

U. S. DEPARTMENT OF COMMERCE
RADIO DIVISION

RADIO SERVICE BULLETIN

ISSUED MONTHLY

Washington, January 31, 1930—No. 154

CONTENTS

	Page		Page
New stations.....	2	Miscellaneous—Continued.	
Alterations and corrections.....	5	Further information regarding Orfordness, England, radiobeacon.....	14
Miscellaneous:		Change in time signals transmitted by Nauen, Germany.....	14
General order of the Federal Radio Commission.....	10	Changes in transmissions of gale warnings and time signals by Daventry and London, England, radiotelephone stations.....	15
International ice patrol service.....	11	Frequencies and time of transmission of ice reports by German radiotelephone stations changed.....	15
Applications for land station licenses must show the exact geographical location.....	12	Frequencies and time of transmissions of weather reports by French stations changed.....	15
Regulation regarding the use of 500 kilocycles (600 meters) for traffic other than calling and distress.....	12	Time of transmission of weather bulletins from Gibraltar changed.....	15
Masters of vessels and radio operators cautioned to follow the requirements of article 19, international convention.....	12	Changes in Lurcher lightship, Nova Scotia, radiobeacon.....	15
Revised amateur station regulations.....	13	Schedule of navigational warnings by British stations.....	16
Iceland and Yugoslavia ratify the international convention.....	14	Fog landing developments.....	17
Procedure of Sayville, N. Y., radio for transmitting traffic lists.....	14	Accuracy obtainable with piezo oscillators.....	17
Transmitting frequencies of Cullercoats (Great Britain) radio.....	14	Method and apparatus used in testing piezo oscillators for broadcasting stations.....	18
Radiobeacon established at North Foreland, England.....	14		

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.
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=coast station.
House	= Hours of operation: N=continuous service, X=no regular hour. Y=sunrise to sunset.
Accounts	= Message accounts settled by.
I. R. T. Co.	= Intercity Radio Telegraph Co.
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, 1929, 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
Atlanta (Candler Field), Ga. ²	FA, FX	WQDP	278 (1,080), 3,484 (86.10), 5,900 (53.57)	P	X	S. A. T. Flying Service (Inc.).
Big Spring (Municipal Airport), Tex. ¹	FA, FX	KGUG	do	P	X	Do.
Minneapolis, Minn. ²	FX	KGPB	2,452 (122.34)	P	X	City of Minneapolis, police department.
New Orleans (Menefee Airport), La. ¹	FA, FX	WQDQ	278 (1,080), 3,484 (86.10), 5,900 (53.57)	P	X	S. A. T. Flying Service (Inc.).
Waco (Municipal Airport), Tex. ¹	FA, FX	KGUH	do	P	X	Do.
<i>Portable</i>						
Texas, Louisiana, and Oklahoma. ³	FX	KGME	1,704 (178.06)	P	X	Wireless Service Corporation.
Do. ¹	FX	KGME	do	P	X	Do.
Do. ¹	FX	KGMG	do	P	X	Do.
Do. ¹	FX	KGMH	do	P	X	Do.
Texas, Louisiana, and Oklahoma, No. 6. ³	FX	KGMI	do	P	X	Do.
Texas, Louisiana, and Oklahoma, No. 7. ³	FX	KG MJ	do	P	X	Do.
Texas, Louisiana, and Oklahoma, No. 8. ³	FX	KG MK	do	P	X	Do.
Texas, Louisiana, and Oklahoma, No. 9. ³	FX	KG ML	do	P	X	Do.
Texas, Louisiana, and Oklahoma, No. 10. ³	FX	KG MN	do	P	X	Do.
Texas, Louisiana, and Oklahoma, No. 11. ³	FX	KG MO	do	P	X	Do.

¹ Type, A1.² Type, A3.³ Type, A1, A3.

Commercial ship stations, alphabetically, by name of vessels

[Additions to the List of Commercial and Government Radio Stations of the United States, edition of June 30, 1929, 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—
Bethlehem ¹	WC DR		PG	X	Bethlehem Transportation Corporation.	Owner.
Cambria ¹	WDDY		PG	X	do	Do.
Commercial Bostonian	KEPM	8	PG	X	Honolulu S. S. Co.	M. R. T. Co.
Cornore	WNIU		PG	X	Ora S. S. Corporation	
Daniel J. Morrell ¹	KG BD		PG	X	Cambria S. S. Co.	Owner.
Edward J. Berwind ¹	KFTY		PG	X	Franklin S. S. Corporation	Do.
Edward Y. Townsend ¹	KG BE		PG	X	Cambria S. S. Co.	Do.
Emory L. Ford ¹	KFKL		PG	X	Franklin S. S. Corporation	Do.
Fred G. Hartwell ¹	KFKJ		PG	X	do	Do.
Intercity Radio Telegraph Co.—general call for any or all vessels	KDZZ					
Lackawanna ¹	WC DP		PG	X	Bethlehem Transportation Corporation	Do.
Lebanon ¹	WFDS		PG	X	do	Do.
Lehigh ¹	WC DN		PG	X	do	Do.
Maryland ¹	WC DQ		PG	X	do	Do.
Pioneer S. S. Co.—general call for any or all vessels	KFZZ				Pioneer S. S. Co.	
Saucon ¹	WQCO		PG	X	Bethlehem Transportation Corporation	Do.
Steelton ¹	WC DS		PG	X	do	Do.

¹ Type, B; fy., 375 (800), 410 (730), 425 (705); rates, Great Lakes service, 4 cents per word. All are equipped with a radio compass.

Commercial land and ship stations, alphabetically, by call signals

Call signal	Name of station	Call signal	Name of station
KDZZ	Intercity Radio Telegraph Co.—general call for any or all vessels.....b	KGMMN	Texas, Louisiana, and Oklahoma No. 10 (portable).....fx
KEFPM	Commercial Bostonian.....b	KGMO	Texas, Louisiana, and Oklahoma No. 11 (portable).....fx
KFKJ	Fred G. Hartwell.....b	KGPB	Minneapolis, Minn.....fx
KFKL	Emory L. Ford.....b	KGUG	Big Spring (Municipal Airport), Tex.fa, fx
KFTY	Edward J. Berwind.....b	KGUH	Waco (Municipal Airport), Tex.....fa, fx
KFZZ	Pioneer S. S. Co.—general call for any or all vessels.....b	WCDN	Lehigh.....b
KGBD	Daniel J. Morrell.....b	WCDP	Lackawanna.....b
KGBE	Edward Y. Townsend.....b	WCDQ	Maryland.....b
KGME	Texas, Louisiana, and Oklahoma (portable).....fx	WQDR	Bethlehem.....b
KGMF	do.....fx	WCDS	Stelton.....b
KGMG	do.....fx	WDDY	Cambria.....b
KGMH	do.....fx	WFDS	Lebanon.....b
KGMI	Texas, Louisiana, and Oklahoma No. 6 (portable).....fx	WNIU	Cornore.....b
KGMJ	Texas, Louisiana, and Oklahoma No. 7 (portable).....fx	WQCO	Saucon.....b
KGMK	Texas, Louisiana, and Oklahoma No. 8 (portable).....fx	WQDP	Atlanta (Candler Field), Ga.....fa, fx
KGML	Texas, Louisiana, and Oklahoma No. 9 (portable).....fx	WQDQ	New Orleans (Menefee Airport), La.fa, fx
		WQDR	Rene.....b

Commercial aircraft stations, alphabetically, by names of craft

[Additions to the List of Radio Stations of the United States, edition of June 30, 1929, and to the International List of Aircraft Stations published by the Berne bureau]

Station	Call signal	Frequency in kilocycles, meters in parentheses	Service	Hours	Owner
Bahia.....	KHEWD		P	X	New York, Rio & Buenos Aires Line (Inc.).
C-224M ¹	KHJOL	3,106 (96.58), 3,142 (95.48), 5,660 (53).	P	X	Boeing Air Transport (Inc.).
C-225M ¹	KHJPK	do.....	P	X	Do.
C-417E ¹	KHJQJ	do.....	P	X	Do.
Creole.....	KHIOX		P	X	Southern Radio Corporation, 26 Broadway, New York, N. Y.
514E.....	KHKJQ		P	X	New York, Rio & Buenos Aires Line (Inc.).
Fokker 2 ¹	KHCLO	3,070 (97.71), 3,106 (96.58), 6,350 (47.24).	P	X	Western Air Express.
Fokker 3 ¹	KHCMN	do.....	P	X	Do.
Haiti.....	KHEYB		P	X	New York, Rio & Buenos Aires Line (Inc.).
Mendoza.....	KHKCX		P	X	Do.
Montevideo.....	KHEUF		P	X	Do.
NC-306N.....	KHFUF		P	X	Pan American Airways (Inc.).
NC-309N.....	KHFVE		P	X	Do.
NC-632M.....	KHKFU		P	X	New York, Rio & Buenos Aires Line (Inc.).
NC-633M.....	KHKG T		P	X	Do.
NC-634M.....	KHKHS		P	X	Do.
NC-793K ¹	KHJRI	3,106 (96.58), 3,142 (95.48), 5,660 (53).	P	X	Boeing Air Transport (Inc.).
NC-805E ¹	KHIBY	do.....	P	X	Universal Aviation Corporation, 1051 Boatmen's Bank Building, St. Louis, Mo.
NC-945M.....	KHFWD		P	X	Pan American Airways (Inc.).
Pernambuco.....	KHEVE		P	X	New York, Rio & Buenos Aires Line (Inc.).
Porto Alegre.....	KHKAZ		P	X	Do.
Port of Spain.....	KHEZA		P	X	Do.
Rio De La Plata.....	KHKBY		P	X	Do.
Salta.....	KHKEV		P	X	Do.
Santiago.....	KHKDW		P	X	Do.
Tampa.....	KHEXC		P	X	Do.
307H.....	KHKKP		P	X	Do.
X-657M.....	KHKIR		P	X	Do.

¹ Type, A3

¹ Type, A1, A2, A3

Commercial aircraft stations, alphabetically, by call signals

Call signal	Name of station	Call signal	Name of station	Call signal	Name of station
KHCLO	Fokker 2.	KHFVE	NC-309N.	KHKBY	Rio De La Plata.
KHCMN	Fokker 3.	KHFWD	NC-945M.	KHKCX	Mendoza.
KHEUF	Montevideo.	KHIBY	NC-805E.	KHKDW	Santiago.
KHEVE	Pernambuco.	KHICK	Creole.	KHKEV	Salta.
KHEWD	Bahia.	KHJOL	C-224M.	KHKFU	NC-632M.
KHEXC	Tampa.	KHJPK	C-225M.	KHKGT	NC-633M.
KHEYB	Haiti.	KHIQJ	C-417E.	KHKHS	NC-634M.
KHEZA	Port of Spain.	KHJRI	NC-793K.	KHKIR	X-657M.
KHFUF	NC-306N.	KHKAZ	Porto Alegre.	KHKJQ	514E.
				KHKKP	307H.

Broadcasting stations, alphabetically, by names of States and cities

[Additions to the List of Radio Stations of the United States, edition of June 30, 1929]

State and city	Call signal	Frequency in kilocycles, meters in parentheses	Power (watts)
New York:			
Long Beach ¹	WCLB	1,500 (200).....	100
Orchard Park (studio at Buffalo, N. Y.).....	WRDA	900 (333).....	1,000
Oklahoma: Elk City.....	KGMP	1,210 (247.9).....	100
South Carolina:			
Charleston.....	WCSC	1,310 (229).....	100 250
Spartanburg.....	WSPA	1,420 (211.3).....	100 250
Vermont: St. Albans.....	WQDM	1,370 (219).....	5

¹ Relicensed.² Day.³ Night.

Broadcasting stations, alphabetically, by call signals

Call signal	Location of transmitter (mail address)	Owner	Frequency in kilocycles, meters in parentheses	Power (watts)
KGMP	Elk City, Okla., Story Hotel	Bryant Radio & Electric Co.	1,210 (247.9).....	100
WCLB	Long Beach, N. Y., Franklin Hotel.	Arthur Faske.....	1,500 (200).....	100
WCSC	Charleston, S. C.....	Fred Jordan & Lewis Burk..	1,310 (229).....	100 250
WQDM	St. Albans, Vt., 16 Kingman St.	A. J. St. Antoine.....	1,370 (219).....	5
WRDA	Orchard Park, N. Y. (studio at Buffalo, N. Y.)	Buffalo Evening News.....	900 (333).....	1,000
WSPA	Spartanburg, S. C., Montgomery Building.	The Voice of South Carolina (Virgil V. Evans).	1,420 (211.3).....	100 250

¹ Day.² Night.

Government land stations, alphabetically, by name of station

[Addition to the List of Commercial and Government Radio Stations of the United States, edition of June 30, 1929, 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
Fort De Lesseps, Canal Zone. ¹	FC, FX	WLZ	711 (420), 750 (400), 826 (365).	O	X	U. S. Army.
Tulsa, Okla. ²	FX	KCAA	296 (1,005).....	Fs, FX	X	Department of Commerce, Bureau of Lighthouses.

¹ Loc. 79° 34' 39" E., 09° 21' 55" N.; type, A1, A2, A3; power, height of aerial, and intensity of current at base, 60 feet, 1.3 amperes.² Type, A3.

Government land and ship stations, alphabetically, by call signals

Call signal	Name of station	Call signal	Name of station
KCAA	Tulsa, Okla. fa, fx	WLZ	Fort De Lesseps, Canal Zone. fc, fx

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, 1929]

Station	Call signal	Frequency in kilocycles, meters in parentheses	Power (watts)	Owner
California: Los Angeles.	W6XAN	23,100 (12.987), 24,100 (12.448), 28,100 (11.494), 31,000 (9.68), 37,000 (8.11), 45,000 (6.667), 55,000 (5.455), 65,000 (4.615).	1,060	Press Wireless (Inc.), 666 Lake Shore Drive, Chicago, Ill.
Illinois: Chicago.....	W9XP	do	1,000	Do.
Florida: Miami.....	W4XA	30,100 (9.97), 40,100 (7.481), 50,100 (5.988).	100	Pan American Airways (Inc.).
New Jersey: Newark (airport).	W2XY	1,608 (186.57), 2,326 (128.97), 3,088 (97.15), 4,785 (62.69), 6,335 (47.35).	400	Colonial Air Transport (Inc.), 270 Madison Ave., New York, N. Y.
Weehawken.....	W2XBK	60,100 (4.99).....	10	R. C. A. Communications (Inc.).
New York: Little Neck.	W2XCK	23,100 (12.987), 24,100 (12.448), 28,100 (11.494), 31,000 (9.68), 37,000 (8.11), 45,000 (6.667), 55,000 (5.455), 65,000 (4.615).	1,000	Press Wireless (Inc.).
<i>Vessels</i>				
Portable (operates on board vessels).	W10XK	6,635 (45.21), 8,200 (36.59), 8,900 (33.71), 11,230 (26.71).	500	Bell Telephone Laboratories (Inc.), 463 West St., New York, N. Y.
Utica.....	W2XAT	50,000 (6) 60,000 (5), 80,000 (3.75), 100,000 (3), 300,000 (1).	10	R. C. A. Communications (Inc.).

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

Call signal	District and station	Call signal	District and station
W2XAT W2XBK W2XCK W2XY W4XA	Second district: Utica (vessel). Weehawken, N. J. Little Neck, N. Y. Newark, N. J. (airport). Fourth district: Miami, Fla.	W6XAN W9XP W10XK	Sixth district: Los Angeles, Calif. Ninth district: Chicago, Ill. <i>Aircraft, portable and vessels</i> Portable (operates on board vessels).

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, 1929, and to the International List of Fixed and Land Stations, published by the Berne bureau]

ALBUQUERQUE, N. MEX. (KSI).—Fy., 235 (1,275), 278 (1,080), 333 (900), 414 (725); hours, X.

CEIBA, P. R., Radio.—Fy., 438 (685), 500 (600), 1,592 (188.44), 5,525 (54), 6,515 (46.05); service, PG.

CLEVELAND, OHIO (WRGH).—Fy., 2,452 (122.34).

CLOVIS, N. MEX.—Fy., 235 (1,275), 278 (1,080), 333 (900), 420 (715); hours, X.

COLUMBUS, OHIO (WHG).—Fy., 235 (1,275), 278 (1,080), 333 (900), 393 (765); hours, X.

- DALLAS, TEX. (Love Field-KGUF).—Type, A1; fy., 278 (1,080), 3,484 (86.10), 5,660 (53); hours, X.
- DEAL, N. J., Radio.—Loc., changed to Ocean Gate, N. J., Radio; fy., add 12,915 (23.23) 17,130 (17.513); hours, N.
- FRAMINGHAM, MASS. (WMP).—Owner, Commonwealth of Massachusetts, department of public safety.
- HOQUIAM, WASH., Radio.—Hours, N; owner, Olympic Radio Co.
- INDIANAPOLIS, IND. (WHM).—Fy., 235 (1,275), 278 (1,080), 333 (900), 400 (750); hours, X.
- INDIANAPOLIS, IND. (WMDZ).—Owner, city of Indianapolis police department.
- KINGMAN, ARIZ. (KSX).—Fy., 235 (1,275), 278 (1,080), 333 (900), 457 (655).
- LANAI, HAWAII.—Fy., 500 (600), 4,212 (71.22), 5,720 (52.447).
- MARION, MASS., Radio (WCC).—Fy., add 111 (2,705), 125 (2,400), 137 (2,190).
- MIAMI, FLA. (WKDL).—Fy., 278 (1,080), 333 (900), 414 (725), 500 (600), 2,662 (112.69), 3,070 (97.71), 5,690 (52.72), 12,210 (24.57).
- NEEDHAM, MASS.—Fy., 7,370 (40.71), 7,835 (38.29), 15,670 (19.145), 15,880 (18.892).
- NEWTON, MASS.—Loc., changed to Needham, Mass.; loc., 71° 13' 45'' W., 42° 16' 40'' N.; fy., add 7,835 (38.29), 15,760 (19.036); hours, X.
- NEW YORK, N. Y., Radio (WHD).—Hours, N.
- NEW YORK, N. Y., Radio (WPN).—Loc., changed to Garden City, N. Y., Radio; type, A1-2-3; fy., 4,116 (72.886), 5,525 (54.3), 6,515 (46.05), 8,630 (34.76), 11,050 (27.15), 11,200 (26.79), 16,580 (18.094), 16,900 (17.751), 22,100 (13.575), 22,160 (13.538).
- SAN JUAN, P. R. (WGZ).—Loc., 66° 06' 50'' W., 18° 27' 55'' N.
- SAN JUAN, P. R. (WJT).—Loc., 66° 06' 50'' W., 18° 27' 55'' N.; fy., 4,276 (70.15).
- SAN JUAN (Pan American Airport), P. R. (WMDU).—Fy., 278 (1,080), 2,662 (112.69), 3,070 (97.71), 5,690 (52.72), 12,210 (24.57).
- SAYVILLE, N. Y., Radio.—Fy., add 392 (765), 500 (600).
- SEATTLE, WASH. (KGPA).—Owner, city of Seattle fire and police departments.
- SELIGMAN, ARIZ.—Loc., changed to Flagstaff, Ariz.
- TUCKERTON, N. J., Radio (WSC).—Fy., add 111 (2,705), 125 (2,400), 137 (2,190).
- TULARE, CALIF.—Fy., 2,416 (124.17).
- VIEQUES, P. R., Radio.—Fy., 438 (685), 500 (600), 1,592 (188.44), 5,525 (54), 6,515 (46.05); service, PG.
- WAYNOKA, OKLA.—Fy., 235 (1,275), 278 (1,080), 333 (900), 393 (765); hours, X.
- WINSLOW, ARIZ.—Fy., 235 (1,275), 278 (1,080), 333 (900), 400 (750).

Portable

- TEXAS, LOUISIANA, AND OKLAHOMA.—Fy., 1,600 (187.5), 1,652 (181.6), 1,664 (180.29), 1,680 (178.6), 1,704 (176.06).

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, 1929, and to the International List of Ship Stations, published by the Berne bureau]

- A. A. AUGUSTUS.—Accounts, owner.
- A. D. MACBETH.—Accounts, owner.
- AGWISTONE.—Name changed to Beacon; owner, Beacon Oil Co. (Inc.).
- ALDER (KDTI).—Name changed to Consec; owner, John W. Hubbard.
- ALDER (WPBY).—Owner, William Boyce Thompson.
- AMAZON.—Accounts, owner.
- ARMINDA.—Accounts, owner.
- BALLENAS.—Accounts, owner.
- BARRYTON.—Accounts, owner.
- BRISTOL.—Name changed to William H. Machen.
- CHARLES NELSON.—Owner, Charles Nelson Co.
- CHIPPEWA.—Accounts, owner.
- CLETUS SCHNEIDER.—Owner, Schnedider S. S. Co.
- COMMERCIAL SPIRIT.—Name changed to Charles Nelson.
- COMMERCIAL TRAVELER.—Name changed to Nelson Traveler.
- COMUS.—Name changed to Western Ocean; owner, North American Fruit & S. S. Corporation.
- CORVUS.—Name changed to Flomar; owner, Calmar S. S. Corporation.
- DARDEN.—Name changed to Elizabeth Kellogg.

- EASTERN CROWN.—Owner, Eastern Crown S. S. Co (Inc.).
 F. A. BAILEY.—Accounts, owner.
 FONTANA.—Accounts, owner.
 FRANK BILLINGS.—Accounts, owner.
 FRANK SEITHER.—Accounts, owner.
 FREEPORT SULPHUR No. 6.—Name changed to Thermo; owner, Thermo S. S. Co.
 GADFLY II.—Fy., 143 (2100), 151 (1985), 375 (800), 410 (730), 425 (705), 500 (600), 5525 (54.3), 5555 (54), 8290 (36.19), 11050 (27.15), 11230 (26.71).
 G. A. TOMLINSON.—Accounts, owner.
 GLENDOYLE.—Owner, Hammond Lumber Co. (Inc.).
 GOODTIME.—Accounts, owner.
 GRAND ISLAND.—Accounts, owner.
 HUGUENOT.—Owner, American Trust Co. (Inc.).
 HULVER.—Owner, Tennessee Coal, Iron & Railroad Co.
 ISOBEL WEEMS.—Owner, Baltimore & Carolina S. S. Co.
 JOSEPH D. WOOD.—Name changed to Henry W. Card; owner, Virginia Towing Corporation.
 LAKE GALEWOOD.—Owner, Robert C. Sudden.
 L. E. BLOCK.—Accounts, owner.
 MALOLO LIFEBOAT (KIIA).—Name changed to Malolo Lifeboat No. 1.
 MALOLO LIFEBOAT (KIIB).—Name changed to Malolo Lifeboat No. 2.
 MARIPOSA.—Accounts, owner.
 MARITANA.—Accounts, owner.
 MUNBEAVER.—Owner, Munson S. S. Line (Inc.).
 OLIVE K.—Fy., 11050 (27.15).
 ORAN.—Name changed to San Anselmo.
 POINT BONITA.—Accounts, R. M. C. A.
 POINT GORDA.—Accounts, R. M. C. A.
 POINT REYES.—Accounts, R. M. C. A.
 QUEEN.—Correct call W G C R (U. S. L.).
 RAJAH.—Owner, Munson S. S. Line (Inc.).
 REME.—Name changed to Pegasus; owner, Clifford Hemphill.
 ROBERT J. PAISLEY.—Owner, Schneider S. S. Co.
 ROMULUS.—Owner, Spencer Kellogg & Sons (Inc.).
 SANTA ANA.—Owner, Orange Belt S. S. Co.
 SWIFSTARROW.—Owner, Boat Owning & Operating Co. (Inc.).
 SWIFTEAGLE.—Owner, Boat Owning & Operating Co. (Inc.).
 SWIFTLIGHT.—Owner, Boat Owning & Operating Co. (Inc.).
 SWIFTSURE.—Owner, Boat Owning & Operating Co. (Inc.).
 SWIFTWIND.—Owner, Boat Owning & Operating Co. (Inc.).
 WESTERN ALLY.—Name changed to Forbes Hauptman; owner, Chas. R. McCormick Lumber Co. (Inc.).
 WEST MONTOP.—Name changed to San Rafael.
 WILLANGLO.—Name changed to San Angelo.
 Strike out all particulars of the following-named vessels: Centurion, Charlton Hall, Frieda, Heigh-Ho, Iolanthe, Lake Faulk, Manistique, Nipsic, Oceania, Oneida (KEZJ), Skagway, Suremico, Trader, Winchester.

COMMERCIAL LAND AND SHIP STATIONS, ALPHABETICALLY, BY CALL SIGNALS

KDDA, read Nelson Traveler; KDEQ, read Charles Nelson; KDTI, read Consec; KDPO, read Beacon; KEGC, read William H. Machen; KEJF, read Forbes Hauptman; KFIH, read Henry W. Card; KGSL, read Flagstaff, Ariz.; KIIA, read Malolo Lifeboat No. 1; KIIB, read Malolo Lifeboat No. 2; KOPL, read Flomar; KOTR, read San Rafael; KUDG, read San Anselmo; KUNP, read Thermo; KUPK, read Elizabeth Kellogg; WDIO, read San Angelo; WICA, read Western Ocean; WJK, read Needham, Mass.; WKDZ, read Pegasus; WOO, read Ocean Gate, N. J., Radio; WPN, read Garden City, N. Y., Radio; strike out all particulars following the call signals: KDHB, KDJJ, KDYZ, KEJP, KEZJ, KFEA, KFRS, KFYC, KGGL, WDCV, WHDB, WPBX, WPCQ, WQCT.

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, 1929, and to the International List of Aircraft Stations, published by the Berne bureau]

The call signals of the following-named aircraft will be changed effective April 1, 1930, as shown hereunder:

Name	Present call	New call	Name	Present call	New call
Buenos Aires.....	KHEK	KHEKP	NC-196H	KHGA	KHGAZ
C-268	KHAF	KHAFU	NC-231E	KHAU	KHAUF
C-269	KHBA	KHBAZ	NC-300N	KHFR	KHFRI
C-270	KHBB	KHBBY	NC-304N	KHFS	KHFSH
C-272	KHBC	KHBCX	NC-395E	KHAW	KHAWD
C-273	KHBD	KHBDW	NC-396E	KHAX	KHAXC
C-274	KHBE	KHBEV	NC-454E	KHAE	KHAEV
C-276	KHBG	KHBGT	NC-890E	KHEM	KHEMN
C-277	KHBB	KHBBH	NC-810H	KHFD	KHFDW
C-279	KHBJ	KHBJQ	NC-811H	KHFF	KHFFU
C-281	KHBK	KHBJK	NC-812H	KHFF	KHFFH
C-283	KHBM	KHBMN	NC-813H	KHFF	KHFFQ
C-284	KHBN	KHBNM	NC-814H	KHFI	KHFIR
C-285	KHBO	KHBOI	NC-1612	KHAC	KHACX
C-286	KHBP	KHBPX	NC-3314	KHFB	KHFBY
C-287	KHBQ	KHBQI	NC-5192	KHFC	KHFCX
C-288	KHBR	KHBRI	NC-7770	KHAY	KHAYB
C-290	KHBT	KHBTG	NC-8000	KHAK	KHAKP
C-291	KHBU	KHBUF	NC-8020	KHAV	KHAVE
C-292	KHBV	KHBVE	NC-8022	KHGB	KHGBY
City of Albuquerque	KHDC	KHDCX	NC-8031	KHHA	KHHAY
City of Columbus	KHDH	KHDHS	NC-8043	KHBB	KHBBY
City of Glendale	KHEF	KHEFU	NC-8044	KHAP	KHAPK
City of Indianapolis	KHDG	KHDGT	NC-9107	KHAS	KHASH
City of Los Angeles	KHDF	KHDFU	NC-9137	KHFA	KHFAZ
City of Philadelphia	KHDK	KHDKP	NC-9151	KHAT	KHATG
City of St. Louis	KHDJ	KHDJQ	NC-9157	KHEC	KHECX
City of Washington	KHDD	KHDDW	NC-9637	KHAQ	KHAQJ
City of Wichita	KHDE	KHDEV	NC-9652	KHDL	KHDLO
Cuba	KHES	KHESH	NC-9653	KHDM	KHDMN
F-1	KHAJ	KHAJQ	NC-9654	KHDN	KHDNM
F-2	KHAG	KHAGT	NC-9655	KHDO	KHDOL
F-3	KHAI	KHAIR	NC-9656	KHDP	KHDPK
F-4	KHCA	KHCAZ	NC-9657	KHDQ	KHDQJ
F-5	KHCB	KHCBY	NC-9658	KHDR	KHDRJ
F-6	KHCC	KHCCX	NC-9659	KHDS	KHDSH
F-7	KHCD	KHCDW	NC-9660	KHDT	KHDTG
F-8	KHCE	KHCEV	NC-9664	KHAD	KHADW
F-9	KHCF	KHCFU	NC-9670	KHFT	KHFTG
F-10	KHCG	KHCGT	NC-9685	KHAH	KHAHS
F-11	KHCH	KHCHS	NC-9688	KHFL	KHFLO
F-12	KHOI	KHOIR	NC-9701	KHAO	KHAOL
F-14	KHOJ	KHOJQ	NC-9703	KHAR	KHARI
F-15	KHCK	KHCKP	NC-9775	KHAA	KHAAZ
Havana	KHER	KHERI	NC-9776	KHAB	KHABY
NC-75K	KHFK	KHFKP	NC-9779	KHRC	KHRCX
NC-100K	KHEP	KHEPK	Rio de Janeiro	KHEO	KHEOL
NC-132H	KHGC	KHGCX	San Juan	KHET	KHETG
NC-133H	KHGD	KHGDW	The City of New York	KHDA	KHDAZ
NC-142M	KHFN	KHFNM	The Kansas City	KHDB	KHDBY
NC-144M	KHFO	KHFOL	Washington	KHED	KHEDW
NC-145M	KHFP	KHFPK	X-118E	KHEI	KHEIR
NC-146M	KHFQ	KHFQJ	X-855E	KHEH	KHEHS
NC-147H	KHFE	KHFEV			

C-4458.—Name changed to F-1.

C-5170.—Name changed to F-2.

C-5358.—Name changed to F-3.

Cuba.—Type, A1 and 2; fy., 333 (900), 375 (800), 414 (725), 457 (655), 500 (600), 3070 (97.7), 3106 (96.58), 5525 (54.3), 5690 (52.72), 8290 (36.19), 11050 (27.15); service, PG; hours, N; rates, 8 cents per word.

NC-144M.—Type, A1-2-3; fy., 333 (900), 414 (725), 500 (600), 2662 (112.69), 3070 (97.71), 3106 (96.58), 5690 (52.72); service, P; hours, X.

NC-145M.—Type, A1-2-3; fy., 333 (900), 414 (725), 500 (600), 2662 (112.69), 3070 (97.71), 3106 (96.58), 5690 (52.72); service, P; hours, X.

NC-146M.—Type, A1-2-3; fy., 333 (900), 414 (725), 500 (600), 2662 (112.69), 3070 (97.71), 3106 (96.58), 5690 (52.72); service, P; hours, X.

NC-182H.—Type, A1 and A3; fy., 3106 (96.58); service, P; hours, X.

