The ORC Newsletter

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Volume XXXI	December, 2019	Number 12

From the President

de Kevin Steers (K9VIN)

Furnace just went out! No joke. 10 PM and one of my two furnaces quit. The new furnace on this side of the house will suffice for a few days until I figure it out. I had replaced the blower last month, but tonight it seems to have quit. Weird. I am going to replace the wall thermostat first, since that is 50 years old, and needs replacement, no matter what.

I occasionally drop my kids off at school, and the teens know I am a ham, but never a word of it to my daughters in school. Abby had gone through the Technician class but never went through with testing. Recently, one of Abby's classmates arrived late to class due to physical therapy and had been driving behind me on his way to school. When he arrived, they were on break and he mentioned out loud that he had followed K9VIN (which they pronounce 'kay-nine-vin', which is funny in itself). They talked about why I have an antenna, and the very young teacher's ears perked up at the mention of the topic, which he actually happened to know a bit about, and they were able to inform the class how ham radio is very cool and helpful in emergencies.

My last topic is my recent realization that my HF coil on my car is sketchy in salty winter weather. Well, I now order a free glass of water when stopping at a fast food restaurant, then I pour the water over the knee high coil to rinse off the salt water spray which might otherwise short out the antenna. If I am not correct, please let it go, but that is my experience.

I will say that I listen mostly on my mobile rig. I have made contacts afar, and also had fun on the Wisconsin QSO Party, so please tune in to HF, folks! ☺

Cheers and 73,

K9VIN
Kevin

DX’ing & Contesting

De Gary Sutcliffe (W9XT)

We will be close to the official start of winter by the time you read this, although it seems we should be half way through it by now, considering the cold and snow we have been having. Still, it is not too late to do antenna work. Yesterday I trenched in a control cable for a remote Beverage antenna switching system I am putting up. I was somewhat surprised the ground had not yet frozen as I cut a slit in the ground to bury the cable.

The start of winter is, of course, the winter solstice, which this year occurs on December 21 at 10:19 PM local time. It marks the time the sun reaches its most southern point. It also means the fewest hours of daylight in the northern hemisphere. The long nights are good for low band operation. The current low sunspot levels also improve propagation on the low bands.

Low band operators are aware of another propagation phenomenon, grey line propagation. From space you would see an area where the earth is lit by the sun. The rest of the planet is in darkness. The ring between the day and night sections is called the terminator.

During the day, the D-layer of the ionosphere forms, and that absorbs the skywave of low frequency signals. The D-layer dissipates at night. That is the reason you only hear local AM broadcast signals during the day. At night it is possible to hear more distant stations, often covering up local stations, especially those that are required to cut power at sunset.

The F-layer, which is the reason for our HF propagation, forms during the day and dissipates at night. Along the terminator, the D-layer is not as big a factor and may actually help a bit by refracting the signal to a lower angle. Meanwhile, the F-layer still may have enough ions to support lower frequencies. Signals can travel along the terminator long distances. Hams call this grey line propagation.

Because the nights are so long right now, the grey line extends the furthest when both stations are in the northern hemisphere. The figure below shows the grey line for December 5 around our sunset. Note that it extends all the way to Southeast Asia. As the days get longer, the curve will change, and the maximum distance will decrease.

Another advantage of this time of the year is that sunset and sunrise happen at more convenient times. It may not be so convenient for driving to and from work in the dark, but it is nice that you don’t have to get up at 5:00 AM to work DX on the sunrise grey line path.

The contests of interest are at opposite ends of the band switch this month. The ARRL 10M contest starts at 0000Z Saturday, December 14 (6:00 PM local Friday), and runs 48 hours. You

can only work 36 of those hours, but with no sunspots there will be a lot of time with no stations heard.

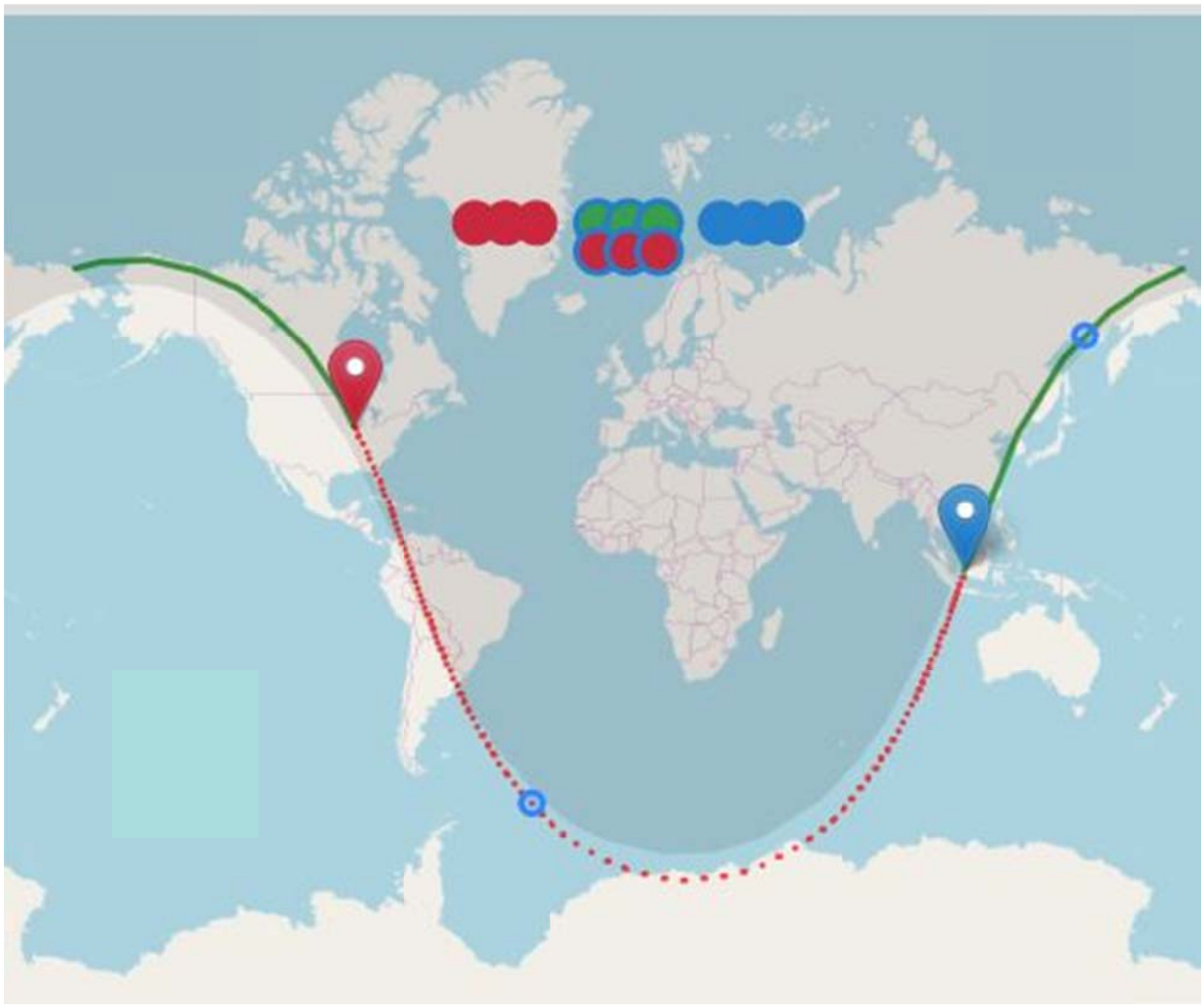


Figure 1. Grey line for December 5 at our sunset. From https://www.voacap.com/hf/

This is one of my favorite contests, and is my favorite during sunspot maximums. It is not so much fun at the bottom of the cycle. Still it is interesting to pick up stations via tropo scattering, Es, and maybe a few meteor scatter contacts during the minimum. We will probably get a shot at some South American stations using Es to couple into Trans Equatorial Propagation (TEP).

It is interesting to note my best ever rate in a contest, 250 contacts per hour, occurred during a sunspot minimum during a massive Es opening to the south. You never know when they happen. I have pulled ahead of my rivals in a few years during the last hour or so when the band opened up after my competition shut down the rig in disgust.

The exchange is signal report and state. DX stations send serial number and a serial number. CW contacts are worth four points and phone contacts are worth two points. Multipliers are states, Canadian provinces, Mexican states, and DXCC countries. There are a lot of classes, including mixed mode, phone only, and CW only. Each of these are subdivided into high, low, and QRP power, and each of those are subdivided into unassisted and unlimited. Pick a less

competitive class and put in the time and you have a very good shot at some wallpaper. Also note that 10M is the only HF band where Technician class ops can use phone.

The full rules for the ARRL10M contest are at http://www.arrl.org/10-meter.

The other contest is the Stew Perry Top Band DX Challenge. It starts at 1500Z (9:00 AM local) Saturday December 28 and runs for 24 hours, but you can only operate 14 hours. Since 160M is mostly dead during the day, you would not want to sit in front of the rig for 24 hours anyway.

The exchange is the grid. That will be EN53Ffor most of us. QSO points are based on the distance of the QSO. Longer QSOs are worth more points. There are no multipliers. The final score is the sum of all QSO points. There are QRP, low, and high power categories. You get more points if you operate at lower power levels. For a given distance, you get 2X as many points if you operate low power, and 4X if you are QRP.

There is another interesting twist. If the other station is low power or QRP, you get extra points. Logging programs will calculate how many points your QSO is worth. It won't know how much power the other station is running, so it assumes it is high power. After you send in your logs, the contest sponsor checks your contacts against other received logs. If the other guy sends in his logs and is in one of the lower power categories, you get extra points. It is interesting to look at the web page and watch your score go up, and your standing going up or down as more logs are received. Full rules are at https://www.kkn.net/stew/stew_rules.html

Moving into next year, the ARRL RTTY Roundup starts January 4 at 1800 UTC (noon local) and runs 30 hours. You can only operate 24 hours though. Although it is called the RTTY Roundup, you can use a variety of modes, including RTTY, PSK, Packet, and FT8. The rules do not mention FT4, which is the new mode designed for contesting. If you plan to operate, this I would check to see if there is an announcement on FT4 as we get closer. You can work a station once per band regardless of the digital mode. The exchanges and multipliers are the same as the 10M contest, except Mexican states are not separate multipliers. The entry classes are high, low, and QRP power with the unlimited and unassisted options. Do check out the rules regarding off-times if you plan on making a serious effort.

Based on previous contests allowing FT8 and RTTY, it seems the highest scorers operated RTTY predominately, reserving FT8 for times the bands were too poor for RTTY. If you are considering operating this one, expect some tough competition. Gary, K9DJT, was #1 in Wisconsin, #2 in Region 9, and #13 in the USA in this contest this year. My guess is Gary will be loaded for bear for the 2020 running.

Major DXpeditions are not common around the Holidays, but there are a lot of casual operations from hams going someplace warm. Operating usually takes a back seat to other vacation activities, and operation may be sporadic.

There is a planned operation from Goree Island from December 13-15 using the call sign 6V1A. The group of Senegalese ops will use SSB and CW. Goree is an island off the coast of Senegal. It was a major staging point during the slave trade. There is a big museum on the slave trade

on Goree. I spent a summer in Senegal while in college as WB9FRG/6W8. It was a very interesting experience.

DXpeditions pick up in January. A group of Russian hams will be on from Palestine with the call E44RU. The plan is to operate 160-10 Meters, CW, SSB, and FT8. The dates are January 6-12.

That wraps up December on the band. Have a Merry Christmas!

THE COMPUTER CORNER

No. 261: Malwarebytes Update

Stan Kaplan, WB9RQR 715 N. Dries Street Saukville, WI 53080-1664
(262) 268-1949 wb9rqr@att.net

It If you paid for a copy or two of Malwarebytes (as have I, for two of my five computers), chances are you are running Malwarebytes 3.x. It would be a good move, and it is free, for you to upgrade to the new version 4. Version 4 sports a new detection engine that is improved over the old model. The new version also has a redesigned interface that seems cleaner and simpler than the old one. And they claim improved performance and efficiency. Here is how to do a really clean install of the new version.

Before you do anything else, find your license key. That is a 20-character key that you got when you ordered and paid for your old version. It looks something like this: AB5CD-EF7GH-I8J9K-L2MNP. If you can't find it in your records, double-click the icon for your old version and look for Account or Account Details; it will be there. Print or record that key carefully. Do not proceed without a copy of that key or you will have to pay for a new version. With the key, it is free.

Next, go to MajorGeeks (https://www.majorgeeks.com/). On the first screen you see will be FEATURED SOFTWARE, and below it will be NEW VERSION 4-Malwarebytes; click the latter. That will get you to a choice of download sites: Download@Authors Site or Download@MajorGeeks.

Choose one or the other and download the installation program, MBSetup.exe, about 1.8 MB in size. (By the way, I always have all my downloads saved to my desktop so that I do not lose them in the bowels of Windows.) Now, with your license key in hand and a copy of the installation program on your desktop or in another known site, you can delete the old version. Deleting the old version first will give you a much cleaner, trouble-free installation.

You can use Control Panel, Add or Remove Programs, to delete the old version. A much better choice is to use HiBitUninstaller, which you can get (free) at MajorGeeks. You can get a regular

installable version or a portable version. The latter needs no installation. You just download a zip file, shuck out the .exe file and click to use it. It will scan your Registry and other sites for bits and pieces, something the Control Panel uninstaller will do poorly, if at all.

Now run the MBSetup.exe installer program. Tell it you want private use, and when it gives you the option to register the license key, take it. Type in that 20-character key that you have from your search; make sure your typing is accurate. Type in the dashes, too. You are now home free. If you purchased a two-computer license for Version 3.x, repeat the process with the second computer. Use the same license key.

Malwarebytes is regarded by all the experts as the best antivirus protection available at present (except for those experts who want to sell you some other brand). I purchased a two-computer license, one for my main machine and one for Nancy's, for super protection, some time ago. My other machines are protected with Microsoft's antivirus package, Windows Defender. That is really quite good and sufficient; Malwarebytes is just my compulsive need for extra protection.

Happy computing!

Editor's Note: If you prefer, you can now update to the new Malwarebytes version by opening the Malwarebytes dashboard on your computer and clicking "Free Upgrade", like I did.-Ben K9UZ

UPCOMING EVENTS

Breakfast at Jim's Grille in Cedarburg – Saturdays at 7:00 AM

January 4, 2020 – 48th Annual Midwinter Swapfest
Waukesha County Expo Center, 8 AM to 1 PM

Upcoming ORC Monthly Programs

December *- John Schrader W9NRG - Emergency Communications for Firefighting*

January *– Elections*

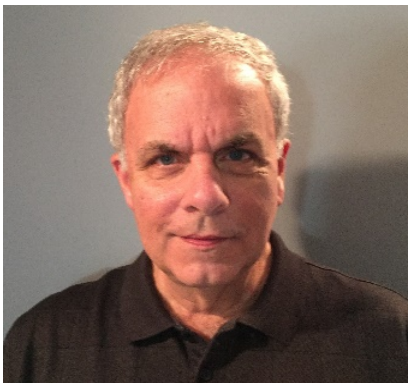
Presenters Needed!

de Pat Volkmann, W9JI

The monthly program is the highlight of the Ozaukee Radio Club meeting. We are fortunate to have a number of very talented people in our club, many of whom have shared their knowledge through a presentation. Share your expertise and experience with the club. Programs can be on any topic that is ham radio related. Contact Pat Volkmann W9JI at w9ji@arrl.net to discuss your idea for a program.

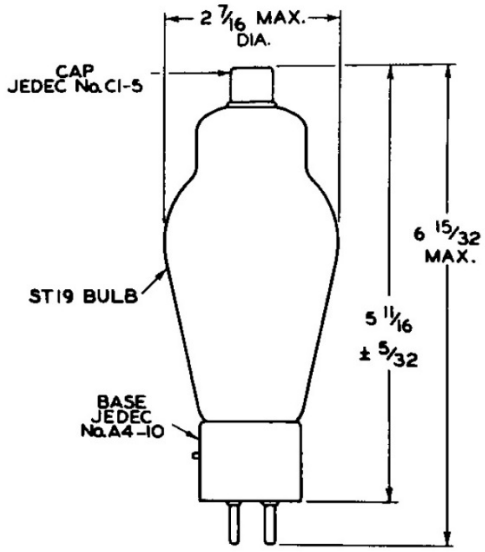
Vintage Amateur Radio

de Bill Shadid, W9MXQ

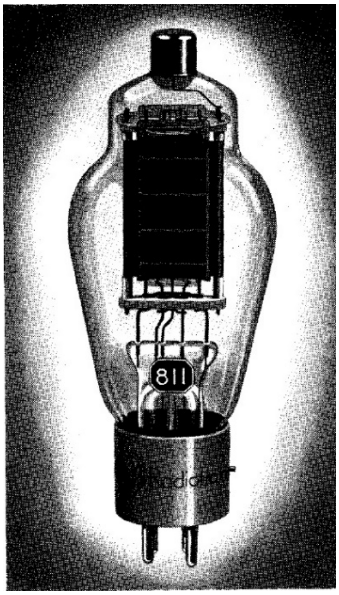


In the late 1930's, Radio Corporation of America (RCA) announced a new RF Triode called the 811. That tube lives on today. We now know it as the 811A. This installment of Vintage Amateur Radio will discuss the 811, the 811A, and modern amplifiers using this vintage tube. This will be the first of three articles on this very popular tube. Products using the 811 or 811A were in ham radio products beginning in the early 1940's (first in WWII military equipment) and right into modern linear amplifiers available on the market, today. The original 811 and is successors over the years carry a reputation not unlike the other popular transmitting tubes over the years' such as the 6L6, 807, 1625, 2E26, and 6146 – just to name a few. While all these tubes are reasonably well known, the 811, and it's 811A successor, have shown a much longer product life cycle with them being the only ones of this group still used in new equipment, today.

Pat Volkmann, W9JI, a good friend, fellow vintage radio collector, and fellow radio historian/restorer advises that he found the RCA 811 in a 1938 RCA Transmitting Tube Catalog. Assuming for the moment that was its time of introduction, that means it is now in its 81st year of production. A good run – and still going forward.



811 Line Drawing (1963)
RCA Technical Sheets



811 Sketch (1941)

811A Photo (2019)
Internet Photo

The major difference in ham radio use of the 811 and the 811A tubes relates to Plate Dissipation. In Intermittent Commercial and Amateur Service (ICAS) these tubes are rated at 50 and 65 watts, respectively – indicating a 30% increase in power capability for the 811A over the 811. Both are rated at a nominal 1,500 volts of Plate Voltage but technical sheets show examples of 1,250 and 1,750 volts, nominal on the plates. Examples of amplifiers in this series of articles will show the use of two, three, and four of these tubes used together. Good operation, within technical limits for dissipation and distortion products would see these tubes used in products

providing linear amplifiers with outputs of 110 watts per tube with the 811 and 160 watts per tube with the 811A. A fine example of a good quality, properly rated 811A Linear Amplifier would be the four 811A tube equipped Collins 30L-1.[1] The 30L-1 has a rated output of 500 to 600 watts. That is well within the bounds of good operation of the 811A at 150 watts per tube SSB and CW RF output. Some modern amplifiers exceed these specifications – but at the penalty of shorter tube life and somewhat increased distortion.

While it is well known that the 811 and 811A could handle full specifications to 30 MHz, it may be less well known that both tubes can attain these ratings to 60 MHz. These tubes are good to 80 MHz at 80% of specifications and can hold to 60% of specifications at 100 MHz.

A relatively unknown trait of both the 811 and the 811A is their fast heating filaments. The filaments could heat so fast that they could illuminate, heat up, and reach full operation in about three seconds. This made it possible to have the filaments off in a portable or mobile installation when in receive. Activating transmit with a microphone button (PTT switch for example) would also turn on the tube filaments. This would greatly reduce current consumption while just listening. [2]

In current times here are four amplifiers that use these tubes. Two of them are current, one has been off the market for a short while, and the last one several years but is of modern design. Three of them are, or were, made in the United States and one was manufactured in the United Kingdom. All four are from manufacturers still active in the ham radio business. We will start with two well-known amplifiers from Ameritron:

Ameritron AL-811 Linear Amplifier[3]
Front and Interior Views
Interior view has front to the right

Ameritron AL-811H Linear Amplifier[3]
Front and Interior Views
Interior view has front to the right

The self-contained Ameritron amplifiers are of good design with the AL-811H being one of the most popular amplifiers on sale to amateur radio operators in the current time[4].

The AL-811 has three 811A tubes while the AL-811H has a complement of four 811A tubes in its amplifier. The interesting part of this amplifier is that the only difference in the two is the vacuum tube area of the chassis. All power components, control circuitry, meters, etc., are the same. The front panels are slightly different in that one says “AL-811” and one says “AL-811H.”

Ameritron rates these amplifiers rather aggressively. Check these specifications:

Ameritron AL-811 Linear Amplifier with 3x 811A Tubes

Mode	Power Output
SSB	600 Watts[5]
CW	600 Watts[5]
RTTY	400 Watts[6]

Ameritron AL-811H Linear Amplifier with 4x 811A Tubes

Mode	Power Output
SSB	800 Watts[5]
CW	800 Watts[5]
RTTY	400 Watts[6]

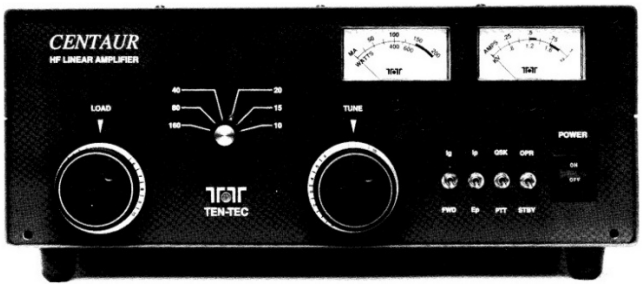
I am referencing the “aggressively” rated by virtue of printed specifications of the tubes which imply that the tubes should be expected to provide 160 watts output, per 811A tube in linear amplifier service on SSB and CW. With three 811A tubes one would expect an output power of perhaps 480 watts and with four tubes one would expect an output power of perhaps 640 watts. For my personal use I would follow those lower numbers using either of these amplifiers. That said, these amplifiers are known for clean and dependable operation so I will remain respectful of Ameritron’s specifications.[7]

Both the AL-811 and AL-811A Linear Amplifiers have a tuned input circuit providing a 50-ohm load to the exciter. These amplifiers require 80-100 watts of drive to get full rated power out. They operate from 160 through 10-meters, including the 17 and 12-meter bands (10 and 12-meter operation required an internal modification).

Both the AL-811 and the AL-811H are desktop units, as noted, with exterior dimensions of 8 x 13.75 x 16 inches (HWD) with both units 30 pounds, according to Ameritron literature.

Hinted above but not said, is that the two Ameritron amplifiers are more alike than different. Essentially all components are identical except that the mounting area for the tubes is different. The AL-811 has a three tube sub-chassis while the AL-811H has a four tube sub-chassis (AL-811H). In terms of weight, the AL-811H should be slightly heavier than the AL-811 model. I think the manuals are in error here – but I am not sure which is correct.

The other domestic manufacturer that made a recent vintage 811A Linear Amplifier was Ten-Tec. The product is not currently manufactured but is supported. It was known as the Ten-Tec Model 411 Centaur Linear Amplifier. It used three 811A final amplifier tubes in a circuit that functionally was like the Ameritron AL-811. Power ratings, however, were slightly different. Here is a picture of this attractive, self-contained amplifier:



Ten-Tec Model 411
Centaur Linear Amplifier

Specifications for the Centaur were as follows:

Ten-Tec 411 Centaur Linear Amplifier with 3x 811A Tubes

Mode	Power Output
SSB	500-600 Watts[5]
CW	500-600 Watts[5]
RTTY	350-400 Watts[6]

Lower power levels shown are for operation on 160 and 10 meters. The Centaur had a tuned input circuit providing a 50-ohm load to the exciter. These amplifiers required 90-100 watts of drive to get full rated power out. They operated from 160 through 10-meters, including the 17- and 12-meter bands (10- and 12-meter operation required an internal modification). The Centaur is 6 x 15.5 x 13 inches and weighs 40 pounds.

I do not have access to a good quality internal picture of the Centaur but unlike the Ameritron AL-811 and AL-811H Linear Amplifiers, the Ten-Tec horizontally mounts the tubes to get a more-low profile look to the cabinet. This horizontal mounting requires an 811A tube that is specially made for this service. It is worth remembering that only certain 811A tubes in today's market can be mounted horizontally. Improperly supported grid structure in some tubes allows them to sag when warm and then touch the plate structure. That causes a catastrophic internal tube failure. RCA, GE, and Cetron tubes from the USA were made for vertical or horizontal mounting. Svetlana tubes from the Russian Republic were also able to handle mounting in either orientation. However, some Chinese tubes are not constructed for horizontal installation. Be sure you check with the North American distributor on this point before buying replacement tubes.

There is another current vintage 811A amplifier that is rarely seen in North America. Linear Amp UK manufactured a modern 811A Linear Amplifier until very recently.

Linear Amp UK Ranger 811H Front

Linear Amp UK Ranger 811H Interior

The Ranger 811H is similar in specifications to the Ameritron AL-811H but front panel and interior layout is different. The completely self-contained design includes a toroidal power transformer that is just visible under the capacitor and diode board in the interior view of the amplifier. The product, unlike USA products, comes ready to operate on all bands, including the WARC bands, from 160 to 10 meters. (European amplifiers not destined for USA sales do not have to inhibit operation on 10 meters.)

Linear Amp UK Ranger 811H Linear Amplifier with 4x 811A Tubes

Mode	Power Output
SSB	800 Watts[5]
CW	800 Watts[5]
RTTY	400 Watts[6]

The Ranger 811H has a tuned input circuit that provides a 50-ohm load to the exciter. This is essential with today's solid-state transmitters. The amplifier is 9.5 x 14 x 16 inches (HWD) and weighs in at about 55 pounds.

If weight is any factor in linear amplifier performance then the Ranger 811H at 55 pounds would seem to possess much more power supply iron and therefore more inherent power capability. However, this could be tied to transformer core material and material used in chassis construction. This is all part of further analysis not complete as this is writing.

In the next installment of this series, we get more into the vintage era with amplifiers many readers will recognize, many may still use, but have not been in production for many years.

I appreciate that you read my articles. Remember that I am open to questions and comments anytime at my email address, W9MXQ@TWC.com.

A special note of thanks to my proofreader, Bob Bailey, W9DYQ. Bob is a bit more than a proofreader as he often adds commentary that makes it into the article.

Credits and Comments:

[1] Subject of a future article.

[2] I have given the reader a little review of ham radio use of these tubes. Further analysis may be had by reviewing applicable vacuum data sheets as available online.

[3] These pictures are from Ameritron literature on the respective amplifiers shown.

[4] "Best Selling Amplifier" quote is from a video on the manufacturing process for the AL-811A amplifier produced by Ameritron. So, this statement is Ameritron's opinion which may well be based on some market measurement process. I have no reason to doubt Ameritron's claims.

[5] Typical SSB and CW Operation. (CW at 50% duty cycle.)

[6] Typical RTTY or Data Operation – at approximately 50% duty cycle.

[7] In fact, Collins Radio Company in their very popular and great performing 30L-1 Linear Amplifier[1] were held to the lower power levels shown on 811A specifications and netted many years of dependable operation. In act I have one such 30L-1 amplifier that is over 60 years old and is still running on its four original 811A final amplifier tubes.

W9MXQ

Remote Station Building, Part 2

De Jeff Whisler W9KW

At the end of Part 1 of this series (in the September issue of this newsletter), I had taken delivery of my new tower and had the tower base in the ground, ready for the tower. The next major step was trenching for the feedlines and laying some chase pipe for the cables. Although I was using coax rated for direct burial, I want to be able to add or replace cables in the future. I would have preferred hardline for the 100-foot runs from our cottage to the tower but I just couldn't afford it. I elected to use 3-inch sewer drain pipe for the cable chase. Other options such as electrical conduit would have been significantly more expensive and my budget was already very strained. I purchased the pipe and fittings from Menards. I used 45-degree elbows to create more gentle turns for the heavy cables. Initially I will have two HF, one VHF/UHF and one rotor control cables. As time and budget allows, I want to add another HF cable for a 160 meter receive antenna.

As with the excavator, I ended up doing the trenching myself. This was due in part to the very severe storms that rolled through the area a week before. The storms did significant damage, and local landscape crews were completely booked and working furiously to help folks with downed trees and all other types of storm wreckage. Looking back, I wish I was a bit more patient and found someone experienced to do the job. As it was, on September 4th, I rented a trencher from a hardware store in Green Bay and towed it 85 miles to the jobsite. I rented the largest machine they had, for 24 hours. It was track-driven and could trench a line 48 inches deep. If you've never seen one, it has a huge chain saw style bar and a giant chain. Hydraulic controls move the bar up and down and also drive the chain and tracks. There is also an auger, perpendicular to the trench line that moves the spoil from the chain off to either side.

I got the machine to our cottage from Green Bay at 6 PM on Tuesday evening. I unloaded the machine and briefly tested it out.

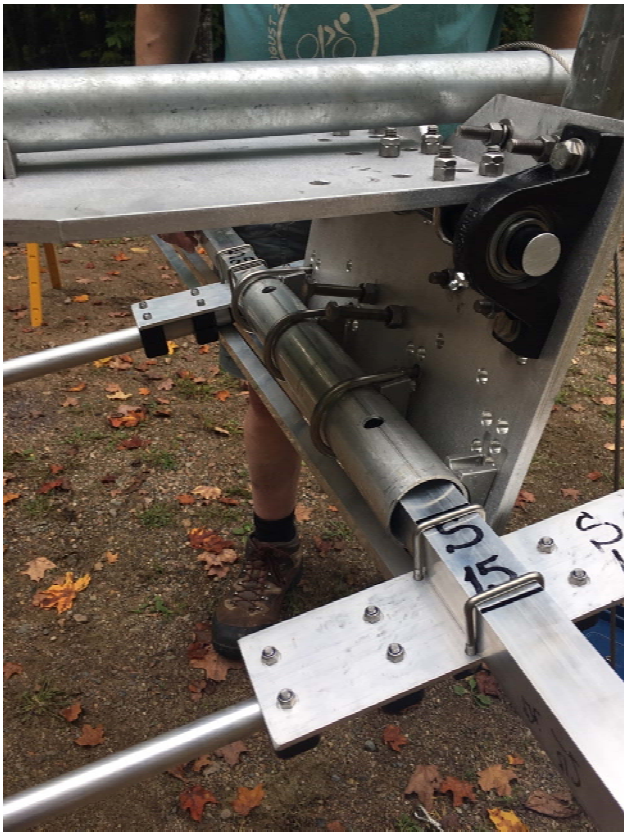
The next morning, I began trenching. It took me twenty feet or so to get used to the machine. Much of the first eighty feet went without a hitch. The final twenty feet were brutal. The machine began spitting up baseball sized rocks, then softball sized rocks, then finally melon sized rocks. I had to stop the machine every foot or so to clear the larger rocks. It took several hours to trench the last twenty feet.

Next, I quickly laid the PVC and backfilled the pipe. It was a sweaty blur of shoveling and raking. Finally, I loaded the machine back on to its trailer and drove like a madman back to the hardware store in Green Bay, just under the 24-hour deadline. The day before the raising party, I spent some time preparing the site, staging parts of the tower packing crate to help skid the tower into position.

On September 14, 2019 I held a tower-raising party at my new station. In attendance and helping were KD9CCE, Fred KB9QDC, Matt and a new friend, Mike. Mike brought a very heavy-duty winch that proved invaluable. We used my truck hitch as a pivot point and carefully moved

the tower sideways into alignment with the base. A bit of re-rigging with some fulcrum and lever work and we had the tower bolted to the base. We carefully raised it to full extension and back again. A major milestone achieved.

We had hoped to make progress building the Optibeam Yagi and installing the rotor and mast, but, alas, Murphy raised his ugly head. The rotor plate provided by the tower manufacturer (yikes!) didn't fit. The crew working on the beam struggled throughout the build process with instructions originally written in German and unartfully translated into English, including metric measurements for everything. We finally called it a day and the crew left late afternoon with my very grateful thanks.



On September 20th Fred KD9CCE returned for Round Two with the rotor, mast, Yagi and TiltPlate. Part of our struggle initially was the integration of the NN4ZZ TiltPlate with the beam. It was a sticky knot to unravel, visualizing how the beam would mount to the TiltPlate and also to the mast. The TiltPlate allows the beam to stay horizontal even as the tower is moved from vertical to horizontal. This allows you to work on the beam at waist level with your feet on the ground when the tower is horizontal. Everything went pretty well.

We didn't quite finish building the beam but the other issues were resolved, and I felt like I would be able to finish before the winter weather closed me out.

On October 4th I returned alone to the jobsite for some additional work on the project. I spent most of that day completing the build of the Optibeam. At the end of the day I was very tired but happy it was completed.

On October 5th, I awoke early. The weather forecast was not good at all—rain all day beginning around 10 AM. I had a small chore to do before the rain hit. I wanted to remove a VHF/UHF beam from the chimney chase of our cottage. The beam would be reinstalled on the mast of my new tower.

Since my early childhood I have been a climber. I climbed many different trees, towers, structures and even mountains. Climbing and heights just don't bother me. They are simply obstacles to be overcome. That morning I set up an extension ladder on the rear deck of our home. I intended to go up on the roof to inspect the job and return with the necessary tools, something I had done many times before. I got up on to the roof without a problem and inspected the job. With a tool list in mind I made my way back to the ladder. I reversed myself for the descent. I set my right foot carefully on a rung to test the ladder's stability. All seemed well. I swung my left foot and body weight over to the ladder. At that moment the ladder seems to have completely disappeared beneath me. I freely fell ten feet to the deck, landing with a violent liquid thump on my left hip and back. I didn't know it at the time, but I broke my pelvis in three places and had two factures in my spine.

Please stay tuned for Part Three….

Ozaukee Radio Club
November 13, 2019 Meeting Minutes

de Ben Evans K9UZ, Secretary

The meeting was called to order at 7:31 PM by President Kevin Steers (K9VIN). All the attendees introduced themselves.

Announcements, Show-and-Tell, Bragging Rights:

Bill S. (W9MXQ): There is a display by WiARC dedicated to ham radio at the Port Washington public library, so check it out. It will be there through November, but the library might let it stay until the end of December.

Stan (WB9RQR): Stan received a QSL card from WW0WWV for the contact made during the WWV Centennial Event, which will be the subject of Fred's (W9KEY) presentation.

Tom R. (W9IPR): The Extra Class License study sessions are up through the end of Chapter 6 and halfway through Chapter 7 of the ARRL book. The sessions are on Saturday mornings at Tom's house if anyone wants to drop by.

Program:

Fred S. (W9KEY) gave a presentation on his and Bill's (AC9JV) trip to Fort Collins, Colorado to the WWV shortwave radio station site and operating on the WW0WWV Special Event Station for the WWV Centennial.

50/50 Drawing:

There was no 50/50 drawing.

Auction:

Stan (WB9RQR) conducted the auction. Many items were sold, including boxes of parts, magnets, an ARRL antenna handbook, a signal generator, a flat monitor, power supply & tuner, and three Libre Office for Windows CDs.

Officer Reports:

Kevin S. (K9VIN), President's Update – No update, except that elections are coming up.

Pat V. (W9JI), 1st VP – No report.

Bill C. (KD9DRQ), 2nd VP – No report.

Tom T. (KC9ONY), Repeater VP – There was a failure of the RF amplifier for the 146.97 repeater. The amp is old and may not be worth fixing, plus others have had problems with amps from the same manufacturer. A new amp would run about $1,000.

Ben E. (K9UZ), Secretary – The minutes from the October meeting were distributed to members by email. Motion to accept the minutes was made by Stan (WB9RQR), seconded by Gary S. (W9XT) and approved by the members. The rosters are still not ready.

Robert E. (K4WTH), Treasurer – Robert was not at the meeting, so Ben (K9UZ) gave the financial report for October which was handed out to members. Motion to accept the treasurer's report was made by Nels (WA9JOB), seconded by Todd (N9DRY), and approved by the members.

Fred S. (W9KEY) asked whether money has been approved to buy a new amp for the repeater, but it has not. Gary D. (K9DJT) moved to have Tom (KC9ONY) look into a new amp not to exceed $1,000. Nels (WA9JOB) seconded the motion and it was approved by the members. Dave C. (KC9REP) asked what the maximum output power was for the existing amp and Nels (WA9JOB) responded it was 120 watts. We are licensed for 100 watts TPO, but the existing amp never managed more than 90 watts. Ken (W9GA) suggested buying a 150 watt amp to run at the authorized 100 watts so that it would run cooler.

Ben (K9UZ), as an additional comment regarding the rosters, suggested leaving the current officers' names off the cover since we're so close to electing a new slate of officers. Kevin (K9VIN) and Tom (W9IPR) suggested instead to delay publication until the new officers are elected, which Ben agreed to.

Committee Reports:

Tom R. (W9IPR), Fall Swapfest – The Fall Swapfest would normally be the first Saturday of September, but in 2020, the first Saturday falls on Labor Day Weekend, conflicting with Maxwell Street Days for the use of the park. Other Saturdays in September create conflicts with other area swapfests, so Tom suggested August 29th instead. Kevin suggested that Tom check with Jim A. (K9QLP) to make sure that August 29th is good for him.

Ken B. (W9GA), Field Day Committee – Something has to be done to have a fully functioning network for logging at the next Field Day. He will leave it up to the operators to find a solution. It may involve having to buy a set of new computers. Stan (WB9RQR) suggested installing Linux on the computers instead of buying new ones. Ken responded that would be okay if someone can find a compatible logging program that people could understand how to use. On the issue of cable versus wireless, Stan said we never went wireless because of the possibility that the HF stations could cause interference to the network. Someone will have to step up and be a technical consultant for the network, perhaps Vic S. (WT9Q).

On the subject of the shed, Ken is still waiting to hear from the buyer of the property. The buyer had previously said he's willing to rent us space in the other building on the property if there's room. The closing has been pushed back past the first of the year.

Old Business:

There was no old business.

New Business:

There was no new business.

Adjournment:

Stan (WB9RQR) made the motion to adjourn the meeting, which was seconded and passed by the members. The meeting was adjourned at 8:55 PM.

Attendance:

There were 20 members and four guests present at the meeting.

A copy of the attendance sheet is available upon request in PDF format. Please contact Ben Evans via email at ben@evansengsolutions.com for a copy.

Respectfully submitted,

B. Benjamin Evans, K9UZ
Secretary

Straight Key Night 2020

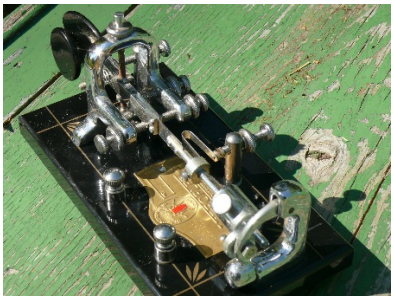
De Pat Volkmann, W9JI

It's almost time, once again, for Straight Key Night. SKN starts on New Year's Eve at 6 PM and runs for 24 hours. Any band can be used, but most of the activity is on the CW portion of the lower HF bands. As the name of the event implies, a straight key (or bug) is preferred, but participants can use any type of key. Straight Key Night is not a contest and there are no scores. You will hear people calling CQ SKN and perhaps substituting SKN for RST in the QSO. You can nominate someone for "Best Fist" and "Most Interesting QSO". Speeds are usually on the slow side, so don't worry if your code is a bit rusty. Jump in and have a good time!

NYE Viking Straight Key

Many people bring out their vintage radio equipment for SKN. All manner of old radio equipment will be put to use, both transmitters and receivers. I usually try to have at least one vintage station running, preferring to use some of the gear that may not have been on the air for a while. This year I am setting up a Hammarlund HQ-129X with an RME DB20 preselector for receiving and a Meissner Signal Shifter as the transmitter.

So get on the air and enjoy a few CW contacts. If you participate, send me your comments at w9ji@arrl.net. I'll collect your observations and publish them in the next newsletter.



Vibroplex Semi-Automatic Key or Bug

JAN, 1974

DATE TIME	STATION CALLED	CALLED BY	HIS SIGNAL RST	MY SIGNAL RST	FREQ.	EMISSION TYPE	POWER INPUT WATTS	TIME OF ENDING QSO	OTHER DATA WB9JGV - Best fist	NAME	QSLs S	QSLs R
Dec31,1973	SKN											
8:14	W3ZJ	WB9JIC	589	579	3530	A1	60	8:22	PILA	ED		
8:23	K3OIO	"	"	"	"	"	"	8:32	NORTH of PILA, PA	RICHARD		
8:35	WB8LWV	"	559	559	"	"	"	8:46	QRM	PETE		
8:46	WB9JGV	"	599	599	3540	"	"	9:04		BILL		
9:45	CQ SKN	W2LYH	579	559	3530	"	"	9:59	RIVERSIDE NY	BOB		
10:30	W4HIR	"	579	589	3530	"	"	10:50	NORTH of NORFOLK, VA.	CAREY		
11:48	K2DW	"	569	559	"	"	"	11:50	NY QY	BILL		
1974 JAN												
12:25	CQ SKN	K4BO	569	469	3532	"	"	12:32	LYNCHBURG, VA	JARED		
5:05PM	WB9BPO	"	599	599	3552	"	"	5:16	MADISON WI (QSL Cont. MIKE X			

Log Excerpt from WB9JIC's (now W9JI) First Straight Key Night

For more information, see http://www.arrl.org/straight-key-night

ORC Meeting Agenda

December 11, 2019

1. 7:00 – 7:30 PM – Network & Rag Chew
2. Call to Order – Kevin Steers (K9VIN)
3. Introductions
4. Announcements, Bragging Rights, Show & Tell, Upcoming Events, etc.
5. Program: John Schrader W9NRG - Emergency Communications for Firefighting
6. Fellowship Break
7. 50/50 Drawing
8. Auction – Stan Kaplan (WB9RQR)
9. President's Update – Kevin Steers (K9VIN)
10. 1st VP Report – Pat Volkmann (W9JI)
11. 2nd VP Report – Bill Church (KD9DRQ)
12. Repeater VP Report – Tom Trethewey (KC9ONY)
13. Secretary's Report – Ben Evans (K9UZ)
14. Treasurer's Report – Robert Eskola (K4WTH)
15. Committee Reports:
    a. Scholarship – Tom W9IPR
    b. Field Day Storage – Ken W9GA
    c. Other
16. OLD BUSINESS
17. NEW BUSINESS
18. Adjournment to ?

Return undeliverable copies to:

The ORC Newsletter
465 Beechwood Drive
Cedarburg WI* 53012

First Class

Next ORC Meeting:

Grafton Multipurpose Senior Center

1665 7th Avenue, Grafton, WI
Wednesday, December 11th, 2019

7:00 PM – Doors Open

7:30 PM – Meeting Begins