

# The Keynote

Newsletter of FISTS CW Club • The International Morse Preservation Society  
Issue 3, 2011

**In This Issue:**  
**Reaching a Goal**  
**- 35 Years Later**

**Antennas for**  
**Operating**  
**Portable**

**Imbedded Morse**  
**Memorabilia**

**N4QR's**  
**160-Meter**  
**CW Transmitter**

**On the Cover:**

**Nick Yokanovich, N3NY, Code Buddy Coordinator**



**"When You've Worked a FISTS, You've Worked a Friend"**

**When you have a question about FISTS, go to the source for the correct answer. Posting a question on a chat room or email reflector may result in a lot of opinions, but your best bet is to ask a FISTS volunteer or look in the reference issue.**

**Please put the word 'FISTS' somewhere in the title of your email. This will help the volunteer recognize that your email is important and not spam.**

**For questions about:**

**Awards and Certificates contact**

**Dennis Franklin, K6DF, fistsawards@gmail.com : 4658 CAPITAN DR, Fremont CA 94536**

**The QSL Bureau contact**

**Stan Reas, K4UK, k4uk@rev.net : 1020 LONG ISLAND DR, Moneta VA 24121-1952**

**Our club call KN0WCW contact**

**Karl Zuege, KB1DSB, hmc.ret.karl@myfairpoint.net : 2176 DRAKE RD, Bomoseen VT 05732**

**The membership roster, call changes, name changes contact**

**Ed Hayes, N7CFA, n7cfa@comcast.net : 2628 LILAC ST, Longview WA 98632-3525**

**To get an application or sample Keynote sent to a friend contact**

**Jim Ranieri, AA9LS, aa9ls@turbotoads.com : 33778 REBECCA RD, Kingston IL 60145**

**Web page changes, getting your personal or club webpage linked, etc contact**

**Webmaster Bill Myers, KK4KF, kk4kf@cox.net**

**Club presentation packets contact**

**Joe Spencer, KK5NA, kk5na@kk5na.com : 3618 MONTRIDGE CT, Arlington TX 76016**

**Code Buddy volunteers and buddies contact**

**Nick Yokanovich, K3NY, & The Historical Electronics Museum Amateur Radio Club,  
k3ny@cablespeed.com : 108 BRENT RD. Arnold MD 21012**

**Sprints contact**

**Gil Woodside, 30 Hilltop Ave, West Warwick RI 02893-2825; wa1lad@cox.net**

**Get Your Feet Wet Weekend /G3ZQS Memorial Straight Key Contest contact**

**Lee Hallin, N7NU, hallinl@lanecc.edu : 3413 WALTON LN, Eugene OR 97408**

**Ordering supplies: Irene Kott W08E**

**44609 North Bunker Hill Dr, Clinton Twp MI 48038 or paypal to fists@tir.com.  
Irene has no email capability. Some shirt sizes are sold out - check web page.**

**All other questions, including supplies, tapes for the blind, callsign/email/ postal address changes, (NO we do not get this info directly from the FCC!) general membership questions and articles for the Keynote contact Nancy Kott WZ8C, nancy@tir.com; PO Box 47, Hadley MI 48440, phone 810-797-2033, fax 810-797-5808. Please check your label for your renewal month/year - dues are \$15/year. Payable to FISTS CW Club or paypal to fists@tir.com.**

# FISTS CW CLUB

The International Morse Preservation Society



"When You've Worked a FIST, You've Worked a Friend"

## North American Memo • Issue 3, 2011

Editor: Nancy Kott WZ8C • PO Box 47, Hadley MI 48440

Email: [nancy@fir.com](mailto:nancy@fir.com) • Phone: 810-797-2033 (leave message if no answer)

## TABLE OF CONTENTS

Information Page.....	2	Reaching a Goal — 35 Years Later....	8	Fifty-One Years To 40 WPM .....	14
Welcome to the New FISTS.....	4	Antennas for Operating Portable .....	10	FISTS Member Feedback .....	16
FISTS AWARDS.....	4	Imbedded Morse Memorabilia.....	12	Tower Rescue Practice .....	18
QRP with K3WWP .....	5	N4QR's 160 Meter CW Transmitter .	13		

Hi FISTS,

The Dayton Hamvention is history, but not the paperwork! It was unusually busy for me — after getting home from Hamvention on Sunday night, I had to turn around and go back to Detroit on Monday for a two-day work convention for my “day job.” All that traveling and paperwork for both work and FISTS left me practically brain-dead. Luckily, the Keynote was just about finished and I was able to whoosh it off to the printer after adding a few finishing touches.

If you have any photos/jpgs and stories about Hamvention, please send them to me. What did you buy? What did you want to buy but didn't? Did you decide to try a new mode or build a kit or antenna? Seems like the Begali keys were flying off the shelves, despite the price! How about Saturday when all the bathrooms “broke” and there was a chance that the Board of Health would shut the Hamvention down if they didn't get it fixed in time for Sunday's opening! I bet that was a first. There were too many Silent Keys since last year, we deeply missed several members whom I expected to see walk down the ramp to the FISTS booth — until I remembered they were SK now or had been for years. We made lots of new friends though, and the booth had a steady stream of activity - more than any other year in recent history.

Remember, this newsletter is only as interesting as YOU make it; I count on photos and stories from the membership to fill the pages. We don't pay for articles, but you'll have the fun of seeing your name in print and we'll send you as many copies as you need to give to friends and relatives!

On the cover this time is Nick, the Code Buddy Coordinator. There have been many stumbling blocks in matching up Code Buddies, mainly from the bands being so crummy. Nick is writing up an article about the program, which we hope to have in the next issue. If you want to volunteer to help someone and be that “friendly fist” on the other end of someone's first few QSOs, or need someone to be there to walk you through the jitters when you get your feet wet on the air with Morse code, drop Nick a note with info on what bands and times you can get on and he'll do what he can to help you. His address is on the inside front cover, and also on our web page <http://www.fists.org>.

I mentioned before that FISTS has a Facebook page. If you are on FB and had a chance to visit the page, I hope you clicked the “Like” icon. There isn't much activity on the page, which is a good thing, since it means you're all on the air....RIGHT?? It gives us another avenue, in addition to mass emails, to notify you of FISTS updates and Sprint/Contest/Activity reminders. Do a Facebook search on FISTS CW Club and the link should pop up.

Don't forget to send in your stories and jpgs...and now, on with your KeyNote More about Hamvention in the next issue.

— 73 88 33 Nancy, WZ8C



# WELCOME TO THE NEW FISTS

Number	Callsign	First	ST	Sponsor	Number	Callsign	First	ST	Sponsor
15432	WA3NZR	J. J.	PA		15441	WA7PCG	WAYNE	OR	
15433	KB8TSO	ERIC	NY		15442	W8STU	STU	OH	
15434	KB1SXH	TIM	NH		15443	W3YYF	CAL	PA	
15435	KB1OF	BUD	ME		15444	K7QAT	David	AZ	
15436	N6TF	WILLIAM	CA		15445	K1RBY	Joe	TN	
15437	AA1BR	Paul	MA		15446	K2AFY	Allen	NJ	
15438	WA2CJC	CJ	NY		15447	KJ4VAS	Carl	FL	
15439	KB4CMF	CHRIS	NY		15448	KJ4ZFE	John	VA	
15440	NQ7L	JAMES	MT		15449	W3OFT	FRED	PA	

## FISTS AWARDS

By Dennis K6DF

Only a few awards to report since the last six weeks. Looks like I've been just as guilty as many other club members about not getting on the air much lately. I've promised myself to get on the rig more and make it a point to work as many new club members as I can in the following months. I will also be looking for many of the old timers that I've had the pleasure to chat with over the past years so I may renew many an old friendship.

To start things off, I got on 20 meters last evening and found Merlin KDØV. Merlin and I have had many FB QSOs over the years and it was fun to hear and copy his fine CW fist once again. We had a very nice CW chat and the QSO ended when the band starting to change with QSB setting the pace of our last few exchanges. I finished up the QSO with my usual "31 sent in

land-line code" ( à. - the last dash sent much longer than a normal dash) and a rhythmic "Shave and a Hair Cut". Just as I heard Merlin follow up with his "Two-Bits," my wife announced that dinner was on the table. I was pleased with myself for being able to get to the table on the "first call". (Now . . . I know I'm probably the only ham that has to be called several times for dinner . . . right?) I sat down with a big grin on my face as my wife, Pam, started to explain that dinner was not quite ready yet. Over the years, she has become accustomed to making several "dinner calls" to me when she knows I'm on the radio. I must admit she's got it down to a science after 42 years of marriage with a ham. But this time I completely fooled her! We both had a good laugh because I messed up her timing.

A little later in the evening, I reflected on my QSO with Merlin. Even though it was not a lengthy chat I still enjoyed it very much because he's a long time CW friend. I guess the point I am trying to make here is, getting on the air and pounding the brass with an old friend was well worth the time and effort . . . and . . . that's what FISTS is all about.

It's OK to set some goals for your operating pleasure, such as earning some of the FISTS awards. But when you get on the air and seek out FISTS members to collect their FISTS numbers, be sure to take a little time to get to know the other operator. By doing so, you will develop some really great friendships and it will make your on-the-air time so much more enjoyable. The awards will still come your way, possibly a little slower than



using the “wham-bam” type QSO, but I guarantee you will have a much richer amateur radio experience for the rest of your life.

You may use the e-mail address, (*fistsawards@gmail.com*) to send in your award logs. Excel, Word, Open Office, and Text files are the only file types accepted. Please read the e-mail log rules on the FISTS web site for details.

Send in complete logs for awards. That means all of the following information; Call, Date of QSO, Band, FISTS Nr., Point/s claimed for each QSO. Incomplete logs will delay receiving your award.

Check the FISTS Web Page for additional information regarding current FISTS awards and how to apply for them: <http://www.fists.org/awards.html>

If you have any questions about the awards that are not answered on the FISTS awards web page, feel free to e-mail your questions to me at *fistsawards@gmail.com*

Keep banging the brass . . . I will C U on the bands . . .

— 73, Dennis K6DF 

### AWARDS ISSUED

Apr 6, 2011 To May 18, 2011

Gold	Veteran Award
W4IHI	K1TG

Platinum 500	14 Million
KA8HFN	Sticker
	K4UK

WAS Award
WB6SZZ

# QRP WITH K3WWP

## — COLUMN #91

by John Shannon, K3WWP

**A**bout five years ago I had a column dealing with successfully using QRP on the ham bands. Since I continue to get questions about the subject, I’m going to re-hash that column here with some updated notes added. Read and answer the questions honestly. If the answer is positive, go on to the next question. If you answer negatively, read the answer to see how you can improve. (Nancy’s note: These questions aren’t only for low-powered stations. I recommend you read them no matter what your station output power.)

1. Are your CQs short and to the point? The best CQ pattern is a simple 3x2 with breaks of 4 or 5 seconds to listen for an answer. For example CQ CQ CQ DE K3WWP K3WWP K, listen for 4 or 5 seconds, briefly tuning up and down 500 Hz or so with your RIT to catch anyone calling you who is not zero beat. If you don’t get an answer, repeat the sequence until you do or until you get tired and go looking for someone else’s CQ, or QRT and do something else like go fishing. Please never call endless CQs before sending your call. How often have you heard someone send a string of 10, 15, or even more CQs without identifying himself? Doesn’t that turn you off? It does me. I tune away from that person very quickly.

When you decide to call CQ,

using a short CQ pattern with short listening breaks is the best way to get a lot of QSOs. I can’t emphasize this enough. Short CQs won’t turn folks away when they hear you. Use short listening breaks so there are no long gaps between sending CQs. If someone catches just your call at the end of a CQ, they’ll listen a bit to see if was a CQ or you were in a QSO. If you wait too long to send CQ again, they’ll tune away thinking it wasn’t a CQ.

2. Is your Morse as near to perfect as possible? Many DX stations say it’s much easier to copy a weak station whose sending is perfect than a strong station who is sending a conglomeration of dots and dashes that only occasionally form letters. Strive for perfection in your sending. Listen to WIAW

or other 'machine sent' perfect code and strive to emulate it when you send CW. I'm sure you've all been forced to try to figure out if that was a Q or the letters MA, etc. While trying to figure that out, you miss the following letters and the confusion compounds itself.

Be sure each letter is sent as one unit, not as the above example with Q being sent with an extra space in the middle of the letter. It is equally as bad to run letters together. I often get folks who want to tell me what their horse's name is; they send NAG is Joe. Of course that comes from running the M and E together to make it sound like a G. Going beyond letters, be sure that words are spaced apart correctly as well. There are many ways of doing this. I find if when using a paddle, I make it a point to briefly rest my hand on the table in-between words, which automatically gives me that little extra spacing needed to separate words from each other.

3. Is your keying free from chirp, clicks, and drift? The same thing applies here as to sending perfect Morse. It's much easier to copy a signal that is clean and crisp than one that sounds like a canary singing or a cricket chirping. Make it a point to periodically check your signal on the air either by exchanging stations with a ham friend so you can hear your own signals, or having someone you can work who will honestly tell you if your signal is not up to par. Most folks are reluctant to tell someone if their

signal has any defects. You hardly ever hear a T in the RST that is not a 9 nor hear a C or K after the RST even if your signal deserves such a report. You need someone who will be honest about your signals if you really want to find out. If you have a separate transmitter and receiver, it's easy to check yourself. I used to always know just how my signal sounded before I got a transceiver. Now all I ever hear is how the sidetone generator in the transceiver sounds. It could be perfect and still transmit a defective signal. Unfortunately less than perfect signals are all too common among many of the little dedicated QRP rigs around. There are also many that do have perfect signals as well. It's up to you to find out which are which and only use the good ones if you want to succeed. The best option is to use a really good main-line commercial rig and just set it to QRP power levels like I did with my Kenwood TS-570D and now my TS-480SAT. A bit on the expensive side, but I'm certain my signals will be perfect.

4. Is all (or as much as possible) of your RF being radiated up to the ionosphere? When you are dealing with such a small amount of RF to start with, it is important to waste as little of it as possible heating up your feedline or any of the many other ways it can be wasted. If you use a single band antenna, be sure it is resonant as close as possible to the frequency you use the most. If you use a single antenna on

several different bands, use some sort of matching network to get an SWR as close to 1:1 as possible. I hear many stations running 100W or more who are much weaker than they should be, and I'm sure there is a mismatch somewhere in their antenna systems. I know QRP works great even with simple antennas if you're just sure those antennas are doing their job. Oh you can occasionally make a QSO with a badly mis-matched antenna to be sure. In the fast paced contest atmosphere, I've now and then forgotten to switch antennas and made QSOs on 20 with my 10 meter dipole, etc. before I noticed my error. So it does happen, but a perfect match works much better.

5. Do you use proper procedures in your operating? This covers a multitude of things. I'll just mention a few here. If you DX, be sure to listen to the DX station before jumping in and calling. Find out his pattern. Some stations finish each QSO with their call; others send simply dit dit. Learn what the station you're trying to work is doing before you jump in. Also be sure where he is listening. If he ends with UP, UP 1, etc., never call him on his own frequency. Call 1 (2,3, whatever) kHz higher than his frequency. Often times the station won't say UP, and then it's up to you to figure out what he is doing with some careful listening. If he's very rare with no pileup on top of him, then it's virtually certain he is working split frequency. Search for

the pileup a kHz or two higher in frequency.

Otherwise don't do things like ending your CQs with KN, don't call someone at the end of a QSO if they have sent CL. Learn all the procedure signals and what they mean, then use them only in the correct way.

6. If you are calling CQ at 30 WPM, and someone answers you hesitatingly at 20 WPM, do you slow down to answer him? This is a rough one, but generally it is best to match your sending speed to that of the station you are working. There are cases where someone can copy 50 WPM, but just can't send faster than 20 WPM. However, never answer someone's CQ faster than the speed at which they are sending unless you know them and know they can copy faster.

7. Do you zero beat a station each time you call someone? This is very important, so learn how to zero beat someone with your rig if you don't already know. If the station you're working is running 400 watts, and you call him 500 Hz higher in frequency, it is quite possible that another station will not hear you and jump right on top of you. However if you are on the exact frequency of the 400-watt station, you can pretty much be sure that he will keep the frequency clear for both of you. Even more important, when you zero beat someone exactly; the two of you are only using one fre-

quency instead of two leaving that much more room for other stations. Finally, if you call off frequency, you are less likely to be heard. The station you are calling will almost always start off listening on his own frequency (except for some DX operations as mentioned previously), and if someone else is zero beat and you are not, guess who is going to get the QSO. Also some stations NEVER use their RIT and listen ONLY on their own frequency. I know that for a fact as when I mentioned tuning around with my RIT in between CQs, one station said he never thought of that, and thanked me for mentioning it.

8. One thing that many QRP'ers do is to sign /QRP at the end of their calls. I've made over 52,000 QRP QSOs, worked 212 countries (entities), all states many times

over, and all continents many times over in the past 17-18 years and have never done that, so... Also many DX station say they will not answer anyone who sends /QRP and definitely will not log a station as /QRP in their logs for QSLing purposes.

There are many other things that you can do to be successful with QRP. I often think of little things while I'm operating and will try to make notes and present them in a future column. Meanwhile I'd appreciate hearing any suggestions you have. 73

— Contact K3WWP via:  
John Shannon, 478 E. High St.,  
Kittanning, PA 16201-1304; home.  
windstream.net/johnshan; john-  
shan@windstream.net

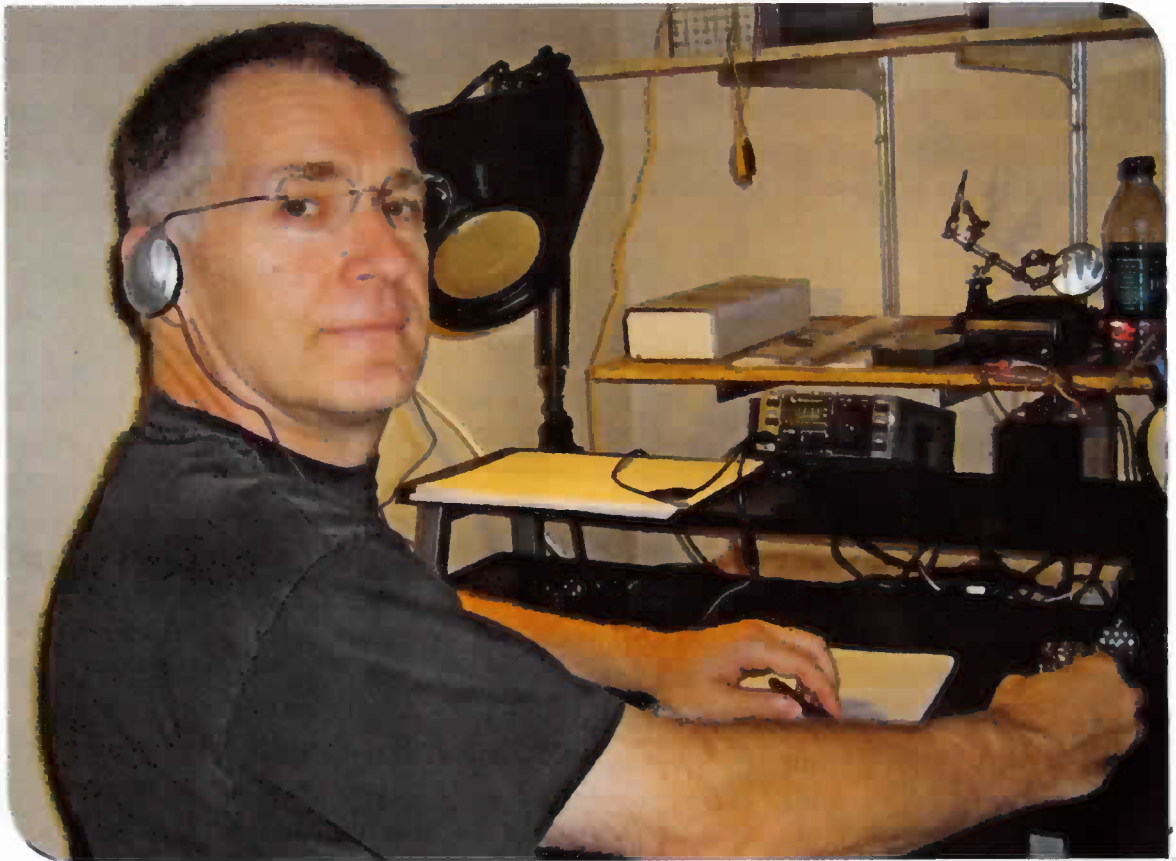
Visit the NAQCC site at naqcc.  
info



## FISTS Members Visit Barbados

Three FISTS members and a friend went to Barbados for the WW WPX SSB Contest. Pictured on the balcony of their luxury villa, just steps from the beach, are the Barbados team (left to right): Bob Mennell WB5IUU FISTS #12463, Paul Franz, W5PF, Bill Frink K5WAF #8843 and Cal White WF5W #12237. They are also members of the TDXS (Texas DX Society).





WB0OEW with his K1.

## REACHING A GOAL — 35 YEARS LATER

By *Elwood Downey, WB0OEW, FISTS 14201*

I had been a shortwave listener all my teen years with a 4-tube Knight Kit Star Roamer. It was only an AM receiver, but I added a homebrew BFO, so I had heard plenty of hams on sideband and I knew enough CW to listen on some conversations. In 1974, I was a freshman at Purdue University; a budding electrical engineer. Once I saw the club station at Purdue,

W9YB, I knew it was finally time to become a ham.

At that time, you had to go to an FCC examination site. The day of my exam, I was excited and pretty nervous, waking up 4 AM. It was dark and raining. Taking the bus from West Lafayette to Indianapolis, I found the Federal building by the appointed hour.

Being a smart-*alack* EE wannabe,

my goal was to jump immediately to Extra. I aced the written elements but choked on the 20 WPM, so my first license was Advanced. Well, that was still pretty good. It allowed me many good times and I made many friends at W9YB.

After graduation, my first job was in Richardson, Texas designing all sorts of antennas. That was great fun, but the company was small



and when they lost the bid on a big new contract I was the last in, so I was the first out.

After that I drifted more into the software side of things and ended up learning enough about large telescope control systems to make a living at it. Along the way, ham radio gradually shifted to the back burner as I was working hard and raising a family.

One day in 2007, I was tired after work and walked slowly to the mail box to check the usual bills. What I found surprised me: a free copy of WorldRadio. They were still a print publication then. I have no idea why or how I happened to get that issue, it was totally unexpected. But it hit me like a brick. Standing right there by the mail box by the road, all the memories came back. If anyone saw me right then, I imagine I looked liked I had had a stroke and was dead in place. I started leafing through it as I walked back into the house. Ham radio. Where had the years gone and why did I ever leave it?

The bug hit me right between the eyes. I surfed the web to catch up on all the changes I'd missed and was particularly stunned to realize there was no longer a code requirement — none at all.

As fate would have it there was a local hamfest coming up and with a little study, I passed the final element and walked out as a new Extra. It was as exciting as the first time. I kept my call for old time's sake.

But something wasn't quite right. I felt good about finally getting

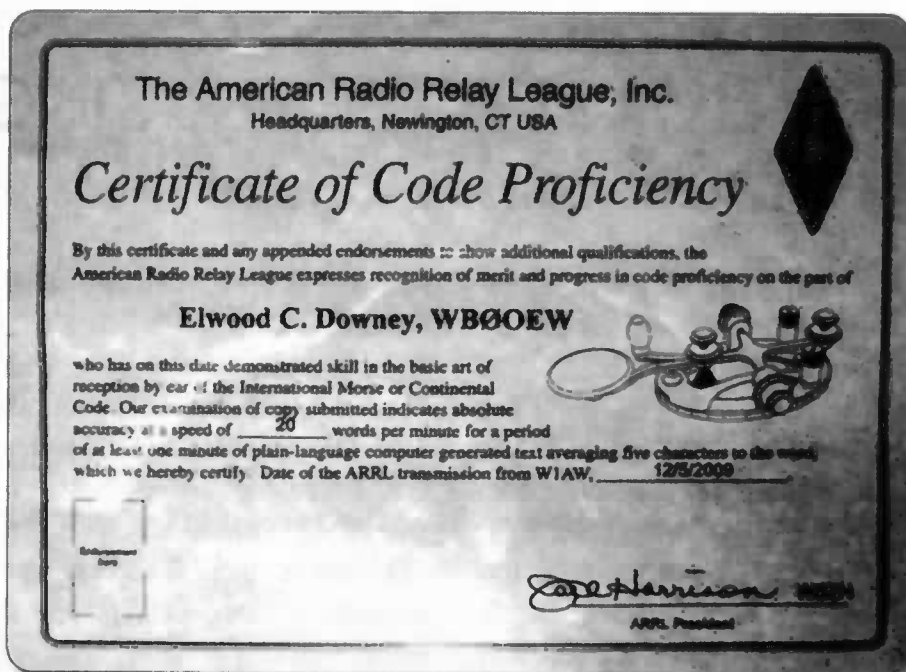
Extra, but I knew deep inside it still wasn't the Extra I wanted originally unless I could copy 20 WPM. I mean no disrespect for those out there who have not tried code, that is perfectly fine. Folks all have their own interests. I just needed to do this for myself.

My next step was to get a radio. I had decided to start out with QRP. I was impressed with all the great choices and settled on a K1. It was fun to build. I put up a simple 40 meter dipole to get started. I remember the exact moment I fired up that radio for the first time. Just the sounds of HF static sounded so good to my ears. I asked myself again why I had let this go for so long.

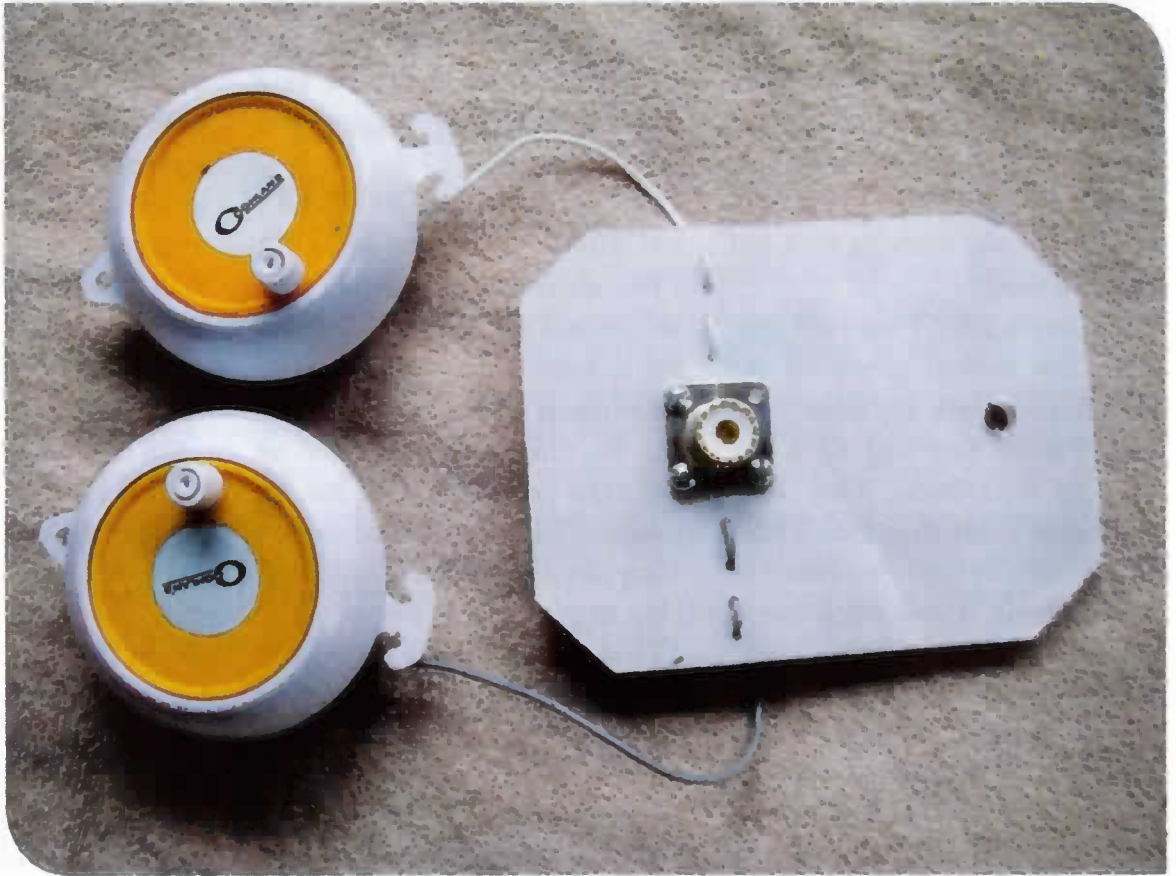
I had the usual panic but made it through my first contact at about 13 wpm. After a while I realized I was inching up to 20 wpm. I listened regularly to W1AW and then I remembered the ARRL qualify-

ing runs. So again, at the appointed hour (it was even raining again) I got out a sheet of paper and tried to copy at 20 wpm. I only needed to get a minute of perfect copy of the five minutes but I had it almost all solid copy, certainly a full minute was in there somewhere. I decided to send it in. After a few weeks, I received a certificate for 20 wpm. Well, now, I must say that meant a lot to me. I was finally at the top of the ladder I started to climb 35 years before.

I'm still not confident above 20; I'm not a natural CW operator. But it's still the only mode I use and I love it. I'm still busy with other stuff, but now I make the time to get on the air. The camaraderie I felt at W9YB is still there; hams are still a great fraternity. I'll be more active when I retire in a few years. You can be sure I won't let ham radio slip away again.



WB0CEW's 20 wpm proficiency certificate.



## ANTENNAS FOR OPERATING PORTABLE

By Jerry Metz, N1QLL

I shared some hard-earned lessons with a fellow I met on the air recently, and figured I would share them with you, too. The question was: What antenna do you like when operating portable from islands or light houses?

I bought a Buddipole a few years back and it is very well-made and compact, but that may be its problem: it has two relatively

short telescoping whips and relies on loading coils to get low SWR. Well, you can get low SWR with a dummy load also, but it doesn't work DX very well and my hunch is that the whips are just not massive enough to radiate well.

It turns out there is an easy way to make a compact dipole that works well supported in the center as an inverted Vee. For the center,

take a scrap piece of plexiglass or polycarbonate about 4 by 6 inches and near one edge drill a hole big enough to mount a UHF Coax Connector (Radio Shack 278-0201) and near the opposite edge drill a hole big enough for the rope or string that will suspend the feed point. Two lightweight insulated wires come from the coax connector in opposite directions, one

soldered to the center post and one screwed to one of the four mounting holes around the edge of the coax connector.

The easy way to anchor these wires to the plastic is to drill a series of 3 or 4 small holes in a row from the coax connector to the edge of the plastic and simply weave the antenna wire back and forth through the holes en route to the coax connector. Each wire needs to be 27 feet long, and the far end goes into a plastic spool. The antenna is "tuned" by unrolling equal amounts of wire from each spool. The wire left on the spool doesn't seem to cause any problem. The spools are designed with a "T" that the wire can be wrapped around once the right amount is unrolled.

The plastic spools are available from Campmor ([www.campmor.com](http://www.campmor.com)) as a "laundry reel," part No. 23019-N for \$4.99 each. Order two, remove the nylon rope and replace it with inexpensive "alarm wire" from Radio Shack. The "laundry reel" shell is in two pieces; they unscrew to reveal the insides and give access to the spool. Grab the back side of the housing in the left hand with the crank facing you, grab the front of the housing with the right hand, and twist counter-clockwise. The two halves of the shell will unlock and open so you can remove the clothesline and install the wire.

In the field, unroll an equal amount of wire from each spool and wrap each around the "T" of

its spool. The plastic shell also has a hole opposite the "T" through which I thread about 15 - 25 feet of twine with a tent peg on the end. Raise the center piece, with attached coax feedline, and decide which way you want the signal to go, since the antenna has two wide lobes radiating out like a dipole. Grab a hammer and drive the tent pegs into the ground, making the inverted Vee.

The other antenna I use was reviewed in QST on page 54 of the June 2010 issue. It's called the "Miracle Mixed-Mode Dipole Antenna" and it's made in Canada. Look it up at [www.miracleantenna.com](http://www.miracleantenna.com) and you'll learn how it works. I'll just say it's easy to deploy and works very well on 40 M. The skinny coaxial feedline that comes from the plastic "miracle" box is 17'6" long and ends in a BNC connector (but

---

**“When you are through using the antenna, simply pull up the tent pegs, roll the wire back up into the “laundry reels” and you’re ready for next time.”**

---

If I'm going to be on 20 meters, I unroll 15'9" from each spool. For 30 meters, 21'6" and for 40 meters, 31'2". If I want 15 meters, I unroll the entire spool, 27' and use a tuner. Your measurements may vary. No tuner needed for the 20 - 40M, since you simply unroll equal lengths and check with your SWR meter, and mark the wires for future reference.

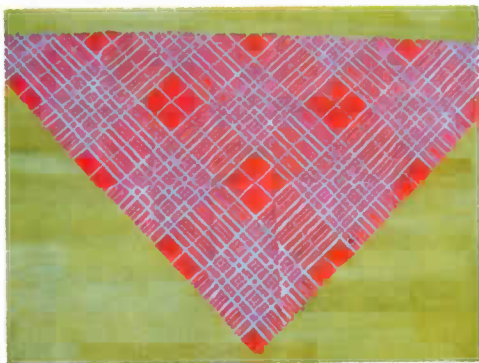
When you are through using the antenna, simply pull up the tent pegs, roll the wire back up into the "laundry reels" and you're ready for next time.

Radio Shack has an adapter, BNC Male to PL-259 Female, part number 278-120 if your rig only likes PL-259 plugs.) The antenna part, measured from the miracle box, is a little over 65' and has a little loop at the end for string.

It works as a sloper, hung from the nearest tree. I've even hung it from the upper railing of a light-house with super results, perhaps because any antenna you use from a site surrounded by salt water is going to get out like gangbusters!

— *QRU es 73 de NIQLL, Jerry*





The neckerchief looks like a plain plaid design.



In this close-up you can see the speckled white squares and rectangles spelling "canada" in Morse code.


## IMBEDDED MORSE MEMORABILIA

by Bill, NZ1D, 6315

Here are two photos of a Canadian Boy Scout neckerchief (folded once to fit the photo). A "simple" plaid design, you say? But notice that the speckled white stripes that interrupt the broad red bands running both vertically and horizontally through the design repeatedly spell out "Canada" in Morse code. The design is shown more clearly in the close-up version that shows one corner of the neckerchief.

For those of us old enough to remember

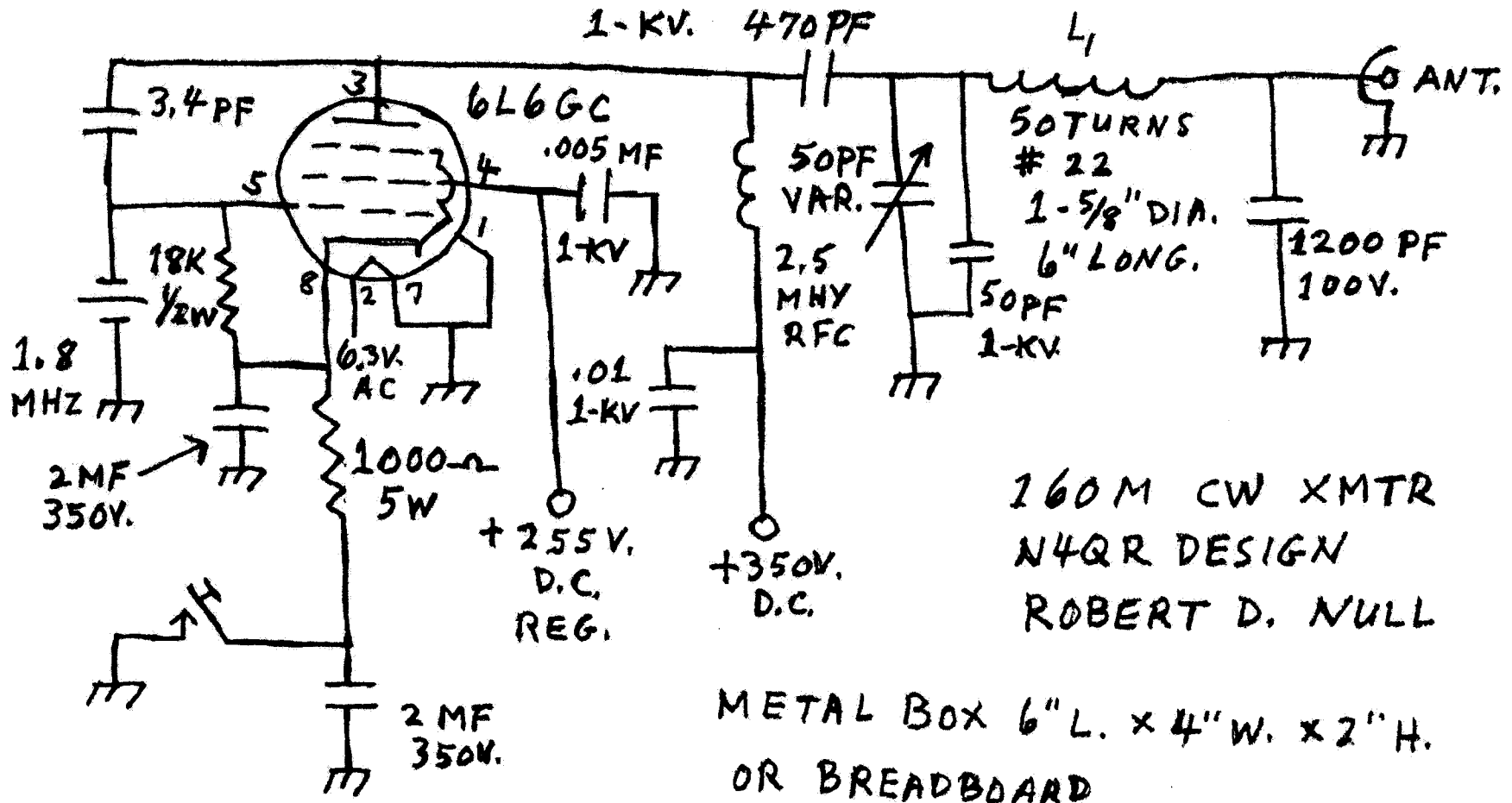
WWII, the Canadian war-time 5-cent piece (which had twelve facets on the outer edge) contained Morse characters on the reverse rim that spelled out "When we work willingly we win."

And, speaking of imbedded Morse, the opening credits of Howard Hawk's 1938 comedy "Bringing up Baby" (and probably other Hawk's films as well), contained the message "an RKO radio picture" sent in very fast Morse. — Bill, NZ1D, 6315. 

# N4QR'S 160 METER CW TRANSMITTER

by Bob Null, N4QR

**B**ob Null, N4QR, sends along this schematic with a note saying that it is one of his old-tec projects. When he operates them on the air, he receives requests for schematic diagrams. We thought the homebrewers in the club would enjoy trying this one. You can contact Bob at 501 N 1st Ave, Malden NC 28650 (no email).



160 M CW XMTR  
N4QR DESIGN  
ROBERT D. NULL

METAL BOX 6" L. x 4" W. x 2" H.  
OR BREADBOARD

USE WHITE PLASTIC WATER PIPE FOR L<sub>1</sub>





# FIFTY-ONE YEARS TO 40 WPM

By Schley Cox, Cap, W4AMW, #8793

**M**y folks gave me a Vibroplex Original model bug for my birthday in 1964. I had been licensed for four years and I knew that a semi-automatic bug was just what I needed in my new CW career. My J-38 was just too old fashioned. It took me about twenty years to learn how to use the bug and another twenty-six years to use it well — so much for the certainty of youth. But I was right: eventually it was just what I needed.

## Join in the Fun

I am Frank WA3GYW and have been a member of FISTS CW Club since April of 2009. I am not a "top gun" high-speed telegrapher, but I thoroughly enjoy CW. I have been active in QRP for just about all my amateur radio life.

I want to welcome all licensed FISTS and all amateurs to the informal CW net on 50.098 MHz on Sunday, Monday, Wednesday, Friday and Saturday at 0001 (8:01pm Eastern time).

All are welcome and encouraged to check in (QNI). The net lasts for up to 20 minutes. Hope to see FISTS members there!

— 73 Frank - CW 4 Ever!

I spent the first few years attaching heavy nuts to the pendulum arm with loops of solder in order to slow the bug down to 13 wpm. Of course left to its own devices the bug wanted to hum along at a minimum 22 wpm with the two supplied weights. When I got to 15 wpm (I could almost smell the smoke) I started a flirtation with a keyer and a paddle. I liked it because I could s-l-o-w it down to where I was comfortable.

Of course being comfortable doesn't make progress. It seemed to take forever to get up to 18 and 20 wpm. The keyer and paddle combo seldom ever challenged me. I found myself turning the speed down more than I turned it up. During contests my code speed would go up a little but it never stayed there.

I was visiting one of my insurance customers one day when his warehouse manager, Alan, K4FYI, saw a Ham Stick on the trunk of my car. We did the Happy Dance hams do when they meet someone who

speaks the same language. Soon we set up a sked on 80 Meters and were happily dit dahing along at about 18 wpm. I forget whose idea it was to make our goal 30 wpm but we fired up almost every Saturday inching toward the big Three O.

Something happened to my fist when I reached 25 wpm. My sending became sloppier and sloppier. My most used character was the one with the eight dits. I tried hard, practiced more, changed the character weighting, nothing helped. I was on the road a lot and thanks to WIAW Code Practice sessions each day my receive speed shot up to 30 plus. But I was stuck at sending 25.

Re-enter the Vibroplex bug. There may be a Chiropractor or exercise physiologist out there who can explain why I can send at speeds over 25 wpm much better with the bug than I with a paddle. I thought it was supposed to be the other way around. But I didn't ask questions.

When we did reach 30, I went

right along with FYI,s idea to reach 40. I took one of the weights off the bug. ZING! It sounded good and it felt good. I found a 1951 Vibroplex Presentation on eBay. It had been owned by a young man who gave up his dream to be a railroad telegrapher to go fight in Korea. His name was James Kirk (no, not that one). This puppy has an adjustable pendulum that can be fine tuned to a fist. KAPOW! Now there was real CW smoke in the shack.

I found an interesting looking right-angle bug made by K4VIZ. It may not be for everybody but it sure was for me. I can ALMOST with some unlimbering, three cups of coffee and by holding my tongue in my left cheek send 40wpm error free. I try hard not to have a swing in my fist but a good CW ham like Alan can still tell which key I am using. We think we can do our Happy Dance again around the beginning of 2011 when we have that first solid 40 wpm QSO.

Here's what I've learned. CW takes practice, lots of it, sending and receiving. At five wpm proper spacing isn't that important because you write down each letter. It,s not hard to put the letters into words. However, at 25 plus wpm spacing becomes critical because you start hearing whole words instead of characters. The word the is no longer t-h-e it is just the word the, one whole sound. If the other station doesn't leave a bit of space between wordsitgetsreallyhardtocopy. See?

If you can find a schedule you

both can keep it really helps to have a "code buddy". K4FYI and I have not only been pretty good about meeting on Saturday mornings but we took it a step further. When one of us goes on vacation we try for at least one sked on 40, 30 or 20. When the XYL and I went to Burlington, VT in August I set up an HT-1A rig with a homebrew Bud-dipole. FYI and I had a FB QSO on 20 Meters while I was sitting in a park overlooking Lake Champlain. He has talked to me from his trips to Florida and New Mexico.

as I snuck up on 40 wpm with my bug I noticed something didn't feel quite right. After 15 minutes of fidgeting I changed the height of my swivel chair and found I could send more easily. I didn't like the height of the thumb and finger pieces on my K4VIZ key so I put it on a half inch thick piece of wood. It feels much better now.

I listened to W1AW as part of my daily routine on the road. I listened to code practice even when it was too fast to copy. I did that Happy Dance right there in the car when

---


“Here's what I've learned.  
CW takes practice, lots of it,  
sending and receiving.”

---

There are so many adjustments to make and keep tight on a bug it is no wonder that fiddling with another telegrapher's key back in the day resulted in an invitation to step out back for a bit. You just don,t spit into the wind and you don,t fiddle with another op's key. I counted 12 threaded things on a bug you need to adjust and then keep tight. These include the nuts holding the key cord. One day when my sending became erratic I discovered one of the nuts holding the cord was loose.

Even if use a paddle and a keyer there are still a lot of variables that will affect your fist. One morning

I realized I had picked out a word or two at 30 and then 35 wpm and finally 40. You can listen to W1AW code practice on your computer. I put a CW practice app on my new iPhone.

Alan and I talk about what we call the "can't go fast enough boys" on 7033 and 3533 Khz. We THINK they are running 50 wpm. It's really hard for us to tell since code sent at that speed sounds more like RTTY than Morse to us. One of us, I think it was Alan, mentioned making 50 our next goal. I already have learned to hear the at 50 wpm. 

# FISTS MEMBER FEEDBACK

## More Info on QRS

Many thanks for the article “QRS Means Slow Down”.

Here is the meaning of QRS? and QRS.

QRS? Shall I send slower?

QRS Send slower ( ... wpm)

*A question to a station that seems to be having difficulty copying you would be: QRS?*

The answer would be QRS20 or QRS15 if that is the speed they can copy under current conditions. The best operator who copies Morse that sounds like a data burst often has to QRS5 when there is local QRM or QRN. The station on the other end might still be able to copy the usual (for them) 60 wpm, but the idea is communication between the two stations.

Many, but not all, stations like to copy at their “highest comfortable speed” as it minimizes time, others like to copy speeds at just above what they can comfortably copy. When Morse testing was done with a requirement of one-full-minute error free, everyone could copy about 5 wpm faster if they needed to get the gist of what was being said. However there is no more testing or Morse requirement, so many stations don’t have any idea of what speed they can copy. Is it the speed that they can pick the meaning out of, or is it the speed at which they can copy every

letter and transcribe it to paper?

Sometimes you will hear one station with a keyboard and one of his friends sending back with a hand key. So sending slow to a station doesn’t mean that you need to have the other sender slow down. I would assume unless you had a emergency message to rescue you, that if you call me you can copy me unless you tell me otherwise.

WD9ABC de KD0ROL PLS QRS13 K

You might include some more information like “EMERGENCY” or “QRN” or “QRM”, etc.

Ralf, DL4TA has an excellent list of International Q signals at <http://www.kloth.net/radio/qcodes.php>

The ARRL has added some addi-

tional Q signals of its own: The QN series and the amateur emergency signal QRRR and their “Calling All Radio Amateurs” signal of QST which in the early twentieth century was the predecessor for CQ which means “General Unrestricted Call To Any Station” which was replaced by the current CQ. In commercial Morse radiotelegraphy there was a “Restricted Call” which is CP. It could be directed to a group of stations or stations of a certain nationality.

The answer usually is COMMUNICATE. Tell the other station what you need to communicate, and if communication is impossible, try another station.

— 73, David J. Ring, Jr., N1EA

## Silence is Golden

Hello Nancy,

I wanted to comment on an article in the last issue of The Keynote, “CW: the DXer’s Valuable Tool,”

One thing Dee didn’t mention is the ability to operate silently with CW.

With voice communications, one can plug a set of headphones into their rig but they still have to speak in a normal tone of voice while transmitting.

On the other hand, when operating CW, the addition of a headset makes

this mode virtually silent. I find it extremely useful when camping so I don’t have an angry mob coming to my site complaining about the noise. Depending on the location of your shack in the home, this could make the difference between being able to operate into the wee hours of the morning or shutting down early so as not to disturb the sleep of our loved ones. Who knows, it might just save your marriage as well.

— 73, Dirk Esterline, KG8JK



## From a New FISTS Member

Hi Nancy,

I just wanted to thank you for being so prompt with my membership. I wasn't expecting a certificate, but it looks great! I have all ready put it in a frame and placed it in my shack with honors. I even received a copy of the FISTS' Keynote all ready. It was some good reading. I am so proud to be a new member of FISTS. I tell everyone about our club. I

also enclosed a picture of my shack. In the picture is my Yaesu FT-950, Kenwood TM-V71A, Jetstream JT-220M, MFJ-969 tuner and (2) MFJ-398B speakers. Thanks in advance. 73, Stu , W8STU, 15442

P.S. I have over 300 hundred QSO's now and 36 confirmed States on 40 meters.. I hope to join in a FISTS net soon. Hopefully this Saturday at 2300 hours.



The station of Stu, W8STU, #15442.

.....  
*Send in your Hamvention stories and jpgs for the next Keynote!*

**CHECK THE MAILING LABEL ON THE BACK COVER FOR YOUR FISTS RENEWAL DATE**

## iPhone Practice Apps?

Hi Nancy,

Do you know of a CW iPhone app where one can practice BOTH copy and sending? "Ham Morse" seems to do this, but I was curious what the FISTS Club thinks about the available apps.

— tnx, de Tom Kmiotek,  
AB9IN <dit><dit>  
t.kmiotek@sbcglobal.net

**Nancy's note:** I don't know of any, but someone out there probably does. In my never-to-be-humble opinion, you'd be better off getting a code oscillator, an inexpensive straight key, and a cassette player, Record yourself sending an article from the newspaper or magazine. Then play it back and see if you can copy it, and evaluate how you sound. Are your words properly spaced? Are you running letters together? Are there any words you can abbreviate or use a Q-sign for? I know it's not as easy as carrying around an iPhone, but it's a tried and true method for improving your fist and your sending proficiency.

Anyone have any reviews on iPhone software they care to share in an upcoming issue? If so, send them in to [nancy@tir.com](mailto:nancy@tir.com).

## TOWER RESCUE PRACTICE



Larry Wheeler, W9QR, in Spencerville, Indiana sends along some photos taken with a telephoto lens during an injured man rescue practice on a 120' tower.

He writes, "Each man had to bring a fellow worker down and be brought down in order to be certified to work on commercial towers. It was the first time anyone else had ever climbed my tower, which I built in '85. The supervisor was on the tower for five hours straight. That makes my feet hurt, just to think about it!"



# FISTS DOWN UNDER Newsletter – May 2011

Editor & QSL Manager for ZL: Nigel Hardy, ZL2TX,  
P.O. Box 15078, Otaki 5542, New Zealand. - Tel: 06-364-6339



Newsletter Distribution & QSL Manager for VK: Chris Thompson, VK1CT,  
P O Box 65, Dickson, ACT 2602, Australia

Membership/Awards Liaison: Ralph Sutton, ZL2AOH, 12c Herbert  
Gardens, 186 The Terrace, Wellington 6011, New Zealand  
Tel: 0-4-473-0847. Fax: 0-4-473-0848

QSL Manager for ZL6FF: Nigel Hardy, ZL2TX at address above.  
QSL Manager for VK2FDU: Chris Thompson VK1CT at address above

Address e-mails for all persons above to:  
<fists-down-under@ihug.co.nz>  
Web site -: <www.fistsdownunder.org>



## SUGGESTED FISTS CLUB CALLING FREQUENCIES

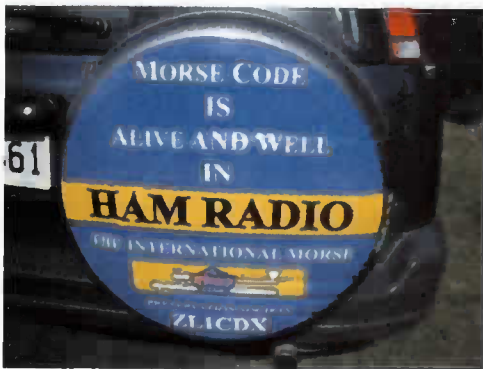
1.808 MHz (160m) – 3.528 MHz (80m) – 7.028 MHz (40m) – 10.118 MHz (30m) –  
14.058 MHz (20m) – 18.085 MHz (17m) – 21.058 MHz (15m) – 24.918 MHz (12m) – 28.058 MHz (10m)

Members are reminded that the above frequencies are suggested calling frequencies. If they are busy, it is suggested that once you establish contact with a station, it may be prudent to change frequency down the band, avoiding other calling frequencies of known clubs.

## DOWN UNDER MEMBERS' NEWS

We appreciate the donations received from **VK1AI Greg #9604**, **VK2PS Steve #9022**, **VK5KJJ Knud #9689** and **VK6QW Bill #14106**.

**ZL1CDX-Turner (Geordie) #9048** wrote from Rotorua. : Thanks for the mention in the last newsletter.



He reckons he is doing his bit hopefully to attract new members and draw attention to Ham Radio and the FISTS club, both dear to his heart, by having some free publicity on the spare wheel cover of his Honda CRV. As the present sunspot cycle is at last showing signs of life, it may ignite new interest in this great hobby of ours. It amazes me that the value of ham radio operators around the globe, whom have shown during past and present catastrophic events their expertise in communications, that governments are quite prepared with little consultation or heed to expert opinion, taking our frequencies off us and selling them to the highest commercial bidder. They allow devices to be used via power lines that are known to cause interference not only to our frequencies, but to emergency services, police, military and aviation communications as well.

It looks like Ham Radio has some major challenges ahead in the future!

He also wrote - While I was exercising what little grey matter I have, I was wondering what your thoughts are on the following- I usually attend 3 or 4 junk sales per year and was wondering if the club would benefit from having a table at each junk sale ? Of course we would have to have plenty of promotional material to hand out as well as membership application forms. The ideal would be a banner to hang on the wall behind the table and if anyone else in another area wanted to run with this everything could be forwarded to them.

Our response to Geordie's suggestions is included in "Housekeeping" below.



**ZL1BRS – Syd #9013.** The March 2011 newsletter mentioned the problems Syd was having with his antique Icom 701 rig and the fact that he was more or less permanently QRT! - *Not any more, thanks to the extreme generosity of a fellow member - Ed*

Syd was delighted, when out of the blue came a telephone call from Alan, ZL4AT #9074, in Invercargill

Alan offered him a Kenwood TS 120S transceiver in going order that he wasn't using, at no charge, even arranging free delivery using his son who just happened to be passing through Dunedin. Syd on learning that Alan did a lot of reading these days, reciprocated by bundling up his selection of QST Magazines that he had previously tried to sell, giving them to Alan's son to take home.

Alan will be pleased to learn that Syd has arranged to have the equipment serviced and overhauled in Auckland and expects to be active once more in the very near future.

Syd mentioned that Alan did not have the service manual for the Kenwood TS 120S: - *A downloaded a copy of both the Operating and Service Manual are in the mail for you Syd – Ed!*

### **HOUSEKEEPING**

We have had several inquiries about obtaining club stickers. As our source of cloth badges is temporarily unavailable, we have arranged for a supply of stickers suitable for installation on the inside of car windows. These have been ordered but have not arrived at time of writing. One will be posted out to all those members who have renewed their subscriptions by due date, since our cloth badges ran out.

We have from time to time set up displays at ham radio events. The materials available from us are brochures that incorporate application forms and A-3 sized posters. These are available on request by any member who wishes to promote FISTS Down Under at any event, e.g. junk sales and ham fests.

### **FORTHCOMING EVENTS**

These are some of the contest/event offerings in May 2011 most of which will be of more interest to our NA and EU readers – Thanks to WA7BNM Contest Calendar <http://www.hornucopia.com/contestcal/contestcal.html>

AGCW QRP/QRP Party	1300Z-1900Z, May 1
10-10 Int. Spring Contest, CW	0001Z, May 7 to 2359Z, May 8
SKCC Weekend Sprint	0000Z-2400Z, May 8
CWops Mini-CWT Test	1100Z-1200Z, May 11 and 1900Z-2000Z, May 11 and 0300Z-0400Z, May 12
EUCW Fraternizing CW QSO Party	1000Z, May 14 to 2000Z, May 15
FISTS Spring Sprint	1700Z-2100Z, May 14
Run for the Bacon QRP Contest	0100Z-0300Z, May 16
NAQCC Straight Key/Bug Sprint	0030Z-0230Z, May 19
RSGB 80m Club Championship, CW	1900Z-2030Z, May 19
His Maj. King of Spain Contest, CW	1200Z, May 21 to 1200Z, May 22
SKCC Sprint	0000Z-0200Z, May 25
<b>CQ WW WPX Contest, CW</b>	<b>0000Z, May 28 to 2359Z, May 29</b>
MI QRP Memorial Day CW Sprint	2300Z, May 29 to 0300Z, May 30

### **TRAWLING THE WEB**

Register for a free daily newsletter of interesting news-bites: [www.amateurradio.com](http://www.amateurradio.com)

Watch what old Sol's up to: <http://heliviewer.org>

How's your hearing? (Don't try this when the cat or dog are nearby!) - [http://www.youtube.com/watch?v=4G60hM1W\\_mk&feature=relmfu](http://www.youtube.com/watch?v=4G60hM1W_mk&feature=relmfu)

**CHERRY BLOSSOM TIME IN JAPAN**

JE1CLH-Mack #9012 shows that it is cherry blossom time in Japan just now, with this fine picture.



**FIST OF THE YEAR**

**(U.K. Keynote Spring 2011)**

The "FIST of the year" nominations were in general, poorly supported; however, it has culminated in an unusual event where four people have tied votes! So FIST of the year shared awards (in no particular order) will go to:

David, G3SCD/VK3DBD 3756.

Peter, G4LHI 2219.

Dave, MOTUB 14528.

Phil, M6PHL 14543.

Excerpts from descriptions for nominees included:

"Enthusiasm for the society"

"Support and nurturing of new licensees in their quest to learn CW"

"Help and advice to members"

.From FISTS Down Under - Congratulations to all concerned, especially David VK3DBD #3756

**FISTS DOWN UNDER WEB SITES**

David VK3DBD #3756, recently made some useful suggestions regarding our Morse Key Web Site. He asked if we could place a description of each key, the maker, who owns it and other information on the Site. *I thoroughly agree David! .This job was assigned to your Editor, who just hasn't got around to updating the site as yet. It will be done in the near future and as always any help or assistance would be greatly appreciated – Ed*

**FISTS DOWN UNDER NEWSLETTER**

**Remember this is your newsletter!**

Your articles, stories, photographs and items of interest are always needed by your Editor. Once again there will be a prize for the best article received during the past year ending with this issue. For the Runner Up, there will also be a Special Award of a FREE Subscription for one year to FISTS Down Under.

**We will announce this year's winners in next month's issue.**

Articles and Photographs may be submitted be either e-mail or post. Those submitted by post will be returned to the sender once dealt with. Our addresses are in the newsletter header – please use them! - Please think about it! - Start writing now for next year's prizes!

CRAZY WARTIME DEVICES – 2

By ZL2AOH-Ralph #1073

Just because my first article about the Acoustic Warning Device was published in the April newsletter, I can assure you that it was not an April fools' spoof. It was fair dinkum. The weird attempts of the authorities to protect us were continued by the installation of the PAC system, (Parachute and Cable.)

This device consisted of rockets that deployed a parachute that was attached to a light steel wire. On our ship there were two rocket launchers, one on each side of the upper bridge. The wire was attached to both rockets and coiled in cylindrical drums located by the launchers. The concept was that as an enemy aircraft approached at low altitude the two rockets would be fired simultaneously. On reaching altitude the rockets would eject small parachutes from which the steel wire suspended between them would entrap the aircraft, (especially the propellers) and cause the aircraft to crash. The rockets were fired by a system of control cables and pulleys attached to a toggle that was suspended from the wheel house deck head.

Additionally the wire-equipped rockets were replaced at dusk with parachute flares. The objective of these was that in the event of a convoy being attacked at night, the PAC equipped ships would send up flares to illuminate the area so that it might reveal enemy submarines on the surface between the rows of ships.

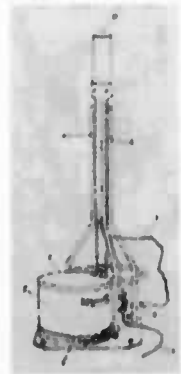
In my ship, this system was only operated twice once by day and once by night and neither case was in anger!

As I mentioned, the toggle to operate the rockets was suspended from the wheelhouse deck head. Also suspended from the deck head was a toggle that operated the ship's whistle. We were leaving Liverpool with a pilot on board. In the narrow channel the pilot had to make a turn and was to signal his intent by sounding the ship's whistle. – Yes, you guessed it; he pulled the wrong toggle and, whoosh, the rockets went skyward and there was wire everywhere entangling the masts and rigging as the parachutes descended.

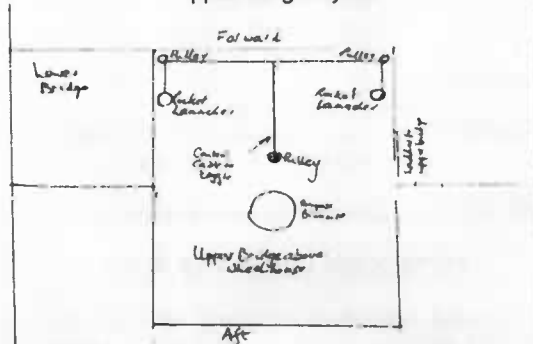
The control cables to operate the rockets were positioned along the surface of the deck of the upper bridge that housed the compass binnacle from which direct bearings could be made of features such as headlands and lighthouses. One night sailing independently in the Caribbean the second mate went to the upper bridge to take a bearing of a lighthouse. In the dark his foot became entangled in the control wire. Again, whoosh, the rockets fired and released the parachute flares that could have been seen for miles around. Fortunately there weren't any enemy craft in the vicinity, although some time later in the war it was a happy hunting ground for U-boats.

I have read that similar systems were tried at land based installations. There is record of two German planes having been brought down on land by a derivation of the PAC that trailed a bomb on the wire, but there is no record that I can find about any of these devices ever entrapping an enemy plane at sea.

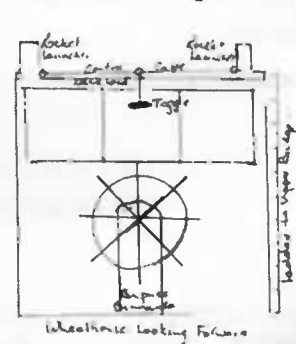
Land based PAC



Upper bridge layout



Wheelhouse looking forward



The picture on the left is the only one I could find. None seems available of a maritime installation. My childish efforts show the layout aboard ship.

Like the acoustic warning device, the parachute and cable understandably didn't survive long. But it wasn't the last crazy invention with which they wanted to "protect us. Another will be revealed next month, together with something that actually worked.

# FISTS CW Club Membership Application

**If this is a renewal or if you have had a FISTS number before, please check here.....**

Call sign: \_\_\_\_\_ Name on the air: \_\_\_\_\_

Full name: \_\_\_\_\_

Mailing address: \_\_\_\_\_  
\_\_\_\_\_

Email address: \_\_\_\_\_

(Please print clearly. We do not give out or sell your email address to anyone)

Birthday: \_\_\_\_\_ Phone: \_\_\_\_\_

The newsletter is offered on audio cassette to blind members at no charge. If you require this service please check here:

Favorite bands: \_\_\_\_\_  
\_\_\_\_\_

Other club affiliations (ARRL, QCWA, etc) \_\_\_\_\_  
\_\_\_\_\_

Other interests: \_\_\_\_\_  
\_\_\_\_\_

Date: \_\_\_\_\_ How did you hear about FISTS? \_\_\_\_\_

Signature: \_\_\_\_\_

Please make checks (\$15 per year, includes newsletter) payable to FISTS CW Club and mail to:

Nancy Kott WZ8C

PO Box 47

Hadley MI 48440

Also payable via paypal.com to FISTS@TIR.COM

FISTS CW Club  
PO Box 47, Hadley MI 48440

NON-PROFIT  
U.S. POSTAGE  
PAID  
PERMIT 762  
MICHIGAN WEB PRESS  
ROYAL OAK, MI 484068

Please note the RENEWAL DATE on your mailing label. Renewals are \$15/year.  
Send in your stories and photos for The Keynote!

# K3NY

Nick Yokanovich  
108 Brent Road  
Arnold, MD 21012  
Anne Arundel County Maryland  
FM19



Nr 3549 Century Award 349

Nick, the Code Buddy Coordinator's QSL card