Radio Service Bulletin

Issued Monthly by Bureau of Navigation (Department of Commerce)

Washington, September 1, 1921—No. 53

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Abbreviations

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.)

R. C. of A. = Radio Corporation of America.
Co. = Company.
Corp. = Corporation.
& = And.

65901—21—1
# RADIO SERVICE BULLETIN.

## 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.]

<table>
<thead>
<tr>
<th>Station</th>
<th>Call signal</th>
<th>Wave lengths</th>
<th>Service</th>
<th>Hours</th>
<th>Station controlled by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bakersfield, Calif.</td>
<td>WJT</td>
<td>300, 400, 600</td>
<td>PR</td>
<td>X</td>
<td>Alfred Harrel</td>
</tr>
<tr>
<td>Chicagof, Alaska</td>
<td>KRX</td>
<td>400, 460, 500</td>
<td>PR</td>
<td>X</td>
<td>Chichagof Mining Co.</td>
</tr>
<tr>
<td>Dallas, Tex.</td>
<td>WRR</td>
<td>200, 300, 375, 600</td>
<td>PR</td>
<td>X</td>
<td>City of Dallas</td>
</tr>
<tr>
<td>Detroit, Mich.</td>
<td>WQX</td>
<td>200, 300, 375, 600</td>
<td>PR</td>
<td>X</td>
<td>City of Dallas (Police and Fire Sign Dept.)</td>
</tr>
<tr>
<td>Hartford, Conn.</td>
<td>WQB</td>
<td>200, 300, 375, 600</td>
<td>PR</td>
<td>X</td>
<td>Central States Radio Service</td>
</tr>
<tr>
<td>Lima, Ohio</td>
<td>WBY</td>
<td>1700</td>
<td>PR</td>
<td>X</td>
<td>C. D. Tusa Co</td>
</tr>
<tr>
<td>Skagit Power Site, Wash.</td>
<td>WJE</td>
<td>300, 450, 550, 600</td>
<td>PR</td>
<td>X</td>
<td>City of Seattle, Light Dept.</td>
</tr>
<tr>
<td>Taft, Calif.</td>
<td>WJK</td>
<td>300, 400, 600</td>
<td>PR</td>
<td>X</td>
<td>Alfred Harrel</td>
</tr>
</tbody>
</table>

1. Range, 90; system, composite; rates, none.
2. Loc. (approximately) O 90° 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; rates, 100; 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° 27' 00": range, 200; rates, none.
8. Loc. (approximately) O 121° 15' 00", N 48° 46' 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.]

<table>
<thead>
<tr>
<th>Name of vessel</th>
<th>Call signal</th>
<th>Rates.</th>
<th>North and South American service</th>
<th>Transoceanic service</th>
<th>Service</th>
<th>Hours</th>
<th>Owner of vessel</th>
<th>Station controlled by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empire Arrow</td>
<td>KDUG</td>
<td>Cents</td>
<td>Cents</td>
<td>PG</td>
<td>X</td>
<td></td>
<td>Standard Transportation Co.</td>
<td>Edgar Palmer</td>
</tr>
<tr>
<td>Guinevere</td>
<td>KDUP</td>
<td></td>
<td></td>
<td>PG</td>
<td>X</td>
<td></td>
<td>American S. S. Co.</td>
<td>Owner of vessel</td>
</tr>
<tr>
<td>Half Moon</td>
<td>KDUP</td>
<td></td>
<td></td>
<td>PG</td>
<td>X</td>
<td></td>
<td>Standard Oil Co. of N. J.</td>
<td></td>
</tr>
<tr>
<td>Harry Bates</td>
<td>KDUB</td>
<td></td>
<td></td>
<td>PG</td>
<td>X</td>
<td></td>
<td>U. S. Steel Products Co.</td>
<td></td>
</tr>
<tr>
<td>John D. Archbold</td>
<td>KDUM</td>
<td></td>
<td></td>
<td>PG</td>
<td>N</td>
<td></td>
<td>American S. S. Co.</td>
<td></td>
</tr>
<tr>
<td>Knoxville City</td>
<td>KDUO</td>
<td></td>
<td></td>
<td>PG</td>
<td>X</td>
<td></td>
<td>U. S. S. B.</td>
<td>R. C. of A.</td>
</tr>
<tr>
<td>Louis R. Davidson ¶</td>
<td>KDUH</td>
<td>4</td>
<td>4</td>
<td>PG</td>
<td>X</td>
<td></td>
<td>Great Lakes Transit Corp.</td>
<td>James Shevan</td>
</tr>
<tr>
<td>Lubrico</td>
<td>KDUC</td>
<td>4</td>
<td>4</td>
<td>PG</td>
<td>X</td>
<td></td>
<td>U. S. S. B.</td>
<td></td>
</tr>
<tr>
<td>Octorara</td>
<td>WCED</td>
<td>4</td>
<td>4</td>
<td>PG</td>
<td>X</td>
<td></td>
<td>Great Lakes Transit Corp.</td>
<td></td>
</tr>
<tr>
<td>Patride</td>
<td>KDTX</td>
<td></td>
<td></td>
<td>PG</td>
<td>X</td>
<td></td>
<td>James McAllister</td>
<td></td>
</tr>
<tr>
<td>Ripple</td>
<td>KDUU</td>
<td>4</td>
<td>4</td>
<td>PG</td>
<td>X</td>
<td></td>
<td>U. S. S. B.</td>
<td>S. O. R. S.</td>
</tr>
<tr>
<td>Southern Cross</td>
<td>KDTZ</td>
<td>4</td>
<td>4</td>
<td>PG</td>
<td>X</td>
<td></td>
<td>U. S. S. B.</td>
<td></td>
</tr>
<tr>
<td>Spedeljack</td>
<td>KDFU</td>
<td>4</td>
<td>4</td>
<td>PG</td>
<td>X</td>
<td></td>
<td>American S. S. Co.</td>
<td></td>
</tr>
<tr>
<td>Theodore H. Wickwire, Jr.</td>
<td>KDLU</td>
<td>4</td>
<td>4</td>
<td>PG</td>
<td>X</td>
<td></td>
<td>American S. S. Co.</td>
<td></td>
</tr>
<tr>
<td>West Prospect</td>
<td>KDUK</td>
<td>4</td>
<td>4</td>
<td>PG</td>
<td>X</td>
<td></td>
<td>American S. S. Co.</td>
<td></td>
</tr>
</tbody>
</table>

1. Range, 150; system, Navy-Wireless Specialty Apparatus Co., 1000; w. l., 300,600.
2. Range, 100; 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, Mareoni; 120; w. l., 300,600.
5. Range, 100; system, Deforest; w. l., 1, 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.]

<table>
<thead>
<tr>
<th>Call signal</th>
<th>Name</th>
<th>Call signal</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>WBY</td>
<td>Lima, Ohio</td>
<td>KDUC</td>
<td>Lubrico</td>
</tr>
<tr>
<td>WCD</td>
<td>Octorara</td>
<td>KDUD</td>
<td>Knoxville City</td>
</tr>
<tr>
<td>WJE</td>
<td>Skagit Power Site, Wash</td>
<td>KDUF</td>
<td>Speeljacks</td>
</tr>
<tr>
<td>WJT</td>
<td>Bakersfield, Calif.</td>
<td>KDUG</td>
<td>Empire Arrow</td>
</tr>
<tr>
<td>WJB</td>
<td>Taft</td>
<td>KDUL</td>
<td>Louis R. Davidson</td>
</tr>
<tr>
<td>WQB</td>
<td>Hartford, Conn.</td>
<td>KDUI</td>
<td>William T. Roberts</td>
</tr>
<tr>
<td>WQX</td>
<td>Detroit, Mich.</td>
<td>KDUK</td>
<td>West Prospect</td>
</tr>
<tr>
<td>WAR</td>
<td>Dallas, Tex.</td>
<td>KDUL</td>
<td>Theodore H. Wickwire, Jr</td>
</tr>
<tr>
<td>KDTX</td>
<td>Patricia</td>
<td>KDUN</td>
<td>Ripple</td>
</tr>
<tr>
<td>KDTZ</td>
<td>Half Moon</td>
<td>KDXF</td>
<td>Guinevere</td>
</tr>
<tr>
<td>KDUW</td>
<td>Harry Yates</td>
<td>KRX</td>
<td>Chicago, Alaska</td>
</tr>
<tr>
<td></td>
<td></td>
<td>KVV</td>
<td>Seattle, Wash.</td>
</tr>
</tbody>
</table>

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.]

<table>
<thead>
<tr>
<th>Station</th>
<th>Call signal</th>
<th>Station controlled by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fort D. A. Russel, Wyo.</td>
<td>WYCK</td>
<td>War Department.</td>
</tr>
<tr>
<td>Fort Douglas, Utah</td>
<td>WYCI</td>
<td>Do</td>
</tr>
<tr>
<td>Jefferson Barracks, Mo.</td>
<td>WYCI</td>
<td>Do</td>
</tr>
<tr>
<td>Memphis, Tenn.</td>
<td>WYDB</td>
<td>Inland &amp; Coastwise Waterways Service, War Department.</td>
</tr>
<tr>
<td>New Orleans, La.</td>
<td>WYDC</td>
<td>Do</td>
</tr>
<tr>
<td>Norvik, Alaska.</td>
<td>WYMS</td>
<td>Washington-Alaska Military Cable &amp; Telegraph System.</td>
</tr>
<tr>
<td>St. Louis, Mo.</td>
<td>WYDA</td>
<td>Inland &amp; Coastwise Waterways Service, War Department.</td>
</tr>
</tbody>
</table>

Government ship stations, alphabetically by names of stations.
[Additions to the List of Radio Stations of the United States, edition of June 30, 1921.]

<table>
<thead>
<tr>
<th>Name of ship.</th>
<th>Call signal</th>
<th>Name of ship.</th>
<th>Call signal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baton Rouge 1</td>
<td>WYDI</td>
<td>Natchez 1</td>
<td>WYDD</td>
</tr>
<tr>
<td>Cairo 1</td>
<td>WYDF</td>
<td>New Orleans 1</td>
<td>WYDH</td>
</tr>
<tr>
<td>Great Northern</td>
<td>NAXL</td>
<td>Shawnee 1</td>
<td>NIZJ</td>
</tr>
<tr>
<td>Haifa</td>
<td>NITF</td>
<td>St. Louis</td>
<td>WYDG</td>
</tr>
<tr>
<td>Memphis 1</td>
<td>WYDJ</td>
<td>Tampa 1</td>
<td>NTC</td>
</tr>
<tr>
<td>Modoc 1</td>
<td>NIVD</td>
<td>Vicksburg 1</td>
<td>WYDE</td>
</tr>
<tr>
<td>Mohave 1</td>
<td>NIXB</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.]

<table>
<thead>
<tr>
<th>Call signal</th>
<th>Name of station.</th>
<th>Call signal</th>
<th>Name of station.</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAXL</td>
<td>Great Northern</td>
<td>WYDA</td>
<td>St. Louis, Mo.</td>
</tr>
<tr>
<td>NITC</td>
<td>Tampa</td>
<td>WYDB</td>
<td>Memphis, Tenn.</td>
</tr>
<tr>
<td>NITF</td>
<td>Haifa</td>
<td>WYDC</td>
<td>New Orleans, La.</td>
</tr>
<tr>
<td>NITR</td>
<td>Mohave</td>
<td>WYDH</td>
<td>Louis R. Davidson</td>
</tr>
<tr>
<td>NIVD</td>
<td>Modoc</td>
<td>WYDE</td>
<td>Vicksburg</td>
</tr>
<tr>
<td>NIZJ</td>
<td>Shawnee</td>
<td>WYDS</td>
<td>Cairo</td>
</tr>
<tr>
<td>WYCI</td>
<td>Noorvik, Alaska</td>
<td>WYDG</td>
<td>St. Louis</td>
</tr>
<tr>
<td>WYDJ</td>
<td>Fort Douglas, Mo.</td>
<td>WYDI</td>
<td>Baton Rouge</td>
</tr>
<tr>
<td>WYCK</td>
<td>Fort D. A. Russel, Wyo.</td>
<td>WYDJ</td>
<td>Memphis</td>
</tr>
</tbody>
</table>
### RADIO SERVICE BULLETIN.

**Special land stations, alphabetically by names of stations.**

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

<table>
<thead>
<tr>
<th>Station</th>
<th>Call signal</th>
<th>Station controlled by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baltimore, Md.</td>
<td>3XAA</td>
<td>E. Craig Densten.</td>
</tr>
<tr>
<td>Baltimore, Md.</td>
<td>3XT</td>
<td>R. Selway Collins.</td>
</tr>
<tr>
<td>Baltimore, Md.</td>
<td>3XX</td>
<td>Louis E. Richwien.</td>
</tr>
<tr>
<td>Detroit, Mich</td>
<td>3XAB</td>
<td>City of Detroit, Police Department.</td>
</tr>
<tr>
<td>Enterprise, Oreg.</td>
<td>7ZH</td>
<td>Orland M. Heacock.</td>
</tr>
<tr>
<td>Houston, Tex.</td>
<td>5XS</td>
<td>Tel Electric Co.</td>
</tr>
<tr>
<td>Kansas City, Mo.</td>
<td>9XK</td>
<td>Robert R. Moore.</td>
</tr>
<tr>
<td>Montgomery, Ala.</td>
<td>5XR</td>
<td>S. O. F. Rathbourn.</td>
</tr>
</tbody>
</table>

### Special land stations grouped by districts.

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

### 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.

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

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

**AGOWDAY.**—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.
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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 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.

COLUMBIA.—Range, 300; system, R. C. of A., 1000; hours, X.

CONCRO.—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.

DOANE BROOK.—Strike out all particulars.


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 W. BROWN.—Range, 150; system, R. C. of A., 1000; w. l., 300, 600.


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.


JOHN P. REISS.—System, R. C. of A., 1000.

JOSEPH R. PARBOTT.—Range, 150; system, R. C. of A., 1000.

JUNIATA (WCB).—System, R. C. of A., 1000.

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

LAKE AGOMA.—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.
Lake Land.—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.
Minneapolis (WEK).—U. S. Shipping Board owner of vessel.
Monana.—Range, 300; system, Navy, 1000; w. l., 300, 450, 600.
Mopang.—Strike out all particulars.
Mopun 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.
Octoara.—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 Ries.—Range, 150; system, R. C. of A., 450.
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.
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.
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.

Fort 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. (5ZAT).—Call signal changed to 5ZAK.

San Francisco, Calif. (6XC).—Pacific Radio Supply 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.
RADIO SERVICE BULLETIN.

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:


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.
<table>
<thead>
<tr>
<th>Name</th>
<th>Grade</th>
<th>Number</th>
<th>Date Issued</th>
<th>Port Issued</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bauer, Joseph T.</td>
<td>First</td>
<td>15707</td>
<td>June 12, 1918</td>
<td>Seattle</td>
</tr>
<tr>
<td>Boothroyd, P. D.</td>
<td>do</td>
<td>20167</td>
<td>Oct. 27, 1919</td>
<td>Do</td>
</tr>
<tr>
<td>Brown, Lewis</td>
<td>do</td>
<td>25012</td>
<td>Apr. 14, 1921</td>
<td>New York</td>
</tr>
<tr>
<td>Butler, Ralph E.</td>
<td>do</td>
<td>22437</td>
<td>Apr. 12, 1920</td>
<td>Seattle</td>
</tr>
<tr>
<td>Chipman, Gordon F.</td>
<td>do</td>
<td>26101</td>
<td>Sept. 22, 1919</td>
<td>Do</td>
</tr>
<tr>
<td>Conlan, Lucian D.</td>
<td>do</td>
<td>16379</td>
<td>Nov. 28, 1919</td>
<td>Detroit</td>
</tr>
<tr>
<td>Davis, Burton L.</td>
<td>do</td>
<td>16846</td>
<td>Jan. 22, 1919</td>
<td>Boston</td>
</tr>
<tr>
<td>Dowling, John F.</td>
<td>do</td>
<td>19705</td>
<td>Nov. 21, 1919</td>
<td>Do</td>
</tr>
<tr>
<td>Dunn, William T.</td>
<td>do</td>
<td>23630</td>
<td>Nov. 5, 1920</td>
<td>New York</td>
</tr>
<tr>
<td>Eberlin, Vigo C.</td>
<td>do</td>
<td>21021</td>
<td>Apr. 19, 1921</td>
<td>Do</td>
</tr>
<tr>
<td>Gates, Francis S.</td>
<td>do</td>
<td>21741</td>
<td>Feb. 10, 1920</td>
<td>San Francisco</td>
</tr>
<tr>
<td>Garber, John H.</td>
<td>do</td>
<td>25799</td>
<td>Apr. 24, 1920</td>
<td>New York</td>
</tr>
<tr>
<td>Gordon, Henry</td>
<td>do</td>
<td>18962</td>
<td>Aug. 18, 1919</td>
<td>Do</td>
</tr>
<tr>
<td>Grout, Leslie H.</td>
<td>do</td>
<td>19442</td>
<td>Sept. 4, 1919</td>
<td>Do</td>
</tr>
<tr>
<td>Hanser, Lincoln</td>
<td>Second</td>
<td>16165</td>
<td>May 17, 1920</td>
<td>Do</td>
</tr>
<tr>
<td>Halsey, Harry</td>
<td>First</td>
<td>19665</td>
<td>Feb. 13, 1920</td>
<td>Baltimore</td>
</tr>
<tr>
<td>Hendrix, Paul A. T.</td>
<td>do</td>
<td>24074</td>
<td>June 25, 1920</td>
<td>San Francisco</td>
</tr>
<tr>
<td>Hunt, Howard E.</td>
<td>do</td>
<td>17470</td>
<td>July 24, 1919</td>
<td>Boston</td>
</tr>
<tr>
<td>Hyman, Harry</td>
<td>do</td>
<td>22135</td>
<td>July 17, 1920</td>
<td>Baltimore</td>
</tr>
<tr>
<td>Keefe, Francis M.</td>
<td>do</td>
<td>21450</td>
<td>Feb. 18, 1920</td>
<td>Boston</td>
</tr>
<tr>
<td>LeRoy, Frank S.</td>
<td>Second</td>
<td>13551</td>
<td>Jan. 30, 1920</td>
<td>Do</td>
</tr>
<tr>
<td>McDonald, John W.</td>
<td>First</td>
<td>24126</td>
<td>Feb. 2, 1921</td>
<td>San Francisco</td>
</tr>
<tr>
<td>McElroy, Charles A.</td>
<td>do</td>
<td>21390</td>
<td>July 15, 1920</td>
<td>Boston</td>
</tr>
<tr>
<td>Miller, William C.</td>
<td>do</td>
<td>19651</td>
<td>May 23, 1919</td>
<td>Washington, D.C.</td>
</tr>
<tr>
<td>Nunn, Joseph</td>
<td>Second</td>
<td>17560</td>
<td>July 19, 1920</td>
<td>New York</td>
</tr>
<tr>
<td>Olten, George C.</td>
<td>First</td>
<td>14955</td>
<td>June 5, 1919</td>
<td>Do</td>
</tr>
<tr>
<td>Red, W. K. H.</td>
<td>do</td>
<td>23905</td>
<td>Nov. 24, 1919</td>
<td>Do</td>
</tr>
<tr>
<td>Sabau, G. C.</td>
<td>do</td>
<td>19733</td>
<td>Dec. 9, 1919</td>
<td>Boston</td>
</tr>
<tr>
<td>Scheir, Leon</td>
<td>do</td>
<td>22169</td>
<td>Oct. 8, 1920</td>
<td>Philadelphia</td>
</tr>
<tr>
<td>Vernet, Chas. Noah</td>
<td>do</td>
<td>19542</td>
<td>Sept. 4, 1919</td>
<td>New York</td>
</tr>
</tbody>
</table>

**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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