

**THE FACTS ON FILE
DICTIONARY OF
TELECOMMUNICATIONS**

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Facts On File Publications
460 Park Avenue South
New York, N.Y. 10016

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Published in the United States of America in 1983 by Facts On File, Inc., 460 Park Avenue South, New York, N.Y. 10016, by arrangement with Penguin Books Ltd., Harmondsworth, Middlesex, England.

Library of Congress Cataloging in Publication Data

Graham, John, 1936-
Dictionary of telecommunications.

Bibliography: p.

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TK5102.G73 1983 384'.03'21 82-15675

ISBN 0-87196-120-2

Printed in the United States of America

R

radar A system that detects distant objects by measuring the deflection of *micro-wave* frequencies, used, for example, to provide information about the movement of aircraft, ships or vehicles.

radio frequencies The spectrum of frequencies used for *radio transmission* and generally considered to be within the range from 20 kHz to 3 GHz. ⇨ article on *electromagnetic waves*.

radio frequency carrier wave A *radio frequency signal* used to carry another signal imprinted upon it by the techniques of *modulation*.

radio frequency signal Any signal falling within the *radio frequency spectrum* (20 kHz to 3 GHz) and used to radiate information through *space*. ⇨ article on *electromagnetic waves*.

radio frequency spectrum The range of *electromagnetic waves* associated with radio and television broadcasting, including transmission in the following *bandwidths*:

<i>low frequency (LF)</i>	30 kHz to 300 kHz
<i>medium frequency (MF)</i>	300 kHz to 3 MHz
<i>high frequency (HF)</i>	3 MHz to 30 MHz
<i>very high frequency (VHF)</i>	30 MHz to 300 MHz
<i>ultra high frequency (UHF)</i>	300 MHz to 3 GHz

This spectrum covers the present range of frequencies used for commercial and military/civil communications.

radio receiver A device which can be tuned to receive *radio frequency signals* and to detect *sound signals* carried in the broadcast *radio signal* for audible presentation to listeners.

radio signal Same as *radio frequency signal*.

radio transmission A form of *telecommunication* in which *message signals* are radiated as energy in the form of *radio waves*. Examples of *radio transmission* include sound and television public broadcast systems, established to serve a particular geographic area, as well as *directional radio systems* designed to provide a *channel* for point-to-point communication.

radio transmitter A device capable of capturing *signals* representing *sound* or *light* and converting them by a process of *modulation* into a form suitable for transmission as *electromagnetic waves* in the *radio frequency spectrum*.

radio waves A range of *electromagnetic waves*, in the *frequency spectrum* from 20 kHz to 3 GHz, which are suitable for carrying *signals* across *space*.

radiometry The measurement of light energy from a source, irrespective of human factors involving the perception of light. Studies concerned with consideration of the human factors are known as *photometry*.

RAM ⇨ *random access memory*.

random access memory (RAM) A type of storage device used in *computers* to retrieve information directly with very short access times measured in milliseconds. Any particular retrieval operation will produce information within a more or less constant access time, regardless of the last location addressed. Magnetic disc storage is an example of such a storage medium, but *magnetic tape* is not a random access memory medium. ⇨ *main memory*.