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RADIO DIVISION

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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.
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.
Hours	= 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.
I. W. T. Co.	= Independent Wireless 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
Arlington, Tenn. ¹	FX	WNDQ	5,855 (51.23).....	PR	N	Universal Wireless Communication Co. (Inc.).
Dallas, Tex. (Love Field). Laurel, Md. ¹	FA, FX FX	KGUF WNDN	5,870 (51.11).....	P PR	N	S. A. T. Flying Service (Inc.). Universal Wireless Communication Co. (Inc.).
Do. ¹	FX	WNDO	5,235 (57.30).....	PR	N	Do.
Louisville, Ky. ¹	FX	WPDE	2,418 (124.17).....	P	X	City of Louisville.
New Brunswick, N. J. ¹	FX	WNDP	4,705 (63.76).....	PR	N	Universal Wireless Communication Co. (Inc.).
Trenton, N. J. ¹	FX	WNDR	5,205 (57.63).....	PR	N	Do.

¹ Type, A1.¹ Type, 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—
Arcturus ¹	KIKZ	8	PG	X	Cape Verde Islands & West African Trading Co.	Owner.
Arden.....	KDPN	8	PG	X	U. S. S. B.....	
City of Alma.....	KUBP	8	PG	X	do.....	
Dorchester.....	WFDX	8	PG	X	R. O'Brien & Co. (Inc.).....	R. M. C. A.
Gadfly II.....	WQDO				Frederick H. Rawson.....	
Hermosa.....	KGMA				William J. Maggio.....	
Isobel Weems.....	KEVS	8	PG	X	Baltimore & Carolina Line (Ind.).....	
Kelvinia.....	WTIU	8	PG	X	Luckenbach S. S. Co.....	
Kittiwake.....	WQDN				Lyman C. Wright.....	
Missouri ²	WQDK				Wisconsin & Michigan Transportation Co.....	
Pacific Sun.....	WQDL	8	PG	X	Motor Tankship Corporation.....	
Quincy.....	WFDZ	8	PG	X	R. O'Brien & Co. (Inc.).....	Do.
Winthrop.....	WFDY	8	PG	X	do.....	Do.

¹ Py., 375 (800), 425 (705), 500 (600).² Py., 375 (800), 410 (730), 425 (705).

Commercial land and ship stations, alphabetically, by call signals

Call signal	Name of station	Call signal	Name of station
KDPN	Arden.....	WNDO	Laurel, Md.....
KEVS	Isobel Weems.....	WNDP	New Brunswick, N. J.....
KGMA	Hermosa.....	WNDQ	Arlington, Tenn.....
KGUF	Dallas, Tex. (Love Field).....	WNDR	Trenton, Tenn.....
KIKZ	Arcturus.....	WPDE	Louisville, Ky.....
KUBP	City of Alma.....	WQDK	Missouri.....
WFDX	Dorchester.....	WQDL	Pacific Sun.....
WFDY	Winthrop.....	WQDN	Kittiwake.....
WFDZ	Quincy.....	WQDO	Gadfly II.....
WNDN	Laurel, Md.....	WTIU	Kelvinia.....

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
C-178E ¹	KHLAZ	3,106 (96.58), 3,142 (95.48), 5,660 (53).	P	X	Pacific Air Transport (Inc.).
C-179E ¹	KHLBY	do	P	X	Do.
C-183E ¹	KHJAZ	do	P	X	Boeing Air Transport (Inc.).
C-184E ¹	KHJNM	do	P	X	Do.
C-185E ¹	KHJMN	do	P	X	Do.
C-187E ¹	KHJIR	do	P	X	Do.
C-188E ¹	KHJLO	do	P	X	Do.
C-189E ¹	KHJJQ	do	P	X	Do.
C-190E ¹	KHJKP	do	P	X	Do.
C-191E ¹	KHJEV	do	P	X	Do.
C-192E ¹	KHJDW	do	P	X	Do.
C-413E ¹	KHJCK	do	P	X	Do.
C-415E ¹	KHJBY	do	P	X	Do.
C-740K ¹	KHLGX	do	P	X	Pacific Air Transport (Inc.).
C-741K ¹	KHLDW	do	P	X	Do.
C-743K ¹	KHLEV	do	P	X	Do.
C-5340 ¹	KHLFU	do	P	X	Do.
C-5389 ¹	KHLGT	do	P	X	Do.
C-5390 ¹	KHLHS	do	P	X	Do.
C-7135 ¹	KHJHS	do	P	X	Boeing Air Transport (Inc.).
C-7136 ¹	KHJGT	do	P	X	Do.
C-7137 ¹	KHJFU	do	P	X	Do.
Cuba	KHES		P	X	New York, Rio & Buenos Aires Line (Inc.).
NC-107H ¹	KHGEV	333 (900), 375 (800), 414 (725), 500 (600), 3,106 (96.58).	PG	N	Curtiss-Wright Flying Service.
NC-109H ¹	KHGFU	do	PG	N	Do.
NC-110H ¹	KHGGT	do	PG	N	Do.
NC-134H ¹	KHGHS	do	PG	N	Do.
NC-182H	KHIAZ				Empire Air Transport Co.
NC-8031 ¹	KHHA	3,106 (96.58), 3,484 (86.10), 5,600 (53.57).	P	X	S. A. T. Flying Service (Inc.).
NC-9670	KHFT		P	X	Pan American Airways (Inc.).
San Juan	KHET		P	X	New York, Rio & Buenos Aires Line (Inc.).

¹ Type, A3. ² Type, A1, A2. ³ Type, A1.

Commercial aircraft stations, alphabetically, by call signals

Call signal	Name of station	Call signal	Name of station	Call signal	Name of station
KHES	Cuba.	KHJCK	C-413E.	KHJMN	C-185E.
KHET	San Juan.	KHJDW	C-192E.	KHJNM	C-184E.
KHFT	NC-9670.	KHJEV	C-191E.	KHLAZ	C-178E.
KHGEV	NC-107H.	KHJFU	C-7137.	KHLBY	C-179E.
KHGFU	NC-109H.	KHJGT	C-7136.	KHLGX	C-740K.
KHGGT	NC-110H.	KHJHS	C-7135.	KHLDW	C-741K.
KHGHS	NC-134H.	KBJR	C-187E.	KHLEV	C-743K.
KHHA	NC-8031.	KHJJQ	C-189E.	KHLFU	C-5340.
KHIAZ	NC-182H.	KHJKP	C-190E.	KHLGT	C-5389.
KHJAZ	C-183E.	KHJLO	C-188E.	KHLHS	C-5390.
KHJBY	C-415E.				

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)
Arizona: Jerome	KGMC	1,310 (229)	100
Georgia: Rome	WFDV	1,370 (219)	100
Hawaii: Honolulu	KGMB	1,320 (227.3)	500
New Mexico: Roswell	KGMD	1,500 (200)	100

Broadcasting stations, alphabetically, by call signals

Call signal	Location of transmitter (mail address)	Owner	Frequency in kilocycles, meters in parentheses	Power (watts)
KGMB	Honolulu, Hawaii, Hawaiian Trust Building.	Honolulu Broadcasting Co.	1,320 (227.3)	500
KGMC	Jerome, Ariz., 711 Main Street.	Charles C. Robinson	1,310 (229)	100
KGMD	Roswell, N. Mex.	Dispatch Publishing Co. (Inc.)	1,500 (200)	100
WFDV	Rome, Ga., 5 West Fourth Avenue.	Doiles Goings	1,370 (219)	100

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
Balboa, Canal Zone (fifteenth district reserve unit)	FC	NDG		O		U. S. Navy.
Point Bonita, Calif.	FC	NGD		O		U. S. Coast Guard.

Government ship stations, alphabetically, by name of stations

[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	Call signal	Frequency in kilocycles, meters in parentheses	Service	Hours	Owner
Indianapolis	NABD		O		U. S. Navy.
Itasca	NOCD		O		U. S. Coast Guard.
Saranac	NOCJ		O		Do.
Sebago	NOCF		O		Do.

Government land and ship stations, alphabetically, by call signals

Call signal	Name of station	Call signal	Name of station
NABD	Indianapolis.....b	NOCD	Itasca.....b
NDG	Balboa, Canal Zone (fifteenth district reserve unit).....fc	NOCF	Sebago.....b
NGD	Point Bonita, Calif.....fc	NOCJ	Saranac.....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, 1929]

Station	Call signal	Frequency in kilocycles, meters in parentheses	Power (watts)	Owner
Portable: New Jersey.	W3XO	6,640 (45.18) to 7,330 (40.93), 8,570 (35.01) to 10,400 (28.85), 11,550 (25.97) to 12,890 (23.27), 13,720 (21.87) to 15,250 (19.672), 17,280 (17.361) to 19,530 (15.361), 20,000 (15) to 22,070 (13.593).	10	American Telephone & Telegraph Co., 195 Broadway, New York, N. Y.

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

Call signal	District and station	Call signal	District and station
W3XO	Third district: New Jersey (portable)..		

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]

- ABERDEEN, WASH.—Type, A1, A2; fy., 406 (740), 442 (680), 462 (650), 500 (600); hours, 7 a. m. to 7 p. m. daily.
- BURBANK, CALIF.—Loc., changed to Los Angeles, Calif.; type, add A1.
- CEDAR RAPIDS, IOWA.—*Read*, Cedar Rapids (Municipal Airport), Iowa, loc., 91° 39' 00" W., 41° 56' 00" N. (approximately); type, A3; fy., 278 (1,080), 3,142 (95.48), 5,660 (53).
- CHEYENNE, WYO.—*Read*, Cheyenne (Municipal Airport), Wyo., loc., 104° 48' 00" W., 41° 08' 00" N. (approximately); type, A3; fy., 278 (1,080), 3,142 (95.48), 5,660 (53).
- CHICAGO, ILL.—(WBQ).—*Read*, Chicago (Cicero Air Mail Field), Ill., loc., 87° 45' 00" W., 41° 48' 00" N. (approximately); type, A3; fy., 278 (1,080), 3,142 (95.48), 5,660 (53).
- CHICAGO, ILL. (WJA).—Loc., 87° 37' 28" W., 41° 52' 42" N.; fy., 7,355 (37.71), 15,760 (19.036); hours, X.
- CLEARWATER, CALIF. (Los Angeles) (KNR).—Fy., add 6,815 (44.02).
- DES MOINES, IOWA.—*Read*, Des Moines (Municipal Airport), Iowa, 93° 37' 00" W., 41° 35' 00" N. (approximately); type, A3; fy., 278 (1,080), 3,142 (95.48), 5,660 (53).
- ELKO, NEV.—*Read*, Elko (municipal Airport), Nev., loc., 115° 08' 00" W., 40° 08' 00" N. (approximately); type, A3; fy., 278 (1,080), 3,142 (95.48), 5,660 (53).
- EL PASO, TEX. (KGKA).—Fy., add 278 (1,080), 3,070 (97.71), 3,460 (86.70), 8,015 (37.43), 12,180 (24.63).
- EL PASO, TEX. (KGUA).—*Read*, El Paso (Municipal Airport), Tex.; type, A1; owner, S. A. T. Flying Service (Inc.).
- FORT WORTH, TEX. (KGT).—*Read*, Fort Worth (Meacham Field), Tex.; type, A1; owner, S. A. T. Flying Service (Inc.).
- FRESNO, CALIF. (Chandler Field).—*Read*, Fresno (Aviation Field), Calif.
- HOUSTON, TEX.—*Read*, Houston (Municipal Airport), Tex.; type, A1; owner, S. A. T. Flying Service (Inc.).
- IOWA CITY, IOWA.—*Read*, Iowa City (Municipal Airport), Iowa, loc., 91° 33' 00" W., 41° 40' 00" N. (approximately); type, A3; fy., 278 (1,080), 3,142 (95.48), 5,660 (53).
- LINCOLN, NEBR.—*Read*, Lincoln (Municipal Airport), Nebr.; loc., 96° 45' 48" W., 40° 51' 16" N.; type, A3; fy., 278 (1,080), 3,142 (95.48), 5,660 (53).
- MEDFORD, OREG. (Aviation Field).—*Read*, Medford (Municipal Airport), Oreg.
- NEW YORK, N. Y. (WGA).—Loc., changed to Garden City, N. Y.
- NORTH PLATTE, NEBR.—*Read*, North Platte (Municipal Airport), Nebr.; loc., 100° 45' 00" W., 41° 08' 00" N. (approximately); type, A3; fy., 278 (1,080), 3,142 (95.48), 5,660 (53).
- OCEAN TOWNSHIP, N. J. (WLO).—Loc., changed to Lawrenceville, N. J., 74° 44' 23" W., 40° 18' 48" N.
- OCEAN TOWNSHIP, N. J. (WNC).—Loc., changed to Lawrenceville, N. J.; 74° 44' 23" W., 40° 18' 48" N.
- OMAHA, NEBR.—*Read*, Omaha (Fort Crook Air Mail Field), Nebr., loc., 95° 55' 00" W., 41° 05' 30" N. (approximately); type, A3; fy., 278 (1,080), 3,142 (95.48), 5,660 (53).
- PHOENIX, ARIZ. (KGKC).—Fy., add 278 (1,080), 3,070 (97.71), 3,460 (86.70), 8,015 (37.43), 12,180 (24.63).
- PORTLAND, OREG. (KVO).—*Read*, Portland (Swan Island Airport), Oreg., loc., 122° 43' 00" W., 45° 33' 00" N. (approximately); type, A3; fy., 278 (1,080), 3,142 (95.48), 5,660 (53).

- REDDING, CALIF.**—*Read*, Redding (Municipal Airport), Calif.; loc., 122° 24' 56" W., 42° 34' 17" N.; type, A3; fy., 278 (1,080), 3,142 (95.48), 5,660 (53).
- RENO, NEV.**—*Read*, Reno (Hubbard Field), Nev., loc., 119° 45' 33" W., 39° 30' 51" N.; type, A3; fy., 278 (1,080), 3,142 (95.48), 5,660 (53).
- ROCK SPRINGS, WYO.**—*Read*, Rock Springs (Municipal Airport), Wyo., loc., 109° 14' 00" W., 41° 38' 00" N. (approximately); type, A3; fy., 278 (1,080), 3,142 (95.48), 5,660 (53).
- SALT LAKE CITY, UTAH (KQD).**—*Read*, Salt Lake City (Municipal Airport), Utah, loc., 111° 56' 38" W., 40° 46' 12" N.; type, A3; fy., 278 (1,080), 3,142 (95.48), 5,660 (53).
- SAN ANTONIO, TEX.**—*Read*, San Antonio (Winburn Field), Tex.; type, A1; owner, S. A. T. Flying Service (Inc.).
- SAYVILLE, N. Y. (WKI).**—*Fy.*, add 14,710 (20.39).
- SEATTLE, WASH. (KZJ).**—*Read*, Seattle (Boeing Field), Wash., loc., 122° 10' 00" W., 47° 30' 00" N. (approximately); type, A3; fy., 278 (1,080), 3,142 (95.48), 5,660 (53).
- Strike out all particulars of the following-named stations:** Alameda, Calif. (KFU); Anniston (permanently moored vessel near Mobile, Ala.); El Paso, Tex. (KGJU); Evans Bay, Alaska; Harrisburg, Pa. (WKB); Los Angeles (Rogers Field), Calif. (KGJV); Mills Field (San Bruno), Calif.; Naknek, Alaska (KTZ); New York, N. Y., Radio (WCG); Philadelphia, Pa. (WDH); Phoenix, Ariz. (KGJR); Pybus Bay, Alaska; Quadra, Alaska (KHD); San Diego, Calif. (KGJS); Tenakee, Alaska (KOU); Wilmington, Calif.; Wyandotte, Mich.; Yes Bay, Alaska.

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 Berns bureau]

- ADMIRAL CHASE.**—Accounts, M. R. T. Co.
- ADMIRAL MOSER.**—Accounts, M. R. T. Co.
- AKUTAN.**—Type, B; service, PG.
- ANNISTON CITY.**—*Fy.*, 375 (800), 410 (730), 425 (705), 454 (660), 500 (600).
- BAINBRIDGE.**—Type, B; *fy.*, 375 (800), 410 (730), 425 (705); accounts, R. C. A.
- BALLENAS.**—Type, A1 and 2; *fy.*, 375 (800), 410 (730), 425 (705); rates, Great Lakes service, 4 cents per word; accounts, I. R. T. Co.
- BARBYTON.**—*Fy.*, 375 (800), 410 (730), 425 (705); rates, Great Lakes service, 4 cents per word; accounts, I. R. T. Co.
- BEACONSTAR.**—Accounts, R. M. C. A. (U. S. L.).
- BETTY WEEMS.**—Type, B; *fy.*, 375 (800), 425 (705), 500 (600); accounts, owner.
- CAROLINA.**—Type, add A1; hours X.
- CATALINA.**—Type, add A3; *fy.*, add 2,320 (129.3); hours X.
- CITY OF SAGINAW 31.**—Type A2; *fy.*, 375 (800), 410 (730), 425 (705).
- DELIGHT.**—*Fy.*, strike out 410 (730), 454 (660).
- DILWORTH.**—*Fy.*, strike out 125 (2,400); accounts, R. M. C. A.
- ENGLEWOOD.**—Type, B; *fy.*, 375 (800), 425 (705), 500 (600).
- EXCELSIOR.**—Type, B; *fy.*, 375 (800), 425 (705), 500 (600); hours, add N.
- EXMINSTER.**—Correct orthography, Exminster.
- FOUR WINDS.**—*Fy.*, add 5,555 (54), 16,575 (18.1); service, PG; rates, 8 cents per word.
- FRANCES WEEMS.**—Type, B; *fy.*, 375 (800), 425 (705), 500 (600); accounts, owner.
- GEORGEANNA WEEMS.**—Type, B; *fy.*, 375 (800), 425 (705), 500 (600); accounts, owner.
- JEAN WEEMS.**—Type, B; *fy.*, 375 (800), 425 (705), 500 (600); accounts, owner.
- LAVADA.**—Accounts, R. M. C. A.
- MALANG.**—Type, A2; *fy.*, 375 (800), 425 (705), 500 (600).
- NASHABA.**—Accounts, R. M. C. A.
- NAUSHON.**—Type, A1 and A2; *fy.*, 375 (800), 400 (750), 425 (705), 500 (600); hours, X.
- NESHIBA.**—Type, A1 and A3; *fy.*, 375 (800), 400 (750), 425 (705), 500 (600), 2,320 (129.3); service, PG; hours, X; rates, 8 cents per word.
- OCEANIA VANCE.**—Type, A1 and A2; *fy.*, 143 (2,100), 157 (1,910), 160 (1,875), 375 (800), 400 (750), 425 (705), 468 (640), 500 (600); accounts, R. M. C. A.
- PAWNEE.**—Name changed to Hardi Biauou; owner, Henry B. Lloyd.
- SAN DOMINGO.**—*Fy.*, 375 (800), 425 (705), 500 (600).
- WESTPORT.**—Accounts, R. M. C. A.

Strike out all particulars of the following-named vessels: Bohemia, Carnegie, Cethana, F. A. Douty, Gallavant, Kaimiloa, Lake Farrar, Lake Ormoc, Senator, Socony 88, Socony 90, Tally Scow.

COMMERCIAL LAND AND SHIP STATIONS, ALPHABETICALLY, BY CALL SIGNALS

KFM, read Sacramento (Mather Field), Calif.; KEU, read Los Angeles, Calif.; KFZE, read Hardi Biaou; KGE, read Medford (Municipal Airport), Oreg.; KGT, read Fresno (Aviation Field), Calif.; KGUA, read E. Paso (Municipal Airport), Tex.; KGUB, read Houston (Municipal Airport), Tex.; KGUC, read Fort Worth (Meacham Field), Tex.; KGD, read San Antonio (Winburn Field), Tex.; KIBQ, read Exminister; KJE, read Reno (Hubbard Field), Nev.; KKO, read Elko (Municipal Airport), Nev.; KMP, read Omaha (Fort Crook Air Mail Field), Nebr.; KMR, read North Platte (Municipal Airport), Nebr.; KOE, read Cheyenne (Municipal Airport), Wyo.; KQC, read Rock Springs (Municipal Airport), Wyo.; KQD, read Salt Lake City (Municipal Airport), Utah; KQM, read Des Moines (Municipal Airport), Iowa; KQQ, read Iowa City (Municipal Airport), Iowa; KRA, read Cedar Rapids (Municipal Airport), Iowa; KRF, read Lincoln (Municipal Airport), Nebr.; KTU, read Redding (Municipal Airport), Calif.; KVO, read Portland (Swan Island Airport), Oreg.; KZJ, read Seattle (Boeing Field), Wash.; WBQ, read Chicago (Cicero Air Mail Field), Ill.; WGA, read Garden City, N. Y.; WLO, read Lawrenceville, N. J.; WNC, read Lawrenceville, N. J.; strike out all particulars following the call signals: KFC, KFGE, KFU, KFUH, KFWJ, KGBK, KGJR, KGJS, KGJT, KGJU, KGJV, KHD, KISX, KNI, KOR, KOU, KRU, KRUU, KTZ, KUR, KVUA, WCG, WCV, WDDU, WDH, WIDU, WKB, WPK, WSBS, WTII.

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]

- C-268.—Fy., 3,106 (96.58), 3,142 (95.48), 5,660 (53).
 C-269.—Fy., 3,106 (96.58), 3,142 (95.48), 5,660 (53).
 C-270.—Fy., 3,106 (96.58), 3,142 (95.48), 5,660 (53).
 C-272.—Fy., 3,106 (96.58), 3,142 (93.48), 5,660 (53).
 C-273.—Fy., 3,106 (96.58), 3,142 (95.48), 5,660 (53).
 C-274.—Fy., 3,106 (96.58), 3,142 (95.48), 5,660 (53).
 C-276.—Fy., 3,106 (96.58), 3,142 (95.48), 5,660 (53).
 C-277.—Fy., 3,106 (96.58), 3,142 (95.48), 5,660 (53).
 C-279.—Fy., 3,106 (96.58), 3,142 (95.48), 5,660 (53).
 C-281.—Fy., 3,106 (96.58), 3,142 (95.48), 5,660 (53).
 C-283.—Fy., 3,106 (96.58), 3,142 (95.48), 5,660 (53).
 C-284.—Fy., 3,106 (96.58), 3,142 (95.48), 5,660 (53).
 C-285.—Fy., 3,106 (96.58), 3,142 (95.48), 5,660 (53).
 C-286.—Fy., 3,106 (96.58), 3,142 (95.48), 5,660 (53).
 C-287.—Fy., 3,106 (96.58), 3,142 (95.48), 5,660 (53).
 C-288.—Fy., 3,106 (96.58), 3,142 (95.48), 5,660 (53).
 C-290.—Fy., 3,106 (96.58), 3,142 (95.48), 5,660 (53).
 C-291.—Fy., 3,106 (96.58), 3,142 (95.48), 5,660 (53).
 C-292.—Fy., 3,106 (96.58), 3,142 (95.48), 5,660 (53).
 NC-132H.—Type, A1 and 2; fy., 333 (900), 375 (800), 457 (655), 500 (600), 3106 (96.58); service, PG; hours, N.
 NC-133H.—Type, A1-2; fy., 333 (900), 375 (800), 414 (725), 500 (600), 3106 (96.58); service, PG; hours, N.
 NC-9606.—Name changed to read The City of New York.
 NC-9607.—Name changed to read The Kansas City.
 NC-9643.—Name changed to read City of Albuquerque.
 NC-9644.—Name changed to read City of Washington.
 NC-9645.—Name changed to read City of Wichita.
 NC-9646.—Name changed to read City of Los Angeles; fy., 333 (900), 375 (800), 393 (765), 400 (750), 414 (725), 420 (715), 457 (655), 1,624 (185), 2,344 (127.98), 3,106 (96.58).
 NC-9647.—Name changed to read City of Indianapolis.
 NC-9648.—Name changed to read City of Columbus.
 NC-9650.—Name changed to read City of St. Louis.
 NC-9651.—Name changed to read City of Philadelphia.
 Sunbeam.—Type, A3; fy., 2,476 (121.16).

(Unnamed) KHEK.—Named Buenos Aires; type, A1-2-3; fy., 375 (800), 414 (725), 457 (655), 500 (600), 3,106 (96.58); service, P; hours, N.

(Unnamed) KHEO.—Named Rio de Janeiro; type, A1-2; fy., 375 (800), 414 (725), 457 (655), 500 (600), 3,106 (96.58); service, P; hours, N.

COMMERCIAL AIRCRAFT STATIONS, ALPHABETICALLY, BY CALL SIGNALS

KHDA, read The City of New York; KHDB, read The Kansas City; KHDC, read City of Albuquerque; KHDD, read City of Washington; KHDE, read City of Wichita; KHDF, read City of Los Angeles; KHDG, read City of Indianapolis; KHDH, read City of Columbus; KHDJ, read City of St. Louis; KHDK, read City of Philadelphia; KHEK, read Buenos Aires; KHEO, read Rio de Janeiro.

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

KFBB (Great Falls, Mont.).—Power, 500 night, 1,000 day.

KFEL (Denver, Colo.).—Power, 500.

KFEQ (St. Joseph, Mo.).—Fy., 680 (441).

KFH (Wichita, Kans.).—Power, 1,000.

KFXF (Denver, Colo.).—Owner, Colorado Radio Corporation; power, 500.

KGA (Spokane, Wash.).—Owner, Northwest Broadcasting System (Inc.).

KGDR (San Antonio, Tex.).—Call changed to KUT; loc., changed to Austin, Tex.; owner, Rice Hotel.

KGKX (Sandpoint, Idaho).—Power, 100.

KGKZ (Paragould, Ark.).—Call changed to KBTM.

KJR (Seattle, Wash.).—Owner, Northwest Broadcasting System (Inc.); fy., 760 (395).

KMO (Tacoma, Wash.).—Fy., 860 (349); power, 1,000 day, 500 night.

KOMO (Seattle, Wash.).—Fy., 970 (309).

KOY (Phoenix, Ariz.).—Owner, Nielson Radio & Sporting Goods Co.

KREP formerly KFAD (Phoenix, Ariz.).—Call changed to KTAR.

KTIP (formerly KGHX) (Houston, Tex.).—Call changed to KTLC.

KTM (Santa Monica, Calif.).—Loc., changed to 118° 27' 3" W., 34° 1' 19" N.; power, 500 night, 1,000 day.

KTUE (Houston, Tex.).—Power, 100.

KUT (Austin, Tex.).—Call changed to KTRH; loc., changed to Houston, Tex.; owner, Rice Hotel.

KWSC (Pullman, Wash.).—Fy., 1,220 (245.9).

KYA (San Francisco, Calif.).—Owner, Pacific Broadcasting Corporation.

WCFL (Chicago, Ill.).—Fy., 970 (309); power, 1,500.

WDAE (Tampa, Fla.).—Fy., 1,220 (245.9).

WDBO (Orlando, Fla.).—Owner, Orlando Broadcasting Co. (Inc.).

WEBW (Beloit, Wis.).—Fy., 560 (536); power, 500.

WEHS (Evanston, Ill.).—Fy., 1,420 (211.3).

WFAA (Dallas, Tex.).—Loc., changed to Grapevine, Tex.; power, 5,000.

WFBL (Syracuse, N. Y.).—Fy., 1,490 (201.3); owner, The Onondaga Co.; power, 1,000.

WGBS (Astoria, N. Y.).—Fy., 600 (500); power, 500 day, 250 night, experimentally.

WGHP (Fraser, Mich., near).—Loc., changed to Detroit, Mich.; power, 1,000.

WHB (Kansas City, Mo.).—Fy., 860 (349); owner, WHB Broadcasting Co.

WHFC (Cicero, Ill.).—Fy., 1,420 (211.3).

WIBO (Des Plaines, Ill., near).—Fy. 560 (536).

WJBL (Decatur, Ill.).—Owner, Commodore Broadcasting (Inc.).

WJBY (Gadsden, Ala.).—Owner, Gadsden Broadcasting Co. (Inc.).

WKBI (Chicago, Ill.).—Fy., 1,420 (211.3).

WMBC (Detroit, Mich.).—Power, 100 night, 250 day.

WMT (Waterloo, Iowa).—Power, 250, 500 experimentally.

WNRC (Greensboro, N. C.).—Power, 500.

WOI (Ames, Iowa.).—Fy., 640 (469).

WPCC (Chicago, Ill.).—Fy., 560 (536).

WPOE (Patchogue, N. Y.).—Fy., 1,370 (219); power, 100.

WSUI (Iowa City, Iowa.).—Fy., 880 (341).

Strike out all particulars of the following-named stations: WCLB (Long Beach, N. Y.); WSEA (Portsmouth, Va.).

GOVERNMENT LAND STATIONS, ALPHABETICALLY, BY NAMES OF STATIONS

[Alteration and correction 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.]

BOSTON, MASS. (WSX).—Add 321 (935).

HONOLULU, HAWAII (PEARL HARBOR) (NPM).—Owner, United States Navy (U. S. L.).

Strike out all particulars of the following-named station: La Grande, Oreg.

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

BRIARCLIFF.—Operated by New York Naval Militia (add footnote 3 in U. S. L.).

BURNS.—Delete footnote 3 in U. S. L.

BURROWS.—Owner, United States Coast Guard.

GOVERNEUR.—Owner, United States Army (U. S. L.).

GRANT.—Owner, United States Army (U. S. L.).

GWIN to H-9.—Owner, United States Navy (U. S. L.).

Strike out all particulars of the following-named vessels: Chattanooga, Cleveland, Des Moines.

GOVERNMENT LAND AND SHIP STATIONS, ALPHABETICALLY, BY CALL SIGNALS

NIPK (Cartigan, 2d column, p. 156 U. S. L.) read NIVK; strike out all particulars following the call signals: KCS, NAGV, NAKD, NANV.

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, 1929, and to the International List of Stations Performing Special Services, published by the Berne Bureau.]

SOUTHWEST PASS EAST JETTY, LA.—Loc. 89° 25' 38'' W., 28° 54' 23'' N.

RADIO-COMPASS 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 Stations Performing Special Services published by the Berne Bureau.]

Strike out all particulars of the following-named stations: Detour Point, Mich.; Grand Marais, Mich.

EXPERIMENTAL 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, 1929]

CALIFORNIA: Los Angeles (W6XL).—Strike out all particulars.

DISTRICT OF COLUMBIA: Washington (W3XT).—Strike out all particulars.

MASSACHUSETTS: Southbridge (W1XAX).—Strike out all particulars.

NEW JERSEY: Newark (W2XCG).—Strike out all particulars.

NEW YORK: New York (W2XB).—Fy., 560 (535), 710 (425), 860 (350), 1,000 (300), 1,220 (245), 1,490 (200).

PENNSYLVANIA: Philadelphia (W3XS).—Fy., 1,604 (187.03), 2,398 (125.1), 3,256 (92.5), 4,795 (62.57), 6,425 (46.7), 8,650 (34.68), 12,850 (23.35), 17,300 (17.341).

WASHINGTON: Seattle (W7XF).—Strike out all particulars.

PORTABLE:

Washington: Seattle (W7XAR).—Strike out all particulars.

Sixth radio district (W6XQ).—Strike out all particulars.

AIRCRAFT:

NC-5650 (W2XBZ).—Strike out all particulars.

NC-8004 (W2XBJ).—Strike out all particulars.

NC-1474 (W10XAA).—Correct name is NC-417H.

NC-8000 (W4XP).—Strike out all particulars.

New York American (No. 4473) (W2XBK).—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, 1929]

CALIFORNIA: Los Angeles (W6XC).—Strike out all particulars.

MISCELLANEOUS

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, 1929, and the International List of Ships Stations published by the Berne Bureau:

Name	Call signal	Owner	Name	Call signal	Owner
COMMERCIAL			GOVERNMENT—COR.		
Berwindale.....	WKDY	Willmore S. S. Co.	Jackson.....	NIXC	U. S. Coast Guard.
GOVERNMENT			Jouett.....	NEDM	Do.
Active.....	NIXS	U. S. Coast Guard.	Kickapoo.....	NITX	Do.
Agassiz.....	NIVL	Do.	Kimball.....	NIXN	Do.
Alert.....	NIVT	Do.	Legare.....	NITN	Do.
Ammen.....	NABV	Do.	Marion.....	NITB	Do.
Antistam.....	NITL	Do.	Mascoutin.....	NIVP	Do.
Beale.....	NAFK	Do.	McCall ¹	NEJV	Do.
Bonham ¹	NIXQ	Do.	McLane.....	NIVF	Do.
Boutwell ¹	NIXX	Do.	Mojave ¹	NIXB	Do.
Burrows ¹	NAFP	Do.	Monaghan.....	NEKP	Do.
Cahokia.....	NITV	Do.	Montgomery.....	NITT	Do.
Cahoone.....	NIVJ	Do.	Morris.....	NIVB	Do.
Cartigan.....	NIVK	Do.	Nemaha.....	NITK	Do.
Chelan ²	NACD	Do.	Ossipee.....	NEZD	Do.
Conyngham.....	NEGP	Do.	Patterson.....	NESE	Do.
Crawford.....	NIVN	Do.	Paulding.....	NESE	Do.
Cummings.....	NEDT	Do.	Porter.....	NESE	Do.
Cuyahoga.....	NITM	Do.	Pulaski.....	NIXV	Do.
Diligence.....	NIXJ	Do.	Reliance.....	NIXF	Do.
Dix.....	NIVC	Do.	Rush.....	NITP	Do.
Downes.....	NEDX	Do.	Saukee.....	NIVQ	Do.
Eagle.....	NIGZ	Do.	Snohomish.....	NEXQ	Do.
Eriesson.....	NEFD	Do.	Tamaroa.....	NIVR	Do.
Ewing.....	NIXM	Do.	Terry.....	NIKZ	Do.
Fanning.....	NALS	Do.	Tiger.....	NIXP	Do.
Faunce.....	NIVV	Do.	Travis.....	NITJ	Do.
Frederick Lee.....	NIVZ	Do.	Trippe.....	NIQC	Do.
General Greene.....	NIXL	Do.	Tuscarora.....	NEZF	Do.
Haida.....	NITF	Do.	Unalga.....	NIDL	Do.
Harriet Lane.....	NIXR	Do.	Vigilant.....	NIXK	Do.
Henley.....	NASD	Do.	Woodbury.....	NIXZ	Do.
			Yamacraw.....	NIDM	Do.
			Yeaton.....	NIXT	Do.

¹ Symbol shown following name in list beginning on p. 140, Commercial and Government Radio Stations of the United States, but name not shown in list of vessels equipped with radio compass beginning on p. 197.

² Symbol not shown after name in list beginning on p. 140, Commercial and Government Radio Stations of the United States, although named in list of vessels equipped with radio compass beginning on p. 197.

GENERAL ORDERS OF THE FEDERAL RADIO COMMISSION

Character of all mechanical reproductions must be announced (General Order No. 78, December 5, 1929).—I. Ordinary phonograph records, mechanical piano players, etc.—All broadcasting stations shall announce clearly and distinctly the character of all mechanical reproductions broadcast by them, the announcement to immediately precede the broadcasting of each record. In such announcements each talking machine, phonograph or graphophone record used, whatever its character, shall be described by the use of the exact words: "This is a talking machine record," or "This is a phonograph record," or "This is a graphophone record"; each player piano selection used shall be described as played by "mechanical piano player"; every other mechanical reproduction shall be similarly described by the term generally understood and used by the public and meaning such mechanical reproduction.

II. Exclusive transcriptions for broadcast purposes.—Where a recording or transcript is made exclusively for broadcasting purposes and is neither offered

nor intended to be offered for sale to the public, each such recording shall be immediately preceded and followed by the following statement: "This program is an electrical transcription made exclusively for broadcast purposes."

Broadcasting stations shall not use such records, transcriptions or piano player rolls when the length of the rendition thereof exceeds 15 minutes unless provision is made for the announcement of the station call letters which must be given together with the statement above set forth at least once every 15 minutes.

Regulations governing the issuance of construction permits, licenses, etc. (General Order No. 79, December 20, 1929).—It is ordered, That the following provisions be, and the same are hereby, adopted and promulgated as the rules and regulations of the Federal Radio Commission governing the issuance of construction permits, licenses, renewals of licenses, and modifications of licenses with respect to stations engaged in or intending to be used in point-to-point or coastal service in the Territory of Alaska or its territorial waters:

I. The rules and regulations adopted by the commission on October 25, 1929, and recorded in the minutes of that date are hereby repealed.

II. Non-Government stations licensed pursuant to this general order shall provide adequate service at all times without discrimination for the general public.

III. Applications for construction permits or licenses for the construction or operation of non-Government stations shall be filed in triplicate in accordance with the radio act of 1927, upon forms furnished by the commission, with supervisor of radio at Seattle, Wash., and shall be routed to the Federal Radio Commission as follows:

(A) Said supervisor shall send the applications to the "officer in charge, Washington-Alaska Military Cable and Telegraph System." (W. A. M. C. A. T. S.) This officer shall recommend by indorsement the type of equipment, frequencies, etc., necessary for efficient operation with the Alaska system.

(B) Said officer shall then forward such applications to the office of the Chief Signal Officer of the United States Army. This officer will either approve or amend the recommendation of the officer in charge, W. A. M. C. A. T. S.

(C) The Chief Signal Officer shall then send such applications to the chief of the radio division, Department of Commerce, who shall make the usual record in such cases and forward such applications to the Federal Radio Commission for final action.

IV. Construction permits, licenses, and all formal notices shall be forwarded to the applicant or licensee in the reverse order of the procedure set out in Section III hereof.

V. All licensees using transmitters employing damped-wave emissions shall change such equipment to transmitters employing continuous waves or modulated continuous waves at the earliest practicable date. In no case will the commission after May 31, 1931, issue construction permits or licenses of renewal or modifications of licenses with respect to any transmitter employing damped-wave emissions.

VI. (A) The following frequencies and types of emissions are hereby designated for point-to-point communication between Government and non-Government stations in Alaska, provided, however, that stations now equipped with damped-wave transmitters may continue the use of such transmitters only subject to the conditions of Section V hereof:

172 kc. ¹ A1, A2	192 kc. ¹ A1, A2	227 kc. ¹ A1, A2
178 kc. A1, A2	193 kc. A1, A2	246 kc. A1, A2
182 kc. A1, A2	212 kc. ¹ A1, A2	252 kc. A1, A2
183 kc. A1, A2	217 kc. ¹ A1, A2	256 kc. A1, A2
186 kc. A1, A2	219 kc. ¹ A1, A2	262 kc. A1, A2
187 kc. ¹ A1, A2	220 kc. ¹ A1, A2	263 kc. A1, A2
188 kc. A1, A2	222 kc. ¹ A1, A2	272 kc. ¹ A1, A2
189 kc. A1, A2	225 kc. ¹ A1, A2	274 kc. A1, A2

and subject to the further provision that the commission will not approve the assignment of Government frequencies for the use of non-Government stations unless the Chief Signal Officer has approved the applications therefor.

(B) The following frequencies and types of emission are hereby designated for short-distance point-to-point communication between non-Government stations, provided that the maximum power on such frequencies shall not exceed 100 watts, and upon the condition that no interference will result to other services.

3,160 kc. A1, A2, A3	3,172 kc. A1, A2, A3	3,184 kc. A1, A2, A3
3,166 kc. A1, A2, A3	3,178 kc. A1, A2, A3	

(C) The following frequencies and types of emission are hereby designated for the use of stations engaged in ship-to-shore or coastal communications provided the maximum power on such frequencies shall not exceed 200 watts:

1,540 kc. A1, A2, A3	500 A1, A2	B Calling and distress B Working Working
1,592 kc. A1, A2, A3	425 A1, A2	
1,660 kc. A1, A2, A3	460 A1, A2	
1,708 kc. A1, A2, A3		
2,320 kc. A1, A2, A3		
2,428 kc. A1, A2, A3		
2,560 kc. A1, A2, A3		

and subject to the condition that after May 31, 1931, type B emissions shall not be employed.

Licenses of Alaskan stations extended (General Order No. 80, December 20, 1929).—It is ordered, That all existing licenses and special authorizations covering the operation of coastal and point-to-point transmitting stations located in the Territory of Alaska, heretofore extended by the commission's General Orders No. 72 and No. 73 are hereby extended to and will expire March 31, 1930.

Provided, however, That this order shall not be deemed or construed as a finding or decision by the commission or as any evidence whatsoever that the

¹ Government frequencies.

continued use or operation of any such station after March 31, 1930, serves or will serve public interest, convenience, or necessity or that public interest, convenience, or necessity will be served by the granting of any application for license or renewal of license, and the holder of any license or special authorization subject to this order who continues to use or operate any station during the period covered by this order shall be deemed to have consented to such conditions.

It is further ordered, That no construction permit, license, or renewal, or modification of license be granted unless subsequent to the issuance hereof, an application therefor has been made pursuant to the radio act of 1927 and in accordance with the provisions of General Order No. 79 of the commission.

General Orders Nos. 43 and 46, limiting chain programs to certain stations repealed (General Order No. 81, December 20, 1929).—In order to assure the uninterrupted broadcasting of high-class chain programs for the benefit of the general public; in order to afford adequate time to the Federal Radio Commission and full opportunity to investigate and determine whether chain programs are being unnecessarily duplicated, and to enable said commission to determine what progress has been and is being made toward the successful operation of two or more stations on the same frequency in synchronism, either by wire connection or otherwise; to afford the Federal Radio Commission opportunity to determine whether chain broadcasting may be successfully carried on in the future with a more economic use of frequencies than now employed, it is

Ordered, That General Order No. 43 of the Federal Radio Commission, adopted at a meeting of said commission on September 8, 1928, which had as its purpose the regulation of chain broadcasting and placed definite limitations on stations which might engage in chain broadcasting, and General Order No. 46 of the Federal Radio Commission, adopted by said commission on October 5, 1928, as an amendment to General Order No. 43 aforesaid, be and said General Orders Nos. 43 and 46 of the Federal Radio Commission are hereby rescinded and repealed.

Use of damped waves restricted (General Order No. 82, January 3, 1930).—*It is ordered:* 1. No license will be issued hereafter for the operation of any radio station using, or proposing to use, transmitting apparatus employing damped wave emissions except under the following conditions:

(a) When such apparatus was installed on board a ship prior to January 1, 1930, in such cases licenses will be issued for the operation of damped wave transmitters on the following frequencies only: 375, 410, 425, 454, and 500 kc.

(b) Licenses may be issued authorizing the operation of damped wave transmitting apparatus in Alaska and its territorial waters provided such damped wave transmitting apparatus was installed prior to January 1, 1930, and upon the condition that the operation of such damped wave transmitting apparatus will cause no interference with any other radio service. In the issuing of licenses authorizing the use of damped wave transmitting apparatus for other than mobile stations the commission will in no case authorize the use of such apparatus subsequent to May 31, 1931, and in no case will the commission, after May 31, 1931, issue construction permits, licenses or renewals, or modifications of licenses with respect to transmitting apparatus employing damped wave emissions and located in the Territory of Alaska.

LIST OF COUNTRIES WHICH HAVE ADHERED TO THE INTERNATIONAL CONVENTION

The following-named countries have deposited with the Department of State at Washington their instruments of ratification of the International Radiotelegraph Convention and General and Supplementary Regulations, signed at Washington, November 25, 1927:

Country	Date of deposit	Country	Date of deposit
Australia.....	Apr. 3, 1929	Mexico.....	Mar. 28, 1929
Austria.....	Dec. 29, 1928	Morocco, except Spanish zone.....	Feb. 4, 1929
Belgium, including Belgian Congo.....	Dec. 15, 1928	Netherlands, including Dutch East Indies, Surinam, and Curacao.....	Oct. 29, 1928
British India.....	Dec. 29, 1928	New Zealand.....	Feb. 7, 1929
Bulgaria.....	July 22, 1929	Norway.....	Oct. 29, 1928
Canada (with the exception of the supplementary regulations).....	Oct. 29, 1928	Portugal.....	July 25, 1929
Czechoslovakia.....	Mar. 1, 1929	Siam.....	July 1, 1929
Denmark.....	Nov. 15, 1928	Spain, including Spanish Colony of Gulf of Guinea.....	Jan. 31, 1929
Estonia.....	Mar. 22, 1929	Sweden.....	Mar. 1, 1929
Finland.....	Jan. 24, 1929	Syro-Libanais Territories.....	Mar. 12, 1929
Germany.....	Aug. 22, 1929	Union of South Africa.....	Jan. 31, 1929
Great Britain.....	Dec. 29, 1928	United States of America (with the exception of the supplementary regulations).....	Oct. 8, 1928
Hungary.....	Feb. 20, 1929	Venezuela.....	Sept. 10, 1929
Italy.....	Jan. 18, 1929		
Irish Free State.....	Jan. 14, 1929		
Japan.....	Jan. 21, 1929		

According to a despatch from the American Minister at Santo Domingo, October 4, 1929, the Dominican Congress approved the convention, general regulations, and supplementary regulations.

NEW BRUNSWICK (HADLEY FIELD), N. J., AND BOSTON, MASS., AIRWAYS RADIO RANGE BEACONS

This beacon transmits signals for the guidance of aircraft along civil airways converging at that point. These transmissions are directional and mark the following courses: Bellefonte, Pa.—Hadley Field, N. J.; Hadley Field, N. J.—Hartford, Conn.; and Hadley Field, N. J.—Philadelphia, Pa. A similar station at Boston, Mass., is about to be placed in operation and will mark the course between Hartford, Conn., and Boston, Mass. These stations are maintained by the Airways Division of the Lighthouse Service, Department of Commerce.

These radio range beacons are operated in conjunction with radiotelephone stations which broadcast weather information to aircraft on the same frequency, thus identifying the radio range beacons.

Airways radio range beacons transmit a characteristic signal alternately from equivalent loops, sending the letter "N" (— .) and "A" (. —), which add together or interlock, marking the radio course along the points of equal signal strength. The interlock signal is a long dash (_____).

Radio-compass bearings, for marine use, taken on these transmissions may not be reliable.

The voice broadcasts made on the hour and half hour by the airway radio station at Hadley Field constitute weather information collected at intermediate points between Cleveland, Ohio, and Hadley Field, inclusive, and between Hadley Field and Boston, inclusive. Washington, D. C., weather is also included in the Hadley Field broadcasts. The Boston station broadcasts weather information collected between Hadley Field and Boston, inclusive.

In addition to the above weather information, forecasts for weather along the Cleveland-New York airway are prepared by the Weather Bureau at 2, 5, 8, 11 a. m., 2, 5, 8, and 11 p. m., eastern standard time, and broadcast by the Hadley Field station on the next 15-minute period following readiness of the forecast, usually at 15 minutes past the hour.

While the foregoing weather information is broadcast principally for aircraft in flight and for use at airports, some benefit may be derived by its use by mariners along the North Atlantic coast.

A schedule of operation of the foregoing air navigation radio facilities is as follows:

Call	Location	Frequency	Transmission
WWU	New Brunswick, N. J. (Hadley Field).....	290 (1,034 m.)--	Radio range beacon. ¹ Voice broadcast. ²
WSX	Boston, Mass.....	321 (935 m.)--	Radio range beacon. ¹ Voice broadcast. ²

¹ Operates during bad flying weather and during regular scheduled flights. Signal is stopped approximately 3 minutes during weather broadcasts and resumed upon completion thereof.

² Broadcasts airway weather information on the hour and half hour. Operates 24 hours daily, including Sundays and holidays.

NOTE.—For schedule of radiophone weather broadcasts by other aeronautical stations see page 14, RADIO SERVICE BULLETIN No. 152, November 30, 1929.

SCHEDULE OF RADIOPHONE WEATHER BROADCASTS BY AERONAUTICAL STATIONS ON THE PACIFIC COAST

Weather information collected from points along airways between the stations named hereunder is broadcast on the hour and half hour. This information is broadcast principally for use by aircraft in flight and by airports; however, mariners along the Pacific coast may find the reports of benefit. Service is maintained 24 hours daily, including Sundays and holidays. A list of stations transmitting similar information is contained in RADIO SERVICE BULLETIN No. 152, November 30, 1929, page 14.

Call	Location	Frequency in kilocycles, meters in parentheses
KCU	Fresno, Calif.....	350 (855)
KCX	Medford, Oreg.....	344 (870)
KCY	Portland, Oreg.....	327 (915)
KCZ	Seattle, Wash.....	338 (890)

REGULATIONS GOVERNING THE OPERATION OF RADIO ON SHIPBOARD WHILE IN PORTS OF GREECE

The following regulations have been issued, particularly for foreign warships anchored in the ports or roadsteads of Phalerum-Piraeus, Corfu, Suda (Crete), Salonika, Dedeagatch, and Chios: Hours during which working is permitted, 0000-0200, 0500-0545, 1445-1545, G. M. T.; frequencies permitted, below 1,500 kc. (200 m.), 500 kc. (600 m.) exclusively for calling, 125-100 kc. (2,400-3,000 m.).

NAVIGATIONAL AND METEOROLOGICAL INFORMATION RECEIVED BY CHILEAN STATIONS FREE OF CHARGE

Vessels navigating in territorial waters may forward messages concerning ice, wrecks, mines, buoys out of position, defective lights and light buoys, meteorological conditions, and notices of sudden phenomena which threaten aerial navigation, free of charge, to the Office of Hydrography and Navigation of the Naval Base of Valparaiso. The messages should be addressed "Ofhidro," Valparaiso.