Repeater Terminology

**autopatch** — a device that interfaces a repeater to the telephone system to permit repeater users to make telephone calls. Often just called a “patch.”

**break** — the word used to interrupt a conversation on a repeater only to indicate that there is an emergency.

**carrier-operated relay (COR)** — a device that causes the repeater to transmit in response to a received signal.

**channel** — the pair of frequencies (input and output) used by a repeater.

**closed repeater** — a repeater whose access is limited to a select group (see open repeater).

**control operator** — the Amateur Radio operator who is designated to “control” the operation of the repeater, as required by FCC regulations.

**courtesy beep** — an audible indication that a repeater user may go ahead and transmit.

**coverage** — the geographic area within which the repeater provides communications.

**CTCSS** — abbreviation for continuous tone-controlled squelch system, a series of subaudible tones that some repeaters use to restrict access. (see closed repeater)

**digipeater** — a packet radio (digital) repeater.

**DTMF** — abbreviation for dual-tone multifrequency, the series of tones generated from a keypad on a ham radio transceiver (or a regular telephone).

**duplex** or **full duplex** — a mode of communication in which a user transmits on one frequency and receives on another frequency simultaneously (see half duplex).

**duplexer** — a device that allows the repeater transmitter and receiver to use the same antenna simultaneously.

**frequency coordinator** — an individual or group responsible for assigning frequencies to new repeaters without causing interference to existing repeaters.

**full quieting** — a received signal that contains no noise.

**half duplex** — a mode of communication in which a user transmits at one time and receives at another time.

**hand-held** — a small, lightweight portable transceiver small enough to be carried easily; also called HT (for Handie-Talkie, a Motorola trademark).

**hang time** — the short period following a transmission that allows others who want to access the repeater a chance to do so; a courtesy beep sounds when the repeater is ready to accept another transmission.

**input frequency** — the frequency of the repeater’s receiver (and your transceiver’s transmitter).

**intermodulation distortion (IMD)** — the unwanted mixing of two strong RF signals that causes a signal to be transmitted on an unintended frequency.

**key up** — to turn on a repeater by transmitting on its input frequency.

**machine** — a repeater system.

**magnetic mount** or **mag-mount** — an antenna with a magnetic base that permits quick installation and removal from a motor vehicle or other metal surface.

**NiCd** — a nickel-cadmium battery that may be recharged many times; often used to power portable transceivers. Pronounced “NYE-cad.”

**open repeater** — a repeater whose access is not limited.

**output frequency** — the frequency of the repeater’s transmitter (and your transceiver’s receiver).

**over** — a word used to indicate the end of a voice transmission.

**Repeater Directory** — an annual ARRL publication that lists repeaters in the US, Canada and other areas.
separation or split — the difference (in kHz) between a repeater’s transmitter and receiver frequencies. Repeaters that use unusual separations, such as 1 MHz on 2 m, are sometimes said to have “oddball splits.”

simplex — a mode of communication in which users transmit and receive on the same frequency.

time-out — to cause the repeater or a repeater function to turn off because you have transmitted for too long.

timer — a device that measures the length of each transmission and causes the repeater or a repeater function to turn off after a transmission has exceeded a certain length.

tone pad — an array of 12 or 16 numbered keys that generate the standard telephone dual-tone multifrequency (DTMF) dialing signals. Resembles a standard telephone keypad. (see autopatch)