West Palm Beach Amateur Radio Group (WPBARG)

CW Contesting for Non-CW Operators

Presented by:

Steve Ikler KS3K

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Outline

- Contesting Basics
- Advantages of Using CW
- Contesting Software
 - Support for CW Readers
 - · Use of Macros to send CW
 - · Use of Call History Files
- Typical Contest QSO
- · Live Demo

Note

- The terms 'Morse Code' and CW
 (continuous wave) are usually used to
 mean the same thing
- However, Morse Code is the method used to encode and decode CW transmissions.
- CW is the mode
- Morse Code is the <u>language</u>

What is a Contest?

- Also known as Radiosport
- A competitive activity
- · May be operated by an individual or a group
- Contact as many other stations as possible in a given period of time
- Exchange information (RST, Name, Zone, State/Province/Country, Serial Number, etc.)

What is a Contest?

- · Contest sponsors define the rules
 - •i.e. bands, modes, exchange, multipliers
- Contacts have points which contribute to a score
- Contest sponsors publish the results

- You don't need to be in the contest to make contacts
- ·You don't need send in your log
- You don't need to operate the whole time; just what you want

Why Contest?

- Test your antennas
- Test your equipment
- For the excitement
- For the competition
- Improve your skills
- · Build up your DXCC totals
- · Build up your WAS totals
- · Bragging rights between friends

Types of Participation

- Search & Pounce (S&P)- tune for stations calling "CQ Contest"
- Running (Run) you are the station calling "CQ Contest" and the S&P stations call you
- If you Run, you need to be able to hold your frequency
- Running yields more contacts, higher score
- S&P is less stressful

Advantages of Using CW

- Universal language No accent or pronunciation problems
- CW XMTRs easier to build so more CW only ops around the world
- CW signal can have 10+ db advantage over
 SSB due to better SNR
 - 100 watts CW = 1000 watts SSB
 - CW gets through!!

Advantages of Using CW

- •Reduced EMI/RFI problems less interference than SSB
- Reduced bandwidth CW ~ 100hz, SSB ~
 2.5Khz, FM ~ 10 Khz
- · Easier to filter out QRM
- Easier to work DX on CW
- · CW ops claim bigger runs with CW

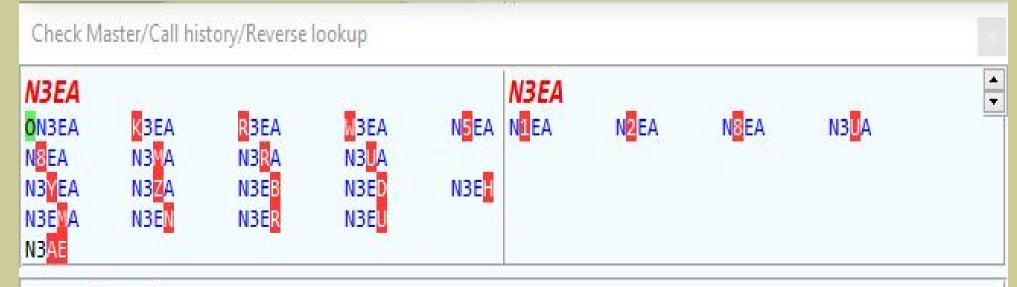
Contesting Software

- Logs contacts
- · Controls rig (if equipped with right cable)
- · Checks for Dupes (Duplicate contacts)
- Can be used to send CW (or voice messages, RTTY, other digital modes)
- · Keeps track of your contest score
- Can use internet to find stations in contest (assisted mode)

- Supports CW Readers
 - Fldigi popular digital mode program
 - CW Get -cw only
- CW readers decode the CW being sent and displays the text on the screen
- You can click on data in the text to copy to log window (Callsign, serial #, etc.)
- You don't need to know Morse Code to use a decoder!

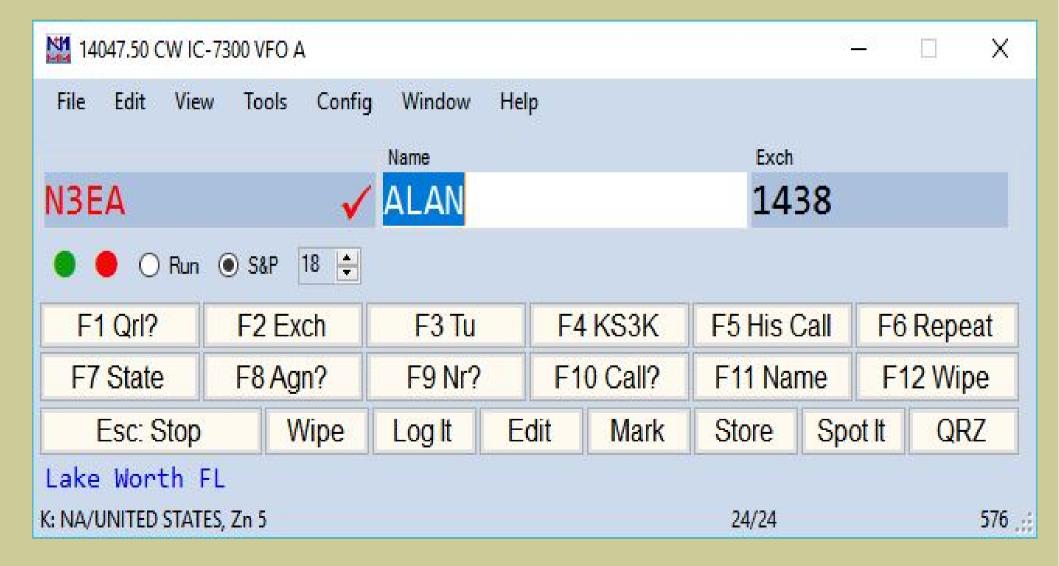
- Can decode a large range of CW speeds
- · Software can also help filter QRM, QRN
- Waterfall in reader helps you to zero beat the signal
- Super Check Partial helps identify full call from partial call
- Call History File helps you fill in exchange info for specific call

MM-DD HH:MM	▲ Call	Freq	М	. Name	Exch	M1	Pts	
03-08 19:36	K7SV	14029.86	CW	LAR	CWA	V	1	
03-08 19:42	KA5M	14039.70	CW	MARSH	1433	V	1	
03-08 19:46	W1UJ	14040.99	CW	JAY	426	V	1	
03-08 19:49	K6RB	14028.00	CW	ROB	CWA	V	1	
03-08 19:51	K9DX	14032.71	CW	JOHN	184	~	1	
03-08 19:54	K5FP	14034.21	CW	FRED	392	V	1	



N3EA(1438)

- •Use pre-defined Macros to send your exchange (your info). Just press a key to send it.
 - ·callsign, state, name, serial number, etc.
- Some radios can be keyed directly without additional hardware



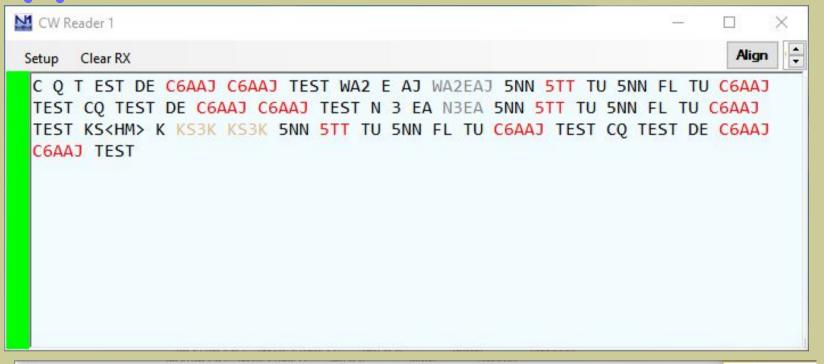
- · Some need special hardware such as:
 - · Winkeyer or compatible keyer
 - · Single transistor keying circuit
 - Uses DTR line on serial port (or virtual Port)

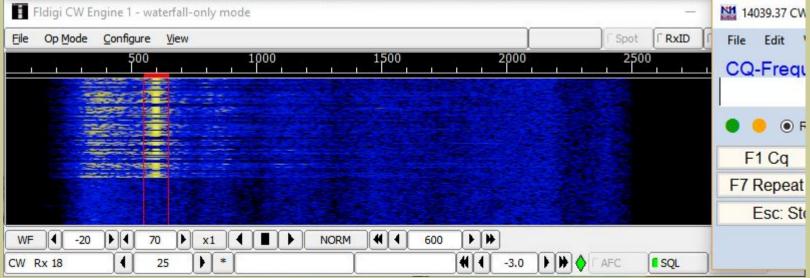
M Config	jurer								×
Hardware	Function Keys	Digital Modes	Other	Winkey	Mode Control	Antennas	Score Reporting	Broadcast Data	
Port COM6 None	Radio	00 ~		_	Details Set	1920	● S01V 0,N,8,1,DTR=CW,R		SO2R
	Com6 Speed		V	Parity		DataBits 8 ✓	Stop Bits	×	
		DTR (pin 4) CW PTT Delay) ~	RTS (pi	in 7) lc	om Code (h 94	ex) Radio Nr		
		30 Allow e			PTT via Ra PTT via Ra	adio Comma adio Comma	e & Software P nd SSB Mode nd CW Mode nd Digital Mode		

- •Running station sends CQ TEST de W1ABC
- You press Macro key to send your Callsign
- Run station calls you back, calls another station, or calls CQ again
- If he calls a station, it's followed by his exchange

- •It's best to listen to him call others before you call him
 - You can copy his exchange when you're calm
 - It will probably be the same or very similar when he calls you
- If running station then calls you, you already know all or most of his exchange

- Press the Macro key to send your Exchange
 - ·i.e. TU 599 STEVE FL
- He may ask you to repeat, if so, press appropriate Macro key
- Most likely he will acknowledge your QSO with TU, QSL or CFM and call CQ again
- · YOU GOT HIM!!! Press ENTER to log it





- · You don't need to know CW to use this method
- But, it's really helpful if you can <u>recognize</u> your own callsign without a reader
- Reader may be too slow to decode your callsign
- Even if you didn't get the exchange correct, you can request QSL card or confirm via LoTW

Demo

- Using N1MM+ as the Logging Software
- · Using Fldigi as the CW Reader
- Note: Readers do best with machine generated
 CW. Uses proper and consistent spacing.
- Luckily, most contesters use machine generated CW

The End!

Questions?

Comments?

Now, go on the air and make some CW contacts!