

# Field Day mystique

*You can almost hear a piano playing the background music from the Keystone Cops!*

by Dave Watrous, WD2K

What is it about that weekend in June that drives sane people to join other Amateurs in a lemming-like migration to the local Field Day site? Some instinctive drive makes them perform feats of strength and daring, erecting outlandish antennas and attaching them to every tree or other structure in sight.

Attired in headgear emblazoned with callsigns, these otherwise staid pillars of the community swarm up shaky towers and undersized trees trailing masses of wire and coax, while chanting, "Only forty-five minutes left" and "Did anyone check the generator?" Or they implore each other to find "just one more barrel connector."

At ground level an equally fanatic group searches for the missing mike being carried around by another group looking for "the rig." But "the rig" is still in the trunk of a car now hurrying off-site to pick up the extension cord promised by the guy who just called on the repeater to say, "I can't make it before four."

At this time the need for the coffee maker becomes critical. The instructions to the appointed person: "Try to make it better than last year's mud." Soon after the measures the coffee, he screams, "Nobody brought any water-again!" He disappears racing over the hill toward the

portable water spigot at the far end of the campground.

As two o'clock nears, it becomes clear that all is lost. The classic cry goes up, "let's get one dipole up, so we can start with at least one station on the air."

Someone attaches coax to two pieces of wire that might be an antenna. Someone else fires up the generator, and runs an extension cord to a rig on a table where a forlorn group huddles over a mike in abject sorrow.

Then there's a cry from the trees, "The antennas are up." Log sheets appear next to now-operating rigs, cups of thick black coffee appear from nowhere, and the bands erupt with, "CQ Field Day."

Soon the annual madness peaks; long-time friends stop screaming at each other and settle down to logging QSOs, as they have for many years. The ritual again enacted, the gods of radio are appeased.

And soon someone sows the seeds of future madness with a simple remark like, "You know, next year we should move the beam a few feet west, to that rise yonder." The cycle, begun anew, will culminate a year hence in another irresistible urge to migrate to "the site."

from the May '95 Troy (New York) ARA "TARA News" Jack Culliton, N2TBZ, Editor via the ARNS

## Good Company

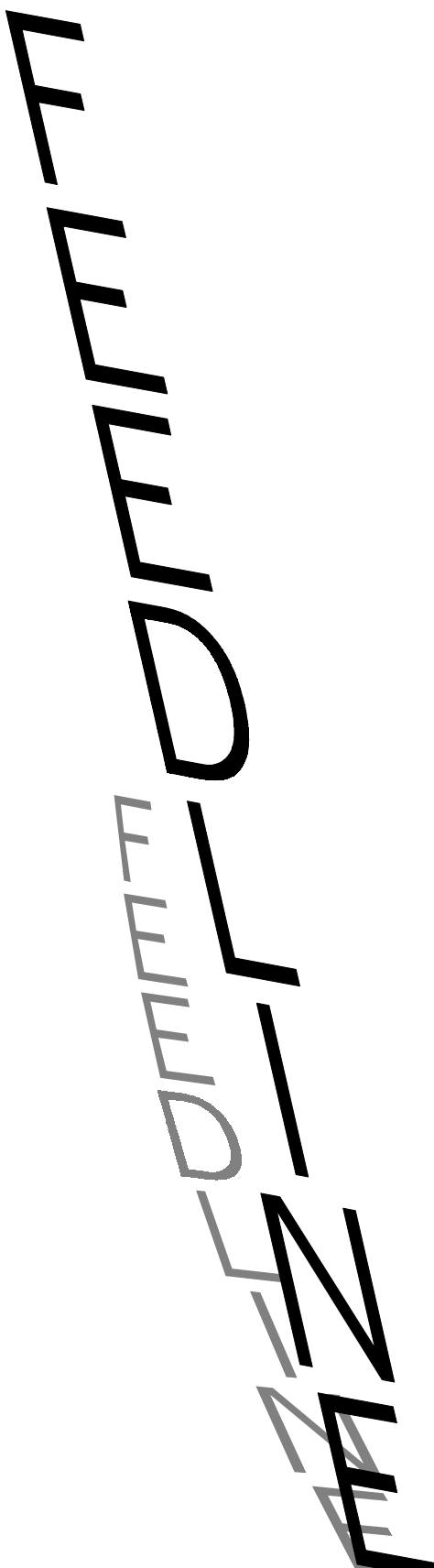
*Made some bad decisions at work lately?  
Cheer up! You're not alone...*

"The wireless music box has no imaginable commercial value. Who would pay for a message sent to nobody in particular?" David Sarnoff's would-be investors in response to his urging for investment in the the radio in the 1920's.

"This *telephone* has too many shortcomings to be seriously considered as a means of communication. The device is inherently of no value to us." Western Union internal memo dated 1876.

"Stocks have reached what looks like a permanently high plateau." Irving Fisher, Professor of Economics, Yale University, 1929.

Next month: computers.



**Inside:**

**Morse Code Tips  
Thoughts on the Internet**

**Gasoline precautions  
Power Amplifiers**

## Feedline

Feedline is a member-supported publication of the Cary Amateur Radio Club and is published monthly. Deadline for submissions is the second Thursday of the month.

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## Cary Amateur Radio Club

The Cary Amateur Radio Club meets on the fourth Thursday of the month, **7:00 p.m.** in the lower level of the Christian Life Center of White Plains United Methodist Church. The June, November, and December meetings are held off-site. Call for location of those meetings.

**Next Meeting: May 23, 1996.**

### 1996 Officers

KB9MS	Bob Lukaszewski	833-0199
	President	
N9CGD	Tom Doligalksi	481-1236
	Vice-President	
K4IWW	Will Harper	467-0224
	Treasurer	
N4UE	Herb Lacey	467-9608
	Secretary	

## Meeting Notes for April, 25, 1996

Meeting called to order at 7:31 p.m., by Pres., Bob, KB9MS. Introductions.

Treasurer's Report - Will, K4IWW, reported: Savings: \$2,903.09; Checking: \$671.55; Cash on Hand: \$18.25; Interest: \$15.34; Total: \$3,608.23. Dues, \$9/yr, still being received. CARC caps still available at \$4.

## OLD BUSINESS

Field Day Site - Bond Park has been secured for FD use as per last meeting. The higher terrain should be definite plus for the VHF/UHF folks. More room is another asset.

## NEW BUSINESS

Anyone interested in a group coax purchase? Call Al, KQ4FP. Al mentioned his wife's hometown has a homepage on the Internet and any messages left there are delivered by the local radio club.

(Continued on page 4)

## Running the legal limit

by "Huck" Huckabee, AA58U

Most of us Amateur Radio operators have at some time wished for a "full-powered rig" especially when we hear stations that don't hear us. I recently worked a station on the West Coast who had a four element beam on an eighty-foot tower, running legal-limit power. I was running 50 watts to a whip antenna on the roof of my RV. Afterward I thought, "We each received good signal reports, yet he ran thirty times more power." I wondered if his investment was in the same proportion. And I wondered, "Is he having proportionally more fun?" Still, most of us would like to "fire a big gun."

Not long after WW-II, when military-surplus radio parts were cheap, I built a kilowatt CW transmitter for 40 and 20 meters. It was great! It blanked out all the radios and TV's for blocks, and neighbor's fluorescent lights blinked my Morse-with their switches off!

My home required a new circuit to supply the rig. The input stage of my receiver burned up, and the odor of hot transformer varnish permeated the house. I even had to warn my small children, "Don't touch the window screens when Dad is on the radio." What fun!

But that old equipment wasn't efficient; it drew 700 watts on standby, and nearly 3,000 watts key-down! Heat wasn't bad in the winter, but in the summer's sweltering heat, my attitude quickly shifted to, "Who wants to nursemaid 3000 watts of heat through a hot Texas night?"

So I gave that rig to a young ham, and built a new one that ran 200 watts. Unfortunately, it and the receiver together consumed-and dumped into my shack-200 watts key-up and 550 key-down. That's still far too much for a Texas summer.

Today I'm down to 50 watts. And seriously considering going QRP.

from the February '96 Austin (Texas) ARC 'AARC-Over'-Mickey McInnis, KB5YAC, Editor via the ARNS.

## The Origin of "73"

*This account by L.R. Moreau first appeared in the SPARK GAP TIMES, the journal of the Old Timers Club of the USA. I feel it might help put an end to those "73s," "Very best 73s," and "Seventy-thirds" used on the bands by "them wot don't know no better" (reprinted by request - KM4LB)*

The traditional expression "73" dates from early landline telegraph days. You can find it in the earliest editions of the "numerical codes," with definitions that are variations on the same idea. "73" indicated that the end, or signature, was coming up.

The *National Telegraphic Review Operator's Guide*, first published in April 1857, shows "73" meaning, "My love to you"! Succeeding issues continued to give this definition. Yet some of the other numeric codes in use back then had the same meanings as today.

Before long, the meaning of "73" drifted away from "My love to you." Another publication, the *National Telegraphic Convention*, defined "73" as a vague sign of fraternalism-just a friendly greeting between operators. It was so used on all wires for many years.

In 1859, the Western Union Company set up the "92 Code," a list of numerals from 1 to 92 that referred to a series of prepared phrases for use on the wires. In the 92 Code, "73" changes from a fraternal sign to a flowery "Accept my compliments"-in keeping with the florid language of the era.

Telegraphy manuals published between 1859 and 1900 show variations of this more straightforward meaning. Dodge's *The Telegrapher Instructor* shows it as "compliments," but Theodore Edison's *Telegraphy Self-Taught* reports a return to "accept my compliments." Finally, a 1908 edition of the Dodge manual gives today's definition, "best regards," though a backward look in another part of that work also lists "compliments"

"Best regards" has remained the literal definition of "73" ever since, but more recently "73" has re-acquired overtones of a warmer meaning. Amateurs use it today as James Reid intended so long ago-m a friendly word between operators.

submitted by H. Pain, G3ATH to (and appearing in) the Southwestern Virginia Wireless Assoc. March '93 "Groundwave." Bill Svec, WA4BKW, edits 'Groundwave.' via the ARNS

## Communication or Isolation?

by David Pascale, WB2HKR

It's a classic irony. In today's ultracom - municative world we move farther from one another in the social sense.

We want more and more electronic links, yet we wish to maintain a detachment and isolation that is turning us into hyperspace hermits. Just look at some of the catch words and buzz phrases of the last ten years.

Personal computer says it all; it warns everyone else to stay away from our bastion of bits and bauds. And the "single serving" concept that evolved for frozen meals implies we would rather eat alone and away. Detecting the trend, Madison Avenue and Swanson are happy to take our money in exchange for making it easier. I think it's sad that so many people now eat alone.

The same tendencies appear in Amateur Radio. Listen on 75-meter phone; check the abundance of all-but-one-way transmissions. Some of those inane rantings confirm the stereotype of the Amateur Radio operator as a loner with a persecution complex, who screams at the world from his basement or garage.

Most of my non-ham friends consider hams to be eccentric, fuzzy creatures who climb on the roof every Saturday. My neighbor loves to point at my antenna and holler, "Talked to Mars yet?"

Why do we have this bizarre image? It's a frightening thought, but maybe we deserve it. I heard a conversation on two meters on one hot summer night that supported the stereotype. One ham told another, in detail, about his troubles with his dual-band radio. Only as the conversation ended did he mention what would have dominated any normal person's emotions. He was on the way to a hospital, to donate one of his kidneys to his son.

If ARRL has a public relations arm, I haven't heard of it. Non-hams might be vaguely aware that we provide disaster communications. But otherwise, in a private poll I conducted over the past two years, not one person knew the meaning of "ham radio operator." And yes, some thought it synonymous with CB'er. Unlike some hams, who would be aghast, I thought it was better than nothing!

Unfortunately, today's technological lunacy makes it more difficult than ever

for hams to become social beings. The Internet allows one to reach out from beneath his electronic cloak and grab information without the painful but glorious interchange that human interaction entails. How about the irony of the computer term *handshake*? Rather than the warm pressing of flesh, it means machines "recognizing" one another via their data streams.

Such an environment is tailor made for the ham community, though I won't limit my indictment to hams. The Internet "surfer" has much the same profile. With more eyes to see with, and more ears to hear with - via phone lines - one can suck up information faster than ever, without leaving the basement. And the Internet is addictive; soon we won't be able to live without it.

There are no easy solutions. And many of my amateur colleagues deny there is even a problem. Yet as the world continues to shrink, the distance between individuals grows. We are fast becoming "the isolation generation." Our ultimate mistake is thinking we can find the elements of a meaningful life among databases, CD ROMS, and "chat rooms."

from the October '95 Troy (New York) ARA "TARA News" @W.J. Eddy, NY2U, Editor via the ARNS

## Is the new gasoline bad for generators?

by Skip Stevens, WA6VFD

You can obtain in-depth information on "bad gasoline" from the July 1995 Trailer-Life magazine article entitled, "Reformulated Gasoline." As the article explains, the culprit is Federal Reformulated Gasoline (RFG), which some call "oxygenated gasoline." The Environmental Protection Agency (EPA) dictates sale of RFG in some areas of the country.

RFG's purpose is worthy - to reduce air pollution. It contains an oxygenating additive-either ethyl tertiary-butyl ether "ETBE" or methanol methyl tertiary-butyl ether (MTBE).

In small engines, RFG usage can cause reduced power, hard starting, engine run-on, vapor lock, increased operating temperature rise, and two- to five-percent lower fuel economy. It may also damage

(burn) pistons and valves. Also, RFG may dissolve O-rings and hoses in older designs.

Since ethanol is hygroscopic (water attracting), RFG oxygenated with EBTE may present special problems. If enough moisture accumulates, the fuel separates into two layers-gasoline on top and ethanol-water below. The ethanol-water layer can corrode certain metal fuel system components, resulting in fuel leaks. But RFG oxygenated with MBTE is benign in this respect.

There is another problem with ETBE in two-cycle engines; when fuel separation occurs in ETBE RFG, the oil mixed into the fuel goes into the top layer, so the engine may seize for lack of oil lubrication. So before you start or refuel a two-cycle engine, always vigorously shake any fuel that has been sitting in the tank for longer than 20 minutes.

RFG is a better solvent than conventional gasoline. It may loosen deposits in the fuel system that can plug the fuel filter, carburetor passages, or fuel injectors. If you use RFG, replace your fuel filter on a regular basis.

from the January '96 Silicon Valley Emergency Communication System's "Repeater" Glen Lokke, KE6NBO, Editor via the ARNS

## Tired?

by Darrold Moline, WA6DNZ

Are you tired? Rundown? Overworked? Some irrefutable statistics show why. The population of this country is 270 million, but 90 million are over 65, leaving 180 million to do the work. People under the age of 21 total 95 million, which leaves 75 million to do the work.

But the federal Government employs 40 million, leaving 35 million to do the work. Fifteen million are in the armed forces, leaving 20 million to do the work. Deduct those in state and city offices, hospitals, insane asylums, etc., and you have 815,000 to do the work. But 462,000 of these are bums or vagrants who refuse to work, so that leaves 353,000 to do the work.

Now it may interest you to learn that there are 352,998 people in jail-leaving just two people to carry the load. That's you and me, brother. And tired or not, I wish you'd do your share!

from the November, 1995 Buena Park ARC "B.P.A.R.C Communicator" @Bob Painter, WA6PLM, Editor via the ARNS

# Slaying the Morse dragon

by Mike Treit, KB7QOP

*It rises before you, its slithering jaws in a hideous grin of smug superiority. It defies you to challenge its mastery over your soul. You charge, but it meets each of your strikes ferociously, with apparently insurmountable strength. The wildness of the fight grows in a crescendo of violence. But finally you collapse, exhausted and frustrated. Gasping, you acknowledge your bitter defeat.*

Does this remind you of your attempts to learn Morse code? If so, fear not, many have gone before you. Many have been frustrated at not being able to learn the code quickly. And, yes, many have become discouraged.

But take heart! Countless others have succeeded. Most of those who failed just used the wrong approach, applied the wrong strategy. To learn anything new, you must first cast aside misconceptions, negative biases, and pessimistic thoughts. If you can do that, you'll discover that Morse code isn't the terrible monster so many have claimed it to be.

Before you begin learning Morse, you must 'empty your cup.' Misconceptions and prejudices hinder learning, so let them go. Then follow the ideas set forth here.

First, it helps to recognize what it is you are trying to learn. Morse code is a series of long and short tones arranged to represent letters, numbers, and punctuation marks. That's it; it's simple and straightforward.

How hard is it to learn such a sequence of sounds? Any person who understands the letters of English language has already done it; the two tasks are essentially the same. When we say the letter "A," we say the sound "ay" (as in way). In Morse code we say "di-dah." Sure the particular sounds are different, but both are just simple combinations of sounds that represent a letter.

So Morse is not a mysterious thing that is difficult for mere mortals to learn. It is, in fact, as easy as first-grade English. And any normal person can master it.

Sure it takes effort. No one goes from learning the first few letters to passing the extra Class code exam overnight. But

**Wanted:** Cheap transportation...requirements: can pass nc inspection - A/C would be nice... Car or truck acceptable...call KM4LB at 469-5129.

anyone willing to apply him- or herself to the task can reach that goal.

Where should you start? Start by forgetting printed representations of the Morse alphabet. Throw them away. Because Morse is a strictly audible code, printed representations actually hinder learning. You can only learn Morse by listening to Morse. This is important.

So get a set of audio tapes or a computer program. The program Super Morse taught the code to me. It's shareware available from the Internet, computer bulletin boards, and many other places. Audio tapes are another good method. Though less flexible, they work for those who don't have a computer.

Once you have the right tools, learning the basics is easy and painless. Set time aside every day - a half hour, broken into two fifteen-minute sections. That's how I started. Learn a few characters at a time, then spend subsequent sessions mastering those characters. When you can recognize them 90 percent of the time or better, learn a new character. Practice until you can recognize all of the characters you've learned so far, before you add new ones. Ironically, if you relax and take your time, you will progress rapidly.

And enjoy the process. This is important. Learning Morse is fun. Have a good time with it and your measurable progress will reward you, giving you the incentive to keep at it. That, in the end, is what counts the most.

(And when you can recognize all the letters, numbers, and the few punctuations Amateur Radio Morse includes, you're ready to tune the HF Novice bands and start eavesdropping on actual conversations. That's even more fun, and unbeatable practice.-AF6S)

from the February RC of Tacoma "The Logger's Bark" -Kathleen Nace, NOEYK, Editor, via the ARNS

(Continued from page 2)

## Meeting...

Could CARC do same? Not sure. (Several NC clubs have homepages.)

## Program:

Will Roberts, AA4NC, with an assist by KI4HN, gave a very interesting program on Amateur Radio Contesting. It started out with a "walk around" contest to give everyone the flavor of a real contest. AA4NC and his many cohorts have been on the DX end of a number of the big, world-wide contests. No doubt, he will be heard from in more of them in the future as time and \$\$\$ allow.

Thanks, Will, for sharing your enthusiasm for contests with us!!!

Next Meeting: Thursday, May 23. Program: How to use CT. If you don't know what CT is, then, you won't want to miss this meeting so you can be better prepared for action on Field Day.

**Note:** The June meeting probably will have to be changed from the 4th Thursday, June 27, to the 3rd Thursday, June 20, in order to be BEFORE Field Day. Stay tuned.

n4ue

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by W1ECH, from the April'95 South Orange ARA