



Squelch Tales



Newsletter for the Merry Meeting Amateur Radio Association for April 2011

The Lost Art of Cable Lacing

By Dan Romanchik, KB6NU

The Make: magazine blog is a wealth of information for amateur radio operators. Recently, they ran a post on what they consider to be on the “lost technology” of cable lacing

<<http://blog.makezine.com/archive/2009/07/lost-knowledge-cable-lacing.html>>.

The blog post does a great job of explaining the technique and includes several illustrations. One of them

<http://cdn.makezine.com/make/blogs/blog.makezine.com/upload/2009/10/lost_knowledge_cable_lacing/cableLacing6b.gif>

is a drawing from an old ARRL handbook. There are also a link to the Wikipedia page on cable lacing <http://en.wikipedia.org/wiki/Cable_lacing>.

Nowadays, we mostly use zip ties to bundle cables, but there are disadvantages to using them. For one thing, to apply them properly, you should have a tool that controls how tightly the zip tie holds the wires. This is to prevent crushing the insulation.

Also, I’ve found that zip ties don’t do so well when the cable has only two or three wires. They’re just not designed to hold so few wires. I think that cable lacing would do a much better job of keeping a small bundle of wires together, say wires that connect front panel components to a PC board.

Cable lacing certainly looks much cooler than zip ties. This is the perfect technique for those homebrewers that want to make their projects look great as well as work great.

I asked on my blog, “Now, where can I find the ‘wax-impregnated cotton or twine’?” and my readers came through. Hamilton said, “Apparently you find wax string

here: <http://www.kitkraft.biz/product.php?productid=1496>.

I remember using it for something as a kid, but I can’t place it.” Ron McKenz wrote, “I notice that a number of telco vendor sell waxed lacing cord. Here are a few URLs:

<http://www.sourcetelsupply.com/catalog/index.php?cPath=27>,

<http://www.tessco.com/yts/resourcecenter/pdfs/clablelacing-FAQ.pdf>,

and <http://www.oelsales.com/product.cfm/267/>.

Ned, WB4KBO, said, “I would suggest a large roll of dental tape and a large-diameter curves sewing needle for fabricating harnesses. I was told that this was the material of choice for lacing harnesses when i worked at Heath Company many years ago. Makes sense to me. Buy it at Meijer for an occasional harness, or a dental wholesale supply house if you are going into production. Also great stuff for kite rigging, vine lacing and many other things.”

Mike, WA6ARA wrote, “What you want is Mil-T-43435. It is better than a cord, it is a flat weave tape, nylon, and

waxed. It is made for cable lacing but is use now in the parachute industry as "super tack". Item T1050 at <http://www.paragear.com>"

So, there you have it. Links to show you how to do it and a couple more links for where to find the lacing material. I now expect all of our homebrew to look a lot neater.

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When not worrying about how to lace cable instead of using zip ties, Dan, KB6NU, blogs about ham radio at www.kb6nu.com, teaches ham radio classes, and operates CW on the HF bands. Look for him around 7.030 MHz or e-mail him pictures of your beautifully-laced cables at cwgeek@kb6nu.com.

W1AW 2011 Spring/Summer Operating Schedule

Morning Schedule:

Time	Mode	Days
1300 UTC (9 AM ET)	CWs	Wed, Fri
1300 UTC (9 AM ET)	CWf	Tue, Thu

Daily Visitor Operating Hours:

1400 UTC to 1600 UTC - (10 AM to 12 PM ET)
1700 UTC to 1945 UTC - (1 PM to 3:45 PM ET)
(Station closed 1600 to 1700 UTC (12 PM to 1 PM ET))

Afternoon/Evening Schedule:

2000 UTC (4 PM ET)	CWf	Mon, Wed, Fri
2000 " "	CWs	Tue, Thu
2100 " (5 PM ET)	CWb	Daily
2200 " (6 PM ET)	DIGITAL	Daily
2300 " (7 PM ET)	CWs	Mon, Wed, Fri
2300 " "	CWf	Tue, Thu
0000 " (8 PM ET)	CWb	Daily
0100 " (9 PM ET)	DIGITAL	Daily
0145 " (9:45 PM ET)	VOICE	Daily
0200 " (10 PM ET)	CWf	Mon, Wed, Fri
0200 " "	CWs	Tue, Thu
0300 " (11 PM ET)	CWb	Daily

Frequencies (MHz)

CW: 1.8025 3.5815 7.0475 14.0475 18.0975
21.0675 28.0675 147.555

DIGITAL: - 3.5975 7.095 14.095 18.1025
21.095 28.095 147.555

VOICE: 1.855 3.990 7.290 14.290 18.160
21.390 28.590

Notes:

CWs = Morse Code practice (slow) = 5, 7.5, 10, 13 and 15 WPM

CWf = Morse Code practice (fast) = 35, 30, 25, 20, 15, 13 and 10 WPM

CWb = Morse Code Bulletins = 18 WPM

CW frequencies include code practices, Qualifying Runs and CW bulletins.

DIGITAL = BAUDOT (45.45 baud), BPSK31 and MFSK16 in a revolving schedule.

Code practice texts are from QST, and the source of each practice is given at the beginning of each practice and at the beginning of alternate speeds.

On Tuesdays and Fridays at 2230 UTC (6:30 PM ET), Keplerian Elements for active amateur satellites are sent on the regular digital frequencies.

A DX bulletin replaces or is added to the regular bulletins between 0000 UTC (8 PM ET) Thursdays and 0000 UTC (8 PM ET) Fridays.

In a communications emergency, monitor W1AW for special bulletins as follows: Voice on the hour, Digital at 15 minutes past the hour, and CW on the half-hour.

FCC licensed amateurs may operate the station from 1400 UTC to 1600 UTC (10 AM to 12 PM ET), and then from 1700 UTC to 1945 UTC (1 PM to 3:45 PM ET) Monday through Friday. Be sure to bring your current FCC amateur license or a photocopy.

The complete W1AW Operating Schedule

may be found on page 103 in the April 2011 issue of QST or on the web at,

<http://www.arrl.org/w1aw-operating-schedule> .



Hams Invited to Track Satellites

Last November, five research satellites were carried to orbit aboard a Minotaur V rocket from Kodiak Island, Alaska. Two of these satellites—FASTRAC 1, known as “Sara Lily” and FASTRAC 2, referred to as “Emma”—entered orbit as a single nanosatellite, but on March 15, scientists sent the command to have them separate.

According to FASTRAC Student Program Manager Sebastian Munoz, KE5FKV, students at the University of Texas will be confirming the separation as the satellites pass: “We started one of the most exciting phases of our project by separating both of our girls so that they can compute on-orbit real-time relative navigation solutions while both of them are freely drifting from one another.”

Munoz said that they would continue to update the satellites’ two line elements (TLEs) on their website for those radio amateurs interested in tracking the two nanosatellites. “I want to thank the ham community all over the world for supporting our project,” Munoz said. “Your support has been incredible and we

really value it. We really appreciate all of your help so far and we hope that we can continue to count on it.”

The FASTRAC website with the current TLEs can be found at:

http://fastrac.ae.utexas.edu/for_radio_operators/users/phpBB3/predictedorbit.php

10 Meter/EchoLink repeater in Lisbon

By Lee- W1LWT.

I am going to try a new RF Idea for Maine and I think it will be it is interesting. It is a 10-meter repeater dedicated to EchoLink for everyone to enjoy, experiment with and have fun with.

It is RF Engineering Designed and coordinated and approved by the NESMC and will comply with all FCC Part 97 Rules applicable to Repeaters.

It will start with a power out level of 10 watts in the set-up phase to see how it performs. It will be located in Lisbon at coordinates 44.0295N, -070.0870W, at an elevation of 249-feet above sea level in Grid Square FN44. The antenna is a half-wave dipole. A standard 10-meter repeater frequency of 29.620 Tx / 29.520 Rx.

Please send signal reports of your contacts and how well it performs for you, and if any DX heard or worked. Over time I’ll send QSL cards to all of you that provided reports.

We’ll back to my RF bench for more experiments and ideas to share. The W1LWT/R 10-meter repeater will have EchoLink Node No. 517147.

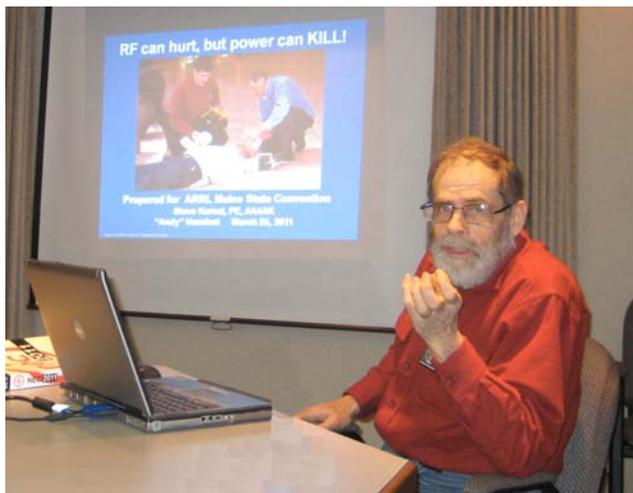
If you have 10-Meter FM mobile capabilities, give it a try while driving through the Lewiston to Topsham area

and email me at w1lwt@hotmail.com and let me know how it performed for you. Please be patient while we work out any bugs along the way. I will be monitoring.

73 Lee, WILWT

Andy Hamfest & Maine State Convention, a report

Lewiston: The evening of the 25th started the events for the ARRL 2011 Maine State Convention and Andy Hamfest at the Ramada Inn. There was no inclement weather to deal with this year even though the thermometer readings were not very generous. On Friday evening several seminars and forums were held in various conference rooms. The MARAs Steve Kerchel Ph.D., AA4AK gave another one of his well-prepared and informative lectures, this year it was electrical safety and Ham Radio.



DR Steve Kerchel. AA4AK imparting knowledge on electrical safety

Following Steve's lecture, ARRL New England Director Tom Frenaye, K1KI held the ARRL Forum in the main conference auditorium. Tom covered most of the topics of interest concerning our hobby and what the League's position

was and what action was being taken. Tom reported that the League financial health is good and the losses of a few years ago have been recuperated. Also membership in the ARRL is up and the number of folks entering the hobby is up. However he reported that number of new hams in New England and Maine is down slightly from last year.

The following morning had the flea market hall full of folks looking for a good deal and lots of eyeball QSOs were taking place.



Don (KA1WAL), Harry (N1TTT) & Bruce (W1ZE)
Take a break from shopping

Unfortunately there were not as many sellers as in previous years but there were still goodies to be had. George Szadis, K1GDI had a table and sold everything he came with. Nice going George.



Bill (K1MNW), Mark (W1AUX) & Don (KQ1L) in a
222 MHz repeater conference

The Maine Chapter of the QCWA had their spring meeting Saturday at the convention. Phil Young, W1JTH of Augusta received his 75 years in Amateur Radio award that included a lifetime membership in the National QCWA. He joins a very select group of Maine Hams that have received that lofty goal and

award. They are Dick Baldwin, W1RU and Carl Watson, W1NV (SK).



Phil Young, W1JTH receives his 75-year award from QCWA Maine Chapter President Jerry Burns, K1GUP

There was a large turnout of MARA members to the festivities and feedback from the event was very positive. We in the MARA should thank the members of the Androscoggin Amateur Radio Club for their efforts in running a successful event...

(Photos by KX11 staff photographer)

In Phil's Own Words

By Phil Young, W1JTH

My interest in radio started many years before I became a Ham. At about age seven I came across several copies of "Science and Invention", a Gernsback publication that was one of the first magazines to devote a section to radio, about 1922-24. Most broadcast radios of that era were 3 or 4 tube sets manufactured by Federal or General Radio and generally not available in that rural area of Maine and had to be obtained from a distributor. An uncle who lived in Bangor happened to be an agent and sold a Federal 4 tube set to my father. So when the magic device invaded our household in 1924, anything I could get my hands on to explain its working became a hot item, Even though, at seven, I had to depend mostly on 'reading' pictures to explain the diagrams.

I became the family radio technician, connecting the batteries, speaker, antenna and ground in the spring and reversing the operation in the fall. Radio reception was not good in the

summer and most radio owners "saved" the set from summer static by putting it away until fall. The little town of Shirley Mills, just south of Greenville, Maine had no commercial electricity so the radio used batteries for power, a lead acid auto battery for the filaments, two B batteries for the 90 volts and a 4-1/2 volt C battery powered the radio. I remember taking the 6 volt car battery down to the general store on my sled in the winter time to get it recharged. The store owner had a 32 volt Kohler plant for lights that could charge the 6 volt battery making it good for another week of listening.

My first real contact with amateur radio came about 8 years later after we moved to Corinna. That was when I started working after school, part time, at a local gas station. The owner, W1BGU, had his ham station there tucked in a corner between the cash register and parts counter. It was a rack and panel transmitter with plywood front panels painted black and sporting five or six round panel meters, many switches and knobs, very impressive for a first view of such an outfit, Stony took on the task of coaching me. With a borrowed ARRL handbook (original price, \$2.00) for a textbook I managed to cram enough information in a few months to pass the 'Class C' exam. I had little trouble with the code since I and a buddy had teamed up as a Boy Scout to compete in several signaling contests using visual methods of sending and receiving with Morse code. The biggest problem was converting from sight to sound. My friend Stony gave me the FCC Class C amateur radio exam in the spring of 1936. The wait began for the ticket to arrive.

During that time I managed to dicker, beg, borrow and finagle enough radio parts to build a transmitter. It was the classic circuit of that time for 160 meter AM Phone, a 47 oscillator, a 46 buffer and a pair of 46 tubes in the final amplifier running around 40 watts input. The modulator was a 25 watt P.A. amplifier that I wound a transformer for to build the output impedance up to the required value to match the R.F. Amplifier.

I mounted it in a wooden rack that my brother built for me He also donated an unused chicken coop behind the house that I cleaned up and fixed for radio shack. My receiver was a

converted TRF broadcast set that was tweaked down to 160 meters.

The ticket came in the middle of March in 1936 and after school I headed for the chicken house, license in hand. There's nothing like the terror of the first solo contact. With sweat running down my back in spite of the 40 degree March temperatures, I called CQ several times and finally got an answer from Charlie Parker, WIILU, in Castine. Charlie and I were both seniors in high school. We talked about our similar activities in school and what was ahead after graduation. After that initial contact I went back to the house to contemplate the marvels of my accomplishment,

I moved away from Corinna after graduating from high school that year and the station went with me to Dryden, Maine.

I met Dot, now WITGY, when I moved to Dryden and we were married in 1941 and put amateur radio on hold. Kenny was our first child, born in 1942.

All amateur activity came to a halt in 1941 due to W.W.II. Amateur transmitting gear had to be made inoperative. I still have the yellow FCC permit noting that my radio gear was registered and made inoperative.

Ham radio experience was considered a valuable asset in the war days and having passed the Navy's Eddy test, a screening process developed by Captain Eddie, went off to Navy electronics schools at Great Lakes Naval Training Center, Hertzl City College in Chicago, Gulfport Naval Training Center in Mississippi and Navy Pier back in Chicago. After serving my time in the Navy, I was discharged in 1946 as an Electronics Technician's Mate.

In 1947 I made the trek to Boston and the infamous 16th floor of the Custom House and passed my upgrade test to "Advanced". I returned to that spot later to get a Commercial Radio Telephone License.

Dot had gotten her amateur license in 1950 and we again became active on the ham bands. Carol was born in 1951 but Dot burned up the CW bands in the evenings after putting her to bed and while waiting for me to get home from my night job.

We moved to Augusta in 1954 and I worked for a time as broadcast technician at WRDO. In 1957 I joined the radio crew at the Maine

Department of Transportation as a radio technician. Following Bob Parker's, WITO, retirement, I took over as Supervisor of Radio Communications, a job I held until my retirement in 1977.

Since that time, Dot and I have been quite active, This is a great retirement hobby and one that we both enjoy to the fullest. I have been active on most of the HF bands and 2 meters. We both are members of the Quarter Century Wireless Association and participate in the Pine Tree Chapter activities and on the national level as well. I have participated on the Sea Gull Net for many years and have occupied the net control seat on Fridays for more years than I can remember. I also have been involved with traffic handling and was Maine rep to the First Region Nets for over 20 year.

I missed the romantic "Spark" era by a few years but, on the other end of the time spectrum, managed to make contact with several passing satellites and the ISS. Huge changes in ham radio took place during that time span. I consider myself fortunate to have participated in many of the advances in radio technology. It has been a good ride.



73, Phil, WIJTH

The original article appeared in the spring 2011 issue of the Maine Pine tree Chapter QCWA Newsletter