Amateur Radio Foundation Glossary

ESSEX HAM

Term	Description
AM	Amplitude Modulation. Method of combining an audio signal with a carrier. The signal changes the amplitude (height) of the carrier's waveform
AMU	Antenna Matching Unit. Used to "match" antenna impedance to reduce VSWR
Attenuate	To reduce the energy of a radio signal. As an example, heavy rain attenuates (reduces the strength of) radio signals at UHF and above
Balun	Device that couples a balanced and unbalanced feeder / antennas. For example, used to couple a balanced antenna (such as a dipole) to unbalanced feeder (such as co-ax)
BNC	Type of connector used for connecting between radio equipment and an antenna (twist-and-click)
CQ	A general call asking for someone to make contact with you. Derives from "I Seek You"
CW	Continuous Wave – Morse Code
CTCSS	Continuous Tone Coded Squelch System. Sub-audible tone sent alongside a transmission to allow a repeater to "open" – allows the repeater to only forward genuine messages
dB (Decibels)	Used for the measurement of gain (or loss). At Foundation, recall that Yagi (beam) antennas have a gain measured in dB, for example, a Yagi with a 3dB gain would double the radiated power
Dummy Load	Device that plugs into a transmitter's antenna socket to allow you to test a transmitter without radiating a signal into an antenna
EMC	Electro-Magnetic Compatibility. A device's immunity to interference. EMC issues relate to electrical or radio interference to other equipment.
ERP	Effective Radiated Power – How much power your antenna is outputting (calculated by multiplying the power in watts by the "gain" of the antenna)
FM	Frequency Modulation. Method of combining a radio signal with a carrier. The signal changes the frequency of the carrier's waveform
Impedance	An antenna has an impedance, which is measured in Ohms at the feed point. The impedance depends on the size, shape of the antenna, how it's positioned, and frequency transmitted.
Ionosphere	Layer of conductive gases 70-400km above Earth, that refracts HF radio signals back to Earth
Ohm's Law	The Voltage equals the Current multiplied by the Resistance (V = I x R)
PL-259	Type of connector used for connecting between radio equipment and an antenna (screw-thread)
Q Codes	Shorthand codes used on amateur radio dating back to early Morse Code days. Common codes are: QTH (Location) ; QSL (Acknowledgement of receipt) ; QRZ (Who is calling) ; QRM (Man-made interference) ; QRP (Reduced power) ; QSY (Change frequency) ; QSO (communication / contact).
RF	Radio Frequency
SSB	Single Sideband. The exact definition is outside the scope of Foundation, but there are two types: USB (Upper Sideband) and LSB (Lower Sideband). These are methods of transmission, like FM and AM
VSWR	Voltage Standing Wave Ratio. An SWR of 1:1 would indicate that all of the transmitter power is being radiated by the antenna. An SWR reading of 2:1 or higher would indicate that a significant amount of power is reflected back to the transmitter from the antenna (indicating an antenna mismatch)
Yagi	A beam antenna. Typically has a gain, and focusses energy into a single beam