



## CW OPEN 2011

### CWops Events

On-Air Monthly CWT

Next: **10, 24** August 2011

Start time:

1300Z Asia/VK/ZL region

1900Z Europe Region

0300Z (11, 25 Aug) NA region

1-hour each region

Exchange name/number (members)

Exchange name/SPC (non-members)

### CWops “neighborhood”

Look for CWops on 1.818, 3.528, 7.028, 10.118,  
14.028, 18.078, 21.028, 24.908, 28.028, 50.098

### CWops “Happy Hour”

1900 local, every day, on or near the “neighborhood”  
frequencies – just call “CQ” or answer someone else.

### CWops Officers and Director

#### Officers

President: Pete Chamalian, [W1RM](#)

Vice President: Art Suberbielle, [KZ5D](#)

Secretary: Jim Talens, [N3JT](#)

Treasurer: Craig Thompson, [K9CT](#)

#### Directors:

Bert Donn, [G3XSN](#)

Shin Onisawa, [JA1NUT](#)

Vidi La Grange, [ZS1EL](#)

**Webmaster:** John Miller, [K6MM](#)

**Publisher:** Rob Brownstein, [K6RB](#)



**From the president...**

### Winners of the CWops Grant

Last year we announced that a \$1,000 grant had been given to the ARRL Foundation for use by clubs or other groups that would be engaged in CW training. We’ve just learned that the Foundation has awarded \$826 to the following clubs funds as specified:

- Amador County (CA) Amateur Radio Club for CW skill building \$226
- Tampa (FL) Amateur Radio Club for code keys: \$150
- Lake Monroe (FL) Amateur Radio Society for code practice oscillators \$150
- NCCS Middle School Radio Club for code practice oscillator \$150
- Sante Fe (KS) Trail Amateur Radio Club for CW teaching materials \$150

We have been in touch with these clubs and will report back to the members as we hear from them about their programs.

CWops will make another \$1,000 donation to the ARRL Foundation to continue funding these grants. In addition we are

seeking other national or international associations with similar foundations or other programs for making grants like this.

If you know of any programs like this that you think CWops should help, please contact N3JT or N1DG (our education committee) at [education@cwops.org](mailto:education@cwops.org).

### **CW Academy**

The academy is about to launch. So far we have 38 advisors signed up. The CWops website will be updated to include a tab for the CW Academy and will be a place for students to sign up. You will read more about it later in this issue but please note this is a very exciting point for CWops! Through the academy it is our hope to really have an impact on future CW operators. It all starts, like building any building, with one brick at a time. If you are thinking about becoming an advisor and have questions, please shoot W5JQ or K6RB an email.

### **The CW Open**

It's just around the corner. Mark your calendar for:

- August 20 at 1200z to 1559z,
- August 20 from 2000z to 2359z and
- August 21 from 0400z to 0759z

Come join the excitement of the inaugural CW Open.

We are most fortunate to have the support of a number of logging programs – check <http://www.cwops.org/cwopen.html> or <http://www.cwops.org/software.html> for the latest list.

Pass the info about the CWO to your local club too. The more participants we have the more fun it will be!

### **The CWops Web Site**

If you haven't visited our Website in the last few weeks, take a look. John, K6MM has revised the appearance of the pages and navigation, making them easier to use and with a really great new look. Thanks John!

Hope everyone has a great August.

*73, Pete, WIRM*

## From the VP/Activities Chairman



Many of you have discovered that using the FREE software written by Bill, N5RR, is an easy way to keep track of your progress towards both of these awards and several others. If you are interested in downloading the program, it's available on the CWops website: [www.cwops.org/members/index.html](http://www.cwops.org/members/index.html). Start by reading the instructions, then download the program. Bill writes that he will have a new updated version available for download.

According to Bill, "The CAM software version 1.9.1, which will be out in a day or so is going to use a derivative of the Google document version of the membership roster. When that comes out, it will show a number of members that did not renew, or where they were removed due to silent key, or their own request. The CAM software, ver. 1.9.1, will use a subset of the member roster and only include MbrNr, Call, Name, StartDate, QuitDate, Country, and State/Province for US and VEs.

The newest version of CAM will take into account the membership as maintained by CWops and may result in a reduction in the totals for this year's ACA and to a lesser degree CMA awards, because some members did not renew their membership and now have a "Quit" or "End" date within their membership record. Credits associated with non-current members will not be taken away, but will only be valid for QSOs made within the start and end dates.

Reports listed below reflect all information received through July 29, 2011. Stations with an asterisk \* next to their calls have updated their reports this month.

Call	ACA	CMA
N5RR*	417	1604
SM6CNN*	416	1268
KZ5D*	416	1671
W1RM*	373	1355
W4AU	349	712
DJ1OJ*	309	923
W6KY*	299	926

N3JT*	295	920
W1UJ	284	1150
EA8AY	277	664
N2UU*	253	837
W5ZR	246	1133
DL8PG*	242	388
W1UU	237	650
EA1WX	207	619
V31JP	200	318
VE3KI*	193	569
KR3E*	189	662
K6RB	184	898
W4PM	173	1281
N1ZX*	172	269
K2VCO	154	462
W6RKC*	148	557
VU2PTT*	123	273
W4BQF	106	340
N5TM	90	215
K4GM	84	543
K6DGW	80	427
NN6T*	67	191
N3AM	63	778
W1UJ	52	

AD1C	51	377
W2LK	36	406
OK1RR	2	282
HB9CVQ		479

See you in the mini-CWT on Wednesday, August 10 and Wednesday August 24. Be sure to be QRV for the first annual CWO on Saturday/Sunday, August 20 & 21. Invite all your ham buddies to get in on the fun. Form a team and join in the team competition, too.

73 de Art [KZ5D@aol.com](mailto:KZ5D@aol.com) Activities Team Leader

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### **CW Open!!!**

Wow. It's almost here. On Sat/Sun 20 and 21 August the ham radio world will experience the first CW Open – a radiosport event unlike any before. Here's your chance to participate in what will be a historical event. So, don't miss it!

For a first-time event, CW Open has unprecedented logging support (click on the CW Open "tab" on the new Website to see all the information). The event has been highlighted by NCJ (Nation Contest Journal) and been posted on ham club reflectors all over the world.

A lot of time, effort and energy has gone into developing and planning the CW Open. If we all do our part in participating, this event will be a smashing success.

So, get your logging modules ready. If you have no computer logger, consider downloading any of the free loggers and modules available (click "CW Open" tab). There is an excellent article on downloading N1MM and setting it up for CWO in last month's newsletter; and an excellent article on downloading TR4W and setting it up for CWO in this newsletter. Thank you, Pete and Marv.

If you'd just like to try it out, use a pen and paper. But, however you prepare for it, get on the air, call "CQ CWO," call others who are calling "CQ CWO," and exchange serial numbers and names. That's it.

In the September issue of Solid Copy, we will have a preliminary report on CW Open. Let's all turn out for it and put CW Open and CWops in the annals of ham radio history.

73,

*Alan, AD6E*

*Rob, K6RB*

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## CW ACADEMY

The CW Ops board is proud to introduce a new tab to our Webpage for the CW Academy. This has been a major focus of our club for the past four months and now we are ready for launch.

You will find that the CW Academy tab will allow signups for both advisors and students. Last month, we solicited the membership for volunteer advisors and we now have over 40 registered. Thank you! This advisory group consists of 35 volunteers from the U.S. and 5 from the international community. While we have North America well represented, we could sure use more from around the world.

We are now ready to encourage veteran hams who wish to increase their code proficiency and newer licensees that wish to learn the code, to sign up as students on the CW Academy tab. Rob, K6RB, and Jay, W5JQ, will then take the information given by students and advisors on bands and times of availability to arrange on-air schedules.

We would like to encourage the entire membership to frequently tune through our suggested “sub-bands” (x.050 – x.070) for on-the-fly CQs from both members and aspirants. It has been suggested that we use “CQ CWA” and slower speeds on these frequencies to pique interest and curiosity among hams that are unfamiliar with our program. When prospective cw op’s are found, we need to direct them to our Website, [www.cwops.org](http://www.cwops.org), so they can fully understand what we have available for them.

But our thrust shouldn’t stop with licensed hams. Non-hams who show interest in the hobby should be encouraged to join the fun and challenge of communication through Morse code. This will have to be done through members’ one-on-one contact with potential prospects. We all know how this is done; invite friends and kids into the shack, go to community events and set up a portable station, invite people to Field Day, contact science teachers at schools to see if ham radio can be used as a vehicle for science. In spite of NASA’s end of the shuttle program, there are still hams on the International Space Station to keep kids interested in space.

Many of us have been guilty of hanging out below .030 on the bands, either chasing DX or having that all too short QSO at 35 wpm. The CW Academy program not only provides the means to get back to ragchewing and learning more about each other, but also a means to promote and prolong the mode of communication we all enjoy.

73,

*Jay, W5JQ*

*Rob, K6RB*

## The CW Open and TR4W

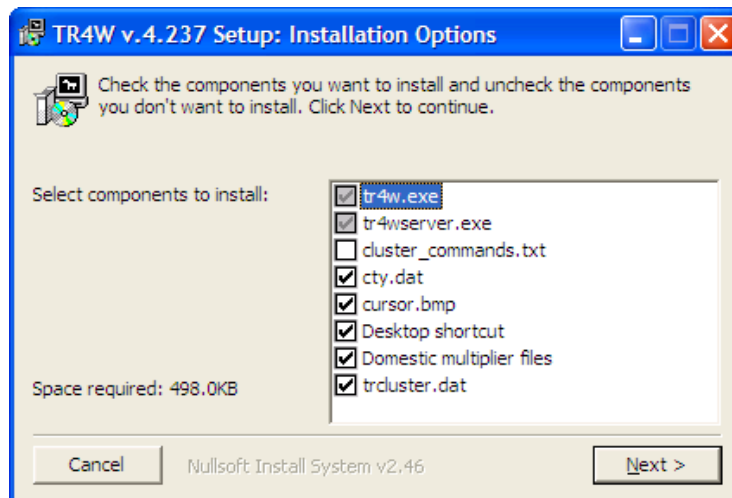
By: Marvin Bloomquist, N5AW

### Background:

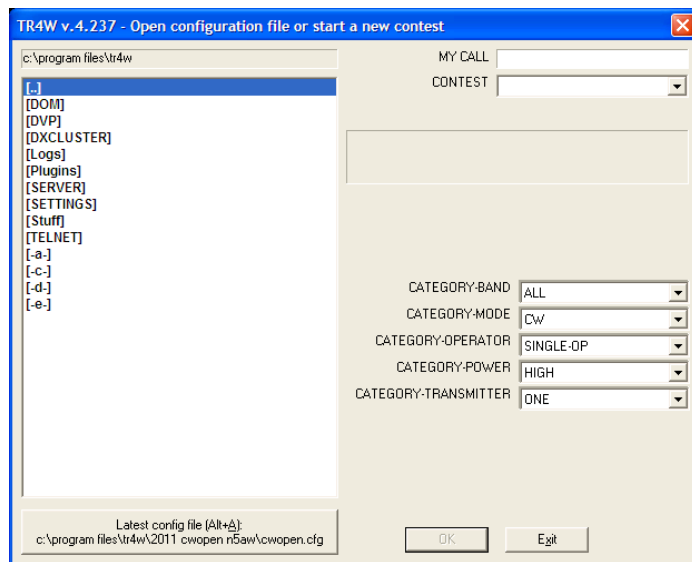
TR4W stands for TR for Windows. Developed by Dmitry Gulyaev, UA4WLI, TR4W is an adaptation of the DOS program TR Log. TR users will find it similar to the DOS program with an improved graphical interface. The download is only 279 K and installs in less than a minute. I have run it under Windows 98, XP, Vista and Windows 7 in stand-alone and networked environments with few problems. While there is no English manual, a context based help function is built into the program. Most commands are the same as in the TR Log manual at <http://www.trlog.com/manual.shtml>.

### Getting Started:

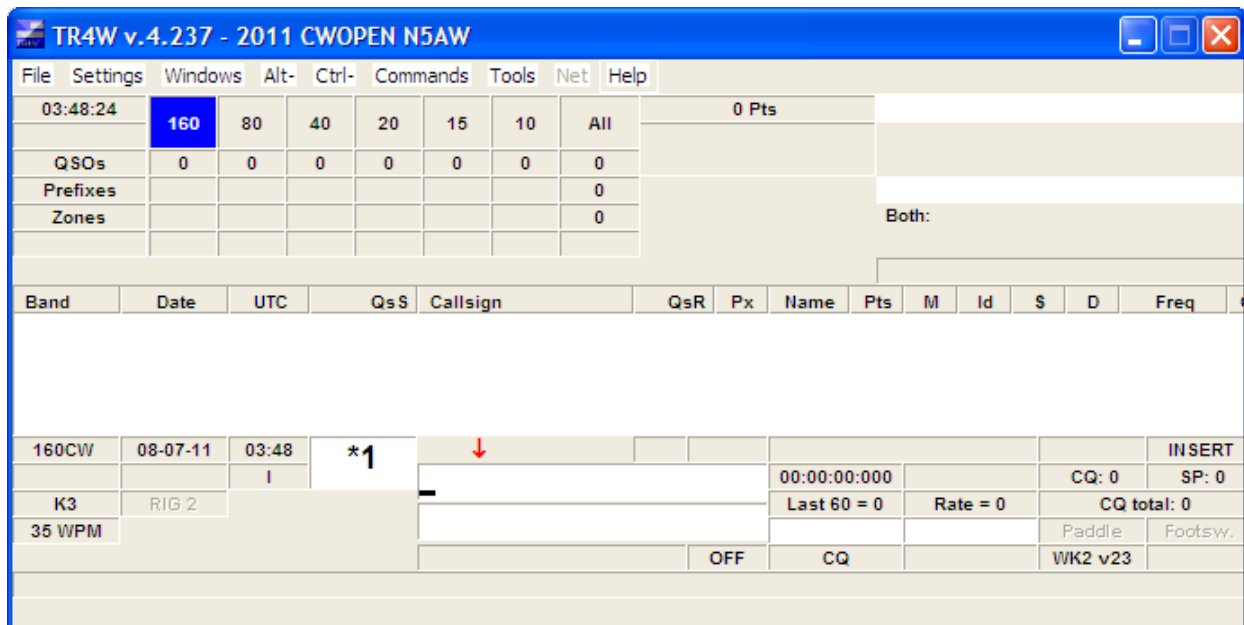
This article will show how to set up TR4W for the CW Open but the program has modules for many other contests as well as general purpose logging. To get started go to the TR4W homepage at: <http://www.tr4w.com/>. Clicking on “DOWNLOAD” brings up a list of TR4W versions for several languages. Select the latest English release listed at the top (4.237 as I write this). Clicking on “tr4w\_setup\_4\_237.zip” will initiate a download of a compressed (zip) file. Once the download is completed, extract the file and you will see a window like this:



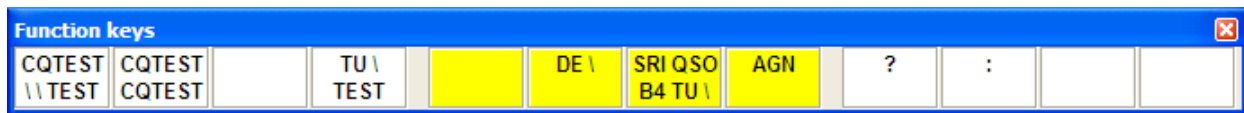
Click on Next and the program will install. When the installation is completed a TR4W icon will appear on your desktop. Clicking on the icon starts the program, bringing up this screen:



Fill in your call and select CWOPEN in the pull down CONTEST menu. You are then asked to fill in your name. Next select your CATEGORY/POWER and click OK. The program opens with two windows:



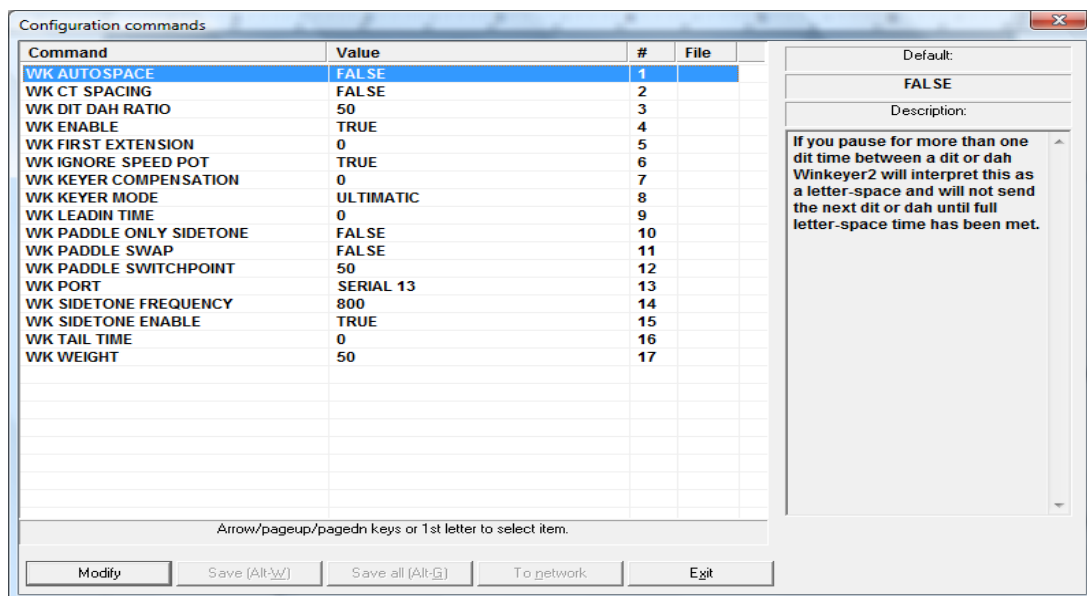




The lower window is a function key template. More about programming these later.

## Interfacing:

Next you will need to configure your CW keying and radio interfaces. I have used a parallel port to key the radio with TR4W but most computers no longer have a parallel port and a Winkeyer or similar external keyer is needed. If you are using a Winkeyer you need to know the port it is assigned to. Go to the “Tools” pull down menu and select “Device Manager”. In Device Manager select “Ports” and make note of the serial ports to which your Winkeyer and radios are connected. Close Device Manager and return to TR4W. On the pull down menu “Settings” select “Winkeyer” to bring up this menu:



Note the context-sensitive “help” on the right side explaining in this case what “WK AUTOSPACE” does. Set WK ENABLE to TRUE and WK PORT to the proper port for your Winkeyer. Select “Save All” before exiting the setup menu.

Returning to the main logging window, from the Settings pull down menu select “CAT and CW Keying”, then “Radio 1” or “Radio 2” to open this window:

**RADIO ONE**

**CAT**

RADIO ONE TYPE: K3

RADIO ONE CONTROL PORT: SERIAL 8

RADIO ONE CAT RTS: OFF

RADIO ONE CAT DTR: OFF

RADIO ONE BAUD RATE: 38400

**CW/PTT**

KEYER RADIO ONE OUTPUT PORT: NONE

RADIO ONE KEYER RTS: OFF

RADIO ONE KEYER DTR: OFF

RADIO ONE NAME: K3

Reset OK Close Apply

The CAT portion of the menu is straightforward. The values shown are for my K3. The CW/PTT options should be NONE and OFF if you are using a Winkeyer. RADIO ONE NAME will appear on the logging screen to identify the radio. If you are SO2R you will need to do this for both radios.

Now go to the Windows pull down menu on the main logging screen and select Radio1 to open a window for the radio. If your radio has been properly interfaced it should look something like this:

**Radio 1**

VFO A: 14021.79

VFO B: 14010.45

RIT XIT SPLIT

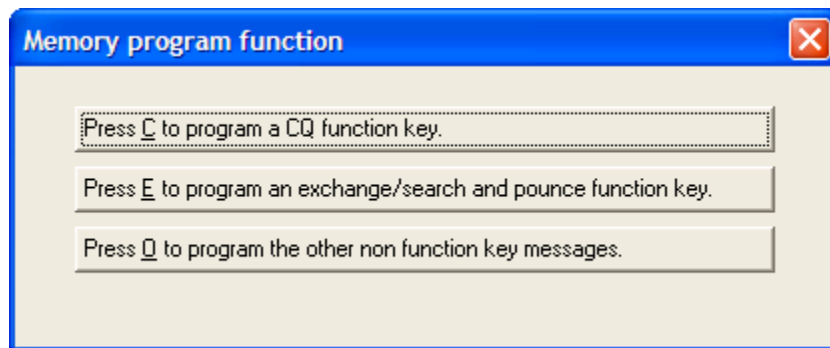
You can drag the window to a convenient place on your computer screen.

### **Other Windows:**

TR4W has a number of additional windows that can be opened from the Windows pull down menu. Others you may find useful in the CW Open are the Band Map, Dupe Sheet and SCP (Super Check Partial). Normally one would want a multiplier window as well but it isn't really needed for CWO. In addition to being "draggable" these windows can be resized.

### **Programmed Messages:**

The program now is ready to go with a set of default messages but you will likely want to program your own. Like most contest logging programs, TR4W has different messages for "Run" and "Search and Pounce". To program them press "Alt P" on the keyboard to bring up this menu:



Select the first option, either with your mouse or C on the keyboard to get the CQ keys. This is how I have them programmed for the CW Open:

List of messages		
Command	Message	Caption
CQ CW MEMORY F1	CQ CWO \ \ CWO	
CQ CW MEMORY F2	CWO \	
CQ CW MEMORY F3		
CQ CW MEMORY F4	@	
CQ CW MEMORY F5	\	
CQ CW MEMORY F6	DE \	
CQ CW MEMORY F7	AGN?	
CQ CW MEMORY F8	QRL	
CQ CW MEMORY F9	?	
CQ CW MEMORY F10	:	
CQ CW MEMORY F11	MARV	
CQ CW MEMORY F12	#	
CQ CW MEMORY CONTROLF1		
CQ CW MEMORY CONTROLF2		
CQ CW MEMORY CONTROLF3		
CQ CW MEMORY CONTROLF4		
CQ CW MEMORY CONTROLF5		

F10 is reserved for toggling keyboard CW off and on (keyboard CW “on” disables the other function keys) but all the other keys are individually programmable including Ctrl Fn and Alt Fn for a total of 35 possible messages (assuming your keyboard has 12 function keys). Normally F1 is the primary CQ message. To program F1 double click on “CQ CW MEMORY F1” to get this menu (default CQ message shown):

Program message	
CQ CW MEMORY F1	
Message	CQTEST \ \ TEST
Caption	
<input type="button" value="Edit"/> <input type="button" value="OK"/> <input type="button" value="Cancel"/> <input type="button" value="List of commands"/>	

You can edit the message just like any text. The back slash (\) is shorthand for your call. Fill in the Caption box only if you wish it to differ from the actual message. The function keys can also be programmed to execute a set of commands shown in the “List of commands” pull down.

In addition to \ as shorthand for your call there are others which are listed in the TR Manual. In F4, I have used the @ symbol which sends whatever is entered in the call window. This is useful when a station does not respond to his report and you want to resend his call.

A similar set of messages for Search and Pounce can be programmed by selecting E on the earlier menu. The S&P function keys I have programmed for the CW Open are shown below.

List of messages		
Command	Message	Caption
EX CW MEMORY F1	Set by the MY CALL	DE+Call
EX CW MEMORY F2	Set by S&P EXCHANGE	S&P Exchange
EX CW MEMORY F3		
EX CW MEMORY F4	@	
EX CW MEMORY F5	\	
EX CW MEMORY F6	DE \	
EX CW MEMORY F7	AGN?	
EX CW MEMORY F8	QRL?	
EX CW MEMORY F9	?	
EX CW MEMORY F10	:	
EX CW MEMORY F11	MARV	
EX CW MEMORY F12	#	
EX CW MEMORY CONTROLF1		
EX CW MEMORY CONTROLF2		
EX CW MEMORY CONTROLF3		
EX CW MEMORY CONTROLF4		
EX CW MEMORY CONTROLF5		

Don't change F1, F2, and F10 but all the other keys can be programmed to your liking. Most of mine are the same as those for CQ. That makes them easier to learn. F5 for example always sends my call. These keys are also used in CQ mode after sending the other stations call and report. For example if the other station asks for a repeat hit F2. Once his report is entered the keys revert back to the CQ keys.

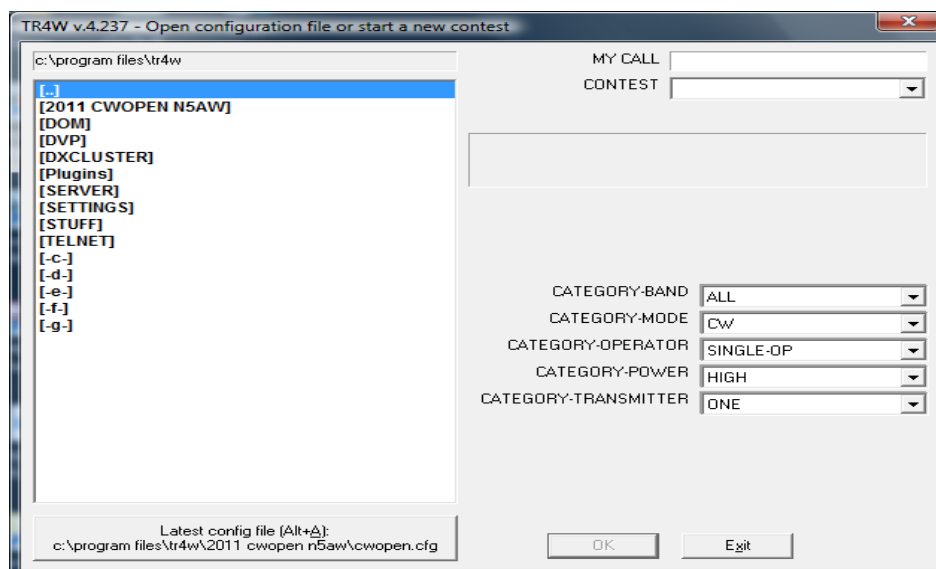
The "O" option allows you to program messages like the exchange and QSL messages that don't need a function key or are used in multiple messages. Here are mine:

List of messages		
Command	Message	Caption
CALL OK NOW CW MESSAGE	} OK	
CQ CW EXCHANGE	# MARV	
CQ CW EXCHANGE NAME KNOWN	# MARV	
QSL CW MESSAGE	73 \ CWO	
QSO BEFORE CW MESSAGE	SRI QSO B4 TU \ TEST	
QUICK QSL CW MESSAGE	TU \	
REPEAT S&P CW EXCHANGE	# MARV	
S&P CW EXCHANGE	# MARV	
TAIL END CW MESSAGE	R	
SHORT 0	T	
SHORT 1	A	
SHORT 2	2	
SHORT 9	N	

The CALL OK NOW CW MESSAGE automatically sends the corrected portion of a call (if you make a change to the initial call copied in CQ mode) followed by the QSL CW MESSAGE. The QSL CW MESSAGE is sent when you hit the Enter key. The key used to send the QUICK QSL message is programmable. The default is backlash (\). Both these QSL keys log the contact completing the QSO.

### Setting Up for Three CW Open Sessions:

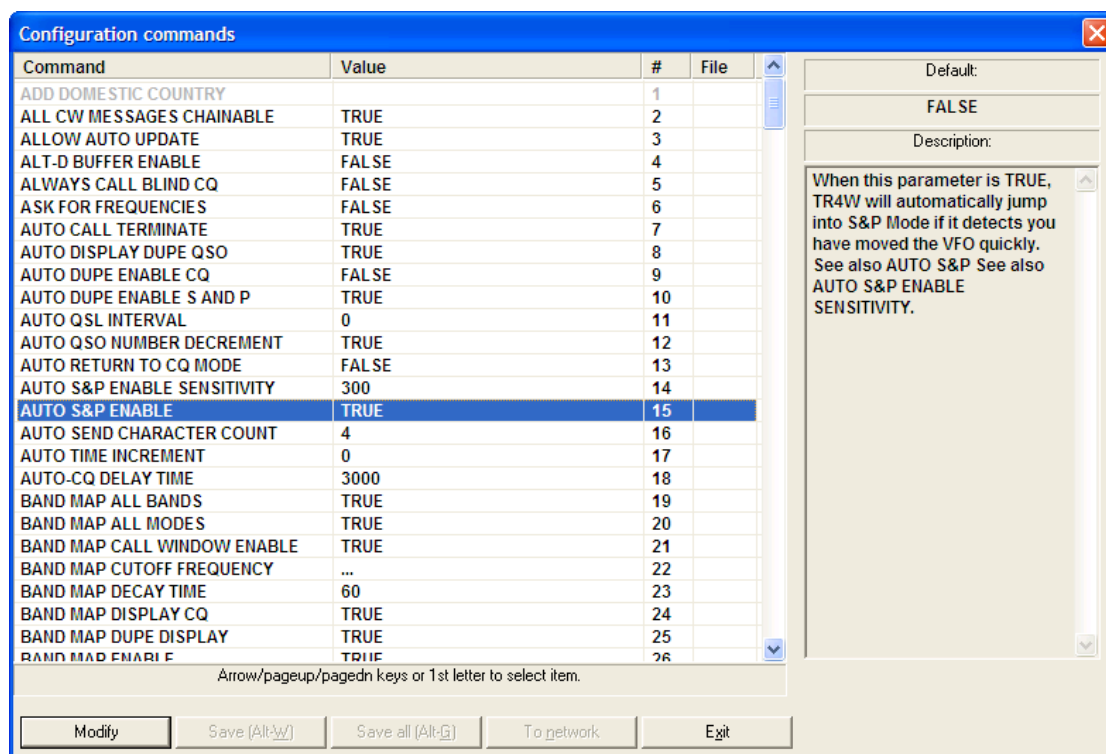
When you quit the program and open it again you will see a screen like this:



It is the same screen you saw at the start of the set up except now [2011 CWOPEN N5AW] is one of the program files. Clicking on it will open up the contest file you just set up. However, if you are going to operate more than one session you will either need to create separate unique folders for each one or move all the files except CWOPS.CFG before the next session. If you choose to set up separate folders ahead of time, open the program folder for TR4W and rename the 2011 CWOPEN *CALL* folder to something like 2011 CWOPEN 1200. Make a folder for each session and copy the CWOPEN.CFG file from your original folder into the others. I find it useful to make a shortcut on my desktop to go directly to the TR4W program folder.

### Other Commands:

There are many options that allow TR4W to be tailored to the individual user. These commands can be accessed by entering Ctrl J to bring up a list. Most of these are described in the TR Log Manual but the description shown on the right when you highlight a command is normally all you need to know. A list of all of these is also available on the TR4W website under Documentation. Here is what the menu looks like:



I have highlighted AUTO S&P ENABLE which I find very useful. As you see in the description this automatically puts you in S&P mode when you tune away from your CQ frequency. You also must specify how far the VFO is moved before it switches to S&P – in this case 300 Hz. Note that tuning the RIT will not initiate the switch to S&P.

Another feature that I find very useful but not everyone likes is AUTO CALL TERMINATE. With this command set to TRUE, when you are in CQ mode and begin typing in the CALL WINDOW, the program will begin sending the call after you enter the number of characters specified by AUTO SEND CHARACTER COUNT. In the example it is set to 4. This takes practice since if the call is long you need to pause after you have typed in the 3<sup>rd</sup> letter until the station completes his call. If you are a slow typist like me this is less of a problem. This option can also be toggled off and on from the logging window by holding down the Alt and – minus keys simultaneously. A similar function in N1MM is called ESM (ENTER SENDS MESSAGE). Many operators find this feature a little tricky to master and end up abandoning it for the old tried and true Return or Enter key. I like anything that reduces keystrokes in contesting, so have found AUTO CALL TERMINATE a run rate booster that was worth mastering. We have used TR4W in multi-op settings with a mix of operators who do and don't like the feature. As mentioned above, toggling it off and on with Alt - is very simple.

The list of commands is long and even with the description can be confusing to a new user. I've listed some of the most important ones below. **Always remember to save your changes before exiting the set up menu.** If you fail to do so your changes will remain in effect only until you close the program. The next time you open TR4W it will revert to prior settings.

AUTO DUPE ENABLE CQ – I normally set this to FALSE and log dupes who answer my CQ.

AUTO DUPE ENABLE S AND P – unless a contest allows dupes or you are using the General Logging module you should set this to TRUE so you don't accidentally call a dupe.

AUTO QSO NUMBER DECREMENT – when this is set to TRUE the serial number is not increased until the next QSO is logged. So if after you have already logged a contact he asks you to repeat the number, it will still be correct if you send it with an F key. If set to FALSE it will be one more than it was. I recommend you set it to TRUE for the CW Open.

CW SPEED INCREMENT – CW speed can be changed with the Page Up and Page Down keys. I prefer a 2 word per minute change instead of the default 3.

ESCAPE EXITS SEARCH AND POUNCE – If TRUE, when you are in S&P mode and hit the Escape key the program switches to CQ mode. In this case I occasionally end up in CQ mode by



accident so I set this to FALSE. Then to go from S&P to CQ you will need to enter Shift-Tab. Once in CQ mode Tab takes you back to S&P.

MY GRID – TR4W automatically calculates beam headings based on this entry so you need to put your proper grid here.

INITIAL EXCHANGE FILE NAME – If you have a text file with calls and names, click on this command to bring up a “browse” menu. Locate the file and double click on it. When one of these calls is entered the exchange will be filled in with the name in the text file and you will only need to enter the serial number. Note for CWO you want only the call and name in the file, not the CW Ops number.

LEADING ZEROS – The name is a little deceiving – this is actually the number of characters you want in the serial number. If you want to start with 001, set this to 3.

SINGLE RADIO MODE – If you are using two radios set this to FALSE. Toggle between radios using Ctrl-R. The active radio will be highlighted on the logging window.

TWO RADIO MODE – For SO2R, setting this to TRUE enables some features that streamline second radio contacts. These are described in the TR Log Manual and take quite a bit of practice to use efficiently so I won’t go into them here.

### **Useful “Alt” and “Ctrl” Operations:**

We have already talked about some of the Alt functions such as Alt-P. Others are listed in the pull down menu Alt-. Here are some of ones I use the most:

Alt-R – toggle between radios in SO2R mode

Alt-B – band up

Alt-V – band down

Alt-M – toggle mode

Alt-S – enter CW speed

Alt-Y – delete last QSO

Alt-L – search your log for a call sign. When you find it you can edit the QSO information.

Cntl-L – list the entire log

Ctrl-Enter – same as Enter except does not send CW

### **An Example S&P QSO:**

Suppose you hear K6RB calling CQ CWO. Enter his call in the CALL WINDOW. If he is a dupe QSO B4 will show up in red just to the left of the window. When he finishes CQing hit either F1 or Enter to send your call. If he is a dupe and you failed to notice the QSO B4 message, no call will be sent, the CALL WINDOW will clear and you will see a message K6RB is a dupe! If he is not a dupe your call will be sent and the cursor will move to the EXCHANGE WINDOW waiting for you to enter his information. If he does not answer you can hit F1 to call again. Still no answer- hit Esc to return to the CALL WINDOW. Hit Esc again to clear his call. If he does come back enter the information in the EXCHANGE WINDOW and hit Enter to send your information and log the contact ... or hit F2 to send the information without logging the contact, then Enter after he has confirmed the exchange to log him. If you need to delete the last contact hit Alt-Y. If you want to check to see if you have worked him without calling, hit the space bar.

### **An Example CQ QSO:**

Find a clear frequency. Hit F8 if you used my example function key entries to send QRL? If no response hit Shift-Tab to enter CQ mode. Press F1 for a “long” CQ or F2 for a “short” CQ. When a station calls type his call in the CALL WINDOW and hit Enter. Your information will be sent and the cursor moves to the EXCHANGE WINDOW. If the station asks for a repeat hit F2. When he sends his information type it in and hit Enter to send the “long” QSL message or \ to send the short message. If you need a repeat and used my example F keys, hit F7 to send AGN? If you need to correct his call you can use the up arrow or a mouse click to go back to the CALL WINDOW and correct it. However, a useful feature of TR4W is to set CALL SIGN UPDATE ENABLE = TRUE. Then you can type a corrected call sign in the EXCHANGE WINDOW and it will replace the original call.

As you gain familiarity with the program you will find you can handle most fills with the function keys. However, you can always send them manually. If you do, the paddle instantly interrupts TR4W's autosending. Esc also stops autosending. This can be useful to shorten a CQ or a QSL message. For example when I have several stations calling, after a QSO I may use Esc to shorten the QSL message to “TU” instead of “TU N5AW”.

### **Correcting an Entry:**

The last five QSOs are displayed above the CALL WINDOW. To edit one of them either double click on the call with your mouse or arrow up from the CALL WINDOW and hit Enter to bring up a window to edit the QSO information. Here is what the QSO edit window looks like:

Callsign	K6RB	United States	RADIO TWO
Band	80	DX	<input type="checkbox"/> DX Mult
Mode	CW	Domestic	<input type="checkbox"/> Domestic Mult
Frequency, Hz	0	Prefix	K6RB <input type="checkbox"/> Prefix Mult
Date	19:39 08-07-2011	Zone	<input type="checkbox"/> Zone Mult
Computer ID	1	Name	ROB <input type="checkbox"/> Name Sent
QSO points	1	QTH	<input type="checkbox"/> Inhibit Mults
Age		Postal Code	<input type="checkbox"/> Dupe
Chapter		Power	<input type="checkbox"/> Deleted
Check		Precedence	<input checked="" type="checkbox"/> S&P
Class		Prefecture	
Number Sent	5	Ten Ten Number	
Number Rcvd	6	RST sent	599
		RST received	599

Buttons: Play, Save, Cancel

If the QSO is no longer in the log window use the Alt-L function described earlier to search for the call. When the QSOs with that station are displayed double click on the one you want to edit. While you can scroll around in the window, I find it easier to use a mouse

### The Bandmap:

One of the advantages of interfacing your radio with a logging program is the ability to generate a bandmap. The bandmap window is activated by selecting it from the pull-down Windows menu. Several commands (Ctrl-J) are available to set the display parameters (bands, modes, decay time, etc). Unless you connect to the DX cluster the bandmap is populated entirely by stations you enter in the CALL WINDOW while in S&P mode. Below is an example from the IARU contest.

The screenshot shows a window titled "Bandmap" with a list of frequencies and call signs. Each entry has a small colored square to its left: red for 'M' (multiplier not worked), yellow for 'D' (worked), and black for a station that has not been worked but is not a multiplier. The background of each row is also colored: dark blue for 'M', black for 'D', and light gray for stations not worked. The bottom of the window has four empty cyan-colored boxes.

Frequency	Status	Call Sign
14015.9	M	TM0HQ
14020.3	D	K7RL
14025.5	M	ON4UN
14027.4	D	N6MA
14028.0	M	9A0HQ
14029.8	D	N9RV
21000.6	D	NR4M
28029.2	M	NX6T

The bandmap is functionally similar to those in other logging programs. When you type a call in the CALL WINDOW and hit Enter or the space bar (but not F1) the frequency and call is placed on the map. The frequencies of the stations on the active band have a dark blue background. The most recent calls entered are shown in with a black background. The oldest are light gray. After a time specified by BANDMAP DECAY TIME the call drops off the map. The stations with a D have been worked. Those with an M are multipliers that have not been worked. A station that has not been worked but is not a multiplier will have a blank beside it.

Provided you have BAND MAP CALL WINDOW ENABLE set to TRUE (the default), as you tune across the band the calls on the map will be displayed in the CALL WINDOW. If it is a dupe it is shown in red to the left. If you hit Enter or the space bar it will be “renewed” and the call cleared from the CALL WINDOW. If the station has not been worked and you hit Enter or F1, your call will be sent just as if you had entered the call manually. If you want to go back to a station displayed in the bandmap, double click on his call and your radio will QSY to his frequency.

### Exporting Logs and Generating Reports:

When the contest is over, you can generate Cabrillo and ADIF files from the Export option in the Files pull down menu. The Reports option will generate a summary and various other reports. These are all stored in the sub-folder for that contest.

### Other Features:

TR4W has many features not covered here including networking, audio recording, and a sophisticated voice keyer.

## Conclusion:

Any good contest logging program takes a while to master. However, I have had guest operators at my station who were able to use TR4W with only a little practice. The CW Open is a good opportunity to give it a try but I strongly recommend you get as much practice as you can before the contest. You can use the GENERAL QSO contest set up to use it as a general purpose logging program. However, the bimonthly CWT's are an ideal place to get some practice. Just chose "CWOPS" for the contest instead of CWOPEN when you go through the setup process and change CWO to CWT in the messages.

As a final check, do a "dummy" CW Open with your transmit off to make sure you have things set up properly before the contest. If you run into problems, one place to get help is through the TR4W Google Group. There is a link to it on the TR4W home page at [www.tr4w.com](http://www.tr4w.com). I would also be happy to try to help. Just send an email to [n5aw@arrl.net](mailto:n5aw@arrl.net).

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### From the editor

I am a very happy guy, these days. Why? Because CW Open is moving along in a very good way and I believe it is going to be a really fun radiosport event. I'm also thrilled that CW Academy is progressing. We've had over 40 member volunteers to serve as advisors, and we're already beginning to get student signups...and most of them are from EU!! Luis, EA8AY, on his own translated our CW Academy information into Spanish and posted it on some reflectors in EA land. And, bang! It enticed several EA hams to sign up. Consider doing something similar, in your native language, in other countries. Our goal is to increase the population of competent CW operators, and we are happy to see interest in any region, any country.

Now that both CW Open and CW Academy are in good shape, we would like to turn our attention to other kinds of on-air activities. For our members who most prefer ragchewing, we are mulling over some interesting ideas, and, of course, we would love to hear from you about what you think might inspire more ragchew activity. And, for our members who love DXing, we are working through ideas for awards and events that will take advantage of our global membership. Again, your ideas and suggestions are always welcome.

The day after CW Open I will be boarding a plane for New York, and two days later, I will be heading to 4X land. I arrive in 4X on Friday morning, and I leave for New York and California the very next Sunday. Ouch! You know who will be suffering from major jet lag. The reason for the trip is to bring my 18 year old son to 4X where he will be studying for the next two years. My oldest boy is already in college, in Oregon. So, it will be just me and Debra. I'll have even more time for ham radio (I hope). I plan to be very QRV in CW Academy, mini-CWTs, and other CWops inspired activities. And, I look forward to having ragchew QSOs with many

CWops members. I want to know where you live, what you do, your interests outside of ham radio, and whatever else you'd like to chat about. I promise I'll be a good listener ☺

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## My Story

Bill Perkins, KC4D, CWops 419



My Story began in the winter of 1957, the “Golden Age of HF Propagation”, as we approached the all time record Sun Spot Numbers of Cycle 19. As with many, who have shared their stories, I am eternally in the debt of my many Elmers and Mentors, who counseled and encouraged me, as I pursued this wonderful life-long hobby, Amateur Radio.

I was 15 years old and visiting in my girl friend's home one Saturday afternoon. I followed her to the basement to ask her father for permission to borrow the family car for a trip to a nearby soda shop. There we found her father seated before his neatly arranged station in QSO with an AM station in Europe. I was fascinated and sat down to observe. I carefully listened to the exchanges, and after a while he turned, handed me the microphone, and invited me to say a few words to his friend in EU. Momentarily I froze with Mic-Fright, but regained my composure and haltingly introduced myself. I was hooked and there was no turning back!!!!

Charlie Bullock, W4UJH (Wiskie Four Uncle John Henry), or “Uncle John,” as he was known on the air, was an engaging thoughtful person who loved to tinker with electronics, and we soon became fast friends. I soon inquired how I might obtain a license and operate my own station. In short order, from a drawer in his operating table, “Uncle John” produced a battery operated code practice oscillator and a venerable WW-II - J-38 Straight Key. Daily code practice sessions followed each afternoon at his desk. The ARRL Novice License Manual and a flash card with the Morse Alphabet were my constant companions. Learning the International Morse code was relatively easy for me, and soon “Uncle John” mailed an application to the FCC for my Novice Exam. The afternoon, I had scheduled to take the exam, I was lightheaded and nervous as a cat. Sensing my delicate state, “Uncle John”, suggested we begin with a little practice before the official code test. I sent for a while with the J-38 and after few minutes, settled and began to send and copy 8 to 10 WPM, with only an occasional error. When “Uncle John” turned and announced that was sufficient, I froze. He smiled, and then quietly announced that I had demonstrated to his satisfaction sufficient skill, and had officially passed the code test. I was ecstatic!!!

My parents helped finance my first station, a World Radio Laboratories, Globe Scout 680 Transmitter, and a vintage Hallicrafters S-40B Receiver. "Uncle John" upgraded the vintage S-40B Receiver with a Heath QF-1 - Q-Multiplier and helped me stretch a 40 / 15 Coax Fed Wire Dipole across the roof of our home, four stories above ground. For antenna switching, a porcelain double pole double throw knife switch was fixed to the face of a home made operating table in front of a set of large dormer windows in our attic.

I was on the air in the 40 Meter novice band. I soon added an ARRL Handbook "Plumber Delight" 15 Meter Rotary Dipole mounted on a galvanized mast and extending above the dormer overhang. Rotation was by the "Armstrong Method", reaching out one of the dormer windows. During this period I met life long friends and great CW operators Fred Fraley, W4DF (SK) and his sister Carol Fraley Lafferty, K4SAF, now Secretary / Treasurer of the US - YLRL. HF Propagation was magical during that first year.

The highlight came one afternoon on 15 Meters. I was listening around one of my US Novice Band crystal transmit frequencies, when to my surprise, I hear an SSB DX station. I listen carefully as he identifies as CR9AH (now XX9) on the Island of Macau off the coast of Southern China. I could scarcely believe what I was hearing. Seldom did I work into the Pacific from my deep Southwest Virginia QTH, and never into that area. When he closed with the other station, I switched on the transmitter and gave him a short call with my hand key. To my astonishment, he replied immediately and subsequently confirmed our cross mode QSO with his QSL. I've never heard a Macau station before or since.

Hams in our area used to congregate and swap stories in a local AM net each evening at 9 PM local on 29 Mhz . These were the days before widespread availability of VHF / UHF FM Repeaters and handheld transceivers and most hams in our area had access to 10 Meter AM. I was drafted to act as net control one night a week and this distracted me from continuing to improve my CW. I joined the local club and participated in the ARRL FD (Field Day) for my first exposure to Contest Operations. At FD, I was drafted to log and keep the Paper Dupe Sheet for the CW position. Fortunately I was paired with Orton (Dug) Duggan, W4EQE. To this High School aged student, Dug was a character bigger than life. A Fast Pitch Softball Star and graduate Electrical Engineer, Dug had earned the DFC (Distinguished Flying Cross) piloting bombers in WW-II over the Italian Alps and into Germany and as far east as Romania. He was shot down and crash landed in Split, and with the help of the Underground, he engineered the rescue of his entire crew and plane. He was a source of endless stories and continuous inspiration. More important, he was a super CW operator. After FD, I visited in his home, where he introduced me to his station which was 100% home brew. The receiver was a multi band dual conversion super het of his own design and fabrication. The receiver employed an "Infinite

Impedance Detector” for CW, which he claimed was much superior to then popular Product Detectors, available in most commercial gear. To this day I don’t know what an “Infinite Impedance Detector Circuit” is, or what it might look like electrically, or if it even exists. Perhaps it is just a figment of the imagination of this aging ham. Dug even fabricate and used his own 600 ohm open wire ladder feed line fashioned from enameled transformer wire and wax soaked wood dowel spacers. He matched the 600 ohm balance line to his 50 ohm unbalanced WW-II vintage Command Set Transmitter by using alligator clips to tap a large multi-turn coil, which he resonated with a parallel air variable capacitor. All of this was mounted in the open on a piece of plywood. propped in the widow of his attic shack. His keyer paddle was fashioned from a vibrator salvaged from a military power supply mounted on a sheet lead weighted J-38 base. He ran only 50 Watts on 40 Meter CW, but could call CQ most any evening and run EU for hours on end.

Dug encouraged me to avoid the temptation to abandon CW for SSB, but rather to continue to improve my code speed by engaging in longer rag chews at speeds that stretched my copy ability. To assist with this, he fashioned for me a paddle like his own, and helped me fabricate and assemble my first electronic keyer, an early ARRL Handbook tube design, which I eventually replaced with a home brew ARRL Handbook version of the famous Hallicrafters, W9TO Keyer.. I upgraded my station with the addition of a new Hammarlund HQ-170 receiver, a used Johnson Viking II transmitter, and a HyGain 3 element Yagi. I became active in the National Traffic Systems VSN and VN CW nets, where I met and was encouraged by several early CW legends, ARRL President, Vic Clark, W4KFC, “PN” K4KNP (Railroad Telegrapher and long term EAN (Eastern Area Net) Manager, Virginia SCM ,”Hoppy” Hopkins, W4SHJ, and long term ARRL Roanoke Division Director PL “Andy” Anderson, W4MWH (now N4AE), to name a few. All of this led to a life long appreciation of and preference for the CW.

During my undergrad college years ’59 through ’63, I was a member of the Georgia Tech Amateur Radio Club and occasionally operated from the Club Station W4AQL. In those days the club station was housed in a small wooden enclosure, precariously perched on top of the slate roof of the Physics Department Building. You had to climb a ladder through the roof of the Physics Building and carefully ascend the rickety wooden stairs to enter the shack. OSHA would have been all over that one today. Inside was an Army Surplus BC-610 feeding a Meter Rotary Yagi mounted on the roof of the wooden enclosure. The BC-610- made a big impression, when we fired it up on 20 / 15 Meter AM or CW. I’m sure simultaneously it destroyed TV reception for miles around.

Upon graduation, my Elmer and CW Mentor, “Dug” helped me secure my first position working for the NASA’s Manned Space Craft Center at Cape Kennedy, where he was then serving as a Program Manger. After a year, I returned to school at the University of Virginia, graduating



with my MBA in the summer of 1966. I began a 25 year career with General Electric Company in Salem, VA , where I met and married Ida, my wife of 44 years.

In 1968, after two years of rotational training in Manufacturing Management, we settled in Lynchburg, VA, where I was at last able to devote a bit more time to our hobby. I decided to upgrade my long standing Conditional Class License and, for the first time, sat for the Exam before an Official FCC Traveling Examiner in Salem, VA. I had been active in the National Traffic System for a number of years operating CW at higher speeds and didn't even bother to test or brush up my CW skills, but only studied the Technical Materials in preparation. The test was held in an old Armory on Salem Avenue and the CW note echoed off of the concrete walls making copy difficult. I had no problem copying the 20 WPM in my head, but I had not recently tried writing it out in long hand, and I struggled mightily. To get my one full minute of perfect copy, the Examiner was kind enough to give me credit for a series of test characters sent as a warm-up before the official five minute test began. I had only prepared for the General and Advanced Technical Exams, but once the examiner scored my Advanced and told me I had passed, he handed me the Extra Exam and told me to give it a shot. Thankfully, I passed all three exams in that one sitting and have not set eyes on an FCC examiner since. I was assigned the Extra Call, KC4D, which was among the earliest KC4 one letter suffix calls released. For the first year or so I received many requests for QSL to confirm Antarctica. Of course word finally got around that only the KC4U?? series was reserved for Antarctic Expeditions.

In the late-90's before my full retirement, I became a member of the Potomac Valley Radio Club and was introduced to competitive Radio Sport Contesting. This opened to me a whole new operational world and new set of friends within our great hobby. Since, I have traveled five times with my Presbyterian Church Mission Team to a remote Mission Station in Northwestern Malawi near the border with Zambia, and secured and still hold the license 7Q7WW. In between mission projects, I managed to operate a bit of several CQWW-WPX CW contests from the Mission Station with the help of Brian Poole, 7Q7BP and Doc Loomis, KA9LFX. Our scores were not impressive, but I found out what it was like to be on the other end of a pileup.



More recently I have been fortunate to learn from and operate with a delightful group of talented "Goat Farm Contesters" from Steve Bookout's NR4M Multi/ Multi Super Station in Locus Grove, Virginia west of Fredericksburg. I continue to learn from the likes of Larry Schimelphenig, K7SV, Mike Sims, K4GMH, Ken Low, KE3X, Sejo Sudic, N3UA, Bill DeLage, K1SE, Ken Clarebaugh, K4ZW, Chip Sufitchi, N2YO, and others. Hopefully my skills will continue to grow.

In 2001, I fully retired and built our current home on six acres in the North West Corner of the City of Lynchburg, VA. I finally had the land and time to try building a competitive station.



The old tube era equipment had long since been replaced by a series of TenTec Transceivers (Omni D, Omni VI Plus, an early IC-756, and IC-706). As our house was under construction, I erected a 135 Foot Rohn 45G Tower with elevated fixed Phillstrand Guys. A two Element 40 meter Cushcraft Yagi was installed at 135 Feet rotated with a Tail-Twister. A Tic Ring Rotor was added at 110 Feet with a multi-element Sommers Log Yagi.



In the last couple of years, I have upgraded to four levels of guying, and deployed K0XG torsion guy arms at the top and mid-tower. Once these tower upgrades were complete, I replaced the Cushcraft 40 Meter Yagi with a 40 through 6 Meter MonstIR SteppIR 3/4/7 Element Yagi w/ 80 Meter Dipole add on Kit rotated with a K0XG super duty rig rotor. I also sometime use a full-wave 80 Meter Delta Loop suspended from the tower just below the SteppIR. This week a group of my local ham friends helped me solidify a plan for the future of my station. As we move forward the two (2) element Cushcraft 40 Meter yagi will be re-installed on the Tic Ring Rotor at about 90 Feet. Later I will add a pair of stacked three element HyGain Triband Yagi's on Heavy Duty Side Mount Rotors. Later still, 500 Feet to the East of the main tower, my AB-

621G "Rocket Launcher" Portable Mast / Tower will support a three element tri-band yagi and a

two element Shorty 40 Meter Yagi for the SO2R Second Radio / Multi-single Multiplier Position. I currently run with an TenTec Orion II Transceiver driving either a no-tune solid state Ameritron ALS-1300 or a venerable TenTec Titan Full Legal Limit Amp. I am assembling a recently acquired K3-100 with second receiver, P3 & matching Wattmeter and expect to deploy them as I transition toward full SO2R capability.

About ten years ago, I made my first ever QSO on Top Band (160 Meters) and have since found it to be among my favorites, particularly during the quieter winter months of the year. I reverse feed my Top Loaded 135 Foot tower against a pair of elevated counterpoise wires, and receive with an array of six 540' Beverages, which cover six of the eight primary compass directions. The system has worked surprisingly well in both domestic and international contests.

Most recently Mark Sihlanick, N2QT, and Mike Sims, K4GMH, and others have encouraged me to try RTTY contesting and my skill with and interest in this mode continues to grow, but my first love remains CW.

As I shared earlier, I'm deeply indebted to the many Friends, Elmers, and Mentors who have counseled and encouraged me over the years. Accordingly, I'm excited about, and looking forward to actively participating in, the new CWops Mentoring Program. I hope to connect in due time with every CWops member either from my home station or while Mobile on the road or around town. I welcome visitors and would love to visit with you face to face, if you are ever in Central Virginia.

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## My Story

Allen Singer, N2KW, CWops 421



Memory can be a funny thing. Often it is quite selective. You can remember scattered events from the distant past, but cannot remember the name of someone that you met last month. History is nothing more than a mutually agreed-upon series of lies.

When I think back to what made me get involved with Ham Radio, the roots go back a long time before I got my first license. Yet, when you look at the person that I am today, these formative experiences explain a lot ... You have to connect a lot of dots, to make a story though ...

The year 1950 must have been very special in our household. We got our first car that year, and our first (B&W) television. I was only 3, but I remember these things clearly.

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The television was a huge console-type, with barn doors, and a speaker big enough for a movie theater. Our antenna (no cable in those days) was a pair of stacked "vees" aimed at the Empire State Building, where all of the transmitters were. All but one, that is! Channel 13 broadcast from Newark NJ, which was about 90 degrees South of the heading to the rest. We lived in Brooklyn then, and International flights went to "Idlewild" airport (renamed for JFK after the assassination.)

My mother liked the movies on channel 13, so I would rock the "fine tuning" trying to get a clear picture. We had no rotor, and no clue that one would have helped. I would sit there for hours, tuning, until an airplane passed on just the right vector, and VIOLA, the picture was perfect! I would call my mother, and she was amazed that we got such good reception. I was convinced that it was my deft tuning that made this happen, and when the airplane passed, and the picture went back to "snow" ... I started tuning again.

Fast forward 61 years, and I still find "tuning the band" to be relaxing, even when the signals are noisy.

My father was in the Navy, during WW2, and learned his Morse from "The Bluejackets Manual" but he wasn't a Radio Operator. He used the "Helio" and blinked messages to other ships in the fleet, during (frequent) times of "radio silence." During the Atlantic crossing, going home, the Helio was his only link to the outside world. I too, learned my Morse from "The Bluejackets Manual" and we would sit in a darkened living room, blinking messages to each other, which drove my mother nuts! She supplied copious amounts of QRM, for as long as the blinking continued. Thanks Mom! Dad may have helped with the code, but it was you who taught me to copy through heavy interference!

When I became a Boy Scout, and they found out that I know Morse Code, they made me a "Signalman." There was one other fellow in the troop who knew Morse, and we would send messages back and forth, with a single flag (non-iambic.) We went on to become State Champions, only to be trounced in a regional competition.

It was around this time, that I got interested in DX. But MY version of DXing, was listening to the Broadcast Band, late at night, when the skip rolled in. I sent away for QSL cards, and still have them somewhere. WKBW, WTOP, WWVA, even CKLW ... big DX!

Funny thing, but to this day, "real" DX happens at night, on low frequencies, with lots of QRN. Maybe that explains why I prefer 160, to ANY other band?

When I got to High School, I joined the Radio Club (W2CLE.) Our entire hamshack consisted of a Gonsett G-50, and an 8 element Hy-Gain beam for six meters. Fifty watts of AM worked anything we heard, which consisted of Brooklyn, with an occasional W4 thrown in. I had no intention of becoming a Ham, but they wouldn't teach me electronic theory, until I could send and receive at 5 WPM. So I learned code for the third time. First, blinking lights. Second, waving a flag, Now sound ... what next?

One day, I had the bathroom pass, from my math class. On the way back, I passed the "Ham Shack" and WA2LZE frantically waved me in. "The band is open, the band is open" he exclaimed. We worked Florida, we worked Louisiana, and we worked Texas, even Arizona ... and then the bell rang. I made peace with an angry math teacher, but was hopelessly hooked on Ham Radio.

The neighborhood had gotten bad. Crime was way up, and trouble beckoned. But as a new licensee, I ran home after school, to get on 15 meters (Novice band) and work Africa. WOMLY had just set up shop in what used to be "French West Africa" ... but was now "the terrible T's." I worked him in Gabon, in the Congo, and who knows where else. ST2AR was an Englishman named Eric. W1MO was on from Mogadishu, signing 6O1ND. PY1DB had a fist that sounded like a machine gun, but would slow down to your speed for a contact. GJ2LU was rare DX. "Ru" was on daily from Mozambique. There were many stations on from Angola. Namibia was "Southwest Africa" and also was very active.

My rig was a DX-20, fifty watts of crystal controlled CW only. My antenna was a 33' piece of wire, plugged into the coax connector with a banana plug, and no ground. Conditions were so hot, that it worked anyway. One day, I heard a really loud WA2. He came right back to me, and said that I was the loudest signal he had ever heard. We discovered that we were only 3 blocks apart. We met, and it was someone I knew well. Art's mother was the Den Mother, when I was a Cub Scout. We were the same age, licensed within months of each other, and remain friends to this day. We both traded our old calls in, in 1978, and he became N2KA.

I had another agenda during the late sixties, and sold all of my radio gear. But in 1973, my neighbor insisted that I take a vacation, and we went to Rockport MA, to stay with her family. Her brother was WA1HLR, and at the end of the week, he presented me with a B&W 5100. I bought a Drake 2-B in the "Yellow Sheets" and was back on the air with a 12AVQ. Then I got a postcard from the FCC, saying that I was operating without any apparent station license! Fortunately, it had just expired, and I was able to renew and keep the same call (WA2WFW.)

In 1978, I became N2KW, and practically lived on the radio for the next ten years. The DX bug had bitten me hard, and although there was no packet cluster then, we kept a 2-meter simplex "spotting" frequency. I joined LIDXA, and met many pioneers, like W2IYX, W2JGR, and W2AYJ. I knew all of the movers and shakers of NJDXA as well. W2TO, W2JB, W2BXA, and W2MZV were all friends. (each and every one of those original callholders, is now in "Zone 41.")

In 1980, my heart swelled with pride, when I heard Max, HB9RS, at the microphone of 4U1UN. Through my friendship with Max, I became an Operator/Instructor at 4U1UN for several years, until my wife got sick, and needed me at home. I had that station on until the wee hours, every single Wednesday night, and was a "new one" to countless ops. I joined KP2A on Desecheo in 1989, and earned my "#1 Honor Roll" plaque in 1991. For most of the eighties, I was the Hudson Division representative to the ARRL's "Contest Advisory Committee." In 1998, my wife lost her battle, and I became a single parent to a 13 year-old daughter, and an 11 year-old son, who had just lost their mother. DXCC became completely unimportant to me, and I only got occasional doses of radio, during contests. I became the 160 meter op at the K1TTT Multioperator Superstation, and still do ARRL-DX (CW) and CQWW-CW from there.

I lost my voice completely, in 1993 or so, and although it has come back (I now sound like a cross between Barry White, and an obscene telephone call) I rarely operate SSB. SSB gives me a headache anyway. The only time you will find me on SSB, is when a contest only awards top score, regardless of mode, so you must run both modes if you want to win. My secret to winning contests can be summed up in one word. Persistence. Remember the fable about the Hare and the Tortoise? I hear guys knocking them off at a rate far greater than mine, but when the contest is over, I have a higher score. Why? Because these guys aren't in to win! They get on for a few hours, and shut down, satisfied that they "supported" the contest. I won't quit until 2359. I don't know how many years I will be able to continue to do that, but I intend to find out!

So there you have it. The story explains my love of CW, my urge to continuously tune, my preference for LF, how I "outgrew" DX, and my secret to whatever success that I have had in contesting, stubbornness. When you have a lousy signal, only stubbornness will get you the contact.

As Jerry would say: "What a long, strange, trip it's been!"

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### Current Nominees

Need Sponsors	<b>EA8DP</b>	H. Montelongo Rivero	20-Jul-11
Need Sponsors	<b>W4TY</b>	Art Williams	24-Jul-11

For more details about nominees and status, check the “members only” on the Website:

[www.cwops.org](http://www.cwops.org)

For information about joining CWops, check the Website under “membership.”