

K9YA Telegraph

Robert F. Heytow Memorial Radio Club

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No Intervention Needed

The Healthy "Addiction"

Philip Cala-Lazar, K9PL

Do you rise from your shack chair with an ear-to-ear grin on your face? Do your QSOs induce euphoria? If so, you're probably also copying, usually late at night: "THATS MY CW FIX FOR THE DAY" or, "TNX I NEEDED A CW FIX."

Some Archaeology

The phenomenon is not a new one, in the January 1937 issue of *Radio* magazine ("The Worldwide Technical Authority of Amateur, Short Wave, and Experimental Radio"), editor, W.W. Smith, W6BCX, writes his "Fingers get to itching" when he gets an appetite for working DX.

Almost two decades later, Wayne Green, W2NSD, in his February 1956 editorial in *CQ* magazine discusses WOR disk jockey, Jean Shepherd's, K2ORS, itchy key

fingers: "Right now Jean is trying to figure some way to get WOR to put a key in the cathode of that 50 KW rig so he can work some CW." Jean was QRT because he was living in a "...TV-ridden apartment house..." In neat juxtaposition, Wayne avers that Jean "...is on the air more than Godfrey." That being fellow ham, Arthur Godfrey, K4LIB, who served as a radio operator in the U.S. Navy and

Coast Guard.

You're Under My Spell

Once learned, code is our constant companion—we hear code patterns or letters in, what is for the uninitiated, random noise. We know when that atmospheric

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"Fingers get to itching"

What's behind it?

Is there some addictive hand/mind connection in seasoned CW ops? Is there an almost palpable need to exercise Morse skills? Does Morse engender endorphins?

Certainly this is not addiction as *A Psychiatric Glossary* (fifth edition, APA, 1980) defines it, "Dependence on a chemical substance to the extent that a physiologic need is established." Rather it's what MS Word's built-in Encarta® World English Dictionary describes as a "great interest in something to which a lot of time is devoted." Only problem with that last is that it fails to append, "and much joy derived."

This addiction is legal, not incapacitating, nor financially disastrous; it is socially engaging; and all the while mentally and physically recuperative and enhancing. Aside from the occasional "Kilocycle Kop," you won't run afoul of the law.

Anecdotally, Morse appears to keep the mind sharp and the digits nimble. There's any number of octogenarian and nonagenarian CW ops whose copying and sending abilities belie their age. Of those veteran hams, there are those who claim they're not as proficient as in years past, however, it's tough to divine this from their high quality on-air skills.

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Following Jimmy Off the Cliff

Vern Weiss, WPE9GHF/W9STB



One of the things I've noticed about piling up the years is my diminishing idealism and my increasing sense that I seem to have "been there, done that." I will be the first to admit that I have never cared to follow the crowd. I couldn't understand why I was this way until I read a quote by writer P.J. O'Rourke,

Whenever I'm in the middle of conformity, surrounded by oneness of mind with people oozing concurrence on every side, I get scared.

O'Rourke is phrasing what every 1950s mother preached to her brood when told you did something, "because Jimmy did it." Mom's version of O'Rourke's statement was consistently and predictably, "Well, little mister... I suppose if Jimmy had jumped off a cliff you would have too?"

Spinning Sounds

When I was a kid we played our music from vinyl 33- and 45-rpm records. Next they fired off at us an "improvement" called *8-track cassettes*. I noticed my friends rushed out immediately and replaced their vinyl records with the new medium. My parents thought about it longer, but eventually bought an 8-track player themselves. My grandparents, however, did nothing; in fact, they still owned a few 78s and kept a Victrola in the cellar, but never moved to 45s and 33s. Then, a few years later, they suckered us consumers into *Compact Cassettes* as a replacement for the 8-tracks; meanwhile, I noticed fewer 8-tracks and even fewer vinyl records in music stores. I dragged my feet a little because I was beginning to figure out what was going on. Now they wanted me to dispose of my records AND my 8-tracks. I thought, "When will this merry-go-round end?" So, I didn't start collecting cassettes until about half way into their "tenure." My

folks didn't touch the newfangled cassettes until CDs were already taking hold and they began to see "their" music on cassettes at the grocery store checkout next to the fingernail clippers and Slim Jims. My grandparents were still talking about "one of these days" bringing the Victrola up from the cellar to play their 78s. Then it was on to *quadraphonic*... then *VHS*... to be replaced moments later by *DVD*, no wait... I mean *CD*, no, I was right the first time if you meant *CD-audio* or *CD-R* or *CD-RW*... then *iPods*... then *Blackberry*... then... then... then...

Do you see what is happening here?

Keeping it Clean

In those days I worked at a local broadcast station and our commercials and most recordings were on similar tape cartridges. We used high quality cartridges, cleaned and maintained them regularly and stored them carefully and the darned things still jammed all the time. Add to the low-tolerances of the system's mechanics a cartridge that spends its life on a grimy car floor, soaking up summer heat and squished bits of under-seat French fries and you've got a pretty unreliable, unsatisfactory device. There was a reason you saw so many smashed to bits along the interstate. It was junk technology and the manufacturers must have doubled over in laughter when we boneheads bought it.

"...smashed to bits..."

With no intent to exaggerate, I will put my low-fi, tube-type amplifier and quality turntable up against ANY digital audio system! The human ear cannot discern nit-noid, fractional performance when comparing state of the art with non-state of the art. Can I tell the difference between 0.5% distortion and 1.0% distortion? No. I probably can't discern any difference between 0.5% and 5% distortion. Having only two ears I could never understand the concept of "quad" sound either.

The More Things Change...

Too often it seems, we change only for change's sake. The replacement rarely justifies total abandon-



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ment of the previous technology. At the store I can buy all sorts of new, improved products to remove adhesive goo left behind by the price sticker on a piece of furniture. I can buy one product for \$2.19. Then there's the deluxe version for \$3.49. This one has lemon-scent, \$3.89. But Grandma just smeared some cooking oil on it and the goo came right off. Are the pricey replacements really better than grandma's cooking oil? Throw into the mix noxious byproducts (like toxicity) and the "new, improved" version has made a quantum step backward. Why are we like this? Is it because we live in a country that measures happiness by snob appeal? Why do we feel the need to replace perfectly serviceable vehicles as each year's new models are introduced? Are we THAT insecure?

One month AFTER our FCC eliminated the Morse code from the amateur license requirements, *Worldradio* carried an article about Morse code being used to communicate TO and FROM stroke victims who have lost their ability to speak and/or hear. Minute finger movements could establish communications with someone in an otherwise silent world cut off from the outside. I saw a similar article five years ago in a medical journal while waiting for the doc to come in and ask me to turn my head and cough.

Repeaters and aviation radio stations throughout the world superimpose information and IDs over audio to enable two pieces of information to pass simultaneously on one frequency. TV stations and networks generate crawlers across the bottom of our screens through complex character generators and computer programs. While this does allow two pieces of information to be conveyed in one place it is hardly a simple process. Conveyance of duplex information has worked almost flawlessly for many years with the simple addition of Morse code to an existing voice channel, providing two different pieces of information. (I am all too aware of frequency division and time division multiplexing, but those hardly pass the litmus test of "Is it simple? Is it cheap?")

Somewhere along the way I got the mistaken notion that amateur radio operators were supposed to be... well, "Quintessential Communicators." Our special role in the grand plan was likened to the cavalry getting through when nothing else could. But sadly we have become a group more comparable to fat guys in recliners whining about the remote control being too

complicated. There is damned little resourcefulness, initiative or "can do" spirit around anymore. How many stories do you know of hams sending their rigs back to the factory for minor service? I know of one who sent his old microphone AND new transceiver back so the mike could be wired to the new rig.

SWL Forever

I began my lifelong love affair with shortwave listening when I found an abandoned SX-25 in my childhood basement. Later, while poking through a pile of old magazines, I discovered *Popular Electronics*. In that issue was a serial article feature called, "Carl & Jerry" by the talented and prolific writer, John Frye, W9EGV. Month after month, Mr. Frye captured our attention with the adventures of two teenage electronics tinkerers.

Sometimes, Carl and Jerry would use electronics to find murderers, sometimes to uncover sinister plots. The serial was obviously fiction and geared toward younger readers, however, even today, I enjoy them.

Frye's brilliant creativity in developing these characters and situations was not only entertainment, but electronics education as well.

My favorite "Carl and Jerry" story of all time has Carl visiting Jerry at his home. Carl leaves to return home for dinner. A mile or so down the country road on which Jerry lived, Carl's car slides

off the road and into a deep ravine. The car lands in a position where it is not visible to the sparsely traveled road and Carl is unable to extricate himself. Night falls and there is little hope for his discovery or rescue. Then Carl remembers the distributor's spark coil and how ignition noise obliterates TV and radio reception for miles around. Yanking wires beneath the dashboard he touches the starter wires together to send out a Morse code S-O-S. Of course, by this time, Jerry has finished his dinner and sits down to enjoy some evening TV. Suddenly, he's aware the buzz and crosshatch on the TV isn't some passing automobile, but his friend Carl summoning help! Jerry copies the Morse message and quickly locates and rescues his buddy.

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Hallicrafters SX-25
Super Defiant

"Carl and Jerry"



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HT to Tank

A 2-meter Brush with Very Heavy Metal

Bob Ballantine, W8SU



M-1 Abrams Tank

During my 50 years as a ham I've enjoyed some memorable on-air experiences. I recall the run-of-the-mill and the remarkable: the occasional frequency fights, the RF bullies and some hombres at certain spots on 75-, 40- and 20-meter phone. Yet, there was one experience that stands out: What was I was hearing?

Monitoring .52

It was the 1980s, 2-meter FM activity was at its peak, and I, too, succumbed with a handheld, a rig for the car and one in the shack.

Anyhow, I was monitoring 146.52 simplex one warm summer evening and heard a carrier. It was nearby and I could hear voices in the background, the sound of crickets and a

metallic clanking I couldn't place. Eventually the station put out a "QRZ?" and identified as a 2-meter mobile. As fate would have it, I was hearing a tank commander, operating an M1 Abrams tank at the adjacent Ravenna Army Arsenal on weekend duty. The tank commander was a WA8 from Akron. We had a nice QSO where he explained he was on reserve duty at the compound. I now wish I'd asked more about the Abrams, but that is history and never have I heard another Abrams roaming our countryside close to home.

Ohio is home to the manufacturer of those vaunted war machines, the M-1 Abrams tank, over in Lima, at the General Dynamics plant. It would not be a fun experience on the receiving end of one of those machines! With a cost per unit of \$2.3 to \$4.3 million, a crew of four, and top speed of 45 mph, it is some formidable heavy metal. Lima is on the western side of Ohio, south of Toledo. It was once home to the gigantic Baldwin Locomotive Works, manufacturer of steamers and diesels during railroad's golden era. It was very sad to see that era collapse. Time marches on... ■

The Post Office Key

Grant McDuling, VK4JAZ

When I was given my first key, I thought nothing more of it. It was a great looking brass piece that got people talking—and it had some history to it.

See, my uncle gave it to me all of 35 years ago. It meant something to me because he was a professional telegraphist in the South African Navy. It was his key and had used it for years; now it is mine and I use it daily.

In fact, this key is what got me interested in Amateur Radio in the first place. What's the point of having something like this if you never get to use it, I reasoned. But, the more into Amateur Radio I got, the more I realised not all keys are the same. In fact, it soon dawned on me not many ops actually use straight keys these days.

This got me interested in finding out a little more about my key than I already knew. A search on the Internet soon told me it is a British General Post Office (GPO) key. I was able to verify this because it has "PAT 1056A" stamped into the end of its wooden base.



I also learned it was made by Walters Electrical Manufacturing Company, a firm that was in business between 1880 and 1960 in London.

It is interesting to note that European keys are generally heavier than their American counterparts, and this suits me just fine. I love the solid feel of my key and the satisfying "clunk" when pounding brass.

These days most CW ops remark at the lovely code I send, but I know this has nothing to do with my skills; it is all due to the charm of my GPO straight key. I now let it do the talking.

I have never used another key, but would like to someday, if only I could come across another. This hobby is sure addictive and I would dearly love to broaden my involvement by adding another key to my solitary GPO gem. ■



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The Indoor Sportsman—Part II

One-Fourth the Size and a Nice Surprise

Rod Newkirk, VA3ZBB/W9BRD

Our basic compact Sportsman radiator, a single-turn loop with appropriate conductor lengths as described in Part I, is a winner on 7 MHz and higher. But Betty and I, with our outside wires down, had additional schedule and net commitments on 80-meters. Our 7' by 11' shack space limitation is okay for a one-turn loop on 40, but alteration is needed for 3.5 MHz. The required circumference, a quarter wavelength plus ten percent, about 75 feet, would be more practical in a gymnasium or concert hall.

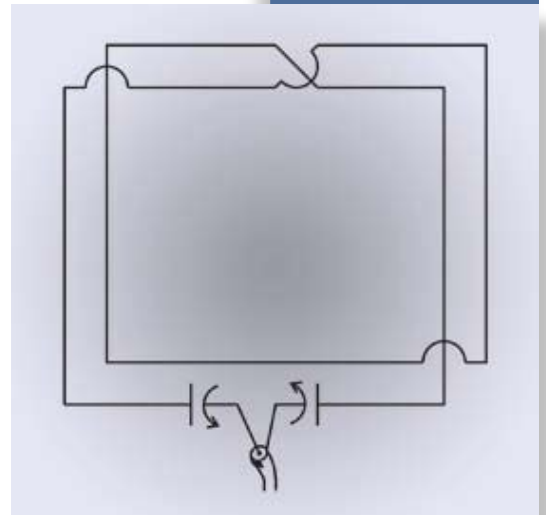
One convenient answer is to configure the quarter-wave wire into a two-turn loop, retaining the original matching, symmetry and balance. In perspective, this is equivalent to a two-foot square on 20-meters. Not very promising. But new factors come into play. One is the spacing between adjacent turns. This forms a linear capacitance that enlarges the system electrically. (Very interesting and something to toy with later.) We chose eight-inch spacing and pruned the circumference slightly to reach 1:1 VSWR match to coax with each of the twin capacitors near 50 pFd. Nothing otherwise critical about the turns spacing except that it be stable.

Another more interesting feature appears. Converting the Sportsman to a two-turn loop redistributes the system's current and voltage. As your neon-lamp

tracer will demonstrate, the current node shifts from top to bottom, opposite the tune/feed point. Phasing between the twin turns, about 45 degrees, is close enough to negate cancellation. Average I and E is smoothed considerably throughout. This is a different animal from the conventional lopsided single-turn compact loop wherein most current rushes to one side, voltage to the other.

Our 3.5-MHz Sportsman II now is a true miniloop with 1/6-wavelength sides. Not a weapon to crash many pileups with, but we were back in 80-meter business with S-units to spare. This encouraged us to take a shot at 160. How would the dispersed current distribution do on top band? A four-turn loop suggests itself, but that's an awful lot of ohmic drapery. Maybe there's another approach, accepting higher Q and narrower bandwidth. How would you do it?

We can't usurp all *K9YA Telegraph* space with VA3ZBB's indoor fun and games, so QRX for Part III. ■



Sportsman II, a quarter wavelength of wire in two turns, ready to rumble. (side view)

Field Day Grotesque

The Odd, The Weird, The Outlandish?

Amateur radio's summer harbinger, Field Day, is celebrated in fields verdant and deserts sere. Sited on asphalted pavements to rocky ledges, effective and ephemeral communications centers arise. Alternate power source installed, festooned with antennas, strewn with cables and wires and equipped with creature comforts (or not), for the next 27 hours hams pound brass; shout "CQ Field Day"; log; troubleshoot; snack; and catch a few Z's. In between, there'll be visitors to chat up, dignitaries to impress, bugs to swat, brows to mop and four-legged visitors to outsmart.



Now, that's a pretty good description of your typical Field Day. But we've heard tell there are those with Field Days stories to tell that are spun from the odd, the weird and the outlandish. Are we talking about you? If you dare, the *K9YA Telegraph* will help you share your Field Day memories with our readers.

Send your Field Day stories (and photos) to:

fd@k9ya.org

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snippet of Morse in a film is the genuine article or not. It's a healthy obsession and one not requiring intervention.

We can try and ignore it, but it always surfaces; those neural pathways we've created cry out for regular exercise—it's a physical and psychological reality. But unlike more muscular exercises, there may be little atrophy despite years of disuse—many a WWII-era radio op, away from Morse for decades, can still manage passable copying and sending abilities.

Lore & More

Aside from the compelling, there's the esthetic: the skills, the lore and pride of membership in a group possessing a very special ability and knowledge.

Without CW ops, other than reference works, where would 150 years of worth of Q-signals and telegraphic abbreviations reside? Our antique and near-antique telegraphic instruments are not relegated to the display shelf, but live anew their destinies.

In our own modest way we carry on the ethos, jargon and practices of all those telegraphers who led the way while pounding brass at sea, on the land and in the air, in wartime and peace.

No matter how diminished its official role arising from changes in licensing requirements, and whether they regularly practice the art or not, Morse still looms preternaturally large in the hearts and minds of amateur radio operators. Nothing so inflames hams' passions or draws them closer. Morse remains our "Holy Grail." ■

The concept was brilliant. The contribution to enhancing every reader's imagination and resourcefulness was superb.

When Words Fail

In a somewhat similar real-life experience, I intervened on a crime closer to home. I used to live in a town in which the post office was unlocked 24-hours-a-day, 7-days a week for people to collect their P.O. box mail. One hot summer Sunday afternoon, though the postal windows were closed, I stopped in to check my own P.O. box while my wife waited in the car. The street outside was busy and noisy as always and inside the cavernous post office building the street noise blended into a cacophony of horns and revving engines. As I stood at the wastepaper basket separating out the junk mail, something worked into my consciousness that seemed out of the ordinary. I was hearing the usual noise but superimposed on that noise I detected three short, three long and three short blasts of a horn. Then it repeated. SOS? I moved to the door to see what was going on in time to see a man bolting from my car and a very frightened wife inside. After she calmed down she told me that she caught the man in her peripheral vision approach the car. In a reflex action she slammed the door lock down. (Thank goodness for air conditioning and the windows being rolled up.) He then ran around to the other door which she had locked and he began trying the handle and pounding on the glass. My wife, whose knowledge of Morse code is only the letters "S-O-S" resorted to it because she knew the only way to

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Ham Quips

DICK SYLVAN, W9CBT



SUPERSIZING AMATEUR RADIO



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attract my attention above the din, was a loud horn... but it had to be something that I could differentiate from the myriad of other horns and street noise.

I said all that to say this: Eliminating Morse code from the amateur radio examination removes more than just a licensing requirement. It stifles a very simple and useful resource. Morse code was the first digital communication mode, linking man with man and man with machine. Voice recognition technology has improved, but in my opinion is still an annoying joke. Think about the last time you called Directory Assistance; after three tries it still can't get it right and you end up talking to a human being after all. What has been saved in our rush to embrace these monuments to technology?

Simplicity is Paramount

Sitting here listening to music on my old SX-25 or sitting here listening to music on a new *Toejamm 2000* with DSP, have I gained anything? My SX-25 is doing exactly what the *Toejamm 2000* is doing, so how can it be considered "obsolete?"

"Obsolete" is defined as "gone out of use, discarded." Though SX-25 receivers may have been discarded by some, has it "gone out of use?" No, because, after all, I am using it. In fact, its robust 6F6 audio is superior to the *Toejamm 2000*. Audio purists around the world lay down big dollars for the superior sound of "obsolete" tube-type equipment.

We are told Morse code is obsolete and not practical. But we know CW works pretty darned well and the changes made don't justify the years of hype.

Meanwhile, I have been trying to send an e-mail to a friend for three weeks. I sent it seven times to provide repair parts information he needed. Last night I heard him on 80 CW, called him, and gave him the information. I told him about the three weeks and seven e-mails. Had I known his unlisted number I would have phoned him like we did in the 1950s. "Obsolete" Morse code achieved what Bell Laboratories, Bill Gates, Microsoft, Intel and Toshiba could not.

I fear the world's rush to abandon Morse as a fundamental and universal format of communications will come back to bite us.



Morse is Robust

Talk to the stroke victims. Talk to my wife. Talk to the ships' passengers and crews whose lives were preserved because they did not have to rely on the frail and fickle GMDSS satellite system that replaced Morse on the high seas. If you want to read a frightening exposé on the folly of replacing Morse read the late Ray Redmond's book, *QTC* (Sequoia Press). Mr. Redmond presents a scathing attack on GMDSS and, if anyone should know, he would. A distinguished "sparks," he saw GMDSS fail time and again aboard the ships he sailed. Amazingly, one mid-level Coast Guard officer was able to parlay his loathing of Morse into its wholesale removal.

Talk to the families of the people killed in the airline crash in Cali, Colombia whose lives might have been spared had the pilots NOT relied on ambiguous GPS information but, instead, tuned in and identified the three-letter Morse call sign of the navigational aid to which they *thought* they were flying.

Even today, in 2007, the frailties of GPS and GMDSS are being exposed. In fact, this spring, the FAA announced plans to restore, expand and update the 50+-year-old LORAN navigation system (that was to be decommissioned by now). The announcement stated LORAN would be used for "at least 10 more years." What does that say to you?

Before we celebrate the "miracle of GPS" with a champagne toast, we should note the FAA recently announced implementation of old fashioned, ground-based navigation stations to back up and crosscheck GPS satellite data. This new and very expensive project is called the Wide Area Augmentation System. The "official" spin on both announcements is that they "enhance" the accuracy of GPS. The reality is that GPS has been found to be unreliable, too vulnerable to things not desired in critical navigation operations and totally useless for elevation information. And *THEY* know it! Thankfully, we can rely on old technology to help it along.

Basics. Let's get back to basics and the beauty of simplicity. Changing for only the sake of change may set us up and we'll only end up chasing Jimmy. ■



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