

## CW OPERATING PROCEDURES -- From AC6V's Book [DX101X](#)

### A1-1. CW TUTORIAL

In addition to the quickie DXpedition and contest CW contacts, you can work a lot of DX in a one-on-one QSO. A lot of common DX is available on CW, with very little competition. For example, the mob will pileup on a European station on phone, but on CW on many occasions you can hear that same country calling CQ with no takers. An excellent CW Tutorial can be found by Jack Wagoner WB8FSV at URL: <http://www.netwalk.com/~fsv/CWguide.htm>

Lets take it step by step.

1. Have a list of CW Abbreviations, Prefixes, and Q-Signals handy. Some DX stations cannot converse in English but you both can get the essentials across with Q-Signals.
2. Know how to "zero beat" a CW signal. Many stations have very narrow filters and you want to be in their bandpass. Refer to the operating manual for your radio.
3. Know how to use your RIT, XIT, Dual VFO's, and CW filters. See Chapter 2.
4. Listen for a DX station calling CQ or wait until they have finished with a QSO.
5. Good operators will send KN as a turn over, which is "go ahead, over, others keep out." Sending just K opens it for others to break in and this is OK if that is desired. SK is the signoff that should be used or CL ("clear") if closing your station.
6. Give a call in 1 X 2 call format -- DX11DX DE WZ9UUU WA9UUU AR (The AR is a prosign sent as one character, i.e. didahdidahdit and means that I am through with this transmission). The DX station knows their call, so send it once. Sending your call twice allows the other station to hear it, then confirm it.
7. If you make the connection, the usual follow up is his or her signal report, repeated twice if the contact is shaky and weak, then your name and QTH. Don't send more than that on the first round. Turn it back to the DX with a K or KN. This will allow the two of you to evaluate if a QSO is sustainable or desirable.
8. On the next over, ask about QSL information if you want it, before the band slips out.
9. If no DX is calling CQ, but the band seems open, find a clear frequency and listen for a bit, if clear, then send QRL? QRL asks is the frequency busy? If someone responds with C, or QRL, no need to respond and clutter up the frequency. If no response to your QRL, repeat a couple of times and then call CQ. Sending just QRL without your callsign is against the rules, but most do it anyway.
10. Calling CQ is typically in a 3 X 2 format CQ CQ CQ DE WZ7UUU WZ7UUU K. Long long CQ's are likely to be ignored. Don't use AR instead of K as it means ending the transmission, and not an invitation for an answer. KN is a turn over to the station you are already working in a QSO

11. Listen for a few seconds using RIT to check for off frequency responses. If you have a narrow CW filter in line, use RIT and tune up and down from your transmit frequency to determine if someone is responding.
12. Repeat your CQ or QSY to a clear frequency, as you may be on a Big Gun frequency that can't hear you.
13. After the initial contact, it is typically DX11DX DE WX6DDD GM (GA, GE) OM TNX FER CALL UR RST ### (339, 599, 549, etc.) NAME HR IS ROD ROD. QTH IS SAN DIEGO, CA. SAN DIEGO, CA. HW? AR DX11DX DE WX6DDD K (OR) KN. See your list of abbreviations if you are not familiar with these.
14. DX11DX returns with essentially the same info, you may get "R" indicating that DX11DX copied all, or QSL on all is sometimes sent.
15. The next round is an invitation to rag chew. If DX11DX is too fast for you, send a QRS (send slower please). Longer QSO's usually include your station configuration, the weather (WX), jobs, ages, etc. You may receive an invitation to operate QSK (break-in) where the QSO is much more conversational. Practice with a friend first as this takes some getting used to and proper equipment settings.
16. It is not necessary to do a (DX11DX DE WD6YYY) every time except every 10 minutes of course. When you turn it over – you can use BK or just KN or K.
17. A signoff looks like this:

DX11DX DE WF6TTT, FB VLAD TNX NICE QSO HPE CUL VY 73 GM SK DX11DX DE WF6TTT Use SK or CL (Closing Station) on your final transmission not AR or K (N)

Then there are some cuties signoffs dit dit, and a response of dit. Old Military types use dit dita dit dit (Shave and a Haircut) with the response of dit dit (2 Bits)!

18. For contests, a common CQ is "test AC6V test".
19. Tail-ending. Wait until another QSO is complete, and then call the station you want to contact.
20. Breaking into a QSO is not commonly done on CW and should be approached with caution. If it obvious that two old friends are in conversation, it is not advisable. If the exchanges include KN – it's a signal that others are not welcome, best wait until the QSO is over and then tail-end. The standard break-in method on CW is to wait between transmissions and then send "BK" for break, or "BK de WT8III".

It is very common to send RST reports in abbreviated form, for example 599, is sent as 5NN. "N" in place of the number "9". Also another time saver is for the zero using a long "T". "T" is sent in place of the number zero as in "POWER HR IS 3TT WATTS". There is a number code for all numbers; however, the N and T codes are the most common ones.

Also CW stations sometimes report their zones as "A4" or "A5" instead of sending "14" or "15". 1 = A, 2 = U, 3 = V, 4 = 4, 5 = E, 6 = 6, 7 = B, 8 = D, 9 = N, 0 = T