Northwest Indiana DX CLUB

Volume 12, Issue 5

May 2024

President's Corner

Next meeting will be in July at the Sugar Bowl in Michigan City at Noon.

Presentation will be on a Moon Bounce.

73 John W3ML Good DXing!

> Meeting Feb. 9th 12:00 Noon Sugar Bowl Michigan City

"Working the World from the Black Hole"

NWI DX Club Website

http://nwidxclub.weebly.com/



Don't forget Steve Mollman is our QSL Card Checker.

DXCC Card Checking is available by appointment and may be available at meetings. E-Mail kd9hl@arrl.net for an appointment or to make other arrangements.

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DX Alert Coordinator Bill South N4SV wbs099@yahoo.com

Reminder, the NWIDX Club has a club call W9NWI.

The call is available to members for use during contests, special events, Field Day, etc. To schedule dates for its use, contact the trustee, Steve Mollman – KD9HL. kd9hl@arrl.net

QSL cards are available.

Notice:

Articles in the Northwest Indiana DX Club Newsletter (except for those separately copyrighted) may be reprinted, provided proper credit is given.

DX ALERT

A Real Time DX Alert System for Northwest Indiana DX Club Members!

The club has initiated a new program to help our members work and log new DX. We call it "DX Alert".

The alerts are from fellow DX members in the local area. If your neighbor Ham can work the DX, you probably can also. The alerts are in "real time". The test/development program resulted in ATNO's and new band fills for the participants.

For the past 25 years we have used DX Clusters as a major source of information on what DX is on the air. Unfortunately, the cluster system has become almost worthless as it has been subverted by other users. Much of what we see on the clusters has nothing to do with DX. It is cluttered with spots for domestic stations, POTA, IOTA, special events and other spots that are useless to a hard core DX'er.

What to do about it? Several club members proposed that a local DX notification system be set up. The big question was how do we get the information to the members? There were trials and tribulations as solutions were explored.

The first proposal was a repeater devoted to DX Alerts. This was rejected because of cost and the limited coverage of a typical repeater. After all we have members as far as 250 miles away.

The second proposal was a telephone relay. The first member calls two members and they in turn each call two more and so on. This was deemed awkward, subject to potential failure should one person fail to call, and the fact that many people block calls from unknown numbers.

The third was a text message to smart-phones. This had potential but it was discovered that not all monitor their phones, there were potential data limits, many don't want their cell phone number publicized and again some members block unknown numbers.

The best solution was a simple e-mail. All of our members have internet access and e-mail accounts. Smart phones, both I-phones and Android, can receive e-mails and smart phones can be set up to alert their user of an incoming e-mail. The e-mail gave the potential of 100% dissemination of the DX Alert.

How does the system work? First a member must work the DX. He then composes a very short message with the vital information in the e-mail title block and then sends it to the program participants.

A typical message may look like this: "DX Alert Austral Is TX5XG 24.911 ft8 fh". Sometimes the sender may want to enhance the message i.e. "DX Alert Austral Is 24.911 ft8 fh beam 234". It is up to the sender to compose what is appropriate.

DX Alert Austral Is TX5XG 24.911 ft8 fh beam 240



To: Poindexter John, Bill South, Tom W8FIB, Earl Gumm, Jerry Hess and 1 more...

An Actual DX Alert e-mail (Note: All info is included in the "Subject" block)

How do you participate? A voluntary list has been set up. Contact via e-mail, Bill South-N4SV at wbs099@yahoo.com. Be sure to include the e-mail address you want to use to receive and send the DX Alerts. Bill maintains the list, keeps it up to date and notifies participants when changes occur.

Setting up your e-mail client should not be a problem. Most e-mail providers have a provision for "group" mailings. We checked out Yahoo, G-mail, AOL and Comcast. Verizon uses Yahoo so they should be okay. If your e-mail provider doesn't have a group mail provision you can copy the list on Word and when it comes time to send an alert past the list in the "To" block of your program.

While not strict, the guidelines for what to send are restricted to DX. The recommended are:

- 1. Rare DX
- 2. Semi rare DX
- 3. DXpeditions
- 4. Just about any DX on 6 meters and 160 meters.

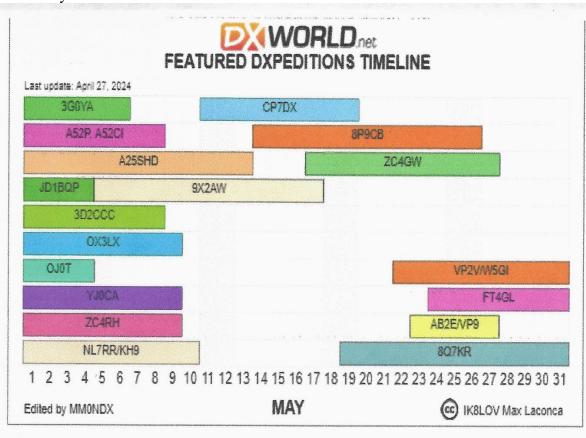
What NOT to send:

- 1. Special event stations
- 2. POTA
- 3. SOTA
- 4. IOTA
- 5. State QSO Parties
- 6. Common everyday DX such as VE, JA, PY, I, EA etc
- 7. Non-DX emails

Thank you to W3ML, N4SV, W8FIB, KD9HL, N9RD, W9KTP and WA9JNO for their assistance, ideas and feedback in putting this program together.

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From Jerry W9KTP



DX Alert Report

April 2024

Reports Made-

Entities Reported – Chad, Austral Islands. Bhutan, Ogasawara, Easter Island, South Sudan, Liberia, Armenia, Pitcairn Island, Kyrgyzstan.

To join the club's DX Alert System, contact Bill South-N4SV. <u>wbs099@yahoo.com</u>. For more information on DX Alert..

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Tree and Rope Care Keeps Antennas on the Air

by Matt Shelburne-W4GO

When it comes to Amateur Radio, things that I think I'm building or installing for temporary use sometimes end up becoming a permanent fixture of my station. What was intended as a "kludge" gets used longer than it should have. This was the case for the rope-and-pulley system that I used to hoist my first HF antenna, an 80 m off-center-fed (OCF) wire dipole, into the trees in 2012.

By sharing lessons gleaned from that and other antenna installations in the years since, I hope to help you get the most utility out of the "living towers" on your property.

Illegal Choke Hold

I had installed the 80 m OCF dipole as an inverted vee, with its feedpoint at a height of 50 ft, and the ends about 20 ft high. The feedpoint was supported by a long rope that ran through pulleys in two trees, one on either side of the dipole. I had climbed the trees to install each pulley about 53 ft high.

At the time, fastening a pulley with a loop of rope tied around the trunk seemed like the strongest and easiest approach to secure it to the tree. I left about 6 inches of slack in the rope, giving little thought to what would happen as the trunk grew. Like any new ham, I just wanted to get the antenna up and get on the air.

Fast-forward seven and a half years from installation. Here is one of those pulleys as I found it, just prior to removing and re-attaching it.



Original attachment rope girdling tree.

I had seen from ground level that the original slack had been completely taken up by the growth of the trunk and the rope loop was now choking or "girdling" the tree. Girdling poses a risk of damaging the tree by constraining the live tissue just under the bark. This is the vital part of the tree that transports nutrients and water.

In this case, there was also a risk of the rope breaking under the extreme tensile force imposed by the trunk as it expands -- slowly but mightily.

I wanted to continue using this rigging to hold up this antenna and other ones in the future, and felt it was worth some effort to keep this tree as sound as possible going forward. So I climbed the tree.



The author climbing one of his 80 m antenna trees.

I Only Have Lag Screw Eyes for You

Once in the tree canopy, I found the rope loop taught as a banjo string. It sprung forcefully off the trunk when I cut it. I re-attached the pulley (Ronstan part no. HRF30101) with what I now consider a more durable and tree-friendly method for the long term, using a lag screw eye.



The pulley re-installed on a screw eye.

This particular screw eye (part no. 30455T63 at McMaster-Carr) is stainless steel with a 2-3/4 inch shank length and 5/16 inch diameter. Before climbing I confirmed that the stainless steel quick link I planned to use would fit through the screw eye and pulley. I used a cordless drill to bore a pilot hole for the screw. Once the new hardware was in place, I snugged the quick link shut with a wrench.

A lag screw eye of this size is strong, and sunk at least two inches into sound wood, it is very unlikely to pull out under the forces involved in supporting a wire antenna.



The re-installed pulley seen from ground.

I estimate that the screw eye installation shown above will last at least three to five years before the trunk starts to subsume the eye. If not backed out of the wood by that point, it could be another five years or more before the tree starts to engulf the pulley as well. You can buy more time by using a screw eye having a longer shank and leaving more shank exposed between the bark and the eye.

The following photos show a similar re-installation; this pulley is about 10 ft high and anchors one end of the 80 m dipole.



Another pulley attached by a rope tightly girdling the tree.



Sinking the new screw eye.



Completed re-installation.

Go Ahead, Be a Block Head

While not typical of wire antenna installations, if a rope, wire or cable under significant tension must be passed around a tree, the trunk can be protected with wood blocks.



Force spreader blocks.

The above photo shows one end of a zip line which I built from 3/8 inch steel cable. The force on the cable exceeds what I want to entrust to a screw eye in wood -- hence the wrap-around anchoring method.

The treated wood blocks, 2 x 4 x 8 inch, distribute the force of the cable over a large area of bark, greatly reducing the pressure exerted on the vital growth layers beneath. As this tree grows, the section of cable around the trunk will eventually need to be lengthened, but the tree won't be damaged, nor will the cable be subsumed into the trunk.

Put Your Cleats On

I usually tie off the tail end of my antenna support ropes to a cleat installed on a tree at chest height. Trunk growth must be dealt with here as well. Roughly every two years, I remove the cleat and re-install it on a fresh spot on the bark.



Rope cleat moved before being engulfed.

Obviously this practice prevents the tree from engulfing the cleat, but it mitigates a more subtle problem which I have experienced: the expanding wood of the trunk can break the horns off a rope cleat of this type. The wood gradually pushes the horn out, breaking it off at the screw. Naturally, the broken cleat no longer retains the rope and allows the antenna to fall. Hence, as a back-up measure, I install a screw eye to which the tail of rope is hitched after it is tied off on the cleat.

The style of rope cleat shown above (part no. 33805T53 from McMaster-Carr) isn't the most robust available, but they're inexpensive, easily installed and removed, and grab the rope better than other types I've tried. With periodic relocation on the tree, they last a long time.

Stick It in a Fork

In cases where pulley installation is not feasible, it is common for hams to use a slingshot, air cannon, or bow and arrow to shoot a light string over some part of the tree. The string is then used to haul up the antenna support rope, which then rests directly on branches or in a fork.



End of 40 m dipole supported by crown branches.

Again, growth must be taken into account for long-term installations. A rope in contact with any woody part of the tree, whether a trunk or a twig, will eventually become engulfed, seizing the rope and preventing the antenna from being lowered.

Preemptively lowering and raising the antenna – even by a few feet – every three to six months is usually sufficient to keep the rope from becoming bonded to the new wood growth. The rope itself will remain able to slide, with some resistance, through the tunnel of wood that forms around it.

However, knots in the rope will not fit through such as passage. Use a single length of rope, rather than shorter lengths joined with knots, for the portion that must run through the tree when the antenna is lowered for maintenance.

This author learned the hard way that even the melted tip of a rope, used to prevent the cut end from fraying, can be too large to fit through a tunnel of wood that the rope otherwise slides through. When the time comes to remove the rope altogether, cut off the melted tip before pulling the rope out of the tree.

There's the Rub

Another disadvantage of foregoing a pulley is the risk of abrasion damage to the rope. The problem is greatest when the rope is supported by the branches of one tree and is tied off to the trunk of a different tree. The result is that, as the supporting tree sways in the wind, the branches move considerably with respect to the rope which rests on them.

By contrast, abrasion is minimal or non-existent when the rope is tied off to the trunk of the same tree that holds it up. In this case, the rope and tree move in unison in the wind.

Ropes that are subject to abrasion should be lowered periodically for inspection. In my experience, every six months is a good interval to perform this check. The rope below was close to failure when I pulled it down for inspection. A couple more weeks of rubbing on the branches, or a good pull in a heavy wind would have broken it and brought the attached dipole down.



Abrasion-damaged 3/16 inch polyester rope.

The most suitable type of rope for antenna support is black, braided polyester (trade name Dacron). It is strong, resists abrasion as well as can be expected, and is nearly impervious to UV degradation and moisture damage.

I usually use 3/16 inch diameter, single-braid rope in applications supported by a pulley. I generally try to use 1/4 inch single-braid when the rope is subject to abrasion against the tree, as the larger diameter lasts a bit longer. Double-braid polyester rope would offer even better durability, but it's significantly more expensive than single-braid.

Regardless of the diameter and construction of the rope, if it rubs against the tree that holds it up, it should be considered a consumable material and will have to be replaced eventually.

This article is published with the kind permission of the author. Matt Shelbourne-W4GO is a resident of Midland, VA, an Extra class licensee, an avid Summit of the Air enthusiast and active participant in State QSO parties. Midland, VA is about an hour Southwest of Washington, DC.

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QSL Cost to Increase

The US Postal Service announced on April 9, 2024 it is proposing to raise the price of a stamp by 5 cents to 73 cents from the current price of 68 cents. An international stamp will raise from \$1.55 to \$1.65.

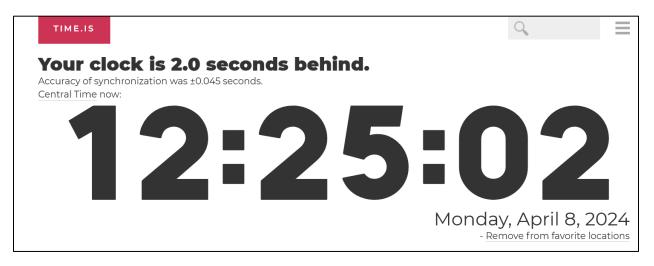
The proposed changes, if approved by the Postal Regulatory Commission, will take place July 14, 2024. This will be the sixth time since August of 2021 postal prices have been increased.

Handy Hint

What Time is it? How to Correct an Erroneous Computer Clock. By Steve Mollman-KD9HL

I have a computer that is devoted exclusively to Ham Radio. This computer handles such chores as logging, RTTY, rig control, firmware updates and WSJT-X. It is a fairly new Dell Windows 11 machine. Being a thrifty ham, for power conservation, when the computer is not needed it is shut down. Unfortunately, when this computer is turned on and booted up it has a bad habit of often displaying an incorrect time. Numerous "cures" have been attempted to no avail. Eventually the computer will correct itself, a process that can take up to 15 minutes. I use Meinberg NTP Time Keeping software.

For verification of the clock accuracy, I use the Web Site https://time.is/ which displays any time discrepancy. The Time.is web site operates independently and doesn't correct any errors.



"Time.is" Display Showing Clock Error

Having incorrect time is a big problem with WSJT-X because in most modes it will not decode without the correct time.

Recently I discovered a neat little free program/app named "TimeFudge", written by Mike Black-W9MDB that allows manual corrections to the computer's clock. Now when the computer boots up with an erroneous time, it can be quickly corrected and all is well in the world of WSJT-X.



"TimeFudge" Display/Control



"Time.is" Display Showing Corrected Time

Adjustments can be made with increments as little as 1/100 of a second which makes for superior accuracy in the correction.

Time.is can be accessed at: https://time.is/

TimeFudge can be downloaded at: https://timefudge.software.informer.com/

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Do you have a Handy Hint that you would like to share? Contact Steve Mollman at KD9HL@ARRL.net

Tom, W8FIB sent in some links about Amateur Radio Songs.

High Power Country https://suno.com/song/00cee842-ec16-4295-a7c6-90ad45857039

Ride the waves https://suno.com/song/8d66a6d9-5bff-4367-812b-281dda5e7f34

The Frequency of the Wild https://suno.com/song/1992c38f-eddf-4075-83e2-775f281dd071

Code Breaker https://suno.com/song/f9426926-e648-4fec-a723-e208f2716395



FOR SALE ITEMS

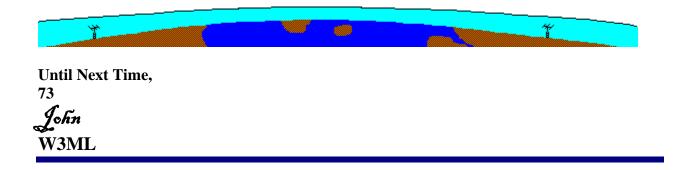
Astron LS-10A 28 VOLT DC POWER SUPPLY. \$50.00 No shipping. Power Supply Weight: 18.00 lbs. Contact John, W3ML



If you have ham items for sale, email me a list along with prices and contact information. I will put it in the next newsletter.

Let me know when an item is no longer for sale so I can remove it. For Sale items will be removed from the newsletter after 3 months.

I want to thank those that have been sending in articles for the newsletter. All items are appreciated.



President Northwest Indiana DX Club

http://nwidxclub.weebly.com/





