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DEPARTMENT OF COMMERCE
BUREAU OF STANDARDS
WASHINGTON

Letter
Circular
No.274

December 19, 1929.

SOURCES OF RADIO INFORMATION.

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1. Periodicals
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1. Periodicals.

The following is a partial list of periodicals largely devoted to radio. They are monthly, except where otherwise stated. A number of electrical and general magazines also publish considerable radio information.

Proceedings of the Institute of Radio Engineers. 33 West 39th Street, New York, N.Y. (Technical).

Bell System Technical Journal. Published by Bell Laboratories Inc., 463 West Street, New York, N.Y. (Technical).

QST. Published by American Radio Relay League, Hartford, Conn. (Semi-technical).

Radio Engineering. 52 Vanderbilt Avenue, New York, N.Y. (Semi-technical).

Radio. Pacific Building, San Francisco, Calif. (Popular).

Radio News. 184-10 Jamaica Ave., Jamaica, N.Y. (Popular).

Radio Broadcast. Published by Doubleday, Doran & Co., Garden City, N.Y. (Radio trade periodical).

Radio Retailing. Published by McGraw-Hill Inc., 10th Avenue at 36th Street, New York, N.Y. (Trade).

General Radio Experimenter. Published by General Radio Company, 30 State Street, Cambridge, Mass. (Trade, apparatus).

Radio News of Canada and Television Review, Published by Stone & Cox Ltd., 80 George Street, Toronto, Canada. (Popular).

Experimental Wireless and Wireless Engineer. Published by Ilffe & Sons Ltd., Dorset House, Tudor Street, London, E.C.4, England. (Technical).

Wireless World & Radio Review. Dorset House, Tudor Street, London, E.C.4, England. (Semi-technical). (Weekly).

Modern Wireless. Published by Amalgamated Press Ltd., Fleetway House, Farringdon Street, London, E.C.4, England. (Semi-popular).

Elektrische Nachrichten-Technik. Published by Weidmannschen Buchhandling, Berlin S.W.68, Germany. (Technical; in German).

Zeitschrift für Hochfrequenztechnik (also called Jahrbuch der Drahtlosen Telegraphie und Telephonie). Published by M. Krayn, Genthiner Strasse 39, Berlin W10, Germany. (Technical; in German).

L'Onde Electrique. Published by E. Chiron, 40 rue de Seine, Paris, France. (Technical; in French).

2. Books.

Many books have been published to meet the needs of the various classes of readers interested in radio. Below are listed a few of them. For Government radio publications, see Section 3 below.

Elementary Books.

Signaling through space without wires. Sir Oliver Lodge. 1894. Electrician Publishing Co., London, England.

Principles of wireless telegraphy. G.W.Pierce. 1910. McGraw-Hill Book Co., 370 Seventh Ave., New York, N.Y.

Modern theory and practice in radio communication. G.D. Robinson. 1920. United States Naval Institute, Annapolis, Md.

Radio for everybody. A.C.Lescarbours. 1922. McGraw-Hill Book Co., 370 Seventh Avenue, New York, N.Y.

The complete radio book. Yates and Pacent. 1922. Century Co., 353 Fourth Ave., New York, N.Y.

Radio telephony for amateurs. S.Ballantine. 1922. David McKay Co., Philadelphia, Pa.

Elementary textbook on wireless vacuum tubes. John Scott-Taggart. 1922. Wireless Press, Ltd., London, England.
Also 326 Broadway, New York City.

- Letters of a radio engineer to his son. J. Mills. 1922.
Harcourt, Brace & Co., 383 Madison Avenue, New York City.
- How radio receivers work. W.V.B.Roberts. 1924. Doubleday
Doran & Co., New York City.
- The radio manual. O.E.Dunlap, Jr. 1924. Houghton-Mifflin
Co., Cambridge, Mass.
- Practical radio. Moyer and Westrel. 1926. McGraw-Hill
Book Co., 370 Seventh Ave., New York, N.Y.
- The story of radio. O.E.Dunlap, Jr. 1927. The Dial Press,
152 W. 13th St., New York, N.Y.
- Radio engineering principles. Lauer & Brown. 2d edition.
1927. McGraw-Hill Book Co., 370 Seventh Ave., New York, N.Y.
- Principles of modern radio receiving. L.G.Hector. 1927.
Burton Publishing Co., Bigelow Bldg., Buffalo, N.Y.
- The outline of radio. J.V.L.Hogan. 1928. Little, Brown & Co.,
Boston, Mass.
- The radio manual. G.E.Sterling. 1928. D.Van Nostrand Co.,
250 Fourth Avenue, New York, N.Y.
- Experimental radio. R.R. Ramsey. 1928. Bloomington, Ind.
- Radiotelegraphy and telephony. Duncan and Drew. 1929.
John Wiley & Sons, 440 Fourth Avenue, New York, N.Y.
- The radio amateurs handbook. F.E.Handy. 1929. American
Radio Relay League, Hartford, Conn.
- Radio theory and operating. Mary T. Loomis. 1929. Loomis
Publishing Co., Washington, D.C.
- I.C.S.handbook for radio operators. 1929. International
Correspondence Schools, Scranton, Pa.
- Elements of radio communication. J.H.Morecroft. 1929.
John Wiley & Sons, 440 Fourth Avenue, New York, N.Y.

Advanced or Technical Books

- Electric waves. H. Hertz. 1900. English translation by
D.E.Jones. MacMillan & Co., 60 - 5th Ave., New York, N.Y.
- The wireless telegraphist's pocketbook of notes, formulae
and calculations. J.A.Fleming. 1915. Wireless Press, Ltd.,
London, England. Also 326 Broadway, New York City.

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- The principles of electric wave telegraphy. 4th edition. J.A.Fleming. 1919. Longmans, Green & Co., 55 Fifth Ave., New York, N.Y.
- Electric oscillations and electric waves. G.W.Pierce. 1920. McGraw-Hill Book Co., 370 Seventh Ave., New York, N.Y.
- The thermionic vacuum tube and its application. H.J.Van der Bijl. 1920. McGraw-Hill Book Co., 370 Seventh Ave., New York, N.Y.
- Wireless telegraphy and telephony. W.H.Eccles. 1921. Wireless Press, Ltd., London, England. Also 326 Broadway, New York City.
- Thermionic tubes in radio telegraphy and telephony. John Scott-Taggart. 1921. Wireless Press, Ltd., London, England. Also 326 Broadway, New York City.
- Radio-frequency measurements. E.B.Houllin. 1925. J.B. Lippincott, 227 South 6th Street, Philadelphia, Pa.
- Fundamentals of radio. J.L.Thomas. 1927. D.Van Nostrand Co., 250 Fourth Avenue, New York, N.Y.
- Wireless direction finding and directional reception. 2d edition. R.Keen. 1927. Ilffe & Sons Ltd., Dorset House, Tudor Street, London, England.
- Propagation of wireless waves. P. Pedersen. 1927. Vimmelskaftet, Copenhagen, Denmark.
- Les ondes electriques courtes (short electric waves). R.Mesny. 1927. Les Presses Universitaires de France, 49 Boulevard Saint-Michel, Paris, France.
- Theory of thermionic vacuum tube circuits. L.J.Peters. 1927. McGraw-Hill Book Co., 370 Seventh Avenue, New York, N.Y.
- Principles of radio communication. J.H.Morecroft. 1927. John Wiley & Sons, 440 Fifth Avenue, New York, N.Y.
- Robison's manual of radio telegraphy and telephony. 1927. United States Naval Institute, Annapolis, Md.
- Hochfrequenzmesstechnik (high frequency measurements). A.Hund. 2d edition. 1928. Julius Springer, Berlin, Germany.
- The fundamentals of radio. R.R.Ramsey. 1929. Bloomington, Ind.

3. U.S. Government Radio Publications.

The "Radio Service Bulletin" is a monthly publication of the United States Department of Commerce. It contains changes or additions to the list of U.S. radio stations, information regarding radio regulations, announcements of new radio publications issued by the various Government departments, and brief items of Government radio news. Subscriptions may be placed with the Superintendent of Documents, Government Printing Office, Washington, D.C., at twenty-five cents per year for delivery in the United States and its possessions; Canada, Cuba, Mexico, Newfoundland, and Republic of Panama. For other countries the subscription price is forty cents per year.

A large number of papers on radio subjects have been issued by the Bureau of Standards. Some of these have been published by the Government Printing Office and some in various periodicals. Most of them are of interest primarily to the radio engineer or scientist rather than to the public. A complete list of these publications can be secured by addressing a request to Bureau of Standards, Washington, D.C., for Letter Circular No. 40, "Radio publications of the Bureau of Standards."

The Bureau of Standards will also send to anyone, on application, a monthly card notice announcing all its new publications. These notices state the price at which each publication may be purchased from the Superintendent of Documents. The publications of the Bureau of Standards cover many subjects besides radio, including electricity, light, sound, heat, chemistry, metallurgy, engineering materials, standards of weight and measure, and many other scientific and technical subjects. Circular No. 24 (and supplements), of the Bureau of Standards, lists all of the publications of the Bureau on all subjects, and gives a brief abstract of each; this is obtainable from the Bureau on application.

"A Decimal Classification of Radio Subjects; An Extension of the Dewey System," Bureau of Standards Circular No. 138, gives in decimal form a classification of the whole radio field, which has been found useful for classifying and filing radio publications, reports, specifications, and other radio material. This is used in classifying the references to current radio periodical literature which appear each month in the Proceedings of the Institute of Radio Engineers. The price is ten cents, obtainable only from the Superintendent of Documents, Government Printing Office, Washington, D.C.

The Bureau of Standards also issues Letter Circulars on various subjects, in mimeographed form (like this one).

Only a limited number of copies of these are available and they are not sold. The available Letter Circulars are listed in Letter Circular No. 40 mentioned above. The Bureau can not supply a set of them to anyone. A copy of any one Letter Circular may be secured by any person having specific use for it on application to Bureau of Standards, Washington, D.C.

A card giving the International Morse Code and Q-signal abbreviations used in radio telegraphy, may be secured upon request addressed to Radio Division, Department of Commerce, Washington, D.C., or to any of the Radio Supervisors listed in Section 4 below.

The call letters, frequencies, etc., of transmitting stations are given in the pamphlets, "Amateur radio stations of the United States" (price 25 cents), and "Commercial and Government radio stations of the United States," (price 15 cents), obtainable upon order from Superintendent of Documents, Government Printing Office, Washington, D.C. These pamphlets are revised annually. The prices given above are for the editions dated June 30, 1929; the prices are subject to change from year to year. Current additions or other changes in the lists of commercial and Government radio stations are published monthly in the "Radio Service Bulletin" described above.

The Federal Radio Commission issues from time to time mimeographed lists of transmitting stations. Copies of these lists may be obtained upon request from Federal Radio Commission, Washington, D.C.

Lists of the radio stations of the world are published by the International Bureau, Berne, Switzerland. There are available the following lists: "Fixed and land stations," 1st edition, January 1929, \$1.50; "Stations performing special services," 1st edition, March 1929, (includes radiocompass, radio beacon, and stations transmitting time signals, meteorological information, notices to mariners, and press notices,) \$1.50; "Ship stations," 1st edition, February 1929, \$2.40; "Aircraft stations," 1st edition, April 1929, \$0.90; "Broadcasting stations," 1st edition, April 1929, \$0.90. The prices include postage and all supplements to the end of the current year. Remittances should be sent to the International Bureau of the Telegraph Union, Radiotelegraph Service, Berne, Switzerland.

4. Radio Laws and Regulations.

The laws are given in a pamphlet, "Radio laws of the United States," obtainable for ten cents from the Superintendent of Documents, Government Printing Office, Washington, D.C. The regulations are published from time to time, as General Orders of the Federal Radio Commission, in the "Radio Service Bulletin" described above. The General Orders

are also available in mimeographed form upon request to Federal Radio Commission, Washington, D.C.

The laws provide that in order to operate a radio transmitting station, both a station license and an operator license must be secured. The laws provide severe penalties for the operation of a transmitting station without proper licenses.

A station used only for receiving does not require a station license. Operators of stations used only for receiving do not require operators' licenses, but must maintain secrecy in regard to messages heard, other than broadcast messages.

Station licenses are issued by the Federal Radio Commission and operators' licenses by the Department of Commerce. Before undertaking the construction or operation of a station a person should write to the U.S. Supervisor of Radio for the district in which he is located. The Supervisor supplies information and the necessary application blanks.

The offices of the Supervisors of Radio are located as follows:

First District; Customhouse, Boston, Mass.
Second District; Subtreasury Building, New York City.
Third District; Ft. McHenry, Baltimore, Md.
Fourth District; Post Office Building, Atlanta, Ga.
Fifth District; Customhouse, New Orleans, La.
Sixth District; Customhouse, San Francisco, Calif.
Seventh District; 2301 L.C. Smith Bldg., Seattle, Wash.
Eighth District; David Stott Bldg., Detroit, Mich.
Ninth District; Engineering Building, Chicago, Ill.

5. Safety Rules.

All ordinary precautions required for the safe operation of any electrical equipment should be observed in every radio station. All high-voltage wiring should be carefully insulated and kept as far as possible from other wiring and so placed as to minimize the possibility that the operator may come in contact with it, and suitable danger tags should be displayed.

Insurance companies make certain requirements regarding electrical installations in any buildings on which they carry risks. The usual requirements are summarized in a small book, the National Electrical Code, which may be secured for ten cents from the National Board of Fire Underwriters, 85 John Street, New York, N.Y. Article 37 of this Code gives the requirements for radio equipment.

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Requirements for safe radio construction are given in Bureau of Standards Handbook No. 9, "Safety Rules for Radio Installations," which may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D.C., at ten cents per copy. This handbook gives, on pages 7 to 14, rules for erection of antennas. Some explanation of these rules and of the reasons for them is given in Part 5 of B.S. Handbook No. 4, "Discussion of the National Electrical Safety Code," the price of which is \$1.00.
