RADIO SERVICE BULLETIN

Washington, July 1, 1921-No. 51

| Abbreviations. New stations: Commercial land stations, by names. Commercial ship stations, by names. Commercial land and ship stations, by call signals. Government land stations, by names. Government ship stations, by names. Government land and ship stations, by call signals. | 2 3 3 3 | Commercial land and ship stations, by call signals. Government land stations, by names. Government ship stations, by names. Government land and ship stations, by call signals. Special land stations, by names. Miscellaneous: Operators' licenses suspended. Distribution of weather information by | Page |
|--|------------------|--|------|
| Government land and ship stations, by call | 3 | Operators' licenses suspended | 9 |

ABBREVIATIONS.

| to the Inter | ssary corrections to the List of Radio Stations of the United States and mational List of Radiotelegraph Stations, appearing in this bulletin under 3 "Alterations and corrections," are published after the stations affected wing order: |
|-----------------|--|
| Name G. loc. | =Name of station. =Geographical location: O=west longitude, N=north latitude, |
| Call | S=south latitude. =Call letters assigned. |
| System Range | =Radio system used and sparks per second. =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 =s. m. (12m=middsy). s =p. m. (12s=midnight). |
| Rates | —Ship or coast charges in cents: c—cents. (The rates in the interna- tional list are given in francs and centimes.) |
| I. W. T. Co. | = Independent Wireless Telegraph Co. = Radio Corporation of America. |
| | =Shipe Owners Radio Service. |
| Co. | =Company. |
| Corp. & | =Corporation. =And. |
| 56590- | 21 |

RADIO SERVICE BULLETIN.

HE 8671 2d not

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, 1920, and to the International List of Radiotelegraph Stations published by the Berne bureau.]

| | · | | | | | | |
|----------------------|-----------------|---|----------|--------|------------------------|--|--|
| Station. | Call signal. | Wave lengths. | Service. | Hours. | Station controlled by— | | |
| Hillsboro, Oreg 1 | KGH | 300, <i>600</i> , 8,300, 9,400, 14,200, | PR | x | Federal Telegraph Co. | | |
| Palo Alto, Calif. 2 | KWT | 15,300. 300, 600, 8,300, 9,400, 14,200, | PR | x | Do. | | |
| San Francisco, Calif | кни | 15,300. 300, 570, <i>600</i> | PR | x | John P. Hickey. | | |

¹ Loc. (approximately) 0.122° 59′ 00″, N. 45° 31′ 00″; rates, from San Francisco to Portland, Oreg., 15 words rush, 60 c.; day letter, 50 words, 90 c.; night letter, 50 words, 60 c.; from San Francisco to Los Angeles and San Diago, 15 words rush, 48 c.; day letter, 50 words, 72 c.; night letter, 50 words, 48 c.; from San Francisco to Seattle and Tacoma, 15 words rush, 72 c.; day letter, 50 words, 51.08; night letter, 50 words, 72 c. ¹ Loc. (approximately) 0.122° 07′ 30″, N. 37° 28′ 00″; rates, from San Francisco to Portland, Oreg., 15 words rush, 60 c.; day letter, 50 words, 90 c.; night letter, 50 words, 60 c.; from San Francisco to Los Angeles and San Diego, 15 words rush, 48 c.; day letter, 50 words, 72 c.; night letter, 50 words, 48 c.; from San Francisco to Seattle and Tacoma, 15 words rush, 72 c.; day letter, 50 words, 81.08; night letter, 50 words, 72 c.

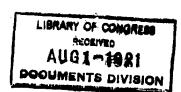
Commercial ship stations, alphabetically by names of vessels.

[Additions to the List of Radio Stations of the United States, edition of June 30, 1920, and to the International List of Radiotelegraph Stations published by the Berne bureau.]

Rates

| | | Rates. | | | 1 | | | |
|---|-----------------|--|-------------------------------|----------------------|------------------|--|-----------------------------|--|
| Name of vessel. | Call signal. | North and South Ameri- can service. | Trans- oceanic service. | Serv- ice. | Hours. | Owner of vessel. | Station con- trolled by— | |
| Agwibay | KDSR | Cents. | Cents. | PG | N | Atlantic, Gulf & West Indies S. S. Lines. | | |
| Atlanta City | KDSW | | | PG | x | U. S. Steel Products | l) | |
| Betty R. Blue Hen State Bohemian Club David McKelvy Diriano | KDTB | 4 4 | 4 4 | PR PG PG PG | X N X X | Edward G. Crossett. U. S. Shipping Board. do Tidewater Oil Co American Sugar Transit Corp. | R. C. of A. | |
| Empire State | KD8V KDTJ | 4 | 4 | , PG | N | U.S. Shipping Board. | S. O. R. S. | |
| Huron 1 | WCH | | | ₽G | x | Wyandotte Transpor | R. C. of A. | |
| IllinoisLiberator | KDSZ KDTA | | | PC | X | Texas Co | | |
| Lio. Nourmahal | KDTI | 4 | | PG | x | U. S. Shipping Board. Vincent Astor | | |
| Playa Puente Sea Ranger | K.DSS | | | PG PG | X | Union Oil Co Ship Owners & Mer- | Owner of | |
| Sea Scout Tecomate | KDST | | | PG PG | XX | chants Tugboat Codo Kyle & Purdy John B. Paine | Do. | |
| Toteco. West Faralon. Yankee Arrow. | KDSU | 4 | 4 | PG PG PG | X X X | Kyle & Purdy U. S. Shipping Board. Standard Transporta- tion Co. | | |

¹ Range, 150; system, R. C. of A., 1,000; w. l., 300, 600; rates, Great Lakes service, 2 c. per word.



RADIO SERVICE BULLETIN.

Commercial land and ship stations, alphabetically by call signals.

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

| Call signal. | Name. | Call signal. | Name. |
|--|-------|----------------------|---|
| KDSO KDSP KDSQ KDSR KDSS KDST KDSV KDSV KDSW KDSW KDSY KDSY KDSZ KDTA KDTB | Lio | KDTH KDTI KDTJ | Blue Hen State. b David McKelvy b Playa. b Betty R b Yankee Arrow b Walter Arrow b Nourmahal b Hammac. b Hillsboro, Oreg c San Francisco, Calif. c Huron b Harvard. b |

Government land stations, alphabetically by names of stations.

[Additions to the List of Radio Stations of the United States, edition of June 30, 1920, and to the International List of Radiotelegraph Stations published by the Berne bureau.]

| Station. | Call signal. | Station controlled by— |
|--------------------------|-----------------|------------------------|
| Manati, CubaQuantico, Va | NMB NFV | U. S. Navy. Do. |

Government ship stations, alphabetically by names of stations.

[Additions to the List of Radio Stations of the United States, edition of June 30, 1920.]

| Name of ship. | Call signal. | Name of ship. | Call signal. |
|---------------------|-----------------|---------------|-----------------|
| Corry. Eagle 24. | NUQZ NEKJ | Mahanna | NURB |

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. |
|--------------------|--|-----------------|------------------|
| NEKJ NEV NMB | Eagle 24 b Quantico, Va c Manati, Cuba c | NUQZ NURB | Corry |

Special land stations, alphabetically by names of stations.

[Additions to the List of Radio Stations of the United States, edition of June 30, 1920, only.]

| Station. | Call signal. | Station controlled by- |
|--|---|---|
| Cambridge, Mass. Lexington, Va Napa, Calif Oakland, Calif. Olympia, Wash. Philiadelphia, Pa Pittsburgh, Pa San Antonio, Tex Do Do Spokane, Wash Sunnyvale, Calif. Worcester, Mass. | 3ZX 6ZAD 6ZAE 7ZP 3XV 8XM 5XP 5ZAI 5ZAI 5ZR 7YL 6XAG | Clapp-Eastham Co. Harry M. Quisenberry. J. J. Mahler, jr. Chris F. Eiferle. Edwin W. Wilson. Thomas Appleby. Phillips Thomas. E. M. Baker. R. C. Walker. John C. Rodriguez. North Central High School. The Radio Shop. Worcester Polytechnic Institute. |

Special land stations grouped by districts.

| Call signal. | District and station. | Call signal. | District and station. |
|---|--|---|--|
| 1XAB 1YK 3XV 3ZX 5XP 5ZAI 5ZR | First district: Cambridge, Mass. Worcester, Mass. Third district: Philadelphia, Pa. Lexington, Va. Fifth district: San Antonio, Tex. Do. Do. | 6XAG 6ZAD 6ZAE 7YL 7ZP 8XM | Sixth district: Sunnyvale, Calif. Napa, Calif. Oakland, Calif. Seventh district: Spokane, Wash. Olympia, Wash. Pittsburgh, Pa. |

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 39, 1920, and to the International List of Radiotelegraph Stations, published by the Berne bureau.]

East Hampton, N. Y.—Range, 500; system, Cutting & Washington, 1000; w. l., 300 600, 1800.

FALL RIVER MILLS, CALIF.—Range, 100; system, composite; rates, none.

LOST HARBOR, ALASKA.-Range, 200

NEWARK, N. J.-W. 1., 300, 600, 3100.

NEWPORT, R. I.—Range, 300; system, Marconi, 1,000; w 1., 300, 450, 600; hours, 8 p. m.-5 a. m.

Susanville, Calif.—Range, 100; system, composite, 240; rates, none.

COMMERCIAL SHIP STATIONS, ALPHABETICALLY BY NAMES OF VESSILS.

Alterations and corrections to be made to the List of Radio Stations of the United States, edition of June 30, 1920, and to the International List of Radiotelegraph Stations, published by the Berne bureau.]

Admiral Sebree.-Range, 150; hours, X.

AJAX -South Pacific Seas Co. owner of vessel.

A RDEN -Station operated and controlled by S. O. R. S.

Auditor.—Range, 300; system, Navy-Marconi, 1,000.

BAYOU CHICO.—Station operated and controlled by I. W. T. Co.

Bristol.—Range, 300; system, Navy-R. C. of A.: 1,000; w. l., 300, 450, 600.

BYLAYL.-W. 1., 300, 450, 600.

CALLABASAS.—System, Navy, 1,000; w. J., 300, 450, 600.

Camden (KDKL).—Range, 300; system, Wireless Specialty Apparatus Co., 1,000; w.l., 300, 600; hours, X.

CHICAGO.—Range, 200.

CITY OF SEATTLE.—Range, 150; system, Marconi, 1000.

CITY OF SHERMAN.—U. S. S. B. owner of vessel.

Comus.—Range, 300; w. l., 300, 600.

Coor,-Station operated and controlled by owner of vessel.

CORONADO.—System, Navy-Kilbourne & Clark, 1000; w. 1., 300, 450, 600.

CUBORE.—Range, 300; system, Marcon', 1000; w. l., 300, 450, 600.

DARTFORD.—Station operated and controlled by S. O. R. S.

DELPHINE. -- Service, PG: hours, X.

Director.—Northern Transportation Co. owner of vessel; station operated and controlled by owner of vessel.

ELDORADO.—Range, 300; system, Marconi, 480; w. l., 300, 450, 600.

Essex.—Range, 150.

E. T. Benford.—Station operated and controlled by R. C. of A.

FLORENCE OLSON.—Station operated and controlled by owner of vessel.

Franklin County.—System, Navy-Wireless Specialty Apparatus Co., 1000; w. 1., 300, 600.

GEO. H. JONES.—System, R. C. of A., 1000.

GLENDOLA.—System, Navy-Kilbourne & Clark, 1000; w. 1, 300, 450, 600.

GLORIA WEST.—Range, 150; system, Navy-Simon, 1000; w. l., 300, 450, 600; service, PG; hours, X; station operated and controlled by owner of vessel.

GLYNDON.-W. 1., 300, 450, 600.

HASTINGS.—Station operated and controlled by I. W. T. Co.

HENRY COUNTY.—System, Navy-Wireless Improvement Co., 1000; w. 1., 300, 600.

I. J. MERRITT.—Range, 200; system, Navy-Marconi, 1,000; rates, North and South American service 4 c. per word; station operated and controlled by owner of vessel.

India Arrow.—Range, 300; system, Marconi, 1000; hours, X; rates, North and South American and transoceanic services 8 c. per word; station operated and controlled by R. C. of A.

JAVA Arrow.—Range, 300; system, R. C. of A., 1000; hours, X; station operated and controlled by R. C. of A.

J. FLETCHER FARRELL.—Sinclair Navigation Co. owner of vessel.

J. M. DANZIGER.—Range, 300.

KETCHIKAN.—Rates, transoceanic service 8 c. per word.

KEYSTONE STATE.—Station operated and controlled by S. O. R. S.

KVICHAK.—System, Marconi, 1 000; service, PR and PG; hours, N and X; rates, North and South American service 8 c. per word.

LABORER.—Northern Transportation Co. owner of vessel.

LAKE DUNMORE.—Station operated and controlled by R. C. of A.

LAKE FANDANGO.—Range, 200; system, Navy-Marconi, 1,000.

LAKE FITCH.—System, Navy-Marconi, 1000; w. l., 300, 600.

LAKE FURNAS.—Range, 200; system, Navy-Marconi, 1,000.

LAKE GEDNEY.—System, Navy-Marconi, 1,000.

LEVISA.—Range, 200.

Manukai.—Range, 150; system, R. C. of A., 1,000; rates, North and South American and transoceanic services 8 c. per word; station operated and controlled by R. C. of A.

MARGARET (KUQS).—Station operated and controlled by owner of vessel.

METAPAN.—Range, 300.

NEW ROCHELLE.—Name changed to Hudson.

NORTH WIND.—Frank W. Frueauff owner of vessel.

NUSHAGAK.—System, Marconi, 1,000; service, PG and PR; hours, N and X; rates, North and South American service 8 c. per word.

```
OHONKARA.—Station operated and controlled by owner of vessel.
```

OLDHAM.—Station operated and controlled by I. W. T. Co.

REDWOOD,-Range, 300; hours, N and X; rates, transoceanic 8 c. per word.

SANTA ANA (WAL).-Hours, N and X.

SANTA LUISA.—Range, 300.

SEAFARER.-R. Bean owner of vessel.

SEEANDBEE.—System, R. C. of A., 1,000.

SELMA CITY.—Range, 300; system, Marconi, 1,000; w. l., 300, 450, 600; hours, X; rates,

North and South American and transoceanic services 8 c. per word.

SIALIA.—System, Cutting & Washington, 1,000, also Deforest radiophone; w. 1., 300, 450, 600-phone 400; rates; North and South American, transoceanic and Great Lakes services, 4 c. per word; station operated and controlled by owner of vessel.

STAR OF GREENLAND.—Station operated and controlled by owner of vessel.

STAR OF LAPLAND.—Station operated and controlled by owner of vessel.

SUNSHINE.-Range, 300; system, Navy-Marconi, 1,000; w. 1., 300, 450, 600.

SURINAME.—Range, 200; system, Wireless Specialty Apparatus Co., 1,000; w. l., 300, 450, 600.

Swiftlight.—Range, 300; system, R. C. of A., 1,000; w. 1., 300, 450, 600; rates, North and South American and transoceanic services 8 c. per word; station operated and controlled by R. C. of A.

Tampico.—Station operated and controlled by owner of vessel.

TATOOSH.—Henry C. Peterson owner of vessel.

THOROBRED.—Service. PG; hours. X; Dutee W. Flint owner of vessel.

TULSAGAS.—Station operated and controlled by S. O. R. S.

VESTA.—Range, 300.

VIGILANT.—Station operated and controlled by owner of vessel.

WESTLAND.—System, Navy-Marconi, 1,000.

WESTWOOD.-W. 1., 300, 450, 600; hours, N.

WHITEMARSH.—E. W. Marland owner of vessel.

Asotin.

WILLIAM M. MILLS.—Station operated and controlled by owner of vessel.

WILLIAM N. PAGE.—System, Navy-Lowenstein, 1,000; w. l., 300, 450, 600.

WISLA.—Range, 275; system, English Marconi, 560; w. 1., 300, 450, 600.

W. L. STEED .- W. 1., 300, 450, 600.

WYANDOTTE (WCO).—Range, 150; system, R. C. of A., 1000.

Strike out all particulars of the following-named vessels:

Abbeville. Aberdeen. Acrema. Aculeo. Afrania. Agria. Ahala. Aiken. Aimwell. Alapaha. Albatross. Alcis. Alderman. Allison. Alpaco. Alta. Amoron. Andra. Angelina. Anthers. Arado. Arambi.

Ardena.

Aspenhill. Astoria. Awensdaw. Baganito. Bagoso. Baladan. Balosaro. Balsto. Banago. Battahatchee. Battonville. Baxley. Bayou Teche. Bedminster. Belding. Beloit. Bensonia. Beres. Blakeley.

Blue Eagle.

Blythedale.

Bologan. Bon Secour. Boone Borad. Botsford. Boulton. Bovkin. Boynton. Braeburn. Brant. Braxton. Bromela. Brompton. Broncho. Brookwood. Buhisan. Bulana. Bushrod. Cabeza. Calala. Campello.

Bobring.

Bockonoff.

Caponka. Caribon. Cartona. Casmalia. Catawba. Cheron. Chibiabos. Clodia. Conewago. Coot. Corone. Corvallis. Cowets. Cresap. Cruso Cumberland.

Carlew.

Dalgada.

Danvers.

Dertona.

Diana.

Daca.

Datis.

Sea Bird. Dungeness. Hokah. Moraine. A 6 747 Sheldrake. Esopus. Horado. Moritz. Evota. Issaguena. Snipe. Falmouth. Sturgeon Bay. Itanca. Nashotah. Fassett. Jamaica. Necolah. Swampscott. Newton (KIRC). Fernandina. Kanakee. Tanks. Fish Hawk. Kasota. Northbend. Tesi. Flavel. Katia. Obak. Tern. Folsom. Kenosha. Oglethorpe. Toka. Fonduco. Kimta. Okiva. Tuwetanka. Forster. Kingfisher (KOQR). Oraton. Tyee (KENB). Fort Leavenworth. Klamath. Osprey. Fort Russell. La Forge. Wakanna. Owatama. Fort Sill. Lone Star. Panga. Wakiki. Fort Smith. Lonoke. Pascagoula. Waneyanda. Fort Wright. Loon. Penguin. Wasco. Governor. Mahnet. Plover. Wayhut. Gray Eagle. Makanda. Quemakoning. Wenakee. Quidnic. Grayling. Maratanza. Widgeon. Grebs. Marshfield. Quinault (KNEI). Wild Goose. Wonahbe. Harish. Mattapan. Quinneseco. Haverhill. Medford. Redlands. Wovaca. Heron. Medric. Sapona. Zenith. Himoto. Mono. Seris.

COMMERCIAL LAND AND SHIP STATIONS, ALPHABETICALLY BY CALL SIGNALS.

KDCI. read Hudson. Strike out all particulars following the call signals. KDJA. KEBK, KEBL, KECC, KECT, KECZ, KEDB, KEDC, KEDD, KEFF, KELD, KELJ, KELV, KEMC, KEMR, KENB, KENL, KEPB, KEPX, KEQQ, KESF, KETD, KETF, KETK, KETR, KETT, KEVL, KEZT, KFM, KGB, KIBS, KIBT, KIBX, KICB, KICF, KICG, KICJ, KICT, KICX, KIDK, KIFF, KIFS, KIFT, KIGY. KIKV, KILB, KILC, KILD, KIRC, KISB, KJOI, KKIA, KKEA, KKIE, KKII, KKIO, KKOU, KLAI, KLN, KMUO, KNEI, KNII, KNIO, KNOE, KNUA. KOLG, KOMJ, KOQR, KOSB, KOSK, KOSP, KOSZ, KOTC, KOTS, KPAE, KPAO, KPAU, KPEI, KPEU, KPIA, KPIU, KPOA, KPOI, KPUA, KPUE, KPUO, KQAO, KRAI, KRAO, KRAU, KRIE, KROA, KRUA, KRUE, KSEO, KTEO, KUDB, KUDF, KUFL, KUFM, KUFQ, KUFS, KUFT, KUFX, KUGF, KUGJ, KUJM, KUJN, KUMJ, KURQ, KVEE, KVEU, KZE, KZUA, KZUO, WBII, WBIO, WBIU, WBOA, WBOU, WCOA, WCAA, WCAO, WCEI, WCEO, WDAE, WDAI, WDEE, WDUE, WGAU, WGIO, WGR, WGUE, WGUU, WJAE, WJEU, WJUU, WKIA, WKOE, WKOI, WLB, WLIU, WLOA, WLUE, WMOI, WMOO, WMOU, WMUU, WNEU, WNIA, WNOU, WNUA, WNUE, WNUI, WPAA, WPB, WPOE, WPOI, WQAI, WQIE, WQIU, WQOO, WQUI, WRIU, WRUE, WRUI, WRUU, WSAU, WSIA, WSIE, WSII, WTAU, WTIA, WTOA, WTOE, WVEO, WVII, WVUI, WVUO, WVUU, WXIE, WXII, WXIU, WXUU, WZAI, WZAO, WZUU.

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, 1920.]

SEA GATE, N. Y. (NAH).—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, 1920.]

Strike out all particulars of the following-named vessels:

| Astoria. | 8. C. 72. | 8. C. 182. | S. C. 262. |
|-----------------------|------------|------------|------------|
| Canonicus. | 8. C. 73. | S. C. 184. | S. C. 265. |
| Castine. | 8. C. 74. | S. C. 187. | S. C. 206. |
| Ragle 2δ. | 8. C. 77. | 8. C. 193. | S. C. 268. |
| G-1. | S. C. 95. | 8. C. 194. | S. C. 269. |
| Samoa. | S. C. 96. | S. C. 196. | 8. C. 272. |
| 8. P. 609 (Nolromis). | S. C. 105. | 8. C. 206. | S. C. 282. |
| 8. C. 17. | S. C. 109. | S. C. 208. | 8. C. 288. |
| 8. C. 19. | S. C. 110. | S. C. 211. | S. C. 291. |
| B. C. 21. | S. C. 111. | S. C. 212. | 8. C. 296. |
| 8. C. 24. | 8. C. 116. | 8. C. 213. | S. C. 304. |
| 8. C. 25. | 8. C. 117. | 8. C. 215. | 8. C. 307. |
| B. C. 26. | 8. C. 113. | S. C. 216. | 8. C. 309. |
| 8. C. 35. | S. C. 120. | 8. C. 217. | 8. C. 322. |
| 8. C. 37. | 8. C. 123. | S. C. 218. | 8. C. 329. |
| 9. C. 40. | 8. C. 126. | S. C. 220. | S. C. 331. |
| 8. C. 42. | B. C. 128. | S. C. 221. | 8. C. 336. |
| 8. C. 43. | S. C. 129. | S. C. 226. | 8. C. 338. |
| 8. C. 44. | 8. C. 133. | S. C. 228. | S. C. 339. |
| 8. C. 45. | 5. Ć. 134. | S. C. 230. | 8. C. 351. |
| 8. C. 46. | S. C. 135. | 8. C. 235. | F. C. 352. |
| 8. C. 47. | 8. C. 126. | B. C. 236. | S. C. 354. |
| 8. C. 48. | B. C. 138. | 6. C. 238. | B. C. 356. |
| 8C. 49. | 8. C. 144. | S. C. 239. | 8. C. 421. |
| 8. C. 50. | S. C. 148. | 8. C. 245. | 8. C. 422. |
| 8. C. 51. | S. C. 164. | S. C. 245. | 8. C. 423. |
| 8. C. 52. | 8. C. 165. | S. C. 248. | S. C. 428. |
| 8. C. 53. | S. C. 166. | 8. C. 250, | 8. C. 429. |
| 8, C. 54. | 8. C. 167. | S. C. 254. | 8. C. 430. |
| S. C. 55. | S. C. 168. | S. C. 255. | Supply. |
| 8. C. 56. | S. C. 178. | S. C. 257. | Yankton. |
| 8. C. 68. | S. C. 180. | S. C. 258. | Yorktown. |
| 8. C. 70. | B. C. 181. | 8. C. 259. | |
| | | | |

GOVERNMENT LAND AND SHIP STATIONS, ALPHABETICALLY BY CALL SIGNALS.

Strike out all particulars following the call signals, NABR, NAH, NAMM, NCS, NDA, NEKK, NGM, NIQF, NIQG, NIQJ, NOBJ, NOBL, NOBN, NOBR, NOBS, NOBT, NOBZ, NOCC, NOCG, NOCK, NOCL, NOCM, NOCN, NOCP, NOCQ, NOCR, NOCS, NOCT, NOCV, NOCX, NOCZ, NODB, NODC, NODD, NODQ, NODS, NODV, NODX, NODZ, NOFB, NOGB, NOGC, NOGP, NOGT, NOGY, NOGX, NOJF, NOJG, NOJJ, NOJL, NOJP, NOJS, NOJV, NOJX, NOKD, NOKF, NOKG, NOKJ, NOKL, NOKP, NOKS, NOLL, NOLM, NOLN, NOLP, NOLQ, NOLS, NOLV, NOLX, NOLZ, NOMC, NOMG, NOMP, NOMQ, NOMS, NONJ, NONL, NONP, NONQ, NONR, NONT, NONV, NONX, NONZ, NOPB, NOPC, NOPK, NOPM, NOPP, NOPV, NOPX, NOQB, NOQC, NOQK, NOQL, NOQN, NOQP, NOQT, NOQV, NOQZ, NORB, NORC, NORG, NORL, NORM, NORP, NORQ, NORT, NOSK, NOSR, NOSV, NOTD, NOTP, NOTS, NOTV, NOVF, NOVP, NOVR, NOVZ, NOXC, NOXD, NOXQ, NOXR, NOXT, NOXX, NOZT, NOZV, NOZX, NQX, NSK, NTK, NXY.

SPECIAL LAND STATIONS, BY NAMES OF STATIONS.

LAWRENCE, KANS. (9YN).—Strike out all particulars.

NEW YORK, N. Y. (2XK).—Superadio Corporation, owner of station.

NORFOLK, VA. (3YD).—Strike out all particulars.

SANTA BARBARA, CALIF. (6ZY) .- Strike out all particulars.

MISCELLANEOUS.

OPERATORS' LICENSES SUSPENDED.

First-grade license No. 19920, issued at Baltimore, January 6, 1920, has been suspended for a period of three months on account of the holder of the license violating article 6 of the International Convention service regulations, in that he transmitted superfluous signals.

First-grade license No. 24055, issued at San Francisco, May 26, 1920, has been suspended for a period of one month on account of the holder of the license violating article 6 of the International Convention service regulations, in that he transmitted superfluous signals.

First-grade license No. 18101, issued at Seattle, July 28, 1919, has been suspended for a period of three months on account of the holder of the license violating article 6 of the International Convention service regulations, in that he transmitted superfluous signals.

First-grade license No. 19675 issued at Boston, October 30, 1919, has been suspended for a period of three months on account of the holder of the license violating article 6 of the International Convention service regulations, in that he transmitted superfluous signals.

DISTRIBUTION OF WEATHER INFORMATION BY NAVAL RADIO STATIONS.

In cooperation with the Office of Communications of the Navy Department the United States Weather Bureau will issue a special bulletin containing surface observations from regular Weather Bureau stations, upper-air observations from aerological stations maintained by the Navy, Army, and Weather Bureau, and a summary of weather conditions, forecasts, and warnings. The bulletin is for the benefit of marine and aviation interests, but is designed especially to meet the needs of the latter. The bulletin will begin June 1, 1921, and will be broadcasted from the naval radio station at Arlington, Va., each morning at 10.30 o'clock (75th meridian time), Sundays and holidays included. This service is in addition to the distribution now being made each night from the naval radio stations at Arlington, Va., Key West, Fla., Point Isabel, Tex., Great Lakes, Ill., and San Juan, P. R., as described in Weather Bureau circular of October 26, 1920.—From Hydrographic Bulletin, June 1, 1921.

INTERFERENCE BY EXPERIMENTAL STATIONS.

It has been reported to the Bureau that some stations, presumably experimenting, use their transmitters without giving their call signal, as required in regulations 76 and 77.

United States Department of Agriculture, Weather Bureau, Washington.

Forecast Division.

Local distribution of forecasts, storm and hurricane warnings, and weather information by naval radio stations.

[In cooperation with Office of Communications of the Navy Department.]

Beginning June 10, 1921, there will be a systematic broadcasting of wind and weather forecasts, storms and hurricane warnings, and advices relating thereto from naval radio stations on the south Atlantic and Gulf coasts, in the Caribbean Sea, and on the Great Lakes. This distribution will be in the nature of a localized service, and supplemental to the general broadcasting of weather forecasts, warnings, and bulletins from the high-powered naval radio stations at Arlington, Va., Key West, Fla., San Juan, P. R., Point Isabel, Tex., and Great Lakes, IH., as described in Weather Bureau nituality of Catalon 26, 1923, and May 16, 1921.

The table below shows the naval radio stations from which distribution will be made, their transmitting wave lengths, call letters, the information which will be broadcast therefrom, the hours of distribution (75th meridian time), and the Weather Bureau stations from which the forecasts and information will be supplied.

Whenever storm or hurricane warnings are issued in the forenoon (based on 8 a.m. observations) they will be broadcast at the same time as the wind and weather forecasts. When issued in the afternoon (based on special observations), they will be broadcast at the evening hours indicated.

Vessel owners and others desiring to receive these reports should make every effort to obtain them on regular schedules, as repetitions, except as indicated, will be made only in unusual circumstances.

Additional copies of the circular may be obtained by application to any Weather Bureau office named in the table or to Chief, U.S. Weather Bureau, Washington, D.C.

| Naval radio | station | в. | | . Danido41 | Washban Dansan | |
|-------------------|----------------------------|------------------|---|--|--|--|
| Location. | Trans- mitting wave. | Call letters. | Weather information broadcast. | Broadcasting time (75th meridian). | Weather Bureau stations issuing information. | |
| Portland, Me | 1,620 | NAB | (a) Wind and weather forecasts and storm warnings for Maine coast, Eastport to Portsmouth; advisory messages regarding storm warnings is sued for north Atlantic coast; and 8 a. m. barometric pressure, wind direction and velecity, and state of weather at Portland. | (e) Noon | Portland, Me. | |
| | | | (b) Storm warnings and advices issued in afternoon. | (ð) 8 p. m. | _ | |
| Boston, Mass | 2, 250 | NAD | (a) Wind and weather forecasts and storm warmings for New Hampshire, Massachusetts, and Rhode Island coasts; ad- | (a) 11 s. m | Boston, Mass. | |
| | | ! | visory messages regarding storm warnings issued for north Atlantic coast; and 8 a. m. baromatric pressure. | | | |
| | | | a. m. barometric pressure, wind direction and velocity, and state of weather at High- land Light, Nantucket, and Block Island. | | | |
| | | | (b) Storm warnings and advices issued in afternoon. | (b) 5 p. m. | | |
| New York, N. Y | 1,832 | NAH | (a) Wind and weather forecasts and storm warnings for New York and Connecticut coasts; | (a) 10.30 a. m | New York, N. 3 | |
| • | | | forecasts Sandy Hook to Grand Banks for European steamers; advisory messages | | · · · · · · · · · · · · · · · · · · · | |
| | | · ! | regarding storm warnings is- sued for north and middle Atlantic coasts; and 8 a. m. barometric pressure, wind di- | | • | |
| | | ! | rection and velocity, and state of weather at Sandy Hook. | | | |
| Philadelphia, Pa. | 1,948 | NAI | (b) Storm warnings and advices issued in afternoon. (a) Wind and weather forecasts | (b) 5 p. m. (a) 10.45 a. m. | Philadelphia, Pa | |
| madapma, ra. | 1, 920 | IAI | and storm warnings for New Jersey, Delaware, and Mary- land coasts; advisory mes- sages regarding storm warn- | (a) 10.40 a. m. | rmagapua, ra | |
| | | | ings issued for north and mid- dle Atlantic coasts; and 8 a. m. wind direction and veloc- | | | |
| | | | ity and state of weather at Delaware Breakwater. (b) Storm warnings and ad- | (δ) δ p. m. | | |
| Baltimore, Md | 700 | NBZ | vices issued in afternoon. (a) Wind and weather forecasts | · · · | Baltimore, Md. | |
| ŕ | | | and storm warnings for Ches- apeake Bay; advisory mes- sages regarding storm warn- ings baued for middle and south-atlantic coasts; and 8 | | | |
| | | | a. m. barometric pressure, wind direction and valocity, and state of weather at Balti- more and Norfolk. | | | |
| İ | | | (b) Storm warnings and advices issued in afternoon. | (b) 4 p. m. | | |

| Naval radio stations. | | В. | | | |
|-----------------------|----------------------------|------------------|---|--|--|
| Location. | Trans- mitting wave. | Call letters. | Weather information broadcast. | Broadcasting time (75th meridian). | Weather Bureau stations issuing information. |
| Norfolk, Va | 1, 851 | NAM | (a) Wind and weather fore- casts and storm warnings for Virginia and North Carolina coasts; advisory messages re- garding storm warnings is- sued for Chesapeake Bay and middle and south Atlantic coasts. | (a) 10.45 a.m | Cape Henry, Va. |
| | | | (b) Storm warnings and advices issued in afternoon. (c) Advisory messages regarding hurricanes. | (b) 4 p. m. 8 p. m. (c) When is- sued and re- peated at 2- hour inter- vals until midnight. | |
| | | | (d) 8a. m. and 8 p. m. barometric pressure, state of weather, wind direction and velocity, condition of sea, and visibility at Cape Henry and Cape Hatterss. | (d) 8.30 a. m. and 8.30 p. m. | |
| Charleston, S. C | 2, 250 | NAO | (a) Wind and weather forecasts and storm warnings for South Carolina coast; advisory mesages relating to storm warnings issued for middle, south Atlantic, and east Gulf coasts; and 8s. m. barometric pressure, wind direction and velocity, and state of weather at Charleston. | (a) 10.30 a. m. | Charleston, S. C. |
| | | | (b) Storm warnings and advices issued in afternoon. (c) Hurricane warnings and advisory messages relating thereto. | (b) 6 p. m. (c) When issued and repeated at 2-hour intervals until midnight. | |
| Savannah, Ga | 1, 813 | NEV | (a) Wind and weather fore- casts and storm and hurri- cane warnings for Georgia coast; advisory messages re- lating to storm warnings is- sued for middle and south Atlantic and east Gulf coasts; and 8 s. m. barometric pre- sure, wind direction and ve- locity, and state of weather at Sayannah. | (a) 11 s. m | Savannah, Ga. |
| | | | (b) Storm warnings and advices issued in afternoon. | (b) 6 p. m. | |
| | | | (c) Hurricane warnings and advisory messages relating thereto. | (c) When is- sued and re- peated at 2- hour inter- vals until midnight. | · |
| Jacksonville, Fla. | 450 | NFI | (a) Wind and weather forecasts and storm and hurricane warnings for east Florida coast, Jacksonville to Miami; advisory messages relating to storm warnings issued for middle and south Atlantic and east Gulf coasts; and 8 a. m. barometric pressure, wind direction and velocity, and state of weather at Jacksonville and Titusville. | (a) 11 a.m | Jacksonville, Fla. |
| | | · · | (b) Storm warnings and advices issued in afternoon. (c) Hurricane warnings and advisory messages relating heroto. | (b) 6 p. m. (c) When issued and repeated at 2-hour inter- | |
| | | | | vals until 7 p. m. | |

| Naval radio stations. | | | | | |
|-----------------------|----------------------------|------------------|--|---|--|
| Location. | Trans- mitting wave. | Call letters. | Weather information broadcast. | Broadcasting time (75th meridian). | Weather Bureau stations issuing information. |
| St. Augustine, Fla. | 1,851 | NAP | (a) Wind and weather forecasts and storm warnings for east Florida coast, Jacksonville to Miami; advisory messages relating to storm warnings issued for middle and south Atlantic and east Culf coasts; and 8 a. m. barometric pressure, wind direction and velocity, and state of weather at Jacksonville and Titusville. | (a) 11.30 a. m | Jacksonville, Fis. |
| | | | (b) Storm warnings and advices issued in afternoon. (c) Hurricane warnings and advisory messages relating thereto. | (c) When issued and repeated at 2-hour intervals until midnight. | |
| Miami, Pla | 1,620 | NGE | (a) Wind and weather forecasts and storm warnings for east coast of Florida, Miami to Key West; advisory messages relating to storm warnings is- sued for the middle and south Atlantic and east Gulf coasts; and 8 a. m. barometric pres- sure, wind direction and ve- locity, and state of weather at Miami. | (a) 11.30a.m | Miami, Fla. |
| | | | (b) Storm warnings and advices issued in afternoon. (c) Hurricane warnings and advisory messages relating thereto. | (b) 6 p. m. (c) When issued and repeated at 2-hour intervals until midnight. | |
| St.Petersburg,Fla. | 2,700 | NGL | (a) Wind and weather forecasts and storm warnings for west Florida coast, Key West to Apalachicola; advisory mesages relating to storm warnings issued for the south Atlantic and Gulf coasts; and 8 a.m. barometric pressure, wind direction and velocity, and state of weather at Tampa and Key West. | (a) 11.30 a. m. | Tampa, Fla. |
| | | | (b) Storm warnings and advices issued in afternoon. (c) Hurricane warnings and advisory messages relating thereto. | (b) 7 p. m. (c) When issued and repeated at 2-hour intervas until midnight | |
| Ponsacola, Fla | 2, 250 | NAS | (a) Wind and weather forecasts and storm warnings for Florida and Alabama coasts, Apalachicols to Bay St. Louis; advisory messages relating to storm warnings issued for south Atlantic and Gulf coasts; and Sa. m. barometric pressure, wind direction and velocity, and state of weather at Pensacols. | midnight. (a) 11.45 s. m | Pensacola, Fia. |
| | | | (b) Storm warnings and advices issued in a fternoon. (c) Hurricane warnings and advisory messages relating thereto. | (c) When issued and repeated at 2-hour intervals until midnight. | |

| Naval radio stations. | | | | There are 10- | Westles 7 |
|-----------------------|----------------------------|------------------|--|---|--|
| Lecation. | Trans- mitting wave. | Cali letters. | Weather information broadcast. | Broadcasting time (75th meridian). | Weather Bureau stations issuing information. |
| New Orleans, La. | 1,832 | NAT | (a) Wind and weather forecasts and storm warnings for Louisiana and Texas coasts, Bay St. Louis to Port Arthur; advisory messages relating to storm warnings issued for south Atlantic and Gulf coasts; and 8a. m. barometric pressure, wind direction and velocity, and state of weather at Burrwood and Port Arthur. | | New Orleans, La. |
| | | | (b) Storm warnings and advices issued in afternoon. (c) Hurricane warnings and advisory messages relating thereto. | (c) When issued and repeated at 2-hour intervals until midnight. | |
| Galveston, Tex | 1,813 | NKB | (a) Wind and weather forecasts and storm warnings for Texas coast, Port Arthur to Corpus Christi; advisory messages re- lating to storm warnings is- sued for the west Gulf coast; and 8 s. m. barometric pressure, wind direction and ve- locity, and state of weather at Galveston. | (a) 11.30 a. m | Galveston, Tex. |
| | | | (e) Storm warnings and advices issued in afternoon. (c) Hurricane warnings and advisory messages relating thereto. | (b) 6 p. m. (c) When issued and repeated at 2-hour intervals until midnight. | |
| Point Isabel, Tex. | 2, 250 | NAY | (a) Wind and weather forecasts and storm warnings for Texas coast, Corpus Christi to Brownsville; advisory messages relating to storm warnings issued for the west Guir coast. | (a) Noon | New Orleans, La. |
| | | | (b) Storm warnings and advices issued in afternoon. (c) Hurricane warnings and advisory messages relating thereto. | (c) When issued and repeated at 2-hour intervals until midnight. | |
| Alpen a, M ich | 1,200 | MSM | (a) Wind and weather forecasts and storm warnings for Lake Huron; advisory messages re- lating to storm warnings is- sued for the Great Lakes. (b) Storm warnings and ad- | (a) 11.45 a, m. (b) 4.45 p. m. | Alpena, Mich. |
| | | | vices issued in afternoon. (c) State of weather, wind di- rection and velocity, and con- diston of sea at 8. a. m. at Mackinaw, Middle Island, Alpena, Tawas, Harbor Beach, and Port Huron (barometric pressure Alpena) | 7.45 p. m. (c) 10.45 a. m. | |
| Buffalo, N. Y | 1,200 | NNZ | and Port Huron Included). (a) Wind and weather forecasts and storm warnings for Lake Ontario; advisory messages relating to storm warnings issued for the Great Lakes; and 3 a. m. barometric pressure, wind direction and velocity, and state of weather | (s) 10.45 a. m. | Buffalo, N. Y. |

| Naval radio stations. | | | | | |
|--|----------------------------|-------------------|--|---|--|
| Location. | Trans- mitting wave. | Call letters. | Weather information broadcast. | Broadcasting time (75th meridian). | Weather Bureau stations issuing information. |
| Cleveland Ohio | 1,080 | NRH | (a) Wind and weather fore- casts and storm warnings for Lake Erie; advisory messages relating to storm warnings issued for the Great Lakes; and 8 a.m. barometric pres- sure, wind direction and velocity, and state of weather at Toledo and Erie. | | Cleveland, Ohio. |
| Chicago, Ill | 1,200 | NUR | (b) Storm warnings and advices issued in afternoon. (a) Wind and weather forecasts and storm warnings for Lake Michigan; advisory messages relating to storm warnings issued for the Great Lakes; and 8 a. m. wind direction and velocity and state of weather at Beaver Island, | (b) 5.30 p. m. (α) 11 s. m | Chicago, Ill. |
| Duluth, Minn | 2,200 | NUX | Plum Island, and Chicago (barometric pressure Chicago included). (b) Storm warnings and advices issued in atternoon. (a) Wind and weather forecasts and storm warnings for Lake Superior; advisory messages relating to storm warnings issued for the Great Lakes; and 8 a.m. barometric pressure, wind direction and velocity, and state of weather at Duluth and Sault | (b) 5.30 p. m. (a) 10.45 s. m | Duluth , Min n. |
| Guantanamo, Cuba. | 2,750 | NAW | Ste. Marie. (b) Storm warnings and advices issued in afternoon. All hurricane warnings and advisory messages relating thereto whenever issued. | (b) 4.45 p. m. When issued and repeat- ed at about 4-hour inter- vals. | Washington, D. C. |
| Port au Prince, | 2,250 | NSC | do | do | Do. |
| Halti. San Jaun, P. R St. Thomas, V. I. St. Croix, V. I | 2,750 1,688 450 | NAU NBB NNI | do | do | San Jaun, P. R. Do. Do. |

C. F. MARVIN, Chief of Bureau.

ADDITIONAL COPIES

OP THIS PUBLICATION MAY BE PROCURED FROM THE SUPERINTENDENT OF DOCUMENTS GOVERNMENT FRINTING OFFICE WARHINGTON, D. C.

5 CENTS PER COPY SUBSCRIPTION PRICE, 25 CENTS PER YEAR

V