US. Bureau of naviastion (Hepot. of commerce)

RADIO SÉRVICE BULLETIN

ISSUED MONTHLY BY BUREAU OF NAVIGATION, DEPARTMENT OF COMMERCE

Washington, March 1, 1917-No. 27.

CONTENTS.

Land stations, by names. Ship stations, by vessels. Land and ship stations, by call signals. Special land stations, by mames. Special land stations, by districts. Abbreviations. Alterations and corrections: Land stations, by names. Ship stations, by vessels.	3 3 4 5	Miscellaneous: Commercial radio operators licensed during month of January, 1917. Notice to radio operators. Radio apparatus for Dutch steamship companies. Classification of special stations.	8 9
Special land stations, by names			

DEPARTMENT OF COMMERCE, BUREAU OF NAVIGATION, Washington, January 14, 1915.

To collectors of customs, radio inspectors, and others concerned:

This publication is issued monthly by the Bureau of Navigation, Department of Commerce, and distributed to the United States officers engaged in or concerned with the enforcement of the radio laws for their guidance and instruction, and to those concerned with the operation of Government and commercial radio stations for their information.

The Radio Service Bulletin supersedes the quarterly supplements to the List of Radio Stations of the United States and contains information concerning Government, commercial, and special stations only. Information regarding amateur stations appears only in the annual edition of the List of Radio Stations of the United States.

The bulletin contains tables of new stations, alterations, and corrections under headings, so that the List of Radio Stations of the United States and the List of Radiotelegraph Stations, published by the international bureau at Berne, may be brought up to date. Additions, alterations, and corrections should be entered in these two publications promptly on receipt of the bulletin.

Amendments to or changes in the Radio Laws and Regulations of the United States (edition of July 27, 1914) are printed in this bulletin in such a manner that they may be clipped and pasted in

their proper places in that publication.

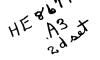
Items of general interest concerning the enforcement of the radio laws are printed in the bulletin from time to time, as occasion warrants.

E. T. CHAMBERLAIN, Commissioner of Navigation.

Approved:

E. F. SWEET,
Acting Secretary.

8**2**893—-17



NEW STATIONS.

LAND STATIONS, ALPHABETICALLY BY NAMES OF STATIONS.

[Additions to the List of Radio Stations of the United States, edition of July 1, 1916, and to the International List of Radiotelegraph Stations published by the Berne bureau.]

Station.	-	ongitu latit pprox	ude		Call signal.	System.	Wave lengths.	Ser- vice.	Hours.
Great Falls, Mont.1 Isabela de Basilan,	O N	111 4 7	10 35	00	KHI	Composite, 200	1700	(*)	X 8m-5,30s
P. I. ³ Kvichak, Alaska ³ Philadelphia, Pa, ⁴	0 70	156 59 75	48 03 09	00 00 44	KHB	Kilbourne & Clark. Marconi, 240	300,400,500, 600 1650	(*) (*)	X 9m-5s
I management I may 1 m.	Ň	39	57	06	22		100	`	

Limited commercial.

* Limited commercial.

1 Station operated and controlled by the Great Falls Power Co., Butte, Mont. The station is limited to communication with Butte, Thompson Falls, and Lewistown, Mont.

2 Station operated and controlled by Philippine insular government, Washington, D. C.

Range, 125. Station operated and controlled by Alaska Packers' Association. The station is limited to communication with the stations of the Alaska Packers Association at Nakmat, Sang Point, and Clarks Point, Alaska, and vessels of the association. The station is in operation from April to Cetober of each year.

4 Range, 400. Station operated and controlled by John Wanamaker. The station is operated in conjunction with Marcon's Philadelphia station, but is limited to communication with a station at New York, N. Y. (WHI).

SHIP STATIONS, ALPHABETICALLY BY NAMES OF VESSELS.

[Additions to the List of Radio Stations of the United States, edition of July 1, 1916, and to the International List of Radiotelegraph Stations published by the Berne bureau.]

tions list of residencial properties and the petite officer.					
Vessel.	Call signal.	System.	Wave lengths.	Serv- ice.	Hours.
Admiral Wainwright 1		Kilbourne & Clark, 1,000.	300, 600	PG	N
Astri®Charles O. Jenkins 4	KYK	do. Marconido	300, <i>600</i>	PG PG	N
F. B. Squire 4. Holden Evans 4. Ituns 7.	WFU KMY WPA	Marconi, 1,000 Halcun	300, 450, <i>600</i>	PG	x
John Scully *	WRQ	Marconi	300, 600	PG	N
May *	WRR KRZ	dodododo	300, 450, 525, <i>600</i> .	PÖ	N N
Sagua ¹⁶ . Santa Maria ¹¹ Sherman ¹² Sir Thomas Shaughnessy ⁴	KMQ WFV	Marconi, 1,000 Marconi	300, <i>600</i>	PG PG PG	x
Southerner 18 United States 14		do		PG	

Pacific Steamship Co., owner of vessel.

1 Pacific Steamship Co., owner of vessel.

2 Range, 100; rates, 4c. per word 40c. minimum per radiogram. Radio station operated and controlled by the McEachern Ship Co., owner of vessel.

2 Range, 100; rates, 4c. per word 40c. minimum per radiogram. Radio station operated and controlled by A. O. Andersen & Co., owner of vessel.

3 Rates, 2c. per word 20c. minimum per radiogram. Radio station operated and controlled by the Marconi Co. Jenkins Steamship Co., owner of vessel.

3 Rates, 4c. per word 40c. minimum per radiogram. Radio station operated and controlled by the Marconi Co. Rodman Wanamaker, owner of vessel, yacht.

4 Range, 150; rates, North and South American service, 4c. per word 40c. minimum per radiogram, transoceanic service 8c. per word 80c. per radiogram. Radio station operated and controlled by the Marconi Co. Bulk Oil Transports (Inc.), owner of vessel.

2 Matican Navigation & Commercial Co., owner of vessel.

3 Rates, North and South American service, 4c. per word 40c. minimum per radiogram, transoceanic service 8c. per word 80c. minimum per radiogram. Radio station operated and controlled by the Marconi Co. Scully Line, Inc., owner of vessel.

3 Oriental Navigation Corp., owner of vessel.

3 Rates, North and South American service, 4c. per word 40c. minimum per radiogram, transoceanic service 8c. per word 80c. minimum per radiogram. Radio station operated and controlled by the Marconi Co. Sun Co., owner of vessel.

3 Range, 250; rates, North and South American service, 4c. per word 40c. minimum per radiogram, transoceanic service 8c. per word 80c. minimum per radiogram. Radio station operated and controlled by the Marconi Co. Chile Exploration Co., owner of vessel.

3 Range, 250; rates, North and South American service, 4c. per word 40c. minimum per radiogram, transoceanic service 8c. per word 80c. minimum per radiogram. Radio station operated and controlled by the Marconi Co. Chile Exploration Co., owner of vessel.

3 Rates, North and South American service, 4c. per word 40c. minimum per radio

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LAND AND SHIP STATIONS, ALPHABETICALLY BY CALL SIGNALS.

[b-ship station; c-land station.]

Call signal.	Name.	Call signal.	Name.
KHB KHI KLQ KMQ KMY KRZ KVO KVT KWU KYK KZU	Kvichak, Alaska C Isabela de Basilan, P I C Southerner b Great Falls, Mont C Sherman b Holden Evans b Orleans b Sagua D John Scully b Santa Maria b Druid b United States b	WFT WFU WFV WHE WPA WRL WRM WRN WRQ WRR WSF	Charles O. Jenkins. b F. B. Squire. b Sir Thomas Shanghnessy b Philadelphia, Pa. c Ituna. b Astoria. b Mary. b Astri. b Margaret. b May. b Admiral Wainwright. b

SPECIAL LAND STATIONS, ALPHABETICALLY BY NAMES OF STATIONS.

[Additions to the List of Radio Stations of the United States, edition of July 1, 1916, only.]

Station.	Call signal.	Wave lengths.	Service.	Hours.	Station controlled by-
Big Creek, Cal. Chicago, Ill. Culver, Ind. Decatur, Ill. Enterprise, Oreg. Eureka, Ill. Greeley, Colo. Grove City, Pa. Kansas City, Mo. Phoenix, Ariz. Red Bluff, Cal. Springfield, Mass. Springfield, Ohio.	9XG 9YN 9YJ 7ZH 9YQ 9YZ 8YV 9ZK 6ZP 6Z8 1ZK	800, 425 300, 600, variable Variable 200, 425 800, 425	P	X X X X X X X X X X X X X X X X X X X	Walter Burnett and Oscar Kipf. Austin A. Howard. Culver Military Academy. James Millikin University. Orland M. Heacock. Eureka College. State Teachers' College. Grove City College. Albert I. Graham. Harry K. Behn, jr. Herbert G. Strain. Glenn C. Sabin. Charles K. Brain.

SPECIAL LAND STATIONS, GROUPED BY DISTRICTS.

Cali signal.	District and station.	Call signal.	District and station.
1ZK 6XV 6ZP 6Z8 7ZH 8YV 8ZQ	First district: Springfield, Mass. Sixth district: Big Creek, Cal. Phoenix, Aris Red Bluff, Cal. Seventh district: Enterprise, Oreg. Eighth district: Grove City, Pa. Springfield, Ohio.	9XG 9YJ 9YN 9YQ 9YZ 9ZK	Ninth district: Chicago, Iil. Decatur, Iil. Culver, Ind. Eureta, Iil. Greeley, Colo. Kansas City, Mo.

ABBREVIATIONS.

The necessary corrections to the List of Radio Stations of the United States and to the International List of Radiotelegraph 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.

G. loc. =Geographical location: O=west longitude, N=north latitude, S=south latitude.

=Call letters assigned.

System = Radio system used and sparks per second.

Range = Normal range in nautical miles.

W. L. = Wave lengths assigned: Normal wave lengths in italics.

Service=Nature of service maintained:

PG = General public.

PR=Limited public. =Private.

O =Government business exclusively.

Hours = Hours of operation:

=Continuous service.

X =No regular hours.

m = a. m. (12m = midday)=p, m. (12s=midnight).

Rates =Ship or coast charges, in cents: c=cents. (The rates in the international list are given in francs and centimes. For approximate purposes, 1 franc equals 20 cents and 5 centimes equal 1 cent.

Notes - Refer to notes in the Berne list.

ALTERATIONS AND CORRECTIONS.

LAND STATIONS, ALPHABETICALLY BY NAMES OF STATIONS.

[Alterations and corrections to be made to the List of Radio Stations of the United States, edition of July 1, 1916, and to the International List of Radiotelegraph Stations published by the Berne bureau.]

Ensenada, P. R.—Service, PG; hours, week days 8m-12m, 2s-5s, Sundays 9m-12m, 7s-8s. Note, Radio station operated and controlled by the Guanica Centrale. The station also communicates with stations at Santo Domingo City and La Romana (Dominican Republic), rate, 12c. per word no minimum.

Great Lakes, Ill.—W. L., 300, 600, 1000; service, PG; rates, 6c. per word 60c.

minimum per radiogram.

King Cove, Alaska.—G. loc. (approximate), O 162° 20′ 00′′, N. 55° 05′ 00′′; range, 200; system, Kilbourne & Clark, 1,000; W. L., 300, 600, 1610, 2000; service, PG and limited and the control of the con ited commercial; hours, 8.30m-12m, 1s-5s, and at other hours when business warrants; rates, 6c. per word 60c. minimum per radiogram. Note, Radio station operated and controlled by the Pacific-American Fisheries Co. The station also communicates with stations at Akutan, Clarks Point, Hales Creek, Larsen Bay, Port Moller, Snag Point. Alockanock River, Latouche, Chignik, Nushagak, Naknek, Cordova, Ugashik, Kvichak, and Egegak, Alaska, rate 6c. per word 60c. minimum per radiogram, domestic count; night messages 75 per cent of day rate; night letters 60c. per 50 words 12c. for each additional 10 words or fraction thereof, domestic count.

KOGGIUNG, ALASKA.—Strike out all particulars.

MIAMI, FLA.—W. L., 300, 450, 600. Note, Radio station operated and controlled by the Marconi Co.

Passagrille, Fla.—Strike out all particulars.

Philadelphia, Pa. (WHE).—W. L., 300, 600; service, PG; hours, 9m-5s. Note, Radio station operated and controlled by the Marconi Co.

St. Petersburg, Fla.—Strike out all particulars.

Tutulla, Samoa.-G. loc. (approximate) 0 171° 00′ 00′′, S 14° 00′ 00″; system, U. S. Navy; W. L., 600, 750; service, PG; hours, N; rate, 6c. per word, 60c. minimum per radiogram. Note, Radio station operated and controlled by the United States Naval Communication Service, Radio, Va. The station communicates with stations at Apia (Samoa), Suva (Fiji Islands), Tahiti Island, and Wahiawa (Hawaii), rate 6c. per word no minimum.

SHIP STATIONS, ALPHABETICALLY BY NAMES OF VESSELS.

[Alterations and corrections to be made to the List of Radio Stations of the United States, edition of July 1, 1918, and to the International List of Radiotelegraph Stations published by the Berne bureau.]

ALLIANCE.—Note, Radio station operated and controlled by the Marconi Co. Fair & Moran, owner of vessel.

BEAVER (WWB).—System, Marconi, 400.

CAPTO.—Strike out all particulars. CARLOS.—Strike out all particulars.

Casiana.—Range, 150; system, Marconi, 1,000; W. L., 300, 600; service, PG; hours, X, rates, North and South American service, 4c. per word 40c. minimum per radiogram, transoceanic service 8c. per word 80c. minimum per radiogram. Note, Radio station operated and controlled by the Marconi Co. Edward L. Doheny, owner of vessel, yacht.

DORCHESTER.—System, Marconi, 1,000; W. L., 300, 450, 600; rates, North and South American service, 4c. per word 40c. minimum per radiogram, transoceanic service

9c. per word 80c. minimum per radiogram.

FREEPORT SULPHUR No. 2.—Service, PG; rates, North and South American service, 4c. per word 40c. minimum per radiogram, transoceanic service 8c. per word 80c. minimum per radiogram. Note, Radio station operated and controlled by the Marconi Co. Freeport Sulphur Transportation Co., owner of vessel.

GRACE DOLLAR.—Strike out all particulars.

HARRY LUCKENBACH.—Note, Radio station operated and controlled by the Marconi Co. Luckenbach Co. (Inc.), owner of vessel.

 H. C. FOLGER.—Range, 250; system, Marconi, 1,000; W. L., 300, 450, 600.
 JULIA LUCKENBACH.—Range, 250; system, Kilbourne & Clark, 1,000; W. L., 300, 450, 525, 600; service, PG, hours, X; rates, 8c. per word 80c. minimum per radiogram. Note, Radio station operated and controlled by the Luckenbach Steamship Co. (Inc.), owner of vessel.

Klamath.—System, Marconi, 240; rates, North and South American service, 4c. per word 40c. minimum per radiogram, transoceanic service 8c. per word 80c. mini-

mum per radiogram.

LUCKENBACH No. 3.—Range, 150; system, Kilbourne & Clark, 1,000; W. L., 300, 450, 600; service, PG, hours, X; rates, 4c. per word 40c. minimum per radiogram. Note, Radio station operated and controlled by Edgar F. Luckenbach, owner of vessel, tug.

LUCKENBACH No. 5.—Range, 150; system, Kilbourne & Clark, 1,000; W. L., 300, 450, 600; service, PG; hours, X; rates, 4c. per word 40c. minimum per radiogram. Note, Radio station operated and controlled by the Luckenbach Steam-

ship Co. (Inc.), owner of vessel.

NewPort (WWH).—Rates, North and South American service, 4c. per word 40c. minimum per radiogram, transoceanic service 8c. per word 80c. minimum per radiogram.

NIRVANA.—Strike out all particulars.

Nokomis (WHD).—W. L., 300, 600; service, PG; rates, North and South American service, 4c. per word 40c. minimum per radiogram, transoceanic service 8c. per word 80c. per radiogram. Note, Radio station operated and controlled by the Marconi Co. Horace E. Dodge, owner of vessel, yacht.

PANUCO (KWM).—Range, 250; system, Marconi, 1,000; W. L., 300, 450, 600; service, PG; hours, X.

POWHATAN (KQY).—Strike out all particulars.

PRESIDENT.—Range, 150; system, Marconi, 400. Note, Radio station operated and controlled by the Marconi Co. Pacific Steamship Co., owner of vessel.

PROVIDENCIA.—System, Halcun, 700; rates, North and South American service, 4c. per word 40c. minimum per radiogram, transoceanic service 8c. per word 80c. minimum per radiogram. Note, Radio station operated and controlled by the Providencia Steamer Co., owner of vessel.

ROCHESTER.—Note, Radio station operated and controlled by the Marconi Co. Rochester Navigation Corp., owner of vessel. Santa Ana.—Hours, X.

SANTA MARIA (WTF).—Strike out all particulars.
SANTA ROSA.—Service, PG; rates, North and South American service, 4c. per word 40c. minimum per radiogram, transoceanic service 8c. per word 80c. minimum per radiogram. Note, Radio station operated and controlled by the Marconi Co. W. R. Grace & Co., owner of vessel.

Speedwell.—Strike out all particulars. WILLAMETTE.—Range, 100; system, Marconi, 240. WM. G. WARDEN.—Range, 250; system, Marconi, 1,000; W. L., 300, 450, 600; hours, X.

Yosemite.—Hours, X. Note, Radio station operated and controlled by the Marconi Co. Puget Sound Commercial Co. (Inc.), owner of vessel. YUCATAN.—Strike out all particulars.

SPECIAL LAND STATIONS, ALPHABETICALLY BY NAMES OF STATIONS.

[Alterations and corrections to be made to the List of Radio Stations of the United States, edition of July 1, 1916, only.]

LA GRANDE, OREG.—Strike out all particulars.
MINNEAPOLIS, MINN. (9ZE).—Call, 9XF; W. L., variable. NORTHAMPTON, MASS.—Strike out all particulars. PRILADELPHIA, PA. (3ZO).—Strike out all particulars. St. Louis, Mo. (9XC).—Strike out all particulars. Springfield, Ill.—W. L., 1750.

MISCELLANEOUS.

COMMERCIAL RADIO OPERATORS LICENSED DURING MONTH OF JANUARY, 1917.

Extra first grade.

Date.	Licensee.	Address.	Serial No.	Where issued.
18	*Lovejoy, Edwin Wm	1818 Magnolia Ave., Los Angeles,Cal.	61	Washington.

First grade.

		•		
2 10	*Allen, George H	16 Bacon St., Waltham, Mass S. S. Durham, Brooklyn, N. Y	15012 15269	New York. Brooklyn. ²
22	*Armstrong, Roy E		14196	New Orleans.
2	*Arnold, Eric W	Hewitt, N. J.	15014	New York.
12	Ashmore, J. Wilmer	i 3498 Hamilton St., Philadainhia, Pa.i	12919	Philadelphia.
. 6	Azoy, Geoffrey V	28 S. Maple Ave., East Orange, N. J.	15267	Brooklyn.
12	Barker, Julian D	28 S. Maple Ave., East Orange, N. J. 19 Channing St., Newport, R. I. 423 W. 22d St., New York, N. Y	14300	Boston.
.5	*Bassett, Joseph M	423 W. 22d St., New York, N. Y	15019	New York.
15	Batchelder, Hugh McL	92 Lake Ave., Meltose, Mass	14304	Boston.
3	*Berntswiller, Arthur C	Univ. of Penna., Philadelphia, Pa	15015	New York.
22	*Biesemeyer, Walter H	6th and Washington Sts., Manito- woc, Wis.	13751	Chicago.
11	*Bisgrove, William E	25 Elm St., New York, N. Y	15022	New York.
11	*Blangenburg, Adolph	294 Manahan St., Brooklyn, N. Y	15024	Do.
23	Blumberg, Ernest R.	Clifton, Tex	14913	Brooklyn.*
2	*Bonduaux, Lucien E		15261	Do.3
7	*Bromley, Arthur C	Latouche, Alaska	14769	Seattle.
4	*Buchanan, J. A Burke, Alan W	2108 L. C. Smith Bldg., Seattle, Wash	14763	_ Do.
23	Burke, Alan W	40 Pollock Ave., Pittsfield, Mass	14308	Boston.
26	*Callahan, Francis J	Care Federal Telegraph Co., San Francisco, Cal.	13888	San Francisco.
19	*Cassells, Paul E	S. S. Jos. R. Parrott, Key West Fig.	13256	Key West.2
5	Cerio, Thomas. *Cissenfeld, Samuel	25 W. 125th St., New York, N. Y	15266	Brooklyn.2
4	*Cissenfeld, Samuel	611 S. Charles St., Baltimore, Md	12214	Baltimore.
15	*Colby, Edward B	132 Dodge St., Beverly, Mass	14303	Boston.
12	*Cowden, John *Cowden, Renel E	Siasconset, Mass	14298	Do.
5	*Cowden, Renel E	Juneau, Alaska	13873	San Francisco.
30	Cox, James H	631 Capitol St., Vallejo, Cal	13104	Mare Island.
12	*Darlington, Edgar T	325 Budd St., Philadelphia, Pa	15025	New York.
30	Dean, Samuel W	4 Eliot Rd., Lexington, Mass	14314	Boston.
11 17	*du Treil, L. J. N	Galveston, Tex. 1117 Morton St., Alameda, Cal	14195	New Orleans.
	Farrington, Bruce B	Day 55 MG-1 FI	13883	San Francisco.
17	*Ferson, Oliver S	Box 55, Miami, Fla. 310 W. 26th St., New York, N. Y	13255	Key West.
18	*Froberger, Laurence G	Only w. 20th Ot., 146W 10fk, N. 1	15017	New York.
17	*Cordner Author D	Oakhurst, N. J.	15273	Brooklyn.*
11	"Gardner, Armur K	Pocasset, Mass	14306	Boston.

^{*} License issued as renewal of expiring license without examination. Otherwise license issued on written examination.

All licenses issued by radio inspectors of the Department of Commerce unless otherwise indicated.
 License issued by radio examining officer, Navy Department.
 License issued in December; particulars received at Bureau too late for publication in December list.

First grade-Continued.

::::-:		kan markan da kan markan kan markan ya		
Date.	Licensee.	Address.	Serial No.	Where issued.
31	*Gaugh, Harry E	U. S. Coast Guard Cutter Manning, San Francisco, Cal. 1852 W. 49th St., Los Angeles, Cal 12 W. 77th St., New York, N. Y. Fairhaven, Mass. Averlea, Md.	13889	San Francisco.
.3	*Gittings, Donald 8	1852 W. 49th St., Los Angeles, Cal	13872	Do.
16 12	Goniarte, Manuel L	12 W. //In St., New York, N. Y. Fairhavan, Mass. Averlea, Md. U. S. S. Cyclops, New York, N. Y. 1024 Franklin St., San Francisco, Cal. 103 Pine St., Millville, N. J. Hollistar, Cal	15272 14297	Brooklyn.1 Boston.
8	*Graf, Herman, jr	Averlea, Md	12213	Baltimore.
23	*Grantlin, William P	U. S. S. Cyclops, New York, N. Y.	12216	Do.
10	*Hamilton Geo P	1024 Franklin St., San Francisco, Cal.	15021 15029	New York. Do.
23 22	*Hewlett, Palmer B	Hollister, Cal	13884	San Francisco.
12	*Holden, Harry H	Hollister, Cal. Siasconset, Mass. 1719 W. Lexington St., Baltimore,	14299	Boston.
2	Grain Herman, Ir. Grantlin, William P. Grasman, Allen P. Hamilton, Geo. P. Hewlett, Palmer B. Holden, Harry H. Hopper, Horace G.	1719 W. Lexington St., Baltimore, Md.	12212	Baltimore.
12	*Jackson, Arthur E	8609 Kenmore Ave., Cleveland, Ohio	13741	Chicago.
15	Jenkins, Lester I	74 Smith St., New Bedford, Mass	14302	Boston.
30 26	Johnson Thurston A	Lake Manopac, N. Y	15278 14309	Brooklyn. ¹ Boston.
Q	*Johnstone, Richard	821 Shrader St., San Francisco, Cal.	13877	San Francisco.
20	*Keever, Joseph W	1620 48th Ave., San Francisco, Cal	13995	Do.
20 20 20	Kleinherger Richard C	8609 Kenmore Ave., Cleveland, Ohio 74 Smith St., New Bedford, Mass Lake Mahopse, N. Y	12218 15276	Baltimore. Brooklyn. ¹
28 1	*Knieriemen, Joseph	100 Vanderbilt Ave., Stapleton, N. Y. Atco. N. J	12918	Philadelphia.
25 25 19	*Jackson, Arthur E Jenkins, Leeter I Jennings, John W Johnson, Thurston A *Johnstone, Richard *Keever, Joseph W *Kelland, Wesley P Kleinberger, Richard C *Knieriemen, Joseph Kratt, Edwin A Krog, Albert Lamb, Edwin S *Leonard, S. Edwin *Lopez, Anthony Lyon, William H *Lytle, John R MacDuff, Sydney G	100 Vanderbit Ave., Stapleton, N. Y. Atco, N. J. V. E. Beattle, Wash. 649 Poplar St., Poplar Bluff, Mo. Ketchikan, Alaska. 10703 Hull Ave., Cleveland, Ohio. 54 E. 105th St., New York, N. Y. Maple St., Lexington, Mass. 525 Bush St., San Francisco, Cal. 7 Kelvingrove Ter., Glasgow, Scotland.	14777	Seattle.
25	Krog, Albert	649 Poplar St., Poplar Bluff, Mo	13752	Chicago. Seattle.
30	*Leonard S. Edwin	10702 Hull Ave. Cleveland, Ohio	14774 13755	Chicago.
8	*Lopez, Anthony	54 E. 105th St., New York, N. Y	15016	Chicago. New York.
30	Lyon, William H	Maple St., Lexington, Mass	14313	DOSKOT.
8 24	MacDuff, Sydney G	7 Kalvingrova Tar., Glasgow, Scot-	13875 15275	San Francisco. Brooklyn. ¹
_		land.		1
30 19	*MacPherson, William D	549 A St., Lorain, Ohio	13754	Chicago.
15	*Martin Patrick	2707 Briggs Ave., New York, N. Y.	15274 15027	Brooklyn. ¹ New York.
11	Martinez y Gomez, Porfirio	207 Street No. 3, Habana, Cuba	13406	San Juan, P. R.1
6	McGrath, Joseph L	206 Fayette St., Wollaston, Mass	14204	Boston.
18	McKinnon Daniel T	tand. 649 A St., Lorain, Ohio	15263 14773	Brooklyn. ¹ Seattle.
28	*Meldrum, Herbert J	115 Winthrop St., Boston, Mass	14307	Boston.
5	*Michael, Louis J	82 Vanderveer St., Brooklyn, N. Y.	15265	Brooklyn.1
3	Miller, Frank L	170 Maroy Ava Brooklyn N V	13748 15262	Chicago. Brooklyn. ¹
25	*Mowat, Alexander	2105 Bienville St., New Orleans, La.	14197	New Orleans.
14	*Norman, Stacy W	4511 8th Ave., N. E., Seattle, Wash.	14765	Seattle.
9 29	*Onene John F	Hobart Bidg., San Francisco, Cal	13876 12217	San Francisco. Baltimore.
27	*O'Sullivan, James A	Savville, N. Y.	15031	New York.
3	Parker, Perry	Port Angeles, Wash	14766	Seattle.
24 18	*Perry Edgar D	Inderwood Wesh	13887 14767	San Francisco. Seattle.
5	*Phair, Richard J	2265 Mission St., San Francisco, Cal.	13874	San Francisco.
12	*Phillips, Everett E	Box 593, S. San Francisco, Cal	13879	Do.
10	*MacPherson, William D. Malloy, Bernard J. *Martin, Patrick Martinez y Gomes, Porfirio. McGrath, Joseph L. McHugh, John A. McKinnon, Daniel T. *Meldrum, Herbert J. *Michael, Louis J. Miller, Frank L. Miller, Frank L. Miller, Frank L. *Mowat, Alexander *Norman, Stacy W. *Oliver, Charles L. *Onens, John F. *O'Sullivan, James A. Parker, Perry. Peregrine, Clarence A. *Perry, Edgar D. *Phair, Richard J. *Phillips, Everett E. *Pohl, Julius A.	23 Woodland Pf., White Plains, N. Y. Spiketon, Wash. 115 Winthrop St., Boston, Mass. 22 Vanderveer St., Brooklyn, N. Y. 4025 N. Hermitage Ave., Chicago, Ill. 179 Marcy Ave., Brooklyn, N. Y. 2105 Bienville St., New Orleans, I.a. 4511 8th Ave., N. E., Seattle, Wash. Hobart Bidg., San Francisco, Cal. Mantua, N. J. Sayville, N. Y. Port Angeles, Wash. 806 32d St., Oakland, Cal. Underwood, Wash. 2265 Mission St., San Francisco, Cal. Box 593, S. San Francisco, Cal. 203 Hennen Annex, New Orleans, 1-a.	14194	New Orleans.
15	Preiss, Charles E	473 Central Ave., Brooklyn, N. Y	15271	Brooklyn.1
23 5	*Redfern Otto R	1318 7th Ave., Seattle, Wash	14775 15018	Seattle. New York. New Orleans.
5	*Rennard, Edgar B.	Radio Station, Tela, Honduras	14192	New Orleans.
80	Preiss, Charles E	473 Central Ave., Brooklyn, N. Y 1318 7th Ave., Seattle, Wash 209 Garside St., Newark, N. J Radio Station, Tela, Honduras Care Alaska Steamship Co., Seattle,	14788	Seattle.
27				New York
12	*Rodman, Harold L	400 W. Queen St., Inglewood, Cal	13880	New York. San Francisco.
5 12	Rosenthal, Charles 8	909 Jefferson Ave., Brooklyn, N. Y.	15264	Brooklyn.1
25	Russell, Conrad A	Valuaraiso Ind	14301 13753	Boston.
29	Schaeter, Charles M	Box 256, Sayville, N. Y	15277	Chicago. Brooklyn. ¹
11	Semons, Roger W	2 Waverly Ave., Cliftondale, Mass	14296	Boston.
12 11	*Snow. Herbert E	Stanleton N V	12921 15023	Philadelphia. ¹ New York.
31	Stagg, Uberto K	Noroton Heights, Conn	14310	Boston.
5	*Stewart, John A	La Ceiba, Spanish Honduras	14193	New Orleans.
23	sturdevant, Leiand W	183 1st St., Hoboken, N. J. 400 W. Queen St., Inglewood, Cal 909 Jefferson Ave., Brooklyn, N. Y. 1 Byron St., Worcester, Mass. Valparaiso, Ind Box 256, Sayville, N. Y. 2 Waverlyve., Cliftondale, Mass 5308 Haverford Ave., Philadelphia, Pa Stapleton, N. Y. Noroton Heights, Conn La Ceiba, Spanish Honduras. Care Alaska Packers Assn., San Francisco, Cal. 485 E. 6th St. Boston, Mass 303 Hollow Ave., Seattle, Wash 8040 Meridian Ave., Seattle, Wash 83 Chelsea St., Charlestown, Mass	13886	San Francisco.
5	Sullivan, John F	485 E. 6th St. Boston Mass	14293	Poston.
11	*Sunderland, Wayland D	303 Hollow Ave., Seattle, Wash	14760	Seattle.
24 16	*Swett Walter J	83 Chelses St. Charlestown Mass.	14776	Do. Boscon.
-	ense issued as renewed of expiring	Manager Commission of the Comm	13000	DOME.

^{*}License issued as renewal of expiring license without examination. Otherwise license issued on written examination.

1 Licence issued by radio examining officer, Navy Department.

First grade-Continued.

Date.	Licensee.	Address.	Serial No.	Where issued.
16	* Talbot, Norman D	25 Elm St., New York, N. Y	12215	Baltimore.
iŏ :	* Temple, Otto C		15270	Brooklyn,1
ii	Theofan, Costas S	200 Columbus Ave., Boston, Mass,	14295	Boston.
2	*Thompson, Maurice		13871	San Francisco.
31	* Thompson, Thomas B		14779	Seattle.
16	* Ticknor, Reginald		13882	San Francisco.
12	Todd, Stedman F	415 Hillside Court, Piedmont, Cal	13881	Do.
12	Walton, Kenneth B		12920	Philadelphia.1
26	* Ward, Frank A	321 St. Charles St., New Orleans, La.	14198	
12	* Warnock, Archie D		15026	New York.
- <u>-</u> 2	* West, Howard B		15013	Do.
28	* Wheeler, R. L.*	Little Falls, N. Y	15153	Norfolk.
22	* Wilkinson, Frank O		13750	Chicago.
-6	Williams, Harold A		15268	Brooklyn.1
13	* Williamson, Grover			Seattle.
ii	* Wolfe, Albert E.		13878	San Francisco.

Second grade.

10	Bechlofft, Claude B	106 Walnut St., Ridgewood, N. J	13845	Brooklyn.1
18	Benson, Lester A	4156 Shaw Ave., St. Louis, Mo	12397	St. Louis.
18	Blatterman, Headlee	6172 Westminster Pl., St. Louis, Mo	12398	Do.
5	Bylander, Sven A	1414 Abratroz Ave., Berkeley, Cal	13226	San Francisco.
24	Carruthers, David	135 Waverly Pl., New York, N. Y	13352	Brooklyn. ¹
22	Choicener, Theodore R	1414 Abratroz Ave., Berkeley, Cal 135 Waverly Pl., New York, N. Y 136 Hancock St., Brooklyn, N. Y 160 Grenville St., New Bedford, Mass.	13849	Do.1
12	Dahl, Chester W	160 Grenville St., New Bedford, Mass.	12074	Boston.
30	Driscoll, Patrick J	19 1/106[ty ~1 tc., Dongan cims, M. I.	13354	Brooklyn. ¹
9	Elwell, Todd	401 E. 36th St., Paterson, N. J.,	13844	Do.1
22	Falco, Charles C	140 Sands St., Brooklyn, N. Y	13848	Do.1
19	Finehout, Fred	1310 E. New York St., Indianapolis,	12399	Indianapolis.
	,	Ind.		-
4	Grummet, Melvin L	9525 Fourth Ave., Brooklyn, N. Y	13889	Brooklyn.1
16	Henkin, Ascher	355 Stockton St., Brooklyn, N. Y	13847	Do. 1
22	Hoff, Russell	298 Western Ave., Albany, N. Y	13850	Do. 1
18	Johnson, Geo. F	625 Black Ave., Springfield, Ill	12396	St. Louis.
9	Knights, Alexander H	862 Hewitt Pl., New York, N. Y	13842	Brookiyn.1
16	Lambert, Kenneth B	11 Glenview Ave., Iowa City, Iowa.	12394	Davenport, Iowa.
26	MaDan, Edwin	7402 17th Ave., Brooklyn, N. Y	13353	Brooklyn.1
29	McIlvaine, Victor C	208 Verne St., Tampa, Fla	12154	Baltimore.
5	Mov. Donald W	174 Second St., Milwaukee, Wis	13749	Chicago.
16	O'Brien, Lester E	Wilkison, Wash	12277	Seattle.
5		25 W. 125th St., New York, N. Y	13841	Brooklyn.1
24			13351	Do.1
· 5		216 Spruce Ave., Takoma Park, Md.	12007	Washington.
4	Salim, Saim	53 E. 117th St., New York, N. Y	13840	Brooklyn.1
10	Shipley, Reid S	153 E. 86th St., New York, N. Y	13847	Do.1
ğ	Skeete, Benjamin B	39 Lexingto Ave., Brooklyn, N. Y.	13843	Do.1
19	Sommer, James McC	2538 N. Talbott Ave., Indianapolis,	12400	Indianapolis.
	,	Ind.		•
30	Toft, Frank	Mountain View. Cal	13227	San Francisco.
4	Valentine, Milton L	Bayside, N. Y	13838	Brooklyn.1
16	Wittiek, Eugene C	104 6th Ave., Moline, Ill	12395	Davenport, Iowa.

^{*} License issued as renewal of expiring license without examination. Otherwise license issued on written examination.

1 License issued by radio examing officer, Navy Department.

2 License issued in December; particulars received at Bureau too late for publication in December list.

NOTICE TO RADIO OPERATORS.

Until further notice, the examining of radio operators for all grades of licenses at the Boston, Brooklyn, Philadelphia, Charleston, New Orleans, Mare Island, and Bremerton Navy Yards, the Key West naval radio station, and Fort Wood, N. Y., will be discontinued.

Examinations formerly given by the radio examining officers at these points will be conducted by the radio inspectors of the Department of Commerce, exclusively. All applicants for radio operator licenses should apply to the nearest radio inspector, whose addresses are given below:

Boston, Mass	Seventh floor, United States Customhouse.
New York, N. Y	Room 603, United States Customhouse.
Baltimore, Md	Room 15, United States Customhouse.
Washington, D. C	Room 1010, Department of Commerce.
Norfolk, Va	Room 222, Citizens' Bank Building.
New Orleans, La	Room 235, United States Customhouse.
San Francisco, Cal	Room 526, United States Customhouse.
Seattle, Wash	Room 204, Federal Building.
Chicago III	

RADIO APPARATUS FOR DUTCH STEAMSHIP COMPANIES.

Holland's larger steamship companies have recently established a corporation called the Netherlands Telegraphic Co., "Radio-Holland," for the purpose of undertaking the manufacture of radio apparatus for use on Dutch vessels. It is hoped thus to free Dutch shipping from the dependence on foreign companies.

The new "Radio-Holland" is capitalized at \$400,000. The directors comprise representatives of the Holland-America Line, Holland Lloyd, Royal Packet, West Indian Mail, Royal Holland Steam-

boat, and Java-China-Japan Line.

CLASSIFICATION OF SPECIAL STATIONS.

There seems to be some misunderstanding concerning the classification of special stations, as provided in the Laws and Regulations,

edition of July 27, 1914, pages 55 and 56.

Experiment stations.—In the case of experiment stations, such licenses are issued for the purpose of conducting experiments for the development of the science of radio communication, or the apparatus pertaining thereto, to carry on special tests, using any amount of power or any wave lengths, at such hours and under such conditions as will insure the least interference, and where the owners of such stations desire to conduct the usual amateur communications, or engage in the amateur relay league work, this work should be performed on certain authorized wave lengths covered by a license issued for the purpose. It has been found that practically all experiments for the development of radio apparatus can be conducted on an artificial antenna. It may be necessary on special occasions to make tests with some other station for the purpose of determining some special characteristic of the station, this, of course, being permitted.

Technical and training school stations.—In the case of technical and training school stations, these licenses are issued principally for the purpose of training radio operators, and it is believed that most of this work can be conducted without exceptional power and on wave lengths not exceeding 200 meters. Some of the schools turning out the largest number of operators have not found it necessary to do outside transmitting. This part of the training is conducted on buzzers arranged on an interior circuit. Should such stations desire to take part in the amateur relay league work, they should apply for special amateur licenses. Relay work should be conducted on a special wave length designated by the bureau, and ordinary outside communications should be conducted on a wave length not exceeding

200 meters.

Special amateur stations.—In the case of special amateur stations, a wave length in excess of 200 meters is permitted for the special amateur relay work, or emergency work such as that performed in the flood districts, and ordinary communications between special amateur and general amateur stations should not in any case be conducted on wave lengths in excess of 200 meters.

It should be borne in mind by applicants for experiment, technical, and training school, and special amateur station licenses, that the special wave lengths in excess of 200 meters, or power in excess of one-half kilowatt or one kilowatt, depending upon the location of the station, can not be granted for ordinary amateur work, and where stations given special licenses make use of this special power and these special wave lengths for ordinary amateur communication, and such stations are reported to the Bureau for causing interference, their station licenses may be suspended or revoked.

It should also be understood by the holders of special station licenses along the coast that the wave lengths of 300 meters and 600 meters authorized for these stations are solely for the purpose of "listening in" as required by the regulations, and are to be used for transmitting only in the event of an emergency such as is contem-

plated in the regulations.

Where it is desired and appears necessary that two classes of license be issued to a station, two applications should be sent in, one to cover each class of service, as, for example, experiment and special amateur, or experiment and general amateur.

or experiment and general amateur.

Recently, there have been several applications received at the Bureau for experiment licenses where it appeared that the stations

were to be used for limited commercial service.

All applicants for special licenses should furnish the Bureau, through the radio inspector, a statement covering completely the service which is to be conducted by the stations, and indicating the necessity for special power and wave lengths.

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