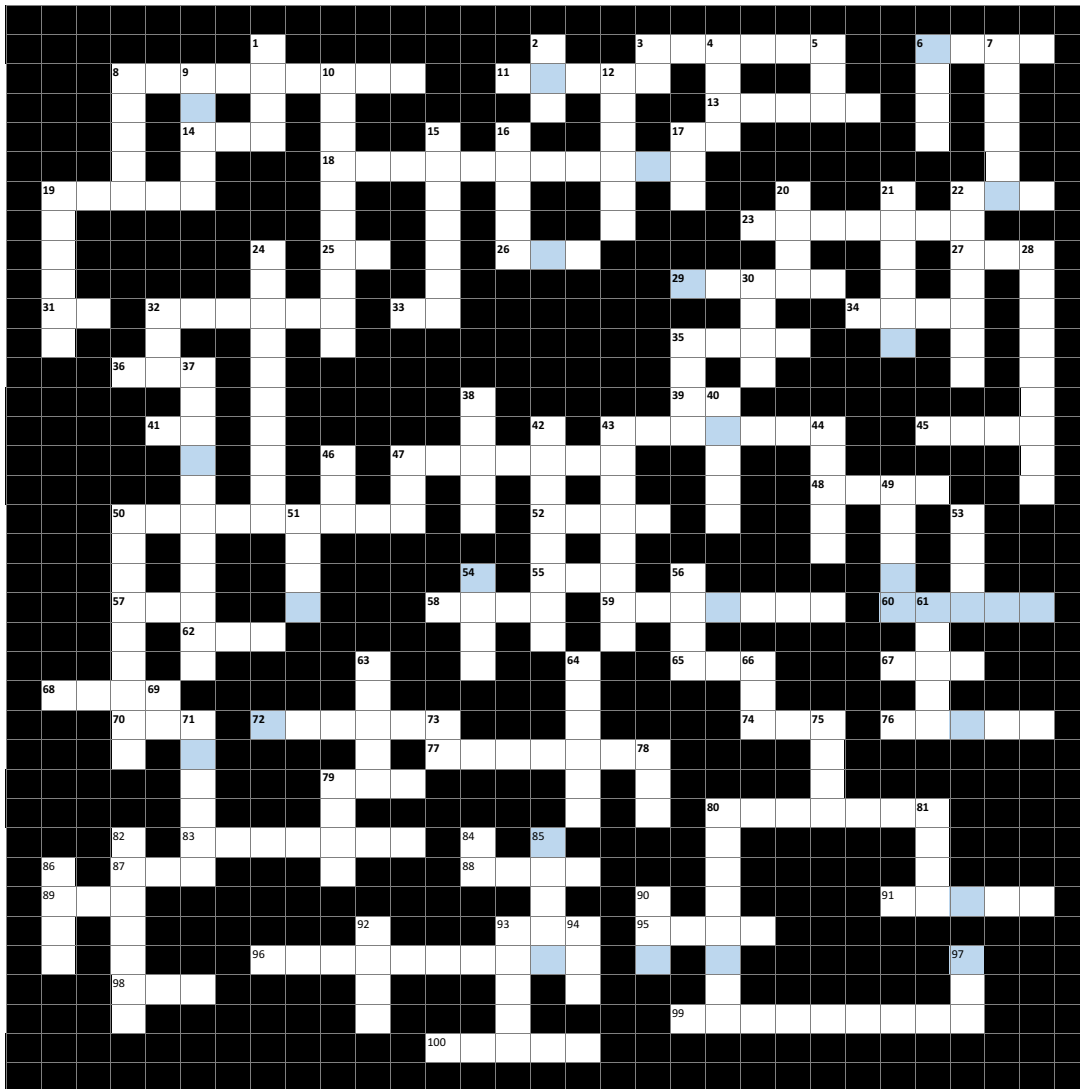


# WIARC Amateur Radio Crossword Puzzle

By Mark VA2MM



## Instructions:

- 1) Print, then solve the crossword puzzle using a pencil and the clues on the next page. Remember that all the words are WIARC or amateur radio related in some way. Use of Google to help find the answers is permitted. It may be a learning experience.
- 2) Using the solved puzzle, write out the ONLY the letters contained in shaded boxes (order from left to right, then top to bottom) to discover the hidden message. Send that message to [webmaster@wiarc.ca](mailto:webmaster@wiarc.ca) or use the website "Contact" form.

ACROSS	
3	Part of the ionosphere that limits daytime range of lower-frequency HF bands
6	Radio is an electromagnetic _____
8	A way to go from QRP to QRO
11	One-way semiconductor device
13	6 dB on a receiver's signal strength meter
14	Angular digital modulation mode (abbr.)
17	To go __ __, is to kick the bucket (abbr.)
18	Radio circuits that locally generate a continuous wave signal
19	Unit of wavelength, or an instrument to measure <b>32-Down</b> or power etc.
22	U.S. Radio Regulator (abbr.)
23	James Clerk _____, scientist and father of electromagnetics
25	Frequencies that interest Basic-with-Honours and Advanced Hams (abbr.)
26	Rig control knob for receiving slightly off-frequency signals (abbr.)
27	Receiver circuit that protects your ears from sudden loud signals (abbr.)
29	Electrical bypass or way to feed a tower
31	Early analog voice mode, first used by <b>50-Across</b> (abbr.)
32	Beam antenna not for arachnophobes (we used one for Field Day 2017)
33	Signals from afar (abbr.)
34	Ideal type of "space" that's often assumed gratuitously, but rare in real life
35	WIARC, for example
36	Power specification that considers antenna input power and its <b>20-Down</b> (Abbr)
39	Call "CQ __ CQ __" for Japan and its continent (abbr.)
41	Earliest ham radio mode, and still used today (abbr.)
43	Hidden beacon finding contest
45	A moxon antenna is like a 2-element yagi with its elements _____ at 90 deg.
47	A 1/4 wavelength end-fed vertical antenna, named for radio pioneer
48	One Joule per second.
50	Quebec-born radio pioneer, first to transmit AM voice
52	Prefix meaning x 1000
55	Type of distortion from non-linear mixing of multiple frequencies (abbr.)
57	Minimalist amateur radio (abbr.)
58	Common way to make an inductor
59	The "A" in WIARC
60	The "R" in WIARC
62	Voice mode common on 160, 80 and 40m bands (abbr.)
65	Dx target continent when you point your antenna to the NE (abbr.)
67	CW distress signal
68	Egalitarian antenna, as opposed to beam (for short)
70	Antiquated unit of frequency (abbr.)
72	A metal that conducts electricity very well
74	Tower holder-upper cable
76	Common form of loop antenna, and also a phonetic
77	Core material often used to make baluns
79	Nucence signals (abbr.), e.g. such as caused by a <b>49-Down + 63-Down</b>
80	Horizontal wires layed on the ground for <b>47-Across</b> antennas
83	WIARC fund-raising event
87	Station accessory required for CW
88	Directional antenna made with loop elements
89	Change frequency (abbr.)
91	Cabinet Minister responsible for <b>53-Down</b>
93	For skywave propagation, keep your frequency below this (abbr.)
95	Antenna designed to maximize its gain in a certain direction, informally
96	Station accessory usually required for AM, SSB or FM
98	Frequencies from 30 MHz to 300 MHz (abbr.)
99	Scientist credited with inventing FM, also a name for field-day antenna rotator
100	"It takes two to _____", also a phonetic

DOWN	
1	A terminal that current flows into (opposite of "source")
2	Poor operator (non-complimentarily). Also a pot cover.
3	French word meaning "From" in CW
4	Mode where FSK tones are generated by a computer sound-card modem
5	Transmitter woe (abbr.) often cured by a balun, ferrite beads or grounding
6	Modern way to electronically confirm QSLs (write the answer backwards!)
7	Variable power transform, handy for testing old radios
8	International ham satellite org. based in Kensington, Maryland
9	Flammable logging system of old
10	Giant orb that makes HF Skywave propagation possible
12	1/2 wavelength center-fed antenna
15	Transmit and receive on the same frequency
16	Help a noobie to not become a <b>2-Down</b>
17	Modified AM with the carrier and one sideband suppressed (abbr.)
19	Voice mode distress signal
20	Useful property of an antenna that focusses most power in certain directions
21	"U R 59" for example
22	Parts of the ionosphere responsible for longest daytime Dx
24	It is often less convenient to use but has lower loss than a coaxial line
28	Electronic component that stores energy in an electric field
30	Similar to a balun, but for use with coax and unbalanced antennas
32	Measurement of reflection (abbr.) due to impedance mismatch in ant. system
35	Most common and convenient type of antenna feedline
37	Station accessory, without which not much happens at all
38	Famous American painter Samuel _____, who also invented a famous code
40	Radio room
42	Name of apartment building that houses the VE2RWI repeaters
43	WIARC operating event held annually in late June
44	Antenna holder-upper (often)
46	A colder version of <b>43-Down</b> (abbr.)
47	Day of the week when WIARC meetings are normally held (abbr.)
49	Transmatch
50	"Oftenness", e.g. how often wave cycles happen
51	High take-off skywave mode used for shortish-distance communication (abbr.)
53	Canadian radio regulator (abbr.)
54	Connect together (e.g. in a grounding system)
56	A home station is a _____ station
61	Positive terminal
63	Part of USB, not "lower"
64	Operating while out and about
66	Transceiver, informally
69	Ubiquitous computer protocol (abbr.)
71	Day of the week when WIARC Information Nets are held
73	Part of the electromagnetic spectrum that interests hams (abbr.)
75	Directional antenna with 1 driven dipole and 1 or more parasitic elements
78	Lunar ricochet (abbr.)
79	Monthly fun feature of the wiar.ca website, and source of this puzzle
80	Automatic re-transmitting station, usually situated in a high location
81	Mountain-top activity for fit operators and light equipment (abbr.)
82	Type of HF Propagation that uses the ionosphere
84	Promiscuous radio call (abbr.)
85	Device to adapt an unbalanced (e.g. coax) feedline to a balanced antenna
86	Online way to request and pay for QSL cards to be sent to you (abbr.)
90	Logarithmic unit of power, referenced to 1 mW
92	Device to block certain frequencies, often used in multiband antennas
93	A modified 2-element yagi with elements bent 90 deg, into a rectangular shape
94	Transistor type featuring high control input impedance (abbr.)
97	Chronological list of all your QSOs