RADIO SERVICE BULLETIN

ISSUED MONTHLY BY BUREAU OF NAVIGATION, DEPARTMENT OF COMMERCE

Washington, December 1, 1916—No. 24

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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.

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.

NEW STATIONS.

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.]

Vessel,	Call signal,	System.	Wave lengths.	Serv- ice.	Hours
-2 *	NXB	U. S. Navy	300,600	PG	N N
.–3 *	NXC NXD	do	300,600	PG	N
4 *	NXD]do	300,600	PG	N
5 *	NXE	do	300,600	PG	N
6 *	NXF	do	300,600	PG	N
7 *	NXG	[do	300, 800	PG	N
ccomac *	NTH	do	300, 600	PG PG	N N
ctive *	NTJ	do	300,600	PĞ	N.
ileen *	NVO	do	300,600	PG	N
lice *	NTM	do	300,600	PG	N N
ronahaa *	NSP	do		PĞ	N
rapahoe * -1 *	NXH	do	300, <i>600</i> 300, <i>600</i>	PG	N N
;=2 *		do	300,600	PG	Ŋ
i–3 *	NXJ	do	300, 600	PĞ	N
agley *	NVU	do	300,600	PĞ	N
arney *	NVV	do	300,600	PĞ	N
Senjamin Brewster 1	KPS	Marconi	300,600	PĞ	74
Biddle *		U. S. Navy	300,600	PG	N
Soston *	NGC	do	300,600	PG	Ñ
Boxer *		do	300,600	PĞ	Ñ
Britannia 3		Marconi, 1,000	300, 450, 600	PĞ	X
Brynhilda 3	Kio	Marconi	300, 600	ΡĞ	1
-1 *	NXK	U. S. Navy	300,600	ΡĞ	N
-2 *	NXL	do	300,600	PĞ	Ñ
-3 *	NXM	do	300,600	PĞ	Ŋ
-4*	NXN	do	300,600	PĞ	Ñ
∖-ŝ *	NXO	do.	300,600	PĞ	Ñ
allao *		do	300,600	PĞ	N
hoctaw *	NŤŸ	do	300,600	PG	N X X X X X X X X X X X X X X X X X X X
ity of Wilmington 4	WOC	Marconi, 400	300,600	PG	X
oncord *	NQH	U.S. Navy	300, 600	PG	N
onstellation*	NĚY	do	300,600	PG	N
umberland *		do	300,600	PG	N
uyama *	NOD	do	300,600	PG	N
ahlgren *	NVY	do	300,600	PG	N
De Long *	NWB	do	300,600	PG	N
lirieda * 'ish Hawk *	NEV	do	300,600	PG	N
ish Hawk *	. NFV	do	300,600	PG	N
oote *		do	300,600	PG	N
ox *		do	300, 600	PG	N
rederick *		do	300,600	PG	N N N
Franite State *	. NNZ	do	300,600	PG	N
Iartford *		do	300,800	PG	N
Iawk *	. NSM	do	300,600	PG	N N
Jercules *	. NTW	do	300,600	PG	N
Iuntington *	NWG	do	300,600	PG	N
Iuntress *		do	300,600	PG	N N N
daho *		do	300,600	PG	N
ntrepid *	NFY	do	300, 600	PG	N
wana *		do	300,600	PG	N
ames McGee 1	KTP	Marconi	300,600	PG	1
. W. Thompson 2	KXT	do	300,600	PG	1
ackawanna 5ancaster *	. KOP	U. S. Navy	300,600 300,600	PG	N

^{*}Rates, 4c. per word 40 c. minimum per radiogram. Radio station operated and controlled by the U. S. Naval Communication Service, Radio, Va. Government, owner of vessel.

¹ Rates, North and South American service, 4 c. per word 40 c. minimum per radiogram, transoceanic service, 8 c. per word 80 c. minimum per radiogram. Radio station operated and controlled by the Marconi Co. Standard Oil Co. of New Jersey, owner of vessel.

² Range, 100; rates, North and South American service, 4 c. per word 40 c. minimum per radiogram, transoceanic service, 8 c. per word 80 c. minimum per radiogram. Radio station operated and controlled by the Marconi Co. Bay Steamship Co. of America (Ltd.), owner of vessel.

² Rates, North and South American service, 4 c. per word 40 c. minimum per radiogram, transoceanic service, 8 c. per word 80 c. minimum per radiogram. Radio station operated and controlled by the Marconi Co. Brynhilds Shipping Corporation, owner of vessel.

² Range, 150; rates, North and South American service, 4 c. per word 40 c. minimum per radiogram, transoceanic service, 8 c. per word 80 c. minimum per radiogram. Radio station operated and controlled by the Marconi Co. Alexander Sprunt & Son, owner of vessel.

² R. Lawrence Smith (Inc.), owner of vessel.

by the Marconi Co. Alexander Sprunt & Son, 6 R. Lawrence Smith (Inc.), owner of vessel.

SHIP STATIONS, ALPHABETICALLY BY NAMES OF VESSELS-Continued.

Vessel.	Call signal.	System.	Wave lengths.	Serv- ice.	Hours.
Massasoit *	NUB KZI	U. S. Navy	300, 600	PG	Ŋ
Mississippi *	NKE	U. S. Navy	300, 600	PG	l N
Modoc *	NUD	do	300, 600	PG	
Mohave *	NTO	do	300, 600	PG	N
Mohawk *	NUE	do	300, 600	PG	N
Mohegan *	NZA	do.,	300, <i>600</i>	PG	l N
Mundale 2	KUJ	Marconi	300, 600		
N-1 *	NZE	U.S. Navy	300, 600	PG	N N
N-2 * N-3 *	NZF	do	300, 600	PG	Ň
N-3 * N-4 *	NZG NZH	do	300, 600	PG	N N
N-5 *	NZI	do	300, 600	PG PG	N N
N-6*	NZJ	do	300, <i>600</i>	PĞ	N
N-7 *	NZK	do	300, 800	PĞ	l N
Narkeeta *	NUF	do	300,600	PĞ	Ň
Oneida *	NSO	do	300, 600	ΡĞ	Ñ
Pawnee *	NUH	do	300, 600	PĞ	ΙÑ
Pawtucket *	NUJ	do	300, 600	PG	l N
Penacook *	NUK	do	300, 600	PG	N
Pentucket *	NUL	do	300, 600	PG	N
Pocahontas *	NOU	-,do	300, <i>600</i>	PG	N
Powhatan *		do	300, 800	PG	N N N
Pueblo *	NDN	do	300, 600	PG	l N
Relief *	NHK	do	300, 600	PG	N N
Rocket *	NUT	do	300, 600	PG	N
Samoset *	NUU	do	300, <i>600</i>	PG PG	N
Schley *	NKT	do	300, 600	PG	N
Seattle *	NWE	do	300, 600	PĞ	ĺÑ
Sebago *	NUV	do	300, 600	PG	ממממממממ
Shaw *	NKU	do	300, 600	PĞ	l Ñ
Shubrick *	NWU	do	300, 600	PG	N
Sioux *	NUW	do	300, 600	PG	N
Somers *	NWV	do	300, 600	PG	N
Southery *	NJY	do	300, 600	PG	N
Standish *	NUY	do	300, 600	PG	l N
Surveyor * Sylvia *	NQU NSS	do	300, 600	PG	(A
Tecumseh *	NUZ	do	300, 600	PG PG	N N
Thornton *		do	300, <i>600</i>	PG	Ň
Tillamook *	NWX NWW	do	300, 600	PG	N
Tingey *	NWY	do	300, 600	PĞ	N N
Traffic *	NVA	do	300, 600	PĞ	Ň
Transfer *	NVB	do	300, 600	PĞ	Ñ
Triton *	NVC	do	300, 600	ΡĜ	N N N
Unadilla *	NVD	do	300, 600	PG	N
Waban *	NVH	do	300, 600	PG	N
Wahneta *	NVI	do	300, 600	PG [N
Wanda *	NWZ	do	300, 600	PG	N
Wellington 3.	KMR	Marconi	300, 600	PG	N
Wm. G. Warden 4 Wompatuck *	KNF NVJ	do	300, 600	PG	NT.
it outpasses,	2473	U. S. Navy	300, 600	PG	N
	!				

Rate, 4 c. per word 40 c. minimum per radiogram. Radio station operated and controlled by J. R. De Lamar, owner of vessel, yacht.
 Munson Steamship Co., owner of vessel.
 Rates, North and South American service, 4 c. per word 40 c. minimum per radiogram, transoceanic service, 8 c. per word 80 c. minimum per radiogram. Radio station operated and controlled by the Marconi Co. Cook-Cummer Steamship Co., owner of vessel.
 Rates, North and South American service, 4 c. per word 40 c. minimum per radiogram, transoceanic service, 8 c. per word 80 c. minimum per radiogram. Radio station operated and controlled by the Marconi Co. Standard Oil Co. of New Jersey, owner of vessel.

SHIP STATIONS, ALPHABETICALLY BY CALL SIGNALS.

Call signal.	Vessel.	Call signal.	Vessel.	Call signal.	Vessel.
710	D==122	Nov	Boxer.	NVY	Daklana
KIO KMR	Brynhilda.	NSY	Comberland.	NWB	Dahlgren.
	Wellington.	NSZ		NWE	De Long.
KNF	Wm. G. Warden.	NTH	Accomac.		Seattle.
KOP	Lackawanna.	NTJ	Active.	NWF	Foote.
XPS	Benjamin Brewster.	NTM	Alice.	NWG	Huntington.
KTP	James McGee.	NTN	Apache.	NWJ	Fox.
KUJ	Mundale.	NTO	Mohave.	NWT	Rodgers.
KXS	Britannia.	NTV	Choctaw	NWU	Shubrick.
XXT	J. W. Thompson.	NTW	Hercules.	NWV	Somers.
ZZI	May,	NTY	Iwana.	NWW	Tillamook,
NDN	Pueblo.	NUB	Massasoit.	NWX	Thornton.
NEV	Elfrieda.	NUD	Modoe.	NWY	Tingey.
NEW	Lancaster.	NUE	Mohawk.	NWZ	Wanda.
VEY !	Constellation.	NUF	Narkeeta.	NXB	A-2.
VIV	Fish Hawk.	NUH	Pawnee.	NXC	A-3.
NFY	Intrepid.	NUJ	Pawtucket.	NXD	A-4.
VGC	Boston.	NUK	Penacook.	NXE	A-5.
VOV	Hartford.	NUL	Pentucket.	NXF	Λ-6.
NHK	Relief.	NUP	Powhatan.	NXG	A-7.
NHN	Idaho.	NUT	Rocket.	NXH	B−1.
NJS .	Frederick.	NUU	Samoset.	NXI	B-2
AJY :	Southerv.	NUV	Sebago.	NXJ	∖ B-3.
VKE	Mississippi.	NUW	Sioux.	NXK	C-1.
NKT	Schley.	NUY	Standish.	NXL	C-2,
1KU	Shaw.	NUZ	Tecumseh.	NXM	C-3.
NZ	Granite State.	NVA	Traffic.	NXN	C-4.
NOD	Cuyama.	NVB	Transfer.	NXO	C-5.
10U	Pocahontas.	NVC	Triton.	NZA	Mohegan.
1QG	Callao.	NVD	Unadilla.	NZE	N-1.
ЙÒН	Concord.	NVH	Waban.	NZF	N-2.
VQU .	Surveyor.	NVI	Wahneta.	NZG	N-3.
ISM	Hawk.	ÑŸĴ	Wompatuck.	NZH	N-4.
VŠŇ	Huntress.	NVO	Aileen.	NZI	N-5.
VSO	Oneida.	NVÚ	Bagley.	NZJ	N-6.
NSP	Arapahoe.	NVV	Barney.	NZK	N-7.
NSS	Sylvia.	NVW	Biddle.	WQC	City of Wilmington.

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.	Serv- ice.	Hours.	Station controlled by-
Bar Harbor, Me Manhattan, Kans Philadelphia, Pa San Bernardino, Cal Superior, Wis	3ZO 6YP	200, 300, 425, 600. 300, 425. 200, 300, 425, 600. 200, 500. 200, 300, 425, 600.	P	X X X X	Arthur H. Lawford. Kansas State Agricultural College. Maynard C. Morris. Y. M. C. A. F. W. Keeler.

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.

Call = 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.

P=Private.

O=Government business exclusively.

Hours = Hours of operation:

N = Continuous service. X=No regular hours. m=a, m. (12m=midday). s=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 Perne 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.]

CAPE ST. ELIAS, ALASKA.—Strike out all particulars.

Kensington, Alaska.—G. loc., O. 135° 06′ 54″, N. 58° 52′ 06″; range, 100-250; system, Marconi, 480; W. L., 300, 600, 1650; service, PG; hours, 15-minute periods commencing at 9m, 1s, and 7s; rates, 6 c. per word 60 c. minimum per radiogram. Notes, Radio station operated and controlled by the Marconi Co. The station also communicates with Juneau and Sitka, Alaska; rate, 6 c. per word 60 c. minimum per radiogram, domestic count.

LEWISTON, MONT.—Name, Lewistown, Mont.; W. L., 300, 600, 1600.

WAHIAWA, ISLAND OF OAHU, HAWAII.—Range, 400; W. L., 300, 550, 600, 750; hours, for PG service, N, for special interisland service, 7m-12m, 1s-5.30s, for service with Tutuila and Apia, Samoa, 8s-2m; rates, change rate to Apia and Papeete to read: Rate to Apia, 50 c. per word no minimum, rate to Tutuila, 10 c. per word \$1 minimum per radiogram. Rate for PG service, 10 c. per word \$1 minimum per radiogram. Notes, Radio station operated and controlled by the Mutual Telephone Co. (Ltd.). The station conducts special interisland service with Kawaihae, Lahaina, and Lihue, Hawaii, and also communicates with Tutuila and Apia, Samoa.

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, 1916, and to the International List of Radiotelegraph Stations published by the Berne bureau.]

ADMIRAL DEWEY.—Note, Radio station operated and controlled by the Pacific Steam-

ship Co., charterer of vessel. Pacific-Alaska Navigation Co., owner of vessel. ADMIRAL EVANS.—Note, Radio station operated and controlled by the Pacific Steam-

ship Co., charterer of vessel. Pacific-Alaska Navigation Co., owner of vessel. ADMIRAL FARRAGUT.—Note, Radio station operated and controlled by the Pacific Steamship Co., charterer of vessel. Pacific-Alaska Navigation Co., owner of vessel.

ADMIRAL GOODRICH.—Note, Radio station operated and controlled by the Pacific Steamship Co., charterer of vessel. Pacific-Alaska Navigation Co., owner of vessel. ADMIRAL SCHLEY.—Note, Radio station operated and controlled by the Pacific Steam-

ship Co., charterer of vessel. Pacific-Alaska Navigation Co., owner of vessel. Admiral Watson.—Note, Radio station operated and controlled by the Pacific Steam-

ship Co., charterer of vessel. Pacific-Alaska Navigation Co., owner of vessel. BRAMELL POINT.—Range, 150; system, Marconi, 1,000; W. L., 300, 450, 600; hours, X. C. A. Canfield.—Range, 300; system, Marconi, 1,000; W. L., 300, 450, 600. CALIFORNIA (NCZ).—Call, NDF.

Camino.—Strike out all particulars.

CHICAGO (WFI).—Strike out all particulars.

CITY OF SEATTLE.—Notes, Radio station operated and controlled by the Marconi Co. Pacific Steamship Co., charterer of vessel. Pacific-Alaska Navigation Co., owner of vessel.

Colorado (NDN).—Strike out all particulars.

EL OCCIDENTE.—System, Marconi, 1,000; W. L., 300, 450, 600.

EL VALLE.—System, Marconi, 480; hours, X; rates, North and South American service. 4 c. per word 40 c. minimum per radiogram, transoceanic service, 8 c. per word 80 c. minimum per radiogram.

GUANTANAMO.—Rates, North and South American service, 4 c. per word 40 c. minimum per radiogram, transoceanic service, 8 c. per word 80 c. minimum per radio-

JOSEPH R. PARROTT.-Range, 200; system, Marconi, 1,000; W. L., 300, 450, 600: service, PG; hours, X; rates, 4 c. per word 40 c. minimum per radiogram.

MARYLAND.—Range, 200; system, Marconi, 1,000; W. L., 300, 450, 600; service, PG; hours, X. Notes, Radio station operated and controlled by the Marconi Co. Crew Levick Co., owner of vessel.

MARYLAND (NJS).—Strike out all particulars.

MEXICAN.—Hours, N.

MILLINOCKET.—System, Marconi, 480; rates, North and South American service, 4 c. per word 40 c. minimum per radiogram, transoceanic service, 8 c. per word 80 c. minimum per radiogram.

NAVAHOE.—Range, 200; system, Marconi, 1,000; W. L., 300, 450, 600; service, PG; hours, X: rates, North and South American service, 4 c. per word 40 c. minimum per radiogram, transoceanic service, 8 c. per word 80 c. minimum per radiogram.

NAVAJO (WNJ).—Range, 300; system, Marconi, 1,000; W. L., 300, 450, 600.
NORMAN BRIDGE.—Rates, North and South American service, 4 c. per word, 40 c. minimum per radiogram, transoceanic service, 8 c. per word 80 c. minimum per radiogram

Oregon (WOC).—Notes, Radio station operated and controlled by the Marconi Co.

Wilson Bros. Co., owner of vessel.

PAULSBORO.—Notes, Radio station operated and controlled by the Marconi Co. Vacuum Oil Co., owner of vessel.

Pearl Shell .-- Range, 250; system, Marconi, 1,000; W. L., 300, 450, 600; service, PG: hours, X.

Pere Marquette.—W. L., 300, 500, 600. Notes, Radio station operated and controlled by the Marconi Co. Pere Marquette Railroad Co., owner of vessel.

Pere Marquette 17.-W. L., 300, 500, 600. Notes, Radio station operated and controlled by the Marconi Co. Pere Marquette Railroad Co., owner of vessel.

Pere Marquette 18.-W. L., 300, 500, 600. Notes, Radio station operated and con-

trolled by the Marconi Co. Pere Marquette Railroad Co., owner of vessel. Pere Marquette 19.—W. L., 300, 500, 600. Notes, Radio station operated and controlled by the Marconi Co. Pere Marquette Railroad Co., owner of vessel.

Pere Marquette 20.—W. L., 300, 500, 600. Notes, Radio station operated and con-

trolled by the Marconi Co. Pere Marquette Railroad Co., owner of vessel. President.—Notes, Radio station operated and controlled by the Marconi Co.

cific Coast Co., owner of vessel.

RESOLUTE.—Range, 200; system, De Forest, 240; W. L., 300, 600; service, PG; hours, X; rates, North and South American service, 4 c. per word 40 c. minimum per radiogram, transoceanic service, 8 c. per word 80 c. minimum per radiogram. Notes, Radio station operated and controlled by the Merritt & Chapman Derrick & Wrecking Co., owner of vessel.

Senator.—Notes, Radio station operated and controlled by the Marconi Co. Pacific Steamship Co., charterer of vessel. Pacific-Alaska Navigation Co., owner of

vessel.

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

Spokane.—Notes, Radio station operated and controlled by the Marconi Co. cific Steamship Co., charterer of vessel. Pacific-Alaska Navigation Co., owner of

TENNESSEE (NUG).—Strike out all particulars.

UMATILLA.—Notes, Radio station operated and controlled by the Marconi Co. cific Steamship Co., charterer of vessel. Pacific-Alaska Navigation Co., owner of

WASHINGTON (NWE).—Strike out all particulars. WESTERN STATES.—W. L., 300, 440, 500, 600; hours, N. WEST VIRGINIA (NWG).—Strike out all particulars.

Wico.—Rates, North and South American service, 4 c. per word 40 c. minimum per radiogram, transoceanic service, 8 c. per word 80 c. minimum per radiogram.

MISCELLANEOUS.

COMMERCIAL RADIO OPERATORS LICENSED DURING MONTH OF OCTOBER, 1916.

Extra first grade.

Date.	Licensee.	Address.	Serial No.	Where issued.1
18	Sibley, Eugene	1125 E. Capitol St., Washington, D. C.	54	Washington,
27		438 W. 23d St., New York, N. Y.	57	Brooklyn. ²
24		U. S. S. Ranger, Boston, Mass.	56	Washington,
19		S. S. Sixaola, New York, N. Y.	55	Brooklyn, ²

	First grade.						
9	Abbey, Harold	R. F. D. No. 1, Eugene, Oreg.	14134	Seattle.			
24	Abrams, George E	R. F. D. No. 1, Eugene, Oreg S. S. H. M. Flagler, Key West, Fla	14161	New Orleans.			
7	Acree, Charles H	U. S. Naval Radio Station, New Orleans, La	12300	Do.			
29 17	Allen, John W.3 Ault, Arthur K	236 Hale St., Beverly, Mass	12183 12184	Baltimore. Do.			
26	Austin, Hervey G	1036 Polk St., San Francisco, Cal.	13905	San Francisco.			
30	Barkley, Patrick J	1038 Polk St., San Francisco, Cal S. S. Heredia, New Orleans, La	14163	New Orleans.			
18	Bauchou, Leon J	Mayneld, Cal	12398	San Francisco.			
28	Beckerman, Benjamin	107 Herze St., Brooklyn, N. Y	14091	New York.			
28 31	Beckerman, Michael Bermingham, James L	do	14271	Do. Boston.			
21	Bevitt, Edwin R	54 A St., Waveland, Mass 3914 3d St., San Diego, Cal 139 Springfield Ave., Rutherford, N. J	13901	San Francisco.			
16	Bigelman, Herbert C	139 Springfield Ave., Rutherford, N. J	12966	Norfolk.2			
25	Bodin, Henry	5 Fella Pl., San Francisco, Cal	15303	San Francisco.			
8	Bolt, Arthur L Brede, Erwin F	4901 Budlong Ave., Los Angeles, Cal	12393 13726	Do, Detroit.			
16	Brusseau, Charles J	55 Melbourne Ave., Detroit, Mich	14157	New Orleans.			
4	Burgess, Hubert A	7801 44th St. SW., Seattle, Wash.	14133	Seattle.			
26	Campbell, Alexander		12186	Baltimore.			
30	Carpenter, Irving T	416 Public St., Providence, R. I.	14093	New York.			
24 18	Cawman, David L Copak, George J	1531 Sewall Ave., Asbury Park, N. J	14088 14911	Do, Brooklyn.²			
18	Crum, Arles A	263 W 58th St. New York N V	14909	Do.			
îš	Dillon, Joseph A	407 S. Claiborne Ave., New Orleans, La	14908	Do.			
16	Doughty, Dennis R	153 E. 86th St., New York, N. Y	14906	Do.			
31	Dunlap, William T	S. S. Alaska, Pier 2, Seattle, Wash	14139	Seattle.			
10 21	Ellis, Homer D	28 Winslow Rd., Brookline, Mass	14268 12015	Boston. Washington.			
21	Estrada, Miss Maria D Ferguson, George B	24 Cottage St., Bayonne, N. J.	14904	Brooklyn.2			
16	Folsom, Harold P	445 Central St., Winchendon, Mass.	14270	Boston.			
2	Ford, Schuyler R	396 E. 16th St., Brockivn, N. Y	14905	Brooklyn.2			
27	Forsyth, James F	108 Prospect St., Somerville, Mass Piedmont Park, Oakland, Cal	14090	New York.			
10 20	Fox, Irving A	73 E. 30th St., Bayonne, N. J.	12394 14160	San Francisco. New Orleans,			
19	Gaskey, Sigmund Gilbert, Harry L	714 Donny Way Spottle Week	14125	Seattle.			
23	Grimshaw, Herbert R	55 Wood St., Rutherford, N. J. 342 Broadway, Tottenville, N. Y. 4034 Latona Ave., Seattle, Wash. 4025 Ellis Ave., Chicago, Ill. 818 E. 4th St., Santa Ans. Cal.	14914	Brooklyn.2			
19	Guy, Raymond	342 Broadway, Tottenville, N. Y	14912	Do.			
23	Hallett, Gena C	4034 Latona Ave., Seattle, Wash	14138	Seattle.			
5 10	Harrison, Percy W Hassler, Bert R	4025 Ellis Ave., Chicago, III	10206	Chicago. San Francisco.			
20	Haverkamp, Herman O.			New Orleans.			
26	Heilig David I	1421 Arch St., Philadelphia, Pa	12185	Baltimore.			
10	Hendrix, Paul A	1421 Arch St., Philadelphia, Pa. 1106 Bush St., San Francisco, Cal. 203 E. 64th St., New York, N. Y. 179 Marcy Ave., Brooklyn, N. Y.	12395	San Francisco.			
18	Hornung, Julius L. La Rue, Lester J	203 E, 64th St., New York, N. Y	14907	Brooklyn.2			
26 20	Lee, James G	Roy 62 Vancouver Wash	14916 14137	Do. Seattle,			
2ŏ	Lockette, Lester	Box 62, Vancouver, Wash Care of Federal Telegraph Co., San Francisco, Cal.	14136	Do.			
17	Lohry, Ross B Loomis, Thomas T	1921 Irving Ave., East Oakland, Cal	12397	San Francisco.			
19	Loomis, Thomas T	Blencoe, Iowa	1 1000	Do.			
26 31	McDonald, Edward F Marshall, Emanuel J	15 Beacon St., Clinton, Mass	14089	New York. Brooklyn.2			
18	Miche, John A	568 Waller St., San Francisco, Cal	12399	San Francisco.			
23	Morrell, Arthur C	16 Beacon 6., Cinton, mass. 402 E. Sid St., New York, N. Y. 568 Waller St., San Francisco, Cal. Navy Y. M. C. A., Brooklyn, N. Y. 521 Nimons St., Saginaw, Mich. 1222 Weat Ave. Wingle Cal.	14915	Brooklyn.2			
3	Pardridge, Clarence R	521 Nimons St., Saginaw, Mich.	13728	Detroit.			
26	Peterson, Kenneth	1493 TI CSU ALVO., IMITURA, CAL	1000	Sau Francisco.			
6	Philbrook, Robert G Risley, Warren B	1 Linden Ave., Greenwood, Mass 96 Marshall St., Conneaut, Ohio	19797	Boston. Detroit.			
27	Roberts, George F.	Stewart Hotel, San Francisco, Cal	12388	San Francisco.			
10	Salter, John R	89 St. James Ave., Boston, Mass	14267	Boston.			
31	Schmitt, Lawrence R	S. S. Creole, New York, N. Y	14094	New York.			
18 24	Schneider, Frank A	Stewart Hotel, San Francisco, Cal. 89 St. James Ave., Boston, Mass. S. S. Creole, New York, N. Y. 25 Ridgewood Ave., Newark, N. J. 765 E. 160th St., New York, N. Y.	14910	Brooklyn.* New York.			
1 20	Mannes desired by and to to	TOO IS TOO IN DO., NOW I UIE, IN I	a suo i	I TOW I UIR.			

¹ All licenses issued by radio inspectors of the Department of Commerce unless otherwise indicated.

² License issued by radio examining officer, Navy Department.

³ Licensed during month of September, papers being received at Bureau too late for publication in November Bulletin.

COMMERCIAL RADIO OPERATORS LICENSED DURING THE MONTH OF OCTOBER, 1916—continued.

First grade—Continued.

Date.	Licensee.	Address.	Serial No.	Where issued.1
30 31 25 19 26 18	Smith, Edmund F Spradley, Albert H Stevens, Charles E Wimpfheimer.Gustave R	Wayne, Mich. 659 Haight St., San Francisco, Cal. 849 Calder Ave., Beaumont, Tex. Care of Standard Oil Co., Baton Rouge, La. 1219 Wheeler Ave., New York, N. Y. 25 Elm St., New York, N. Y.	13906 14162 14158 14917	New Orleans. Do. Brooklyn. ²

Second grade.

5 18 27 25	Coombs, George T Foster, Richard H	220 78th St., Brooklyn, N. Y	12070 12902	Boston. Key West. ² Fort Monroe,
23 5 10	Hill, Claude N Quong, Moy B Wihl, Otto H	Fort McKinley, Portland, Me 172 2d St., Milwaukee, Wis. 72 Woodward Ave., San Francisco, Cal.	12071 12341 13272	Va. ⁴ Boston. Chicago. San Francisco.

RADIO SERVICE PERSONNEL.

H. C. Gawler, who has been serving as captain in the Signal Corps, Massachusetts National Guard, on the Mexican border, has returned to his duties as radio inspector at Boston, Mass.

Charles Blankenship, assistant radio inspector, who has been in charge of the first district during the absence of Radio Inspector H. C. Gawler, has been granted annual leave, at the expiration of which he will be assigned to the port of Norfolk, Va.

Ellery W. Stone, assistant radio inspector at San Francisco, Cal., is making an extended inspection trip through southern California and

points in New Mexico and Arizona.

Otto R. Redfern, formerly manager of the Duluth (Minn.) station of the Marconi Wireless Telegraph Co. of America, has been appointed an assistant radio inspector in the service of the Bureau at New York, N. Y.

Joseph H. Hallock, of Underwood, Wash., has been appointed assistant radio inspector in the service of the Bureau and has been temporarily assigned to Norfolk, Va. Upon the assignment of Assistant Radio Inspector Blankenship to the port of Norfolk, Mr. Hallock will be assigned to duty in the fourth and fifth districts.

The temporary appointment of H. D. Hayes as assistant radio inspector at San Francisco, Cal., has been extended for a period of

three months.

NEW INTERNATIONAL LIST.

The Berne bureau has announced the completion of the fourth edition of the Liste Alphabetique des Indicatifs D'Appel (Alphabetical List of Call Letters) of the radio stations of the world.

This publication may be procured from the Director, International Bureau of the Telegraph Union, Radiotelegraphic Service, Berne,

All licenses issued by radio inspectors of Department of Commerce unless otherwise indicated.
 License issued by radio examining officer, Navy Department.
 Licensed during month of September, papers being received at Bureau too late for publication in November Bulletin. License issued by radio examining officer, War Department.

Switzerland, at the price of 1 franc 30 centimes per copy, plus 35 centimes postage. Remittances should be made by international postal money orders.

REGULATION OF RADIO APPARATUS IN CANADIAN TERRITORIAL WATERS.

The following extracts from the Canadian Radiotelegraph Act and Regulations concerning the operation of radio equipments on vessels in Canadian territorial waters are published for the information and guidance of masters and radio operators of American vessels visiting Canadian ports.

73. Superfluous signals.—The transmission of superfluous signals by any ship or coast station is absolutely prohibited; trials and practices are forbidden except under such circumstances as to preclude the possibility of interference with other stations.

103. Ship stations in Canadian territorial waters.—The radiotelegraph stations on board ships (other than H. M. ships of war or Canadian Government vessels) shall not be worked while such ships are within the territorial waters of Canada, unless specific permission is granted therefor by the controlling Canadian coast stations for the locality, and then only provided such working does not interfere with the operation of any coast station established in Canada, and that the provisions of the Radiotelegraph Convention of London, 1912, and the Service Regulations annexed thereto, are strictly observed.

104. Ship stations in Canadian harbours.—(a) The radiotelegraph stations on board ships (other than H. M. ships of war or Canadian Government vessels) shall not be

worked whilst such ships are within a harbour of the Dominion of Canada.

(b) For the proper enforcement of the above, ships of British register in Canadian harbours must completely disconnect their aerial wires from their radio apparatus, the ends of such wires being suspended entirely clear of the radiotelegraph cabin, preferably from the main rigging, in such a manner as to show they are properly disconnected.

(c) Ships of foreign register in a Canadian harbour must (subject to the provisions of the following subsection (d)) take down their aerial wires completely and disconnect

the same from their radiotelegraph apparatus.

(d) Ships of foreign register remaining in a Canadian harbour for less than twelve hours may, at the discretion of the competent naval authority, be permitted to leave their aerials up, provided the same are disconnected in accordance with the provisions of subsection (b) of this regulation.

WARNING TO RADIO OPERATORS.

The attention of all radio operators on American vessels engaged in foreign trade is invited to Article VI of the London convention and paragraph 209, page 74, of the regulations of the Department, prohibiting the transmission of superfluous signals, and to Article XXXV of the London convention, requiring the transmission of radiograms, except as outlined in that article, to the nearest coastal station.

The Department has recently received several complaints from foreign Governments of interference caused by the radio stations on board vessels of the United States while in or near foreign territory, the greater part of which has been caused by the attempts of radio operators to transmit long distances and by the transmission of

superfluous signals, in violation of the above regulations.

All radio operators are warned that they must obey the international regulations and the regulations of the Department, especially as regards interference with the operation of foreign radio stations, and any operator found guilty of willfully interfering with the operation of other stations may suffer the suspension or revocation of his operator license.

ADDITIONAL COPIES

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