

NEWSLETTER

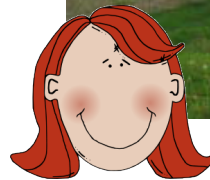
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Mercury Amateur Radio Association - MARA - North America - North East

Dutch Elm Disease Infects Redheads

In 1973 the BBC Radio broadcast an interview with an elderly academic, Dr. Clothier, who discoursed on the government's efforts to stop the spread of Dutch Elm Disease. Dr. Clothier described some startling discoveries that had been made about the tree disease. For instance, he referred to the research of Dr. Emily Lang of the London School of Pathological and Environmental Medicine. Dr. Lang had apparently found that exposure to Dutch Elm Disease immunized people to the common cold. Unfortunately, there was a side effect. Exposure to the disease also caused red hair to turn yellow and eventually fall out. This was attributed to a similarity between the blood count of redheads and the soil conditions in which affected trees grew. Therefore, redheads were advised to stay away from forests for the foreseeable future.

Dr. Clothier was in reality the comedian Spike Milligan.



CONTENTS

- 2 VIEW FROM THE TOWER**
WORDS OF WISDOM FROM A MEMBER OF OUR EXECUTIVE - OR NOT!
- 2 GRANDMA MARA'S CORNER**
RAMBLINGS OF AN OLDER PERSON - IT MUST BE BIG ENOUGH 'CAUSE IT CAME DOWN!
- 2 CULTURED CORNER**
HAIR AND TREES
- 3 TECH STUFF**
PSK31 - YOU CAN DO IT!
- 4 QUOTE OF THE MONTH**
POSSUM LODGE PRAYER
- 4 NEW NEWSLETTER STAFF MEMBER**
TEIXA - OUR NEW RECEPTIONIST
- 4 DI-DAH-DI-DAH-DIT**
FINAL STUFF

OTHER STUFF

E-mail your comments, ideas, or submissions to marane@mara.net

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TOWER

VIEW from the



Grandma Mara's RAMBLINGS

Last month's column finished up about my motorcycle trip from the previous summer. Time marches on and storms come and go. One of those storms that came up the east coast during this last winter took down my newly installed dipole. I looked out once and could see the wet snow sticking and building up on the radiator. The heavy snow load combined with the high gusty winds were too much for the poor thing. And so, it ended up on the ground under several feet of snow. Not a good thing for an emergency antenna!

Once the storm subsided, it was not difficult to see what the problem was. Turned out that the inexpensive shock cord I used for part of the support lines broke apart under

the severe wind fluctuations. That will teach me to go cheap!

When the roads were cleared and the power restored, I drove over to my friendly home building supply store. The nice man (there are helpful people at those places - the trick is to find someone!) in that section showed me the differences between the different types they had in stock, how the elastic varied in stretch, how the covering varied in thread count, and how the hooks were covered with plastic to protect the metal from rusting. Quite an eye-opener for a grandmother who thought shock cords were shock cords! Anyway, I took home several of the best quality ones - two for the dipole ends and two for spares. No time to be caught with your dipole down when a heavy storm has just gone through.

On the weekend, I had my Home Teachers over - a dad and his son. The younger turned out to be pretty good with my slingshot and in no time at all they had my support ropes in place and the dipole back up in the air, even higher this time.

Still don't know who I should be talking to if there was a real problem, but chasing DX in the meantime is good fun and at the very least, a bit of practice.

CULTURED CORNER

by ANØNMS

HAIR

*It seems I spend most all my time
In trying to keep that wire where
Up in the air where it belongs
And all I do is lose my hair*

*Another hobby I should choose
One such that does not frustrate me
To keep what hair that I have left
One that has naught to do with trees*



TECH STUFF

By VE1VQ

IN THE BEGINNING...

Every once in a while a posting on the MARA NE e-mail reflector generates a flurry of follow-up postings. One that did recently was one that I sent, regarding a possible 40 meter frequency to supplement the one we commonly use for the 75 meter net. This would allow for changing band conditions in a time of emergency. What blossomed out of the original message was a suggestion that we consider PSK31 as an alternate to our usual mode of single side band.

We should consider PSK31 for emergency communications.

I had experimented with PSK31 in the past, even building an interface with a pair of transformers and an opto-coupler (see pg 12 of <http://ne.mara.net/psk31.pdf>) using the laptop's com port. This was replaced with a commercial unit a couple of years ago when I noticed a sale on the [Signalink SL-1+](#) (by TigerTronics) at one of the Canadian ham suppliers. I made up the cables to fit my Ten-Tec 538 and was ready to go. After a few weeks of reading the mail and an occasional two-way, the cookie cutter format of the contacts lost their interest for me.



When the suggestion was put forth on the reflector that we might use it for emergency communications, I rummaged through the tangle behind the HF rig and found the hardware once again. I searched and found the several pages that pass as a manual for the interface so I could re-learn what I had to do to get it all going again.

WHAT TO USE FOR A COMPUTER

Sadly my old Toshiba laptop with the already installed software had gone the way of old laptops. The battery didn't hold a charge any longer (not that it mattered as long as I had the power supply connected) but the Win98 operating system was getting kind of flaky, even though I had re-installed it several times. An IBM T40 laptop (a few years newer than the Toshiba) was pressed into service mainly because I had it, and because its footprint was smaller than a newer still HP laptop – always an

important consideration on an overcrowded radio desk. Downloading and installing DIGIPAN, free from <http://www.digipan.net/>, on the T40 got me working software. Setup involves a few steps, none of which are difficult, just a little tedious.

Any computer manufactured in the last few years running WinXP or better will work. You can use something with Win98 if that's all you have. Few of the recent PCs have a serial com port any more so that will be a factor in what interface you use. Newer interfaces are sound activated or operate from the USB port.

RECEIVING

Some have purchased or constructed the necessary interface cables while others have fed their PSK audio (from the computer speaker) into their microphone (which is why you sometimes hear voices or other strange sounds in the digital mode section of the band).

Once you have the receiver's audio feeding your interface and your computer's sound card, make the adjustments recommended in your chosen software's help files. Set your receiver to upper sideband. If your rig allows it, adjust both receive and transmit bandwidths out to 4 to 5 KHz. When you can successfully decode signals that you see on your display, you're close to completion.

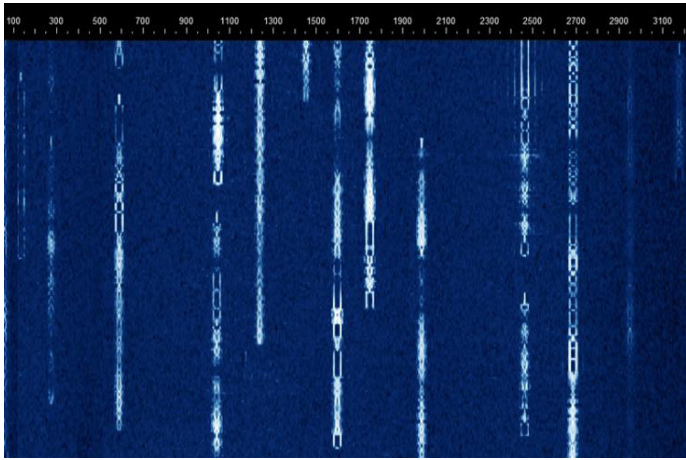
TRANSMITTING

Beginning with the software's recommended settings, adjust your transmitted audio. Start by transmitting into a dummy load. Set your transmit power output down to approximately 20 watts. This will be plenty to communicate with anyone you can see on your waterfall display. Transmitting at the one hundred watt level is not required and will make you unpopular with other bandwidth users, as well as most likely exceeding the duty cycle of your transmitter. Remember that PSK31 is a 100% duty cycle mode. Increase the output from your sound card until the transmitter's ALC flickers. That's high enough; now back off until it does not flicker at all. Over driving with excessive audio will broaden your signal again making you an unpopular spectrum hog.

PSK31 is a 100% duty cycle mode. Operating at a full transmitter output of 100 watts most likely will fry your finals.

Making sure to turn off any speech processing your rig might have will also make for happier neighbors!

It is best to communicate with signals in the main portion of your display. Operating at the very edges of your transmit or receive bandwidth will lessen the power



Above is a computer PSK31 waterfall display, so called because the signals appear vertically on the screen. Signals older in time are at the bottom.

you transmit or the strength of the signal you receive. If you are 3 db down on your transmit filter slope then you are transmitting at half of your power (down from 20 to 10 watts).

Activating the transmit function by using the TUNE function should show some indication on a power meter if you have one installed in-line.

YOU CAN DO IT!

You should now be at the point where you will be able to send and receive with success. After a bit of practice you will come to recognize a usable signal just by the sound. Look around until you find someone calling CQ and give them a call. Most, if not all of the software available allows you to program your keyboard's F keys with macros. With one key press these will transmit a CQ with your call sign, a brag file with your station information, or anything else you want to repeat with other contacts.

So how about it? Anybody for a PSK31 contact?

 Listed below are several web sites for you to check out for further information:

<http://www.tigertronics.com>

Click on 'Signalink Software' on the left side for a comprehensive list and links for software

<http://www.arrl.org/tis/info/HTML/psk31/index.html>

<http://ne.mara.net/psk31.pdf>

QUOTE OF THE MONTH

I'm a man ...But I can change ...If I have to ...I guess.

*The Possum Lodge Man's Prayer
 - from the Red Green Show*

new staff member



Work on the newsletter has grown to the point where we had to take on extra staff. Meet Teixeira, our new reseptionist, grammer korrekter and pruf reeder. She is pictured here multi-tasking by handling two calls at the same time.

DI-DAH-DI-DAH-DIT

A BETTER WAY?

I remember a conversation of some years ago, with an older ham who thought that CB would be the ruination of amateur radio. He forecast that the powers that govern these things would eventually relax the rules to make it easier for people to acquire their ham license by eliminating the code, and that would let in the riffraff. He felt the language that characterized the 11 meter band would come to be the norm for the rest of the ham world; that operating practices and manners would be reduced to the anarchy and mayhem that was the trademark of the 'good buddies' with their kilowatt mouths.

Some of his fears, like the disappearance of the code as a requirement for licensing, have come to pass. Others like the degradation of operating practices have not. In fact, if you listen around the bands, you will generally find as good or better operators as you heard back thirty or forty years ago. It seems that 'good' won out over 'evil' after all.

Very few hams seem to build anything anymore. There are some who still do and whose ideas and articles continue to provide a small flow of articles for QST, QEX, CQ Magazine, as well as the European and Asian publications each month. Projects continue to be designed, built, and published, so obviously there is still interest out there.

Editorials have been written for decades about the over crowding and poor practices on the ham bands.

Despite the crowding (editorials have been written for decades decrying band over-occupancy)

the thing I have noticed is politeness. I hear a lot of people asking if the frequency is in use instead of simply starting in with their transmission. Others have given up the frequency for our Saturday morning net. Still others have let Dan (NE3Z) interrupt their rag chewing to announce an alternate frequency for the DC Storehouse net.

Removal of the code has not proven to be the end of life as we know it despite all the warnings of dire consequences from those who prophesied such. In fact, it has brought in many new members to our hobby, who for whatever reason couldn't grasp the code or who had no interest in learning it in order to explore the other facets of all that is amateur radio.

I'm glad my friend was wrong in most of what he thought might happen. That may be the result of the near expiration of the CB craze. Maybe we simply outlasted them. Or perhaps we taught them a better way!

Until next month,
VE1VQ