

RADIO SERVICE BULLETIN

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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 =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.)
I. W. T. Co.=Independent Wireless Telegraph Co.
R. C. of A. =Radio Corporation of America.
S. O. R. S. =Ship Owners Radio Service.
Co. =Company.
Corp. =Corporation.
& =And.

NEW STATIONS.

Commercial land stations, alphabetically by names of stations.

[Additions to the List of Radio Stations of the United States, edition of June 30, 1921, and to the International List of Radiotelegraph Stations published by the Berne bureau.]

Station.	Call signal.	Wave lengths.	Service.	Hours.	Station controlled by—
Bakersfield, Calif. ¹ ...	WJT	300, 400, 600.....	PR	X	Alfred Harrel.
Chichagof, Alaska.....	KRX	.....	.....	.....	Chichagof Mining Co.
Dallas, Tex. ²	WRR	400, 450, 500.....	PR	X	City of Dallas (Police and Fire Signal Dept.).
Detroit, Mich. ³	WQX	275, 300, 350, 600..	PR	(9)	Central States Radio Service.
Hartford, Conn. ⁴	WQB	200, 300, 375, 600..	PR	X	C. D. Tuska Co.
Lima, Ohio ⁵	WBY	1700.....	PR	X	Illinois Pipe Line Co.
Seattle, Wash. ⁶	KVW	300, 450, 550, 600..	PR	X	City of Seattle, Light Dept.
Skagit Power Site, Wash. ⁷	WJE	300, 450, 550, 600..	PR	X	Do.
Taft, Calif. ⁸	WJK	300, 400, 600.....	PR	X	Alfred Harrel.

¹ Range, 90; system, composite; rates, none.

² Loc. (approximately) O 96° 47' 00", N 32° 46' 00"; range, 200; system, composite; rates, none.

³ Loc. (approximately) O 83° 03' 30", N 42° 20' 00"; system, composite, 500; rates, 2 c. per word, minimum 10 words, 20 c.

⁴ Hours, 8.30 a. m. to 6 p. m.

⁵ Range, 100; rates, none.

⁶ Loc. (approximately) O 79° 00' 00", N 41° 00' 00"; range, 200; system, Deforest; rates, none.

⁷ Loc. (approximately) O 122° 20' 00", N 47° 37' 00"; range, 200; rates, none.

⁸ Loc. (approximately) O 121° 15' 00", N 48° 40' 00"; range, 200; system, composite; rates, none.

⁹ Range, 90; system, composite (radiophone); rates, none.

Commercial ship stations, alphabetically by names of vessels.

[Additions to the List of Radio Stations of the United States, edition of June 30, 1921, and to the International List of Radiotelegraph Stations published by the Berne bureau.]

Name of vessel.	Call signal.	Rates.		Service.	Hours.	Owner of vessel.	Station controlled by—
		North and South American service.	Trans-oceanic service.				
		Cents.	Cents.				
Empire Arrow.....	KDUG	PG	X	Standard Transportation Co.	Owner of vessel.
Guinevere.....	KDUP	.....	.....	.....	.....	Edgar Palmer.....
Half Moon.....	KDTY	.....	.....	.....	.....	Gordon Woodbury.....
Harry Yates ¹	KDUB	.....	.....	PG	X	American S. S. Co.....
John D. Archbold.....	KDUM	PG	N	Standard Oil Co. of N. J.	R. C. of A.
Knoxville City.....	KDUD	.....	.....	PG	X	U. S. Steel Products Co.
Louis R. Davidson ² ..	KDUH	PG	X	American S. S. Co.	Owner of vessel.
Lubrico.....	KDUC	4	4	PG	X	U. S. S. B.....	
Octorara ³	WCD	.....	.....	PG	N	Great Lakes Transit Corp.
Patricia ⁴	KDTX	PG	X	James Shewan.....	Owner of vessel.
Ripple.....	KDUN	PG	X	James T. McAllister...	S. O. R. S.
Southern Cross.....	KDTZ	4	4	PG	N	U. S. S. B.....	
Speejacks ⁵	KDUF	4	4	P	X	Albert Y. Gowen.....	
Theodore H. Wickwire, jr. ⁶	KDUL	.....	.....	PG	X	American S. S. Co.
West Prospect.....	KDUK	4	4	PG	X	U. S. S. B.....	
William T. Roberts ⁷	KDUJ	.....	.....	PG	X	American S. S. Co.

¹ Range, 150; system, Navy-Wireless Specialty Apparatus Co., 1000; w. l., 300,600.

² Range, 150; system, Navy-Wireless Specialty Apparatus Co., 1000; w. l., 300,600.

³ Range, 150; system, R. C. of A., 1000; w. l., 300, 450, 600; rates, Great Lakes service, 2 c. per word.

⁴ Range, 150; system, Marconi, 120; w. l., 300,600.

⁵ Range, 100; system, Deforest; w. l., 300, 450, 600.

⁶ Range, 150; system, Navy-Wireless Specialty Apparatus Co., 1000; w. l., 300,600.

⁷ Range, 150; system, Navy-Wireless Specialty Apparatus Co., 1000; w. l., 300,600.

Commercial land and ship stations, alphabetically by call signals.

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

Call signal.	Name.	Call signal.	Name.
WBY...	Lima, Ohio.....c	KDUC...	Lubrico.....b
WCD...	Octorara.....b	KDUD...	Knoxville City.....b
WJE...	Skagit Power Site, Wash.....c	KDUF...	Speejacks.....b
WJT...	Bakersfield, Calif.....c	KDUG...	Empire Arrow.....b
WJK...	Taft, Calif.....c	KDUH...	Louis R. Davidson.....b
WQB...	Hartford, Conn.....c	KDUJ...	William T. Roberts.....b
WQX...	Detroit, Mich.....c	KDUK...	West Prospect.....b
WRR...	Dallas, Tex.....c	KDUL...	Theodore H. Wickwire, Jr.....b
KDTX...	Patricia.....b	KDUM...	John D. Archbold.....b
KDTY...	Half Moon.....b	KDUN...	Ripple.....b
KDTZ...	Southern Cross.....b	KDUP...	Guinevere.....b
KDUB...	Harry Yates.....b	KRX...	Chichagof, Alaska.....c
		KVW...	Seattle, Wash.....c

Government land stations, alphabetically by names of stations.

[Additions to the List of Radio Stations of the United States, edition of June 30, 1921, and to the International List of Radiotelegraph Stations*published by the Berne bureau.]

Station.	Call signal.	Station controlled by—
Fort D. A. Russel, Wyo.....	WYCK.	War Department.
Fort Douglas, Utah.....	WYCI.	Do.
Jefferson Barracks, Mo.....	WYCI.	Do.
Memphis, Tenn.....	WYDB.	Inland & Coastwise Waterways Service, War Department.
New Orleans, La.....	WYDC.	Do.
Noorvik, Alaska.....	WVM...	Washington-Alaska Military Cable & Telegraph System.
St. Louis, Mo.....	WYDA.	Inland & Coastwise Waterways Service, War Department.

Government ship stations, alphabetically by names of stations.

[Additions to the List of Radio Stations of the United States, edition of June 30, 1921.]

Name of ship.	Call signal.	Name of ship.	Call signal.
Baton Rouge ¹	WYDI	Natchez ¹	WYDD
Cairo ¹	WYDF	New Orleans ¹	WYDH
Great Northern ²	NAXL	Shawnee ²	NIZJ
Haida ²	NITF	St. Louis ¹	WYDG
Memphis ¹	WYDJ	Tampa ²	NITC
Modoc ²	NIVD	Vicksburg ¹	WYDE
Mohave ²	NIXB		

¹ Operated by Inland & Coastwise Waterways Service, War Department.

² Operated by U. S. Navy.

³ Operated by U. S. Coast Guard.

Government land and ship stations, alphabetically by call signals.

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

Call signal.	Name of station.	Call signal.	Name of station.
NAXL...	Great Northern.....b	WYDA...	St. Louis, Mo.....c
NITC...	Tampa.....b	WYDB...	Memphis, Tenn.....c
NITF...	Haida.....b	WYDC...	New Orleans, La.....c
NIXB...	Mohave.....b	WYDD...	Natchez.....b
NIVD...	Modoc.....b	WYDE...	Vicksburg.....b
NIZJ...	Shawnee.....b	WYDF...	Cairo.....b
WVM...	Noorvik, Alaska.....c	WYDG...	St. Louis.....b
WYCI...	Jefferson Barracks, Mo.....c	WYDH...	New Orleans.....b
WYDJ...	Fort Douglas, Utah.....c	WYDI...	Baton Rouge.....b
WYCK...	Fort D. A. Russel, Wyo.....c	WYDJ...	Memphis.....b

Special land stations, alphabetically by names of stations.

[Additions to the List of Radio Stations of the United States, edition of June 30, 1921.]

Station.	Call signal.	Station controlled by—
Baltimore, Md.....	3XAA...	E. Craig Densten.
Baltimore, Md.....	3XT.....	R. Selway Collins.
Baltimore, Md.....	3XX.....	Louis E. Richwien.
Detroit, Mich.....	8XAB...	City of Detroit, Police Department.
Enterprise, Oreg.....	7ZH.....	Orland M. Hancock.
Houston, Tex.....	5XS.....	Tel Electric Co.
Kansas City, Mo.....	9XK.....	Robert R. Moore.
Montgomery, Ala.....	5XR.....	S. G. F. Rathborne.
Norfolk, Va.....	3XY.....	R. L. Hopkins and H. L. Buskey.

Special land stations grouped by districts.

Call signal.	District and station.	Call signal.	District and station.
3XAA...	Third district: Baltimore, Md.	7ZH.....	Seventh district: Enterprise, Oreg.
3XT.....	Baltimore, Md.	8XAB.....	Eighth district: Detroit, Mich.
3XX.....	Baltimore, Md.	9XK.....	Ninth district: Kansas City, Mo.
3XY.....	Norfolk, Va.		
5XR.....	Fifth district: Montgomery, Ala.		
5XS.....	Houston, Tex.		

ALTERATIONS AND CORRECTIONS.

COMMERCIAL LAND STATIONS.

[Alterations and corrections to be made to the List of Radio Stations of the United States, edition of June 30, 1921, and to the International List of Radiotelegraph Stations, published by the Berne bureau.]

MARION, MASS.—System, Alexanderson alternator, w. l., 11620.

TUCKERTON, N. J.—W. l., 300, 600, 16120; service, PG; rates to France, 14 c. per word plus land-line charge.

COMMERCIAL 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 June 30, 1921, and to the International List of Radiotelegraph Stations, published by the Berne bureau.]

ADMIRAL WATSON.—Range, 150; system, R. C. of A., 1000; w. l., 300, 450, 600.

AEOLUS.—System, Federal arc; w. l., 300, 450, 600, 1800.

AGAWAM.—Range, 300; system, Navy-Marconi, 1000; w. l., 300, 450, 600.

AGWIBAY.—Guaranty Trust Co., owner of vessel.

ALABAMA (WRAE).—Range, 200; system, I. W. T. Co., 1000; w. l., 300, 600.

ALPENA.—System, R. C. of A., 480.

AMERICAN LEGION.—Range, 200; system, Federal arc; w. l., 300, 600, 1800.

ANNISTON.—System, R. C. of A., 1000; w. l., 300, 450, 600.

APACHE.—Range, 300; w. l., 300, 600.

ASHBEE.—System, Navy-Lowenstein, 1000; w. l., 300, 450, 600.

ASTRA.—Strike out all particulars.

BADDACOCK.—Strike out all particulars.

BARUGO.—Strike out all particulars.

BEATRICE.—System, I. W. T. Co., 1000.

BOLIKOW.—Strike out all particulars.

CARL D. BRADLEY.—System, R. C. of A., 1000.

CAROLINA.—Range, 150; system, R. C. of A., 240; hours, N.

- CHAPPELL.—Range, 200; system, Navy, 1000; w. l., 300, 600.
- CHARLES O. JENKINS.—Range, 150; system, R. C. of A., 1000; w. l., 300, 600.
- CHESTER VALLEY.—Range, 300; w. l., 300, 450, 600.
- CHICKASAW.—Range, 300; system, Navy-Marconi, 1000; w. l., 300, 450, 600.
- CHICKASAW CITY.—Range, 300; system, R. C. of A., 1000; w. l., 300, 450, 600; hours, X.
- CHICOMICO.—W. l., 300, 450, 600.
- CIGARETTE.—Name changed to Pocantico.
- CITY OF ALPENA II.—Strike out all particulars.
- CITY OF BANGOR.—Range, 150; system, R. C. of A., 1000.
- CITY OF BRUNSWICK.—Range, 200; system, International Radio Telegraph Co., 1000; w. l., 300, 450, 600.
- CITY OF CLEVELAND III.—System, R. C. of A., 1000.
- CITY OF DETROIT III.—System, R. C. of A., 1000.
- CITY OF ELWOOD.—Range, 300; system, Navy-Lowenstein, 1000; w. l., 300, 450, 600.
- CITY OF MACKINAC II.—Strike out all particulars.
- CITY OF SAVANNAH.—System, R. C. of A., 1000.
- CITY OF SHERMAN.—Range, 300; system, Federal arc; w. l., 300, 600.
- CITY OF ST. IGNACE.—Range, 150; system, R. C. of A., 1000; w. l., 300, 450, 600.
- CLEMENS A. REISS.—Range, 150; system, R. C. of A., 1000.
- COLUSA.—Range, 300; system, R. C. of A., 1000; hours, X.
- CONCHO.—W. l., 300, 600.
- CONNEAUT.—Range, 200; system, R. C. of A., 480; rates, Great Lakes service 2 c. per word.
- COTOPAXI.—System, R. C. of A., 1000.
- COULEE.—Range, 200; system, R. C. of A., 1000; w. l., 300, 450, 600.
- COWBOY.—System, Navy-Marconi, 1000; w. l., 300, 450, 600.
- DANEBROG.—Strike out all particulars.
- EASTERN STATES.—System, R. C. of A., 1000.
- ELKHORN.—W. l., 300, 450, 600.
- FARNAM.—Station operated and controlled by I. W. T. Co.
- F. B. SQUIRE.—Range, 150; system, R. C. of A., 1000; w. l., 300, 600.
- FLORENCE LUCKENBACH.—Range, 300; system, Kilbourne & Clark, 1000; w. l., 300, 450, 600.
- FRED'K. LUCKENBACH.—Range, 300; w. l., 300, 450, 600; rates, transoceanic service 4 c. per word.
- FREEPORT SULPHUR No. 1.—Range, 300; system, R. C. of A., 1000; w. l., 300, 450, 600.
- GEORGE WASHINGTON.—Range, 300-800; system, Navy-Marconi, 1000 and Federal arc; w. l., 300, 450, 600.
- GEORGIA (KUR).—Range, 300; w. l., 300, 600.
- HARVARD.—Range, 300; system, Navy, 1000; rates, North and South American service 8 c. per word; Los Angeles S. S. Co. owner of vessel.
- HARVEY H. BROWN.—Range, 150; system, R. C. of A., 1000; w. l., 300, 600.
- HARRY W. CROFT.—System, R. C. of A., 1000.
- HOLLYWOOD.—Strike out all particulars.
- JAMESTOWN.—Range, 300.
- J. A. MOFFETT, Jr.—Station operated and controlled by R. C. of A.
- J. FLETCHER FARRELL.—Range, 300; system, R. C. of A., 1000; w. l., 300, 600.
- J. I. REISS.—System, R. C. of A., 1000.
- JOHN P. REISS.—System, R. C. of A., 1000.
- JOSEPH R. PARROTT.—Range, 150; system, R. C. of A., 1000.
- JUNIATA (WCB).—System, R. C. of A., 1000.
- KERHONKSON.—Range, 300; system, Navy-Marconi, 1000; w. l., 300, 450, 600.
- LAKE AGOMAK.—System, Navy-Marconi, 1000; w. l., 300, 450, 600.
- LAKE CATHERINE.—System, Navy-Marconi, 1000; w. l., 300, 450, 600.

- LAKE ELMONT.—Range, 200; system, Navy, 1000; w. l., 300, 450, 600.
- LAKE FERNANDO.—Station operated and controlled by I. W. T. Co.
- LAKE GRAVELLA.—System, Navy-Marconi, 1000; w. l., 300, 450, 600.
- LAKE HARRIS.—Range, 200; w. l., 300, 450, 600.
- LAKELAND.—System, R. C. of A., 1000.
- LAKE LARGA.—System, Navy-Simon, 1000; w. l., 300, 450, 600.
- LAKE PEARL.—W. l., 300, 450, 600.
- LAKE ST. CLAIR.—Range, 200; system, Navy-Marconi, 1000; w. l., 300, 450, 600.
- LAKE STIRLING.—W. l., 300, 450, 600.
- LAKE STRABO.—System, Navy-Marconi, 1000; w. l., 300, 450, 600.
- M. A. BRADLEY.—System, R. C. of A., 1000.
- MAITLAND No. 1.—System, R. C. of A., 1000.
- MASCOTTE.—System, R. C. of A., 1000.
- MEMPHIS CITY.—Range, 300; system, R. C. of A., 1000; w. l., 300, 450, 600; hours, X; rates, North and South American and transoceanic services 8 c. per word.
- MINNESOTA (WEK).—U. S. Shipping Board owner of vessel.
- MONANA.—Range, 300; system, Navy, 1000; w. l., 300, 450, 600.
- MOPANG.—Strike out all particulars.
- MORRO CASTLE.—W. l., 300, 600.
- NAMASKET.—Station operated and controlled by S. O. R. S.
- NASHABA.—Range, 300; system, Federal arc, w. l., 300, 600, 1800; station operated and controlled by S. O. R. S.
- NORTH AMERICAN.—System, R. C. of A., 1000.
- OCTORARA.—Range, 150; system, R. C. of A., 1000; w. l., 300, 450, 600.
- ORINOCO.—System, Navy-Marconi, 1000; w. l., 300, 450, 600.
- OSWEGO.—Range, 300; system, R. C. of A., 1000.
- OTTO M. REISS.—Range, 150; system, R. C. of A., 1000; w. l., 300, 600.
- PASADENA.—W. l., 300, 600; hours, X.
- PETER REISS.—Range, 150; system, R. C. of A., 480.
- PORTO RICO.—Range, 300; system, Navy-Marconi, 1000; w. l., 300, 600.
- RICHARD J. REISS.—Range, 150; system, R. C. of A., 1000.
- ROBERT C. SUDDEN.—Name changed to John C. Kirkpatrick.
- SEATTLE SPIRIT.—Station operated and controlled by S. O. R. S.
- SILVER SHELL.—Range, 300; system, R. C. of A., 1000.
- SIR THOMAS SHAUGHNESSY.—System, R. C. of A., 240.
- SOLITAIRE.—Range, 150; system, I. W. T. Co., 1000; w. l., 300, 600; rates, North and South American service 4 c. per word.
- STATE OF OHIO.—Range, 150; system, R. C. of A., 1000.
- STEEL ENGINEER.—Range, 300; system, Marconi, 1000; w. l., 300, 450, 600; hours, X.
- STEEL EXPORTER.—Range, 300; system, Marconi, 1000; w. l., 300, 450, 600; hours, X.
- SUMMERLEAF.—Range, 300; system, Navy-Marconi 1000; w. l., 300, 450, 600.
- TORMENTER.—Range, 150; system, R. C. of A., 1000; w. l., 300, 450, 600.
- WEST CHATALA.—Range, 200; system, Navy, 1000; w. l., 300, 450, 600; hours, X.
- WESTERN FRONT.—Strike out all particulars.
- WESTERN LIGHT.—W. l., 300, 450, 600.
- WESTERN STATES.—Range, 150; system, R. C. of A. 1000; w. l., 300, 450, 600.
- WEST IRA.—Station operated and controlled by R. C. of A.
- WESTLAND (KDOY).—System, R. C. of A., 1000; w. l., 300, 600.
- WEST O'ROWA.—Station operated and controlled by S. O. R. S.
- WESTWEGO.—System, R. C. of A., 1000.
- W. F. WHITE.—Range, 150; system, R. C. of A., 1000; w. l., 300, 600.
- WILLIAM A. REISS.—Range, 150; system, R. C. of A., 1000.
- WILLIAM G. MATHER.—System, R. C. of A., 1000.
- WILLIMANTIC.—System, Navy-Kilbourne & Clark, 1000; w. l., 300, 450, 600.

WINONA COUNTY.—Range, 300; system, Wireless Improvement Co., 1000; w. l., 300, 450, 600.

WM. BOYCE THOMPSON.—Range, 300; system, R. C. of A., 1000; w. l. 300, 600.

YANKEE ARROW.—Station operated and controlled by R. C. of A.

COMMERCIAL LAND AND SHIP STATIONS, ALPHABETICALLY BY CALL SIGNALS.

KDQQ, *read* Pocantico; KDQR, *read* John C. Kirkpatrick; strike out all particulars following the call signals, KDSE, KEQC, KEQD, KOPX, KUJD, WEB, WEH WJQ, WKH, and WXAO.

GOVERNMENT 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 June 30, 1921.]

SEA GATE, N. Y. (NAH).—Strike out all particulars.

APPLEDORE ISLAND, ME.—Strike out all particulars.

FORT HOWARD, MD.—Call letters changed to WYCC.

FORT LEAVENWORTH, KANS.—Strike out all particulars.

JACKSONVILLE, FLA.—Strike out all particulars.

PORT ROYAL, S. C.—*Read* Parris Island, S. C.

SLIP POINT, WASH. (NPD).—Strike out all particulars.

WASHINGTON, D. C. (WUP).—Strike out all particulars.

GOVERNMENT 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 June 30, 1921.]

S. P. 1128 (Conestoga).—Strike out all particulars.

GOVERNMENT LAND AND SHIP STATIONS, ALPHABETICALLY BY CALL SIGNALS.

WZAC, *read* WYCC; NAV, *read* Parris Island, S. C.; strike out all particulars following the call signals NAGP, NFI, NPD (Slip Point, Wash.), NTW, WUD, and WUP.

SPECIAL LAND STATIONS, BY NAMES OF STATIONS.

BURLINGAME, CALIF. (6ZR).—*Read* Los Angeles, Calif.

DALLAS, TEX. (5ZG).—Strike out all particulars.

HARTFORD, CONN. (1XV).—Strike out all particulars.

KANSAS CITY, MO. (9ZZ).—Strike out all particulars.

OAKLAND, CALIF. (6XX).—Strike out all particulars.

ROCKLAND, ME. (1XQ).—Strike out all particulars.

SAN ANTONIO, TEX. (5ZAI).—Call signal changed to 5ZAK.

SAN FRANCISCO, CALIF. (6XC).—Pacific Radio Supplies Co. owner of station.

MISCELLANEOUS.

OPERATOR'S LICENSE SUSPENDED.

First-grade license No. 19331, issued at New Orleans, November 13, 1919, has been suspended for a period of three months for violation of article 6 of the International Convention service regulations, in that the holder of the license transmitted superfluous signals.

BARRED FROM EXAMINATION.

Recently an applicant for a radio operator's license was barred from taking another examination for a period of one year, as he attempted to procure his license in a fraudulent manner by copying information from a textbook during the time of his examination.

STATIONS IN CHINA.

The Chinese Government maintains coast stations at Woosung (XSG), Foochow (XOW), and Canton (XNP) for exchange of telegrams between ships at sea and any telegraph office in China, and no other station on the coast of China has the right to handle public correspondence emanating or terminating in China. This information was recently received from the Director General of Telegraphs, Peking, China.

PUBLICATIONS ON RADIO BY THE BUREAU OF STANDARDS.

The following articles regarding radio work of the Bureau of Standards have been published recently:

Measurements on Audio-Frequency Amplifiers. By L. M. Hull. *Wireless Age*, 8, page 12, June, 1921.

Radio Communication with Postal Airplanes. By L. E. Whittemore and J. L. Bernard. *Aerial Age Weekly*, 13, April 11, 18, and 25, 1921, pages 105, 127, and 155.

The Distributed Capacity of Inductance Coils. By G. Breit. *Physical Review*, 17, page 649, June, 1921.

The Department of Commerce Radio Fog Signaling System. By F. A. Kolster. *Shipping*, page 13, February 25, 1921.

Radio Signal Fading Phenomena. By J. H. Dellinger and L. E. Whittemore. *Journal of the Washington Academy of Sciences*, June 4, 1921.

RADIO FOG-SIGNAL STATIONS.

Radio fog signals were established on May 1 last at Ambrose Channel Light Vessel, Fire Island Light Vessel, and Sea Girt Light Station. A vessel equipped with radio compass may determine its bearing from the above signals. The signals are operated each day from 9 to 9.30 a. m. and from 3 to 3.30 p. m. and continuously during thick or foggy weather. Signals are transmitted on 1,000-meter wave-length, as follows:

Ambrose Channel Light Vessel transmits a series of single dashes for 20 seconds, silent 20 seconds.

Fire Island Light Vessel transmits a series of double dashes for 25 seconds, silent 25 seconds.

Sea Girt Light Station transmits a series of triple dashes for 60 seconds, silent 6 minutes.

INFORMATION FROM THE BERNE INTERNATIONAL BUREAU.

Great Britain.—The British Government advises that two general call signals, GEA and GEZ, have been assigned to stations rendering service for aerial navigation. GEA designates any airplane of the British Aerial Forces and GEZ designates any land station.

Iceland.—Normal time was reestablished on July 1 last.

Hungary.—The radio station of Csepel transmits, daily, between 10.20 and 10.30 p. m. (central European time), the bulletins of the Institute of Meteorology and Earth Magnetism at Budapest.

Italy.—Radiogoniometric bearings rendered by a fixed (shore) Italian station, on the request of a mobile station (ship), shall be accepted on the collection of a fixed coast charge of 6 francs for each bearing. Radiograms of this kind are to be handled at the point of liquidation of accounts in the same way as ordinary radiograms of ships.

LOST COMMERCIAL RADIO OPERATORS' LICENSES.

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

Name.	Grade.	Number.	Date issued.	Port issued.
Bauer, Joseph T.	First.	15707	June 12, 1918	Seattle.
Boothroyd, P. D.	do.	20167	Oct. 27, 1919	Do.
Brown, Louis.	do.	21012	Apr. 14, 1921	New York.
Butler, Ralph E.	do.	22457	Apr. 12, 1920	Seattle.
Chipman, Gordon P.	do.	20107	Sept. 22, 1919	Do.
Coman, Lucian D.	do.	16379	Nov. 28, 1919	Detroit.
Davis, Burton L.	do.	16846	Jan. 22, 1919	Boston.
Downing, John F.	do.	19706	Nov. 21, 1919	Do.
Dunlap, William T.	do.	23680	Nov. 5, 1920	New York.
Eberlin, Viggo C.	do.	21021	Apr. 19, 1921	Do.
Gates, Francis S.	do.	21751	Feb. 10, 1920	San Francisco.
Gerber, John H.	do.	20769	Apr. 24, 1920	New York.
Gordon, Henry.	do.	18952	Aug. 18, 1919	Do.
Grout, Leslie H.	do.	19042	Sept. 4, 1919	Do.
Hansen, Lincoln.	Second.	15160	May 17, 1920	Do.
Helgeson, Harry G.	First.	19855	Feb. 13, 1920	Baltimore.
Hendrix, Paul A. T.	do.	24078	June 25, 1920	San Francisco.
Hunt, Howard E.	do.	18707	July 24, 1919	Boston.
Hyman, Harry.	do.	22125	July 17, 1920	Baltimore.
Keefe, Francis M.	do.	21451	Feb. 18, 1920	Boston.
Klosner, Morris.	do.	19219	Oct. 10, 1919	New York.
LeRoy, Frank S.	Second.	15831	Jan. 30, 1920	Do.
McDonald, John W.	First.	24126	Feb. 2, 1921	San Francisco.
McElroy, Charles A.	do.	21390	July 15, 1920	Boston.
Miller, William C.	do.	16931	May 23, 1919	Washington, D. C.
Nunan, Joseph.	Second.	17580	July 19, 1920	New York.
Otten, George C.	First.	18535	June 5, 1919	Do.
Red, W. K. H.	do.	20505	Nov. 24, 1919	Do.
Sabin, G. C.	do.	19733	Dec. 9, 1919	Boston.
Schell, Leon.	do.	22169	Oct. 8, 1920	Philadelphia.
Verret, Chas. Noah.	do.	19042	Sept. 4, 1919	New York.

STATION CLOSED.

The radio station operated by the East Coast Fisheries Co. at Rockland, Me., call letters WST, will close on September 7 at midnight.

CHANGE IN RATES FOR NAVAL STATIONS.

Effective November 1 next the delivery rates for traffic destined to points in Panama via the naval stations in the Canal Zone will be as follows:

2 c. per word for the first 10 words, 1 c. for each word thereafter, in addition to the regular amount for the charge of receiving radio stations.

EXAMINATION FOR RADIO INSPECTOR.

The U. S. Civil Service Commission will hold an examination on October 5 next for radio inspector and assistant radio inspector to fill vacancies which may occur in the Bureau of Navigation, Department of Commerce. For further information apply to the Commission.

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