This is a classic example of why CW operators are so passionate about their craft. The article was originally penned by Nancy Kott WZ8C (Silent Key) and posted by Bruce Prior N7RR.

Morse code. These two words conjure up more emotions than any other phrase in Amateur Radio. For some reason, Hams who enjoy Morse code are fiercely protective of it. When the no-code rumblings began, people started taking sides. It even brought mild-mannered hermits out of their shacks and motivated them to write letters to the FCC and the ARRL. The threat that the bandspace dedicated to code might be taken away brought them together in a way that has never been seen before.

Why would they care? No one is going to make code illegal; no one is going to make them stop using code. So what does it matter? What is it about code?

You may assume they feel that they had to suffer through the code test, so everyone should. Or they feel it is a filter to keep out the riff-raff. Sure, there may be some of that – on the surface – but to bring out feelings this explosive, it has to go deeper.

I started thinking about my own experience. When I moved to Metamora in 1985, my mother would telephone every day, worried about me living in the boondocks. My father, more worried about the rising phone bill than the possibility of me being eaten up by a grizzly bear, suggested that we get our tickets so we could use 2 meters instead of the telephone. My mother said, "I will if you will." And I said, "OK." I had taken electronics in college and worked as an electronic technician at Chevy Engineering seven years, so I didn't have a problem with the theory. But, Morse code? Forget it.

"WHY do I have to learn that stupid code," I whined. "All I want to do is get on two meters. It's not fair." I can't tell you how deeply I resented being forced to do something because of an antiquated requirement. If there had been a no-code Tech license at that time, I would have snatched it up in an instant and not thought twice.

My mother got her No vice license in about six months. It took me over two years to get to 5 wpm. I lost count of how many times I quit and started up again. I fought it every step of the way. When I finally got the 5 wpm in June of 1988 I was relieved. Now I could forget about it.

My mother and I chatted happily on 2 meters for most of that summer, until one day we were talking about what I was going to do that night. We were using the repeater instead of simplex and I had a tendency to forget that people read the mail, especially on repeaters. So, I told her I had stopped at the video rental for some tearjerkers, picked up a pizza, bought a new nightgown and planned on spending the evening taking a bubble bath and relaxing. After my transmission, a male voice came on and said "uh, what is the color of that nightgown, Nancy?" and another piped in, "what time does the movie start?" The local guys were razzing me, all in good fun of course, but I was so embarrassed!

My father said, "You know, if you used CW you could talk on 40 or 80 meters and no one would hear you." That wasn't entirely true, but the idea was appealing. At least there would be a purpose for that darned code. Grudgingly, I started practicing again. My mother upgraded to Extra in a couple months. It took me a year to get to 13 wpm and get my General.

During that year, I spent enough time with code that I got comfortable with it and once I got my 13, something clicked and I got my 20 in about a month with barely any effort at all. Suddenly it became fun!

After I got on the air at that speed, I couldn't get enough of it. I'd come home and rag chew. It would make my day to work a new state or a special event station. Getting the mail each day was like Christmas – QSL cards...certificates!

What happened when I reached about 13 wpm that suddenly made it enjoyable? While doing research on code courses and how people learn, I came across an explanation: Instant Recognition. When you get to a point that you can instantly recognize a code symbol without having to translate it in your mind or do any sort of conscious thinking about it at all, you have Instant Recognition. Once that happens, it becomes effortless and more like a satisfying game. You aren't working, you already "own" those letters. They're part of your subconscious vocabulary.

This is where people get into trouble using the so-called short-cut programs. Believe me, there are no short cuts. You have to do the work. Programs with memorization tricks make learning more fun and will get you to 5 wpm – maybe 10 – but they will not give you Instant Recognition, which is what you need to get past that "wall" you hear about. You hit that wall when the code is coming at you faster than you can translate.

There are no short cuts. There is no magic pill. This is unfortunate because learning code is boring. Rote memorization is about the most mind numbing thing in the world. But once you get it, it is yours forever, just like riding a bicycle. And it is worth it. Why is it worth it? That brings me back to what I said in the beginning. There is something about code that creates a feeling that is deep seated and very strong.

I was reading a book called The Flow by Professor Mihaly Csikszentmihalyi and it dawned on me that this is what makes people so passionate about Morse code! Dr. Csikszentmihalyi is a behavioral scientist. He works at the University of Chicago now, teaching and doing research on human behavior. He grew up in a very poor, war-ravaged part of Europe. He was a curious, observant child and noticed that while most of the adults around him were bitter and unhappy, there were a few who were content and seemed almost happy. When he got older and went to college, he decided to study human behavior so he could see what it was that made these happy people, happy. He discovered that when a person is deeply wrapped up in an activity that meets certain requirements they go into a state of mind he calls "Flow". Professional athletes and musicians typically go into Flow during their practice sessions. Hams go into the state of Flow when they get on the air. But it doesn't happen to all Hams, it tends to happen to CW ops, contesters, or serious DX'ers.

There are seven criteria for the State of Flow. Let's look at them briefly as they relate to Amateur Radio.

- 1 The experience must have a definite goal.
- 2 We must know the steps to reach our goal.
- 3 We must have feedback on how we are doing at each step.
- 4 We must be able to focus on the event.
- 5 We must feel in control of the situation.

Ham radio in general satisfies these five requirements. The goal is a QSO. We have to turn the rig on to have a QSO, we get feedback and focus while communicating on the air, we are in control because we can always pull the plug. So far, these Flow requirements could apply to either SSB or CW. But with the next two requirements, important differences occur.

6 – Our attention must be completely absorbed in the operation.

When we operate CW, especially at or near our fastest copying speed, the operation demands our full attention. If our mind wanders, we miss a letter or a word. Dr. Csikszentmihalyi calls this mental state "optimal experience." When at this optimal experience, the mind is at its best and happiest. This state also alters one's sense of time; time flies by faster. When the optimal experience is over the person feels content, satisfied, and has increased self-esteem.

Using SSB involves little concentration; you can count the spare change from your pocket or look out the window to check the weather while waiting for your turn to talk. Optimal experience is rarely, if ever, achieved.

7 – We must have the possibility of increasing our skill level.

When working CW, after a rest, your mind is ready to enjoy another optimal experience. Each experience adds to the proficiency of the operator who develops a desire to increase his speed because he has found that an increase in speed is an increase in fun and self esteem. There is a huge range for improvement; some operators have reached over sixty words per minute.

When using SSB, there is little chance of developing new skills. This eventually leads to boredom and cessation of operation. This does not bode well for Ham radio as a whole.

Although the no-code license has increased the number of licenses issued, these new licensees are not going to stay with the hobby in the long run because they are not getting the satisfaction of Flow. They might get up to 10 wpm or so, but still don't feel good about it. They get discouraged and quit or they flounder around wishing they could join in the fun, but aren't sure what to do about it. They aren't experiencing Flow because if they try to learn code at all, they are generally learning code with the aide of crutches and therefore not achieving Instant Recognition.

If you are going to invest the time to learn code, you should do it efficiently. This will allow you to see progress and cut the time you need to practice. Aristotle was the first one to discover and document that when you experience two things within a second of each other, the brain can easily associate them together. The further apart the two actions occur, the longer it takes the brain to associate them and the longer it takes to memorize them. What this means to us, is that when we hear the symbol for a letter we must immediately, within a half second, say or write, or both, that letter. Dit dah A . Not dit dah umm. A. The very instant you hear the last dit or dah, SAY the letter. Do this over and over and over. Take on two or three letters, one at a time, and learn them until you OWN them. Then add another letter, but still keep reviewing the ones you already know. The trick is to OVERLEARN them so they become second nature.

Think back to a time when you heard someone from a non-English speaking country speak English. They will be chatting along, comfortable with the vocabulary, until they get to a word they haven't used very often. They'll stop and say `oh,how do you say.?". They have to stop and mentally translate it because they haven't overlearned that phrase. Only spend five minutes or so at a time, and spread out your practice sessions throughout the day. Don't forget to INSTANTLY associate the letter with the symbol. This is critical. The most important thing is to get that instant association going in your brain with the symbol and the letter. You may think you are already doing this, but you will probably be surprised. If you already are at 7 or 10 wpm and think that not having Instant Recognition isn't your

problem, play a code tape and test yourself. If you hesitate for even a fraction of a second, you don't have Instant Recognition. Having to translate even one or two characters will impede you.

Play those letters over and over and using the Instant Recognition half-second technique. If you work on them one at a time, you WILL own those letters and have the whole alphabet in your subconscious and you will find your proficiency increasing and you will get into The Flow of CW.

You will then understand why CW operators defend the code so passionately and hopefully you will join us in preserving the music of Morse on the air for future generations.

Thank you for reading this.

73 Glenn VE3GNA CWOPS #457