL).—Licensee, National Broadcasting Co.

Bound Brook (W3XL).—Licensee, National Broadcasting Co.

Newark (W2XL).—Strike out all particulars.

**NEW YORK:**

New York (W2XU).—Strike out all particulars.

Rocky Point (W2XA).—Fy., 45 (7,000 to 75 (4,000) except 46, 48, 51, 54, 56, 58, 64, 66, 68, 72, 75 kilocycles.

**PORTO RICO:** San Juan (K4XK).—Strike out all particulars.*Portable***CALIFORNIA:**

Oakland (W6XAX).—Strike out all particulars.

Stanford University (W6XH).—Fy., add 23,100 (12.987), 25,100 (11.952), 27,100 (11.070), 60,000 (5) to 400,000 (.75), 401,000 (.74) and above.

**NEW JERSEY:** Ocean Township (W2XAV).—Fy., add 1,816 (165.2).**NEW YORK:**

New York (W2XAX).—Strike out all particulars.

Nassau County (W2XAN).—Location changed to New York, N. Y.

New York (W2XBE).—Strike out all particulars.

**WASHINGTON:** Seattle (W7XA).—Loc., changed to Edmonds, Wash.*Aircraft*

X7654 (W8XC).—Strike out all particulars.

## 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, 1930]

*Portable***NEW JERSEY:** Bound Brook (W3XAK).—Fy., strike out 2,000 (150) to 2,100 (142.9), add 2,100 (142.9) to 2,200 (136.4).**MISCELLANEOUS**

## GENERAL ORDERS OF THE FEDERAL RADIO COMMISSION

*Revised amateur station regulations (General Order No. 84 as amended, September 22, 1930)*

Under the provisions of section 4 of the radio act of 1927, as amended, the Federal Radio Commission establishes the following regulations for amateur radio stations:

SECTION I. Definitions: As used in these regulations.

(a) An amateur is a person interested in radio technique solely with a personal aim and without pecuniary interest.

(b) An amateur operator is a person holding a valid license from the Secretary of Commerce as a radio operator who is authorized under the regulations of the Secretary of Commerce to operate amateur radio stations.

(c) An amateur station is all the apparatus controlled from one location used for amateur radio communication.<sup>1</sup>

(d) Amateur radio communication is radio communication between amateur radio stations by telegraph, telephone, facsimile, or television solely with a personal aim and without pecuniary interest.

(e) A fixed station is a station permanently located.

(f) A mobile station is a station permanently located upon a mobile unit and ordinarily used while in motion.

(g) A portable station is a station so constructed that it may conveniently be moved about from place to place for communication and is in fact so moved about from time to time, but not ordinarily used while in motion.

SEC. II. Classification of amateur stations.—The public interest, convenience and necessity will be served by the operation of amateur stations. Save as re-

<sup>1</sup> As a matter of licensing procedure in all cases of remotely controlled transmitters, the location of the station shall be assumed to be that of the control point, save that, where such control point is more than 5 miles from the radiating antenna, the location shall be assumed to be that of the radiating antenna.

stricted by and subject to the provisions of, treaty, law or regulations of the commission and with the exception of individual cases where the public interest, convenience, or necessity requires otherwise, all applications from amateurs for amateur station licenses will be granted.

**SEC. III. Prescription of the nature of service to be rendered.—**

(a) For the present, amateur mobile stations will not be licensed.

(b) Amateur stations are to communicate only with similar stations.

In emergencies or for testing purposes they may communicate with commercial or Government stations. They may also communicate with mobile craft and expeditions which do not have general public service licenses and which may have difficulty in establishing communication with commercial or Government stations.

(c) Amateur stations shall not broadcast news, music, lectures, sermons, or any form of entertainment to the general public.

(d) Amateur stations shall not transmit or receive messages for hire nor engage in communication for material compensation, direct or indirect, paid or promised.

(e) Except as otherwise herein provided, amateur radio stations shall be used only for amateur radio communication, as defined in section 1, paragraph (d) above.

**SEC. IV. Assignment of bands of frequencies.—**

(a) The following bands of frequencies are assigned exclusively to amateur stations:

- 1,715 to 2,000 kilocycles.
- 3,500 to 4,000 kilocycles.
- 7,000 to 7,300 kilocycles.
- 14,000 to 14,400 kilocycles.
- 28,000 to 30,000 kilocycles.
- 56,000 to 60,000 kilocycles.
- 400,000 to 401,000 kilocycles.

(b) All bands of frequencies so assigned may be used for continuous wave telegraphy.

(c) The following bands of frequencies may also be used for radio telephony:

- 1,715 to 2,000 kilocycles.
- 3,500 to 3,550 kilocycles.
- 56,000 to 60,000 kilocycles.

(d) Upon application, amateurs who hold operators' licenses from the Secretary of Commerce of the extra first-class amateur grade, or higher, or who show special technical qualifications, satisfactory to the licensing authority, will also be licensed for radio telephony in the band of frequencies:

- 14,100 to 14,300 kilocycles.

(e) The following bands of frequencies may also be used for television, facsimile, and picture transmission:

- 1,715 to 2,000 kilocycles.
- 56,000 to 60,000 kilocycles.

(f) Licenses to individual amateur stations shall permit the use of all frequencies within the service bands above assigned which the licensee may be entitled to use and shall not specify individual frequencies.

**SEC. V. Location.—**An amateur radio station shall not be located upon premises controlled by an alien.

**SEC. VI. Regulations concerning the kind of apparatus to be used with reference to its external effects.—**

(a) Amateur stations shall not use apparatus transmitting damped waves.

(b) The frequency of the waves emitted by amateur stations must be as constant and as free from harmonics as the state of the art permits. For this purpose they must use circuits loosely coupled to the radiating system or devices that will produce equivalent effects to minimize keying impacts and harmonics. Conductive coupling to the radiating antenna, even though loose, is not permitted but this restriction does not apply against the employment of transmission-line feeder systems to Hertzian antennas.

(c) Amateur stations must use adequately filtered direct current power supply or arrangements that produce equivalent effects to minimize frequency modulation and prevent the emission of broad signals.<sup>2</sup>

<sup>2</sup> The use of unrectified alternating current power supply will be considered satisfactory in the amplifier stages of oscillator-amplifier transmitter so arranged that variations in plate voltage can not affect the frequency of the oscillator.

(d) Amateur stations are authorized to use a maximum power input into the last stage of a transmitter of one kilowatt.

**SEC. VII. Regulations deemed necessary to prevent interference.—**

(a) In the event that the operation of an amateur station causes general interference with broadcast reception in receiving apparatus of modern design, that amateur station shall not operate during the hours from 8 o'clock p. m. to 10.30 p. m., and on Sundays from 10.30 a. m. until 1 p. m., local time, upon such frequency or frequencies as cause such interference.

(b) An amateur station shall transmit its assigned call at the end of each transmission, but in any event at least once during each 15 minutes of operation.

**SEC. VIII. Other regulations.—**

(a) Amateur station licenses shall be issued only to persons who are amateurs, as defined in Section I, paragraph (a) above.

(b) Amateur station licenses shall be issued only to persons who are amateur operators, as defined in Section I, paragraph (b) above: *Provided, however,* That if an applicant is not such an operator, an amateur station license shall be issued him upon the presentation of affirmative evidence that the station, when licensed, will be operated by an amateur operator.

(c) Amateur station licenses shall not be issued to corporations or associations: *Provided, however,* That in the case of a bona fide amateur radio society, a license may be issued to an authorized official of such society as trustee therefor.

(d) The licensee of a portable station shall give advance notice to the supervisor of radio in the district where application was made for said portable station license, of all locations in which the station will be operated.

(e) The licenses of an amateur station shall keep an accurate log of station operation, in which shall be recorded the time of each transmission, the station called, the input power to the last stage of the transmitter, and the frequency band used.

**SEC. IX. Administration.—**These regulations shall be administered in accordance with the radio act of 1927 as amended.

*Additional data required in applications for consent to assignment of construction permit or license (General Order No. 95, September 29, 1930).*

For the purpose of giving the Federal Radio Commission more accurate information concerning radio stations, for the prevention of violations of section 12 of the radio act of 1927, as amended, and further to give effect to other provisions of the law,

*It is hereby ordered:* 1. That all applications for consent to the assignment of a construction permit or license shall be made upon forms prescribed by the commission setting forth such facts as are necessary to show that the assignee is eligible and qualified to receive a construction permit or license and that the continued operation of the station will be in the public interest. Where the assignment is voluntary, the application shall be executed in duplicate by both assignor and assignee, and duplicate verified copies of the sale or lease contract shall be attached to such application and made a part thereof. Such contract shall provide that the assignee will have complete control of the station equipment and apparatus and of its operation, including unlimited supervision of programs to be broadcast from the station, and shall be subject only to the consent of the commission; where involuntary, it shall be executed by the assignee and shall, in addition, set forth the nature of such involuntary assignment, and a certified copy of the court order or legal instrument by which assignee has obtained such right;

2. That the insolvency of the licensee of any radio station shall be grounds for the revocation of the station license and/or the refusal of the renewal thereof. The appointment of receivers upon grounds of insolvency and preliminary adjudications of bankruptcy will be considered by the commission as prima facie proof of insolvency. Final adjudications will be accepted as conclusive;

3. That a violation of any of the provisions of this order will be deemed grounds for the revocation of station license, under section 14 of the radio act of 1927, as amended, or for denial of the application for renewal of the station license held by a licensee so violating any provision of this order;

4. That General Order No. 9 is repealed.

## CHANGES IN LIST OF VESSELS EQUIPPED WITH A RADIO COMPASS

The following-named vessels are additions to the lists published in Commercial and Government Radio Stations of the United States, edition June 30, 1930, and the International List of Ship stations published by the Berne Bureau.

Name	Call signal	Owner
City of Chattanooga.....	WFCL	Ocean S. S. Co. of Savannah.
Corsair.....	WQDZ	J. Pierpont Morgan.
Cyprus.....	WTBE	International Exploration Corporation.
G. Harrison Smith.....	KGRY	Standard Shipping Co.
Makawao.....	KDNH	Matson Navigation Co.
Makua.....	KUZF	Do.
Manini.....	KDDQ	Do.
Placida.....	KGQA	Harry G. Haskell.
Samuel Q. Brown.....	KDVO	Tide Water Oil Co.
Sanderatt.....	KLEO	Construction Materials Co.
Sylvia.....	KGQD	Logan G. Thomson.
Veedol No. 2.....	KGNE	Tidewater Associated Transport Co.
Velero II.....	WBDY	G. Allan Hancock.

The radio compass has been removed from the vessels: Commercial—D. E. Callender, O. S. McFarland.

## LOST COMMERCIAL RADIO OPERATORS' LICENSES

Hereunder is a list of radio operators' licenses which have been reported to this office as having been lost. Should any of them be found they should be returned to this office for cancellation. Supervisors and others concerned should see that lost licenses are not being used by unauthorized persons.

Name	Class	No.	Date issued	Where issued
Anderson, Elmer C.....	First.....	4857	July 23, 1928	Seattle.
Baird, Lewis C.....	Second.....	3709	Mar. 9, 1929	Kansas City.
Blatt, Harry.....	do.....	606	July 1, 1929	New York.
Brown, James W.....	do.....	4091	June 12, 1930	Seattle.
Clerc, Milton Chas.....	First.....	1611	July 19, 1929	New Orleans.
Crow, Harry.....	Second.....	4891	June 2, 1930	Do.
Degelman, John.....	do.....	2407	Nov. 15, 1929	Los Angeles.
Fonseca, Joseph M.....	First.....	5170	June 14, 1928	New York.
Gylfe, Axel Eugene.....	Second.....	1927	Apr. 15, 1929	San Francisco.
Grunmeier, Paul A.....	do.....	1220	June 17, 1930	Philadelphia.
Hajim, Jack.....	First.....	951	Jan. 10, 1930	New York.
Laughlin, Harold.....	do.....	4834	June 13, 1928	Seattle.
Mahanay, Stuart C.....	do.....	5348	Sept. 4, 1928	New York.
Malsbary, Arno Russell.....	Broadcast.....	1503	June 27, 1929	Los Angeles.
McKinzie, Oliver N.....	Second.....	4705	June 28, 1930	Do.
Prater, John Herschell.....	do.....	2805	Jan. 28, 1929	Detroit.
Reynolds, Norman C.....	First.....	5955	Dec. 27, 1928	New Orleans.
Rodriguez, David.....	do.....	2105	Sept. 17, 1929	San Francisco.
Wilding, jr., John.....	do.....	1756	Aug. 24, 1928	Philadelphia.

## RADIO OPERATORS' LICENSE SUSPENDED

The holder of commercial operators' license, second class, No. 4489, issued June 2, 1930, has been suspended for a period of 60 days for violation of article 17, paragraph 2, subparagraph 1; article 9, paragraph 3, subparagraph 1a, and article 11, paragraph 1, subparagraph 1; of the regulations annexed to the International Radiotelegraph Convention in that he failed to cease transmitting for three minutes beginning at the fifteenth and forty-fifth minutes of each hour; that he transmitted his call signal a greater number of times than permissible; and that he transmitted superfluous signals by carrying on an unofficial conversation.

Operators are cautioned that the above-cited regulations must be strictly adhered to.

## RADIO OPERATOR ELECTROCUTED

A radio operator of a broadcasting station was electrocuted recently by coming in contact with a high-voltage conductor.

This is the fifth fatal accident of a similar nature within the past few years and, in a number of other cases, operators have been severely shocked or burned.

With a view to avoiding such accidents, operators are advised to be extremely careful in coming in contact with high-voltage conductors.

Owners of stations and others responsible for their maintenance are warned that all wiring and other apparatus should be carefully arranged; otherwise, they may be penalized under law.