

# W9JOZ

Volume 11, Issue 10

October 2021

Meeting at Library at 5 pm on:  
October 21st

Fox hunt on the third Sunday:  
October 17th

For more details check-in Sunday on either  
the Knox or Culver repeaters.  
145.410 Knox  
146.670 Culver



Meetings are at the Henry F. Schricker Library on the third Thursday of each month, with the exception of December.

The library is located on west Culver Road, two blocks west of Highway 35.



Are you on the air?

## QSL CARDS

If you have QSL Cards that need to be checked for an ARRL Award, contact me and I will put you in contact with an ARRL Card Checker in our area.

### INSIDE THIS ISSUE

- 1 Meeting Reminder
- 2 Events/Articles

## Events

**Next Meeting is at the Knox Library  
October 21st at 5 pm.**

## Birthdays

Nov. 21 - Chester, KA9FAW

If your birthday has not been listed, it is because I do not have the date for it. If you would like it to be included in a newsletter, please email me the date. Thanks w3ml@w3ml.com

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**Starke County Amateur Radio Club Weekly 2 Meter Net is  
on every Saturday at 8:00 p.m. Central time.**

DAY OF WEEK: Saturday 8:00 p.m. Central time  
HOST: KN9OX Repeater  
FREQUENCY: 145.410 - 600  
PL TONE: 131.8

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**Very Few Items Left From Last Collection of K9QA Gear.  
If you see something on his list that you would like make me  
an offer.**

See all the For Sale Items at  
<http://www.w9joz.org/forsale.htm>

There are a lot of them there. Updated regularly.  
See the For Sale Page on the Club website. If you have items to sell email me a list with prices and contact information.

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# Notice for 2021

**\*\*\*\* Dues for 2021 remain at only \$12.00 a year. \*\*\*\***

## **Paid Members for 2021:**

**Bill, K9BZM  
Richard, K9ILU  
Chester, KA9FAW  
Nita, KC9PM  
Tom, W9QN  
Levi, WB9CAO  
Wayne, K9KFT  
Steve, KB9GPW  
Brian, W9BPD  
Ed, KD9MVW  
Mike, KC9KPG**

**David, KC8OBH  
John, W3ML  
Bart, KC9FQA  
Lenny, KQ9A  
Jack, WA9ZTP  
Bob, KD9IHY  
Jim, WB9UAR  
Paul, N9QYK  
Linda, KC8PKY  
Brian, KE9ML**

**Please stay a member and pay your dues for 2021.**

**Dues may be mailed to John Poindexter 204 South Main St. Knox, IN 46534  
Checks can be made out to the Starke County Amateur Radio Club. \$12.00**

**If you want to pay via PayPal, you will need to send it as Friends and Family so no fees are taken out. \$12.00**

**Send PayPal payments to [w3ml@w3ml.com](mailto:w3ml@w3ml.com)**

**John W3ML**

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**New Year Dues 2022 still only \$12.00**

**We had over a dozen members not pay dues in 2020 & 2021. It would be nice to have them back in 2022.**

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## Data on Number of Radio Amateurs Worldwide Needs Updating

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10/04/2021

The oft-cited figure of 3 million radio amateurs worldwide may need updating. That number was what the International Amateur Radio Union (**IARU**) **published** in 2000 for the global head count. The IARU once regularly collected amateur radio population statistics, but stopped the practice around the point when the worldwide amateur radio population began to decline.

Data available elsewhere for a few major countries shows a steady decline in radio amateurs since 2000, with the exception of the US, where ham licenses — not necessarily licensees — number some 780,000 to date in 2021. Japan's ham radio population has dropped by more than 600,000 over the past 2 decades; as of 2015, it was 435,581, according to JARL. China boasts more than 174,000 radio amateurs as of 2021. According to 2018 statistics, Thailand has 101,763 hams; the UK has 75,660, and Canada has 70,198.

But, the specific size of the worldwide amateur radio population remains open to speculation, although a 2021 figure of 1.75 million may be closer to the truth. — *Thanks to Southgate Amateur Radio News, other sources*

<http://arrrl.org/news/data-on-number-of-radio-amateurs-worldwide-needs-updating>



This is as high I will go up the tower. W3ML fixing his 160 meter dipole.

# Handy Hint

## PL-259 Hints

By Steve Mollman-KD9HL

There have been hundreds if not thousands of write-ups on how to install a PL-259 connector on coax. Nearly all omit two simple steps that could make your installation a little easier.

1. Apply some silicon lubricant to the coax jacket before you screw the fitting on to it. Doing so will make that step easier. Many jackets are “hard” and don’t give easily to the threads of the fitting and the lube can help things along. Most, if not all coax jacket material is impervious to silicon lube. Either spray-on or a very light application of silicon grease can be used. Be careful and don’t get any lube on a conductor that is going to be soldered.
2. Ream out the four solder holes on the fitting. These holes are there to allow soldering the coax braid to the fitting. There are two faults that have occurred in the design and manufacture process. The first is that they are plated with either nickel, silver or even chrome. Chrome is especially difficult to solder to. The other deficiency is that they are small and don’t give much space for iron to heat the braid for a good bond.  
Use a small file or drill to enlarge the hole and expose the brass under the plating. Soldering will be much easier if you do this.

Finally. It is always advisable to avoid the cheap fittings from China. They are often chrome plated (hard to solder) and out of tolerance (won’t make a good connection or can’t be inserted at all). The Amphenol brand RF 83-1SP-6 is a high quality piece with a nickel plated body and silver plated center pin.

◀73's and Good DX ▶

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

Borrowed from the NWIN DX Club

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## HAM RADIO 20XX

By

Jerry Hess, W9KTP

Every so often I have some random thoughts about how ham radio might evolve in the future. Some ideas are odd and some may even be ridiculous. But who knows what the future may bring? Crazy or not here are a few of my ideas.

### Snap, Crackle, Pop (SCP) Radio Filter

When I listen on the low end of 80 meters around 3.510 Mhz in the early evenings, generally all I hear is normal atmospheric static or what I call “Snap Crackle Pop” or SCP. The same SCP seems to be present on any adjacent frequencies. Let’s switch on a hypothetical SCP

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filter on my receiver. The filter takes an instantaneous sample of SCP at 3.510 Mhz and logically “AND’s” it with an instantaneous sample from an adjacent frequency like 3.514 Mhz, replacing the signal at 3.510 Mhz with the result. This continues as long as the SCP filter is selected. Would the SCP at 3.510 Mhz disappear? Would there be some great DX stations just waiting to be discovered?

I often thought that I might test this idea at audio frequencies but I don’t think that would work. I believe a SCP filter would have to be done in the RF stages of a receiver. I don’t know how to do that, but maybe someone does.

### Super Antenna

It has been almost 100 years since the development of the Yagi-Uda or more commonly known as a Yagi antenna. It took several decades before it supplanted rhombic and large array antennas but it has been the dominate gain antenna in recent decades. There are some intriguing antennas on the market such as the “Stepper” and a few others, but nothing that would be considered a major technological change.

I’m thinking someday there will be young person with an uncluttered brain staring at those Maxwell Equations and all that heavy duty theory stuff who will have an epiphany of science and a “Super Antenna” will be born. Here is what I expect our young genius to come up with.

1. Gain of 12-25 dB
2. Electronically steerable in 360 degrees
3. Electronically adjustable elevation and azimuth pattern

Pretty amazing, huh?

### Real Time Propagation

Propagation science is a complex subject as most hams realize. We rely on experts to summarize data collected from numerous sources to plan our activities. We all enjoy and depend on our periodic updates from Carl Lutzelschwab, K9LA at our Club Meetings. Currently, most of the data is collected over periods of times in hours, days or even months to be useful for the average ham.

I have followed some of the references from Carl and several provided by the ARRL Weekly Propagation report. The NOAA data is very extensive and in most cases way over my head. One report I recommend that everyone should checkout at least once is the report by Dr. Tamitha Skov, WX6SWW (See the current ARRL Report for a link).

With all that said as background, I’m hoping by the year 20XX, satellites will be capturing data about the ionospheric layers throughout the world on a real time basis. Super, super, super computers will digest this information and instantaneously make the results available graphically, probably in 3D by 20XX. The ionosphere will always be in a continuous state of change but 20XX computers will compute the necessary parameters for a ham to regularly make a QSO to many parts of the world that we wouldn’t think possible today. As usual, timing will always be key. I have to believe the brilliant people working in this endeavor will no doubt do this and probably more.

### Interference Library

Just like submarines can identify ships and other submarines with their sonar signatures, it seems feasible that our future receivers will have access to libraries of man made noises that could be downloaded and matched to annoying local noises. Whether it’s Grandma Maude’s 1952

Kelvinator frig or the kid down the street with a 1957 Ford Fairlane with a mis-firing cylinder, there will be a signature for it.

In the future, just download a noise library and run the 'Match Feature' in your receiver. It may even find a few noises you didn't know you had. Once the 'Match Feature' is finished, the library could be off loaded and the receiver run as normal. Particularly in a noisy urban environment this could be a fantastic tool. You could be copying signals that just years before you thought were impossible.

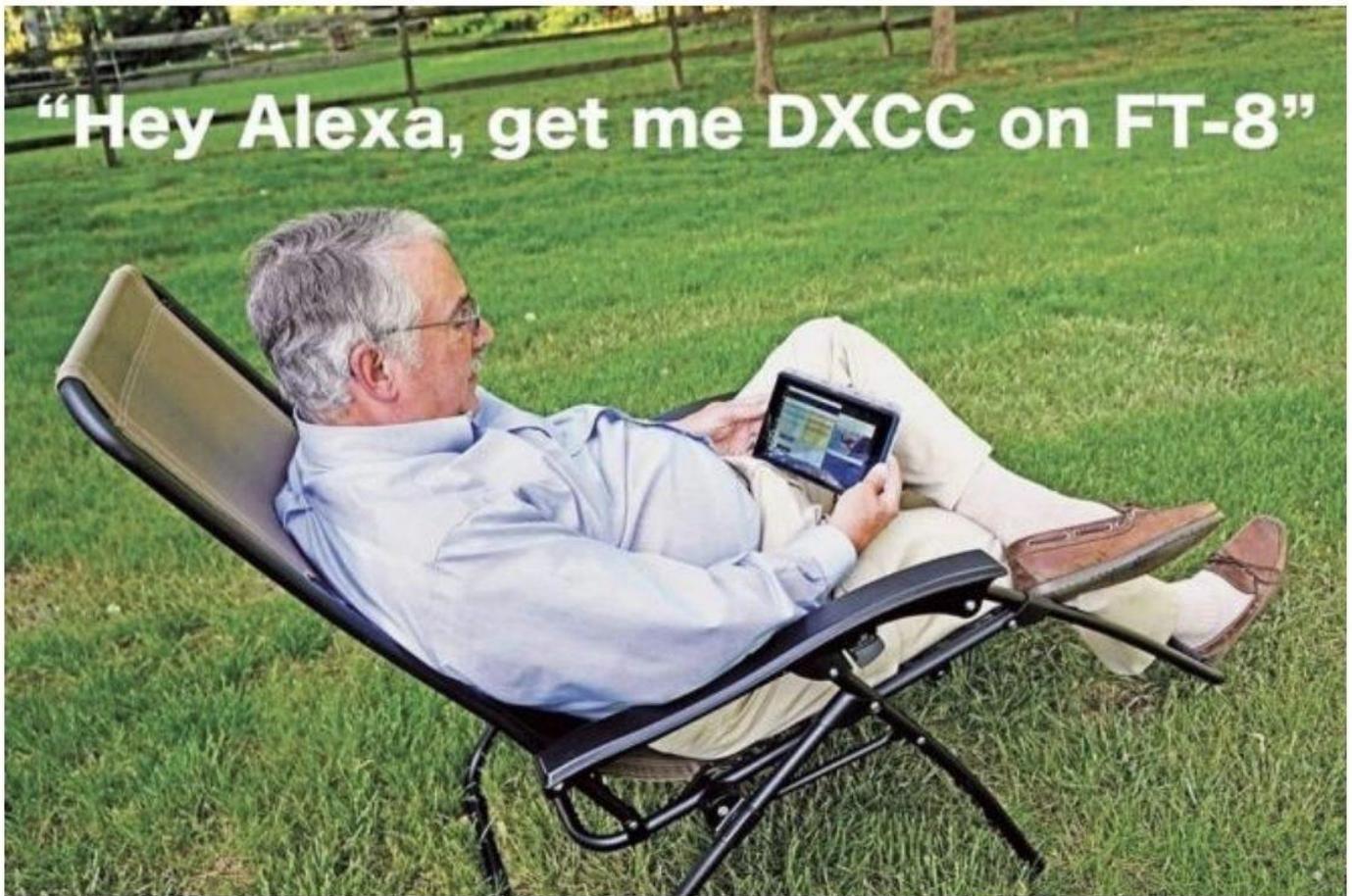
#### Awards and Contests

No doubt newer equipment will change the situation for contesting and obtaining of awards but it will still rely on the skill of the operator. Will the new equipment narrow the gap between the top operators and the average ham? I don't think so, but even so, the rules/categories may change to accommodate everyone. As far as awards such as DXCC, it probably would be easier to accumulate higher totals, but I suspect that there still will be rare countries that will require DX-Peditions to activate them. What I still feel concerned about is the pile-up mess like we have today. Perhaps some future thoughtful people can untangle this blemish on our hobby.

Well there you have it. I told you I'm a little crazy. I hope you enjoyed reading my article and maybe it inspired some ideas of your own!

73's,  
Jerry

Borrowed from the NWIN DX Club



## *For Sale*

**Signalink USB Sound Card Interface-\$75.00**



**NEW** in open box. Includes cables for Elecraft K3-K3S. (Compatible with other rigs with proper cables) Supports all computer program digital modes and digital voice modes, **WITHOUT** using your computer sound card. Retail for \$125 up.

**Collins 30L-1 HF Amplifier (Winged Emblem)- \$695.00**



The Collins 30L-1 is a grounded grid linear amplifier using four 811 A or 572B triode tubes. The amplifier is rated to deliver 1000 watts PEP power input on SSB and 1000 watts average on CW for all bands. It can be driven by most 70-100 watt exciters. Finished in the same light gray as Collins' classic S/Line equipment and the KWM-2A. Can operate off of 120 or 220 volt service.

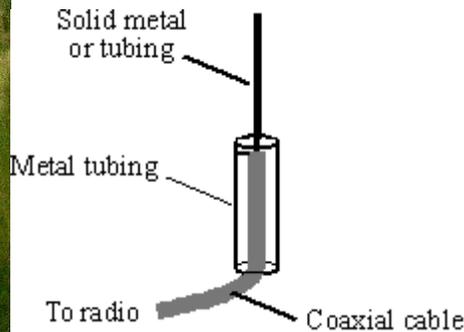
The 30L-1 provides SSB and CW operation and covers the 80, 40, 20, 15, and 10 meter bands; however, provisions were made for general coverage operation. Automatic load control provides maximum talking power without over-driving and distortion, resulting in a cleaner signal.

The tubes can be replaced without removing the unit from the cabinet. With the meter switch in tune position, the 30L-1 tunes by simply adjusting the loading and tuning controls to zero the meter.

This unit is in VERY GOOD condition. Four matched 572B tubes are installed. A matched set of 811A tubes are included.

### **Andrew 2-Meter VHF Antenna- \$110.00**

Andrew Corp. Type 161-3 coaxial type wide band VHF vertical antenna. 144-150.8 MHz Mil-Spec, very heavy duty construction for intended for commercial service. Never used. Andrew Corp. sold these for approximately \$800.00 each. Unit is about 114 inches long.



Contact Steve Mollman-KD9HL  
[KD9HL@arrl.net](mailto:KD9HL@arrl.net)

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If you have something for the newsletter, please send it to me before the 25th of the month.

See you at a meeting.

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*John*, W3ML

