

TORC newsletter

THIRTEENTH edition

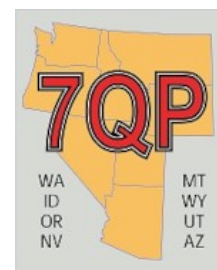
Photo by KI7DET Chris Seger



Photo by
John Payton



SAGUARO by KI7DET Chris



references

Click on titles below to go there

*Clicking on **references** at the bottom of any page returns you to this area of the newsletter.*

CLUB OFFICERS

GROUPS.IO

it's time to get down to business.

Contest Calendar- September

FROM OUR MEMBERS

ARRL Now Provides Free RF Exposure Calculator

TIPS, TRICKS & LINKS

EZNEC will be Free Starting in 2022

A NEW VIEW ON AGING....

WINKEY

PURPOSE of this newsletter (editors page)



CLUB OFFICERS

President (K7AZT Paul Seger)



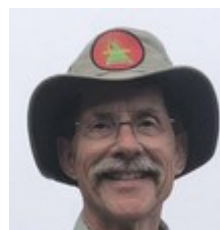
Vice President (W8TK TOM Kravec)



Secretary (W7HD Ron Herring)
& Newsletter Editor



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GROUPS.IO

They click the address ToRC+subscribe@groups.io or copy and paste that address and send an email. They have to get an account – really simple. It only takes a minute.

Once they ask to join I will accept them and off we go.

Send members here: <https://groups.io/g/ToRC>

TORTOLITA RADIO CLUB

Serving the Greater Tucson Area



We formed this club to continue our HF operating events. Now that COVID is behind us, it's time to get down to business.

September 18: Trip to Titan Missile Museum in Green Valley. We plan to use the giant discone antenna which is on the grounds of the museum and is maintained by the Green Valley radio club. It's available to all hams. You can just drive up, connect the coax to your radio, and work the world. A couple years ago I put out a CQ on the antenna and was answered by a station in the Netherlands, whose operator had actually visited the museum and used the same antenna! Stay tuned for details.

October 9-10: Arizona QSO Party: Group operation from Cochise County, which traditionally accounts for <2% of all Arizona station contacts in the AZQP. Bill Clark K6WSC, runs the event and encourages "Expedition" stations to venture into low population counties. We will gather at a ghost town called Fairbank (https://en.wikipedia.org/wiki/Fairbank,_Arizona), a nice park with rest rooms, parking, trees for antenna support, and AC power. There is also an old schoolhouse which has been turned into a museum. Again, stay tuned.

We are working on putting together a complete 2022 calendar of ToRC outings. So far we have Titan Missile Museum on September 18, AZ QSO Party from Fairbank ghost town October 9-10. Thanks to Chris KI7DET and Paul K7AZT we have a new venue to try. The place is officially called Ironwood Picnic Area, part of Tucson Mountain Park which is administered by Pima County Parks and Recreation Department. It's on Hal Gras Road, off Kinney Road about 2 miles south of Gates Pass Road and Old Tucson



Studios, which is now defunct. The small park has 5 nice picnic ramadas and 2 pit toilets. The road is paved but has "speed bumps" from hell which will separate your car from its undercarriage and loosen your molars if taken at speed.

I talked to the park director who told me they do not take reservations for the ramadas, so it's first come, first served. That OK because we have some insomniac members who can claim one for us early. Good news is that no reservations means no fees. Legend says that John Wayne had lunch at the big picnic table under a giant ironwood tree at the end of the road while he was filming at Old Tucson years ago. History!

I have an outing penciled in for November 13 at the Picnic Area. Save the date. Stay tuned for details.

73 de W8TK
Your VP

Just in case the hamfest happens, we have decided to change our outing date to November 14, which is a Sunday. Other Saturdays won't work due to conflicts with Thanksgiving holiday, a couple contests, and El Tour for which some members provide communication.

So we shall gather at Ironwood Picnic Area at Tucson Mountain Park on November 14. Stay tuned for details.

Contest Calendar- September

Tom Kravec W8TK

As our weather cools off, contest season heats up. More action in fall.

QSO parties:

Colorado September 4-5. Details: <http://ppraa.org/coqp>

Tennessee September 5-6. Details: <http://tnqp.org/rules/>

Alabama September 12-13. Details: www.alabamagsoparty.org/

Collegiate September 19-20. Details: <http://collegiateqsoparty.com>

Iowa September 18-19. Details: www.w0yl.com/IAQP

Texas September 18-19. Details: www.txqp.net

Washington State Salmon Run September 18-19. Prizes! Smoked salmon!

Details: <http://salmonrun/wwdxc.org/>

New Jersey September 18-19. Details: <http://k2td-bcrc.org/njqp>

New Hampshire September 18-19. Details: www.w1wqm.org/nhqso/

Maine September 25-26. Details: www.ws1sm.com/MEQP.html

Whew! That's a lot of QSO parties. Next month begins the major contests (CQWWDX, WPX, ARRL DX) and Sweepstakes in November. Stay tuned.

73 de W8TK

FROM OUR MEMBERS

<https://www.radiomanuals.com> can supply manuals for hundreds of radio models going back 50+ years. Even if you have a brand new radio, it probably came with a rudimentary manual and if you're lucky, a CD with the comprehensive manual on it. This company can supply the printed comprehensive manual and in some cases, the factory service manual too. I have no connection to this enterprise except for being a satisfied customer for a couple years. They print the manuals on heavy paper, in color if the original manual has color, and bind it with clear plastic cover front and back. Find out how your radio is supposed to work, no matter its age!

73 de W8TK

Just a heads up.

I have a FT-70D that is about 2 years old.

The battery swelled up and forced itself out of the radio even with the battery lock on and the belt clip installed. The radio was not in the charger.

The battery ejection was so strong that it tipped over the radio from it's upright position.

I think one of the battery cells exploded but did not rupture the battery case.

There is the possibility that this battery could have started a fire.

I would suggest that FT-70D owners remove the battery when not in use and keep it in a safe place.

I have some photos and plan on doing a failure analysis on this one.

I did contact Yaesu and talked to one of their techs but there is not much they can do about it because the battery warranty is only 1 year.

Pass the word around.

73 Ron W6ZQ

Considering how serious this battery failure is, I would think that Yaesu would want to see the battery and would also replace it for free, even if it is outside of the normal warranty period. This is definitely a different situation from a battery not holding a charge.

Imagine if a hybrid auto or EV auto had an battery do this and the manufacturer just said "Huh, interesting...not our problem, though..."

Dave, AE9Q

As many Hams have generators, I thought this appropriate as a warning here...

"More than 350,000 backup portable power generators sold across the U.S. and Canada are being

recalled after eight injuries, including seven finger amputations and one digit getting crushed, according to the U.S. Consumer Product and Safety Commission.

An unlocked handle on the equipment can pinch a user's fingers against the generator frame when moving the product, posing finger-amputation and crushing hazards, Generac Power Systems stated..."

<https://www.cbsnews.com/amp/news/generac-home-generators-recall-finger-amputations/>

JOHN N7GHZ

My XYL and I leased a condo in Idaho to escape the hot summer weather months here Tucson. Due to a change of circumstances I am here in Tucson for a month. Sadly, most of my ham gear is up north in Idaho. I want to set up a station here in Tucson. I have a good xcvr and good high power antenna tuner along with a power supply, straight key and microphone. The only thing missing is an hf antenna. My push-up pole is up north.

I have a 7 foot tall cinder block wall around my house shaped like three sides of a box. I am thinking of an end fed long wire. It looks like my wall is good for about 300 feet in length. I can easily lay my wire along the top of the wall and hold it in place with an occasional brick. I have plenty of #12 awg solid copper insulated house wire. I will operate at 100 watts. Yes, I know this antenna will be a "cloud warmer?NVIS. I am OK with that. My goal is casual operating. My antenna tuner will probably manage whatever complex impedances that present themselves as I change bands.

Here is my question: how long should the wire be? DOOR A: as long as I can get it - a true random length. DOOR B: cut it for resonance at 1.8MHZ?

What say you?

Good info from George, NG7A. Attached is a table detailing antenna wire lengths for EFHW, depending on whether you use 9:1 or 49:1 transformer.

Custom Wire Lengths

Two types of end fed transformers - 9:1 (450 ohm) and a 50:1 (2500 ohm). The 9:1 unun comes with a compromise wire length that is usable with a tuner. Better antenna performance is possible by cutting a piece of wire to the exact length for each band using the tables below for either a 50:1 or 9:1 xfmr.

Technician portion of the HF Bands

Band (Meters)	Frequency	Wire Length 50:1	Wire Length 9:1
80	3.525 to 3.600 MHz	131 feet 3 inches	114 feet 3 inches
40	7.025 MHz to 7.125 MHz	66 feet 1 inches	57 feet 6 inches
15	21.025 to 21.200 MHz	22 feet 2 inches	19 feet 3 inches
10	28.0 to 28.5 MHz	16 feet 6 inches	14 feet 4 inches
6	50.1 to 54.0 MHz	9 feet 0 inches	7 feet 10 inches

CW portion of the HF Bands

Band (Meters)	Frequency	Wire Length 50:1	Wire Length 9:1
80	3.500 to 3.600 MHz	131 feet 9 inches	114 feet 7 inches
40	7.000 MHz to 7.125 MHz	66 feet 3 inches	57 feet 8 inches
30	10.100 to 10.150 MHz	46 feet 2 inches	40 feet 2 inches
20	14.000 to 14.150 MHz	33 feet 3 inches	28 feet 11 inches
17	18.068 to 18.110 MHz	25 feet 10 inches	22 feet 6 inches
15	21.000 to 21.200 MHz	22 feet 2 inches	19 feet 3 inches
12	24.890 to 24.930 MHz	18 feet 9 inches	16 feet 4 inches
10	28.0 to 28.3 MHz	16 feet 7 inches	14 feet 5 inches
6	50.0 to 50.1 MHz	9 feet 4 inches	8 feet 1 inches

SSB portion of the HF Bands

Band (Meters)	Frequency	Wire Length 50:1	Wire Length 9:1
80/75	3.600 to 4.000 MHz	123 feet 3 inches	107 feet 3 inches
40	7.125 MHz to 7.300 MHz	64 feet 10 inches	56 feet 5 inches
20	14.150 to 14.350 MHz	32 feet 10 inches	28 feet 7 inches
17	18.110 to 18.168 MHz	25 feet 9 inches	22 feet 5 inches
15	21.200 to 21.450 MHz	21 feet 11 inches	19 feet 1 inch
12	24.930 to 24.990 MHz	18 feet 9 inches	16 feet 4 inches
10	28.3 to 29.7 MHz	16 feet 2 inches	14 feet 1 inch
6	50.0 to 54.0 MHz	9 feet 1 inches	7 feet 11 inches

Of course, HF radiation such as your transmitter produces is non-ionizing radiation which results only in heating. DNA damage requires ionizing radiation, such as x-rays or gamma rays, and hams don't produce that. Neither does your cell phone. Countless studies have tried to link cellphones cancer. All have failed. Doesn't happen.

A physicist explains why RF can't cause cancer:

<https://www.acsh.org/news/2021/08/09/radiofrequency-radiation-and-cancer-15722>

73 de W8TK

Ok, that physicist is wrong!

It was proven long ago that many of the cops who used police radars & set those units between their legs developed testicular cancer!

That was LOW POWER X-band radar (NOT to be confused with X-Rays!) - 6 to 8 GHz, which is set to be used on 5G phones, as well as higher frequencies in the 22-28 GHz bands.

Oh, and HAMS DO have bands in these frequency ranges too.

While in the Navy, we had warning stickers all over the place, many interlocks to keep from doing stupid stuff... and STRICTLY spelled out test Procedures! And still, sailors who worked on and around RF (radar techs, radiomen, Avionics, etc.) have a higher rate of cancers.

RF can... and has caused cancers!

Somewhere along the line, some folks came up with the notion that only ionizing radiation causes cancer. Incorrect!

Many things can cause cancers; chemicals too...

The entire point is to understand the risks & tech we are working with.

And by running the calcs., it is clear to see that you can run 100 Watts on HF, and have a pretty large margin to work in. However, when we use VHF/UHF handhelds that are only 5 Watts... the safety issue becomes more critical for not only yourself, but others around you.

73 - John - N7GHZ

Dmesg output [snip]

[1.037126] [drm] Your graphics device 9a49 is not properly supported by the driver in this kernel version. To force driver probe anyway, use i915.force_probe=9a49 module parameter or CONFIG_DRM_I915_FORCE_PROBE=9a49 configuration option, or (recommended) check for kernel updates.

SOLUTION:

I just got a new Asus Zenbook (UX425EA) yesterday which comes with 11th Gen i7 Processor + Intel

Iris Xe Graphics, and I was facing the same problem too. After hours of google and scrolling through

threads, I found one final fix which resolved the issue once and for all. You'll require the Ubuntu OEM

kernel. Make sure to enable secure boot in the BIOS (last time I tried installing it without enabling the secure boot, the screen turned black with weird distortions, so I guess it will be an important step).

The following command does it all:

```
apt install linux-oem-20.04 && sudo reboot 0
```

This also worked for my new LG GRAM 16Z90 in Linux Mint. [Ron Herring]

Did You Know?



Two Holes At The End Of Electrical Prongs

You look at them all the time, but have you ever noticed the two holes at the end of every electrical prongs? There's a 99% chance if you unplug any appliance in your home the two flat prongs will have these holes. So why are they there?

There are 3 reasons for them:

1. Inside an outlet there are tiny bumps, these bumps make it so the holes on the prong can "grip" inside, staying in place firmly.
2. These holes allow someone to "lock" the device attached to the cord in case they don't want anyone using it. For example. Some construction sites will place a padlock through the hole when they aren't on the job to stop someone from using an appliance when no one is around.
3. Manufacturers save a small amount of money by having to use fewer raw materials to make these.

Greetings,

Did you ever wonder what speed professional Morse Code ships' 'Sparks' sent? Or what their fists sounded like? This YouTube video answers those question.

It is a live recording of the radio telegraph messages with the RMS Queen Mary's last eastbound trans-Atlantic voyage in 1967 as she sailed down the Hudson and out of New York Harbor. The content of the messages is worth reading too. Fascinating.

The RMS Queen Mary callsign was GBTT. If your CW is rusty, turn on Closed Captions to read what is being sent and received.

URL: <https://www.youtube.com/watch?v=wI087EhiC8k>

I hope you enjoy this bit of history.

73, Paul
K7AZT
Greetings,

Chris KI7DET suggested that I should have mentioned that "Sparks" was the nickname of radio operators in the Merchant Marine, armed forces, and other services. The name originated during the days of spark-gap transmission, but stuck long after spark-gap transmission was outlawed in 1929. "Sparks" was also a common nickname for Navy radiomen because they had four lightning bolts on their insignias. "Sparks" remains common among CW operators.

At the recent QSO Today Virtual Ham Expo, Brian Page N4TRB gave the outstanding presentation "1921 Transatlantic Tests: The Shortwave Revolution" in which trans Atlantic tests between the US and Scotland by amateur radio operators in early December 1921 proved CW far superior to spark, and that shorter wavelengths are superior to the very long wavelengths of the day. Paul Godley, a US amateur sent to Scotland with US equipment, was lead operator.

As a result of these tests, calls were made encouraging all stations, amateur and other, to move from spark to CW, even to ban spark because of its wide bandwidth and severe interference to other stations. Amateurs had left spark by 1923, and it was outlawed in 1929 for good reason.

Another result of these tests was recognition of the superiority of shorter wavelengths. November 5, 1921, just a month before the successful amateur short wave experiment, the US Government fired up 2 of planned 12 massive CW AC generator transmitters (not spark) at 18.2 KHz, in the 16,500 meter band, at RCA Radio Central Rocky Point Long Island. With the amateur and other tests proving conclusively that shorter wavelengths were better, the remaining transmitters were never built. By 1924 long wavelengths were gone.

CW and shorter wavelengths were described as the shortwave revolution. The 1921 amateur experiments, described extensively in Brian Page's presentation, had implications far beyond amateur radio circles.

If you still have access to the QSO Today Virtual Ham Expo, I encourage you to view Brian Page's presentation.

73, Paul
K7AZT

Hello fellow TORC members,

The ARRL has provided a dedicated page with an online calculator that you can use to perform those FCC REQUIRED RF Exposure calculations!

From the ARRL LETTER:

„ARRL Now Provides Free RF Exposure Calculator

The FCC has adopted guidelines and procedures for evaluating environmental effects of RF emissions. The new guidelines incorporate two tiers of exposure limits based on whether exposure occurs in an occupational or "controlled" situation, or whether the general population is exposed or exposure is in an "uncontrolled" situation.

Under the new FCC rules, some amateurs need to perform routine station evaluations to ensure that their stations comply with the RF exposure rules. This can be as simple as running an online calculator to determine the minimum safe distance between any part of your antenna and areas where people might be exposed to RF energy from your station. Although amateurs can make measurements of their stations, evaluations can also be done by calculation.



To make this easy for amateurs, ARRL now provides an [RF exposure calculator](#) on its RF Exposure page. To use the calculator, enter your transmit peak-envelope power (PEP) and operating mode, and answer the questions about the maximum amount of time you might be transmitting. The calculator will give you the minimum distance people must be from your antenna and human exposure.

You can print the results and keep them in your station records. There is no requirement to send your results to the FCC."

<http://arrl.org/rf-exposure-calculator>

In general, if you are running a normal 100 Watt HF station you will not have any issues unless you're less than 10 feet from the antenna.

Now if you are running full QRO power @ 1500 W. You might want to pay more attention.

More importantly... **If you are running your HT (hand held) and using 5 Watts - LOOK OUT!!!**
It states the **MINIMUM DISTANCE IS UNDER 1 FOOT - WHICH IS A PROBLEM UNLESS YOU ARE USING A PLUG IN MIC OR BLUETOOTH TO GET SOME DISTANCE BETWEEN YOU AND THE RADIO/ANTENNA!!!**

Be safe out there f

Last year, shortly after Roger K7ROG and I finished our phone call, a surprise windstorm hit Cedar Rapids packing winds of over 100 mph for about an hour. Peak winds were recorded at 140 mph, which took down a lot of trees and inflicted a lot of structural damage.

A few of us formed an informational emergency net that ran 12 hours a day for 7 days to deal with the aftermath.. In addition to the VHF nets, we used HF to get weather and vital news from outside the affected area. A lot of skills that were honed from Field Days and our HF outings really paid off.

The Great River Amateru Radio Club and their ARES group asked me to give a talk on lessons learned. Here are the link to the presentation:

<https://www.w0dbq.org/ares>

A secondary link is:

<https://youtu.be/jMM9AwUewZA>

73

George NG7A

I viewed the presentation this afternoon and I highly recommend it. George led the effort to get communications back on line despite winds that took down electric service, telephone service, and countless big trees blocking roads. His efforts and those of countless other hams shine a spotlight on the utility of ham radio when all else fails. BRAVO, George!

73 de W8TK

Almost a disaster...!

but not quite, just a pain in the @\$\$ (wallet)!

So, my PC decided to croak on me yesterday, as it would boot up, then reset, boot up again - then just quit. Yuck!

So this morning (Sat) after breakfast, I had energy got down on the floor & disconnected everything to check to see if it was full of dust, etc. It had a bit, but not too bad for 3-1/2 years. I looked it over and found it has 4 fans (pwr sup, cpu, an exhaust fan and the fan on the video card).

Unfortunately, the video card fan was not spinning & felt stuck. So I pulled it out and discovered that this GeForce card was designed by an idiot! Turns out, the fan pwr cable goes through the fins of the heat sink... only problem is; when that wire comes out of the fins, it pops up right into the path of the spinning blades, and yeah - stuck!



Fortunately, the card didn't burn up, and in fact that's why my zoom video/web cam was causing my received video to quit after 20 or 30 minutes.

So after I tucked the wire back in, I took it outside & blew the dust out of it.

Thought that was the issue, but no....! Of course not!

After crawling back under the computer desk to hook everything up - NOTHING! No sign of life - worse than before, as only the fans spun, but the computer failed to even try to boot up - this is not good!!!

Especially with the WW DX Digi contest next Saturday coming quickly.

Took the computer over to the guy who helped me get it built as he has extra parts...

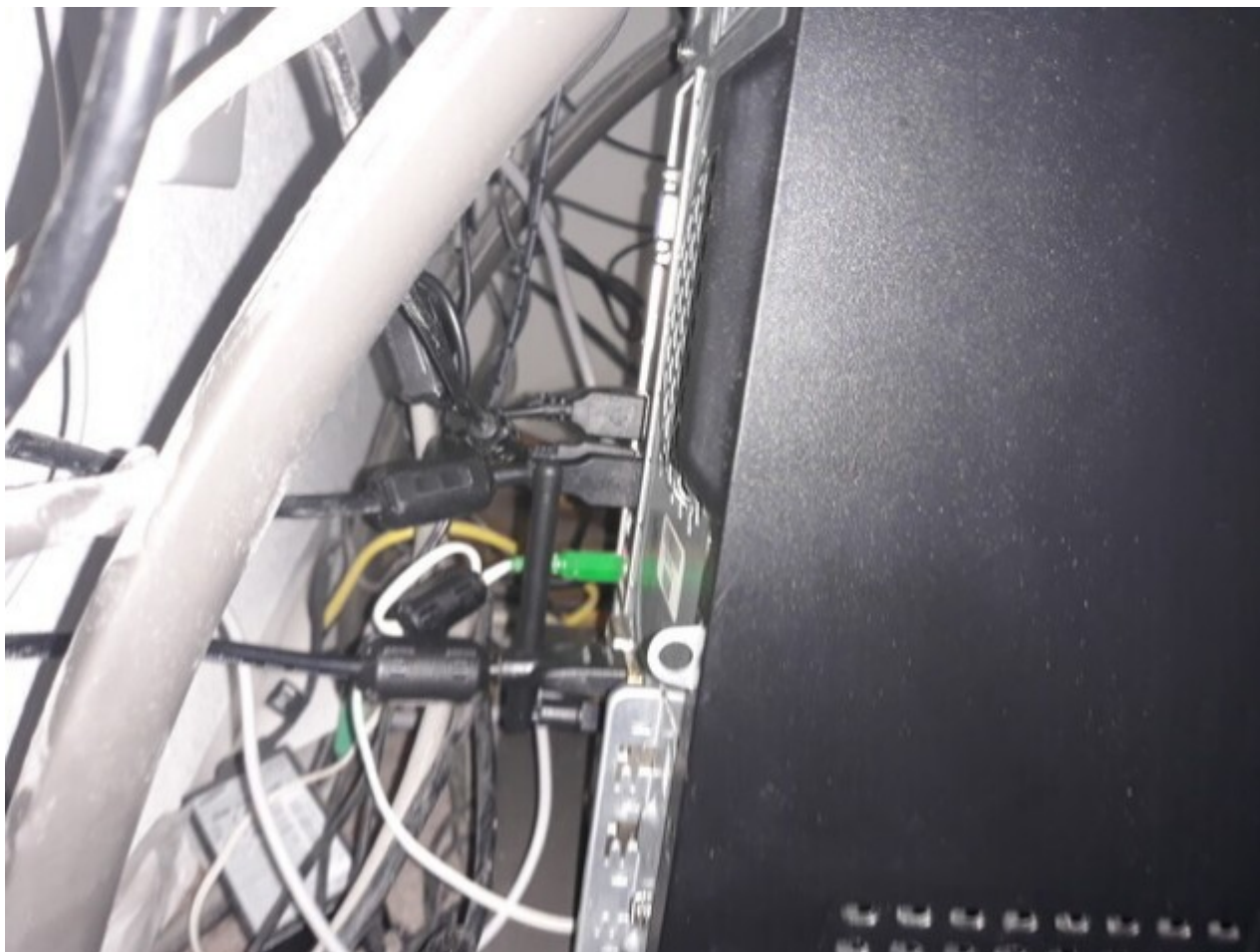
Power supply... BAD! Bad! Bad power supply!!!

40 bucks later... now up and running again, made about a dozen QSO's on FTx modes...

WHEW!!!

By the way, since I was under there (the desk), and laying on the floor, I decided to add a few ferrites to some of the cables I missed; didn't have them at the time to install.

Yeah, it gets just a little busy back there now with the 7 cables, plus ferrites...



Ferrites, ferrites everywhere! But no RFI!!!

Hope to see you all on the air next weekend

73 - John - N7GHZ

TIPS, TRICKS & LINKS

[The 6 Best Lightweight Linux Distros](#)

- If your Windows or Mac computer is old and struggling to keep up, installing Linux can give it a fresh lease of life. Lightweight Linux distributions are designed with speed and efficiency in mind, making old computers usable again.

[How to Forget a Wi-Fi Network on Android](#)

- You've probably connected to many different Wi-Fi networks over time. So, how can you get your Android device to stop connecting to a specific network? You need to make your device "forget" it.

[How to Manage Linux Network Connections from the Command Line](#)

- The nmcli command lets you tap into the power of the Linux NetworkManager straight from the command line, making it perfect for servers with no desktop environment and remote SSH shell administration.

[This 'unique' phishing attack uses Morse code to hide its approach](#)

- Attackers turn to Morse code's dots and dashes in invoicing phishing campaign.

[A physicist explains why RF can't cause cancer](#)

- Of course, HF radiation such as your transmitter produces is non-ionizing radiation which results only in heating. DNA damage requires ionizing radiation, such as x-rays or gamma rays, and hams don't produce that. Neither does your cell phone. Countless studies have tried to link cellphones cancer. All have failed. Doesn't happen.

[How to Create QR Codes From the Linux Command Line](#)

- QR Codes can do a whole lot more than just take you to a web site. And they're easy to create on the Linux command line too. We show you how.

TECHREPUBLIC RESOURCES

[My life with Linux: A retrospective](#)

[How Linux has changed the business landscape: It's more than you think](#)

[Trend Micro's Linux Threat Report identifies the most vulnerable distributions and biggest security headaches](#)

[Linux 101: How to create a compressed archive of a folder from the CLI with zip](#)

[Linux 101: How to delete files and folders from the CLI](#)

[Use caution when making changes to bash configurations in Linux](#)

[How AutoKey can make repetitive tasks, like configuring Netplan, easier](#)

[How to configure SSH access through Webmin](#)

For KC7GDB and KC7MM, I recommend you read this post and attempt to configure your USB devices using UDEV rules. If your USB devices are well behaved (see above), you will be able to create /dev symbolic links that have names **of your choice**. The name will be repeatable, regardless of how many USB devices you insert. The key being **well behaved USB** devices.

It is a simple matter to modify the above for GPS devices. I believe KC7GDB said the GPS enumerated as /dev/acm. If you issue this command:

```
udevadm info --query=all --name=/dev/acm
```

You will get a list of properties that can be used to uniquely identify the device. You can create udev rules, as described above.

As to the by_path and by_id linking, I think you'll find that by_id will be the same for devices built by the same vendor. You will, most likely, find this to be no solution to your problem at all.

How do I get my WiFi working again?

- SOLVED! Michael - I don't believe it but yes that was the problem (I hang my head in shame). There is no LED for wireless on my laptop and it wasn't a function+F2. I actually tried that and it didn't work prior. After reading your post I just realized it's a CTRL+F2 to switch on and off. For the archive record for anyone else with this problem:

- After CTRL+F2 I needed to **right click** (not left) **on the network icon on the panel. Then check off Enable Wireless.** After that I needed to choose my network from the list.
Thank you very much Michael - that one tripped me up.

EZNEC will be Free Starting in 2022

Roy, W7EL

On January 1, 2022 I will be retiring. I'll be nearly 76 and want to spend more time at other things. EZNEC is and always has been developed, sold, and supported only by me, so all development, sales, and support will end at that time. For several reasons there is no practical way to sell or transfer ownership to someone else, so here's what will happen on that date: EZNEC will be released to the public domain and become free of cost and can be freely copied and distributed. I do not plan to release the source code.



There will be one or two EZNEC program types:

EZNEC Pro. This will have all the features of the current EZNEC Pro/2 (internal NEC-2 calculating engine) and will additionally be able to run external compiled NEC-4.2 and NEC-5 programs furnished by the user.

Please keep in mind that NEC-4.2 and NEC-5 are copyrighted software that must be purchased elsewhere. At the time of this writing, the sole seller is Lawrence Livermore National Laboratory (LLNL) but they are in the process of transferring this responsibility to some other person or organization. Note that external NEC-4.2 and NEC-5 programs won't have the full capability of EZNEC Pro/4 with its internal enhanced NEC-4.2 calculating engine, and the LLNL-supplied NEC-4.2 may be very much slower.

EZNEC+. EZNEC Pro uses some advanced memory management methods to accommodate its upper limit of 45,000 segments, and this may cause trouble on some systems. So I might also make available EZNEC+ which has simpler memory handling. However, I'll investigate the possibility of making this unnecessary. No programs will require a hardware key or other additional device. EZNEC Pro/4 with its internal enhanced NEC-4.2 calculating engine will no longer be available for sale or free or as an upgrade from v. 5.0 or earlier. This is because sale of this program requires my verification that a user has purchased an NEC-4.2 license before sending EZNEC Pro/4. I will no longer be doing this. It will also not be available to replace a lost or damaged program, so users must be responsible for maintaining robust backups. The requirement for a hardware key to use EZNEC Pro programs (EZNEC Pro/2 and EZNEC Pro/4) will be removed very soon and announced on the main EZNEC web site main page and elsewhere. Until the retirement date, EZNEC sales and support will continue as before. After that date, no support will be available, and any email or other communications regarding EZNEC support will not be answered. **NO REFUNDS WILL BE GIVEN FOR ANY REASON AFTER THE RETIREMENT DATE.**

Anyone using the public domain programs will do so at their own risk and with no possibility of support or recourse. At the time of this writing, the compiled NEC-4.2 from LLNL has been found to contain at least one bug (which has been repaired in the current EZNEC Pro/4), and the recently released NEC-5 has a substantial number. There is currently no one at LLNL able to fix these and no one outside LLNL authorized to distribute updated versions, so anyone purchasing those programs and using them with the public domain EZNEC Pro program will encounter the bugs and may not have any way to get them fixed. Very soon after starting my own business I discovered a number of things about human nature I hadn't previously realized. One is the following: If you were able to buy a brand new car for \$500 you'd be absolutely thrilled and feel that you had gotten a terrific bargain. But if you discovered that your neighbor had gotten the same car for \$300, those

feelings would immediately switch to convictions that you'd gotten a lousy deal and been cheated. That's my greatest hesitation about releasing EZNEC to the public domain and making it available for free. Rather than expressions of delight from people who will be able to use this software for free, I fear I'll hear (but sorry, I'll ignore) loud complaints from some people who previously thought that EZNEC was worth at least what they'd paid for it (and many have told me they feel it's worth much more) but like the lucky car purchaser now feel they've been robbed because they could have gotten it free if they'd just waited or if I'd made it free a little earlier. Ironically, those people would be happier if I passed it to someone else to continue selling it or simply made it unavailable altogether when I retire. In fact, the only reason for the six month delay until retirement is to give potential new customers fair warning of the choice they can have of buying it now or waiting and getting it free later. I sold my first copy of MININEC-based ELNEC v. 1.0 in March 1990 and two more major versions followed. When personal computers became powerful enough to run NEC-2, I introduced EZNEC v. 1.0 in April 1995. Shortly after that I quit my "day job" as principal design engineer at Tektronix, and EZNEC became my primary way of making a living which it has been ever since. The first Windows version, 3.0, came in May 2000, and versions 4.0 - 6.0 have been introduced since. My customer database which goes back to the first ELNEC sale in 1990 has nearly 13,000 different names and companies. A sizeable fraction of these are current users. You, my customers, have been wonderful. I've enjoyed interacting with you and learned a great deal by doing so. You've been courteous, thoughtful, patient, and honest beyond all expectations. You've enabled me to escape the Dilbert cartoon and have the dream job of being a one person home-based company for 26 years, with no bosses and no employees. It hasn't brought me more than a modest income, but getting rich has never been my goal -- along with occasional consulting it has provided an adequate income and a much, much, more pleasant and stress-free life than a career at a large corporation (or even most small companies). I hope that what I've been able to provide has been a fair exchange. This announcement may be updated from time to time. Last update July 7, 2021.

<https://www.eznec.com/>

A NEW VIEW ON AGING....

Very interesting!!!!

The inventor of the treadmill died at the age of 54

The inventor of gymnastics died at the age of 57

The world bodybuilding champion died at the age of 41

The best footballer in the world, Maradona, died at the age of 60

And then..

KFC inventor dies at 94

Inventor of Nutella brand died at the age of 88

Cigarette maker Winston died at the age of 102

The inventor of opium died at the age of 116 in an earthquake

Hennessy cognac inventor dies at 98



How did doctors come to the conclusion that exercise prolongs life? The rabbit is always jumping, but it lives for only 2 years. The turtle that doesn't exercise at all, lives 400 years. So, Have a drink - Light 'em up - Take a nap - If you wake up have bacon & eggs!!

WINKEY

From the ARRL Contest Update

Brian, N9ADG
ARRL Contest Update

**WinKey**

Steve, N2IC, notes: "For years, a number of contesters disdained WinKey paddle sending. I didn't understand that. My experience was that there was excellent paddle sending with *TRLog*, and that WinKey with *NIMM Logger+* was equally excellent. I couldn't detect any difference. But When I sat down to operate in the 2021 WPX CW @ ND7K, using WinKey with DXLog.net, I immediately understood. There was a noticeable delay between touching the paddle and sending CW. That made it impossible to send decent CW. I wanted to understand what *DXLog* was doing differently. The problem turned out to be the default value of WinKey PTT lead delay, 100 milliseconds, that DXLog.net was using. That delay meant that when you touched the paddle, WinKey was activating its internal PTT, then waiting 100 ms before outputting CW. Changing this to 20 ms instantly solved the problem, making WinKey paddle sending a pleasure. I would also recommend changing the PTT tail delay to 0 msec. These settings are in Options->Configure Interfaces in *DXLog*. For new installations of DXLog.net, these parameters have been changed to 20 msec and 0 msec, respectively. However, **for existing installations, you will have to manually change these parameters.**"

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PURPOSE

TORTOLITA RADIO CLUB TORC	
A group of amateur radio operators aiming to just have fun	
located south of the Tortolita mountains near Marana	
Serving the greater northwest Tucson area and beyond.	
<ul style="list-style-type: none"> • No formalities • No regular meetings - just occasional weekend outings • Occasional newsletters will cover items of interest to the group • NO DUES • No repeaters • Emphasis is on having fun • No bureaucracy 	



The flag photo is courtesy of Ron Herring W7HD and was taken from my front porch.

Newsletter editor: Ron Herring W7HD

Material in this newsletter is public domain and may be freely shared.

Credit may be given as follows: *Courtesy of Tortolita Radio Club*

Your feedback and articles are very much wanted. Please feel free to email me with **suggestions and articles** at w7hd.torc@gmail.com ...

If you are contributing an article, please include a photo of yourself as an attachment. The members would really like to be able to recognize you if they see you out in public (should that ever happen).

The word *tortolita* means little dove and is used here as a reference to the Tortolita Mountains north of Tucson, AZ USA.