



The *ORC* Newsletter

Official publication of the Ozaukee Radio Club, Inc. Email all contributions to the editor, Bill Shadid, W9MXQ (newsletter@ozaukeeradioclub.org). Permission to reprint articles published in any issue is granted provided the Author (as shown in the article) and the Ozaukee Radio Club Newsletter are fully credited in any publication.



ORC Repeaters on 146.97 (-127.3PL), 224.18 (-127.3PL), 443.75 MHz (+127.3PL) - Callsign W9CQO
Web site: www.ozaukeeradioclub.org Facebook: facebook.com/orcwi

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Number 5

From the President

de: Bill Greaves, K9GN



Several awards were named and distributed at the April meeting. Two awards voted by the membership are the Ham of the Year, won by Tom KC9ONY Trethewey for excellent service to the ORC, and the Turkey of the Year, won by yours truly, Bill K9GN Greaves for fostering camaraderie and goodwill within the club. Congrats to all award winners.

Surveys help members express themselves to those chosen to lead an organization. The ARRL launched a national survey this month to learn members views on raising dues and on modifying some activities. The simple fact is ARRL dues have not increased in quite a few years, costs have increased, sponsorships have decreased, and a balancing effort needs to occur. The survey is at <http://arrl.org/take-dues-survey>. You will need to log into the ARRL website as

this is a member-only survey. You can select the login button at the top of the web page.

Somewhat similarly, the ORC wishes to know members views on a number of topics. Look for a survey in the coming months.

Most, if not all of us, have heard of the FCC Exposure Rules. These rules took effect this past May 3, 2023, and now apply to all US hams operating transmitters. Information on these rules is located at the ARRL website at <http://arrl.org/rf-exposure-calculation>. Instructions detail the straight-forward calculations necessary for compliance. The results are kept in your shack for your own use, and in the event the FCC asks for them.

The ORC Swapfest is Saturday, May 6th. Please see the information elsewhere in this ORC Newsletter or on the ORC website. I hope to see you there.

And Field Day is less than 2 months away as it is always the last weekend in June. The ORC will be at Pleasant Valley Nature Park as in the recent past.

My pic this month shows me a few years ago wither: (1) trying out a new pirate Halloween costume, (2) learning about depth perception, or (3) wearing a patch for a couple days for a corneal abrasion. Answer revealed at the club meeting.

Speaking of the club meeting, the membership will gather both in-person and on Zoom, May 10th at 7:30pm, with meet-n-greet at 7:00pm, at the Grafton Senior Center – or on Zoom.

73,

Bill K9GN



bchealth.org

A Message from the Editor

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de: Bill Shadid, W9MXQ, Newsletter Editor

Please note Club President, Bill Greaves, K9GN, on Page 1 for his monthly message. Watch for his picture challenge!! I add my congratulations to Bill Greaves, K9GN, on being voted Turkey of the Year and to Tom Trethewey, KC9ONY on being voted Ham of the Year by the members of the Ozaukee Radio Club. Top notch choices!!

Check out Tom Trethewey, KC9ONY, as he puts out one last reminder in this Newsletter about the 2023 Ozaukee Radio Club Spring Swapfest. Page 5 with the Flyer on Page 37.

Featured this month is an exercise on what Artificial Intelligence (AI) might accomplish if asked to write an article for the Ozaukee Radio Club Newsletter. Pat Volkmann, W8JI, gives us a fine analysis of the technology – starting on Page 6.

Dan Zank, AA9WP, and Stan Kaplan, WB9RQR, are back with new information on ARES (Chat Modes for ARES) and Computer Corner (Fine Tuning your Next Linux Installation). Take a look at their fine work to keep us up to date.

Summer brings slow times for Contesting and other on-air events. But there is plenty still to do – as brought to us by Gary Sutcliffe, W9XT in his On the Air Activities column. Check the column on page 16. And, in support of being active in the hobby, the very next article that your Editor hopes is a regular feature. Look at Tom Trethewey, KC9ONY, and “Things to Do in the Upcoming Weeks.” See Page 20

Your Editor and his Vintage Amateur Radio column brings back a radio product line chronicled a couple of years with the first of two articles on the Japanese market version of the 1970's Kenwood TS-900 HF Transceiver. This article brings hams from Ohio and Wisconsin into the game as they bring an ailing TS-900S back on the air. Starts on Page 21.

Ken Boston, W9GA, brings you the Minutes of the March meeting on Page 33 followed by a return of Pat Volkmann, W9JI, on Page 35 to talk about coming Programs. .

Need help to get your thoughts on paper for an article? That is what the Editor does!! Let me know how I can help you. newsletter@ozaukeeradioclub.org

Check out the Table of Contents on the very next page.

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ORC Newsletter Editor in the not too distant future?

What do you think?

Will it happen?

W9MXQ with iprospect.com

Onward To the Newsletter

The ORC Spring Swapfest 2023 is NOW!

de: Tom Trethewey, KC9ONY
Chairman, Spring Swapfest 2023
swapfest@ozaukeeclub.org

If you are reading this on the night of publication, Friday, May 5, 2023, you still have time to come to the Ozaukee Radio Club's 43rd Annual Spring Indoor Swapfest! It's Saturday, May 6, 2023, from 8 AM to 12 PM, on the Ozaukee County Fairgrounds in the Ascension Columbia St. Mary's Expo Center, in Cedarburg, WI. It's also known as the Milwaukee Curling Club, where we have been since 2014.

You need not be present to win one of three Grand Prizes. One is \$100 cash. Two fantastic door prizes from Bioenno Power, if you are looking for a LiFePO4 battery for portable operations, though you'll have to make arrangements to get them from us. Gift certificates from the ARRL, DX Engineering N3FJP Logging Software, and books from Easy Way Ham Books to name a few.

Once again, Tower Electronics will be here with 14 tables of items and antennas for you to purchase. Food and refreshments sold by the Cub Scout Pack 586 from West Allis, returning again, too.

Can't make the Swapfest for whatever reason? You might have missed a great Swapfest, including the Pico balloon display from the Milwaukee School of Engineering's Amateur Radio Club W9HHX. The balloon will launch, weather permitting, from Lakeshore State Park at 1 PM on Sunday, May 7, 2023. A Racine middle school WLS ARC KD9GRG will launch at around 1:30 PM, too.

Mark your calendar for next year, Saturday, May 4, 2024, for our 44th Annual Spring Indoor Swapfest!

Some have suggested that Swapfests are for selling all kinds of things, and hamfests are for ham related things. We've been calling ours a Swapfest for many, many years. Should we change it to Hamfest?



Can an Artificial Intelligence Write a Newsletter Article?

de: Pat Volkman, W9JI



I was curious about the capability of large language model Artificial Intelligence (AI) programs, so I was happy to sign up for a Beta test of Google's "Bard" AI software. Similar to OpenAI's ChatGPT, you can ask Bard to do things, such as answer questions, make creative content, translate languages and many other tasks.

I thought it would be interesting to see if Bard could write an article for the ORC newsletter. The subject that I chose was the Johnson Valiant transmitter. I picked the Valiant because I had recently done a program for the ORC on this radio, and the details were still fresh in my mind.

I starting with just asking Bard to write an article for the newsletter on the Valiant. The first iteration contained a number of obvious factual errors. I pointed out the errors to Bard and they were corrected in the next iteration. I continued refining the request with more specific requirements, and after eight iterations, this is what Bard produced. The article still has many errors, which are in italics and underlined. Corrections are at the end of this article.

Johnson Viking Valiant Transmitter

de: Bard on April 20, 2023

The Johnson Viking Valiant is a vacuum tube amateur radio transmitter that was manufactured from 1955 to 1962. It was one of the most popular transmitters of its era and is still prized by many hams today.

The Valiant is a versatile transmitter that can be used for a variety of modes, including AM, CW, and SSB. It has a power output of 200 watts in CW and 150 watts in AM and SSB. The Valiant also features a built-in VFO, which makes it easy to tune to different frequencies.

The Valiant is a well-built transmitter that is known for its reliability. It is also relatively easy to service, which makes it a good choice for hams who want to learn about electronics.

If you are looking for a vintage vacuum tube transmitter that is both powerful and versatile, the Johnson Viking Valiant is a great option.

History of Johnson Company

The Johnson Company was founded in 1932¹ by Earl F. Johnson². The company's first product was a vacuum tube amplifier for amateur radio use³. Johnson quickly became a leading manufacturer of amateur radio equipment, and its products were known for their quality and performance.

In the 1950s³ Johnson introduced the Viking line of amateur radio equipment. The Viking line was a popular choice for hams, and it helped to solidify Johnson's reputation as a leading manufacturer of amateur radio equipment.

The Johnson Company continued to manufacture amateur radio equipment until 1979. The company was acquired by EFJ Corporation in 1980, and the Johnson brand name is no longer used.⁴

VFO Resistor

The Johnson Viking Valiant uses an 18K ohm resistor in the VFO circuit. This resistor is known to fail over time, which can cause the VFO to drift. If your Valiant's VFO is drifting, you can replace the resistor with a new one.⁹

Mercury Vapor Rectifiers

The Johnson Viking Valiant uses two mercury vapor rectifiers in the power supply. These rectifiers are no longer manufactured, but they can be found on the surplus market. If your Valiant's power supply is not working, you may need to replace the mercury vapor rectifiers.

6146 Final Amplifier Tubes

The Johnson Viking Valiant uses two 6146 final amplifier tubes. These tubes are no longer manufactured, but they can be found on the surplus market.⁵ If your Valiant's final amplifier is not working, you may need to replace the 6146 tubes.

Correct Type of 6146 Final Amplifier Tubes

The Johnson Viking Valiant uses two 6146 final amplifier tubes. However, not all 6146 tubes are created equal. Some 6146 tubes are more powerful than others.⁶ If you are looking for the most powerful 6146 tubes for your Valiant, you should look for tubes that are rated for 100 watts or more.

Conclusion

The Johnson Viking Valiant is a great choice for hams who are looking for a powerful and versatile vintage vacuum tube transmitter. It is well-built, reliable, and relatively easy to service. If you are interested in purchasing a Johnson Viking Valiant Transmitter, you can find them for sale online and at ham radio swap meets.

I hope this article has been informative and helpful. If you have any questions, please feel free to contact me.

I don't think that Bard is going to replace human writers anytime soon. The article is a basic collection of factual information, with enough opinion statements to make it sound less like computer generated content. The AI has no way to check the accuracy of the facts that it includes. If you plan to use one of these tools to write something, be sure that you know the subject well enough to spot errors.

I then asked Bard a question about the ORC newsletter and got back an interesting answer. Here's the actual question and answer:

W9JI - Have you read the Ozaukee Radio Club newsletter archive? it will provide useful information for articles on amateur radio.⁷

Bard - Yes, I have read the Ozaukee Radio Club newsletter archive. It is a great resource for information on amateur radio. The newsletter covers a wide range of topics, including equipment reviews, operating tips, and technical information. I have found the newsletter to be informative and helpful.

I would recommend the Ozaukee Radio Club newsletter to anyone who is interested in amateur radio. It is a great way to stay up-to-date on the latest news and information in the hobby. You can find the newsletter archive at <https://www.ozaukeeradioclub.org/index.php/newsletters>.

Well, I guess that Bard likes our Newsletter! Or was it just reflecting my question and adding a bit more information?

The results that Bard produced were, I think, somewhat dry and pedantic or "lacking a voice" as my wife described it. After confirming that Bard had read the Newsletter archive, I asked it to write in the style that I use for my articles. Bard did not change the Valiant article it created but added the following paragraphs on the "W9JI Style."

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W9JI Style

de: Bard on April 20, 2023

The W9JI style is a popular style of writing for amateur radio articles. It is characterized by its clear and concise language, its use of technical jargon, and its focus on practical information.

To write in the W9JI style, it is important to keep your audience in mind. Amateur radio operators are a diverse group of people with a wide range of technical knowledge. When writing for this audience, it is important to use language that is clear and understandable to everyone.

It is also important to use technical jargon correctly. Amateur radio operators use a lot of technical jargon, and it is important to be familiar with this jargon in order to communicate effectively with them.

Finally, it is important to focus on practical information. Amateur radio operators are interested in information that they can use. When writing for this audience, it is important to focus on information that will be helpful to them.

By following these tips, you can write articles in the W9JI style that are clear, concise, and informative.

While a flattering description of my writing style, I was skeptical that it was based on facts. Bard got the amateur radio connection to my callsign, but the rest of the text would describe most ham radio authors. Bard also offered up that W9JI was the callsign of John S. Pool. There is an author named John Pool, but he doesn't write ham radios related books. Bard also said that I wrote the ARRL Handbook, Antenna Book, and Operating Manual. Thank you Bard but get the facts straight!

One subject that comes up concerning AI generated content is plagiarism. As Bard says, "I am trained on a massive dataset of text and code. This dataset includes text from books, articles, websites, and code from open-source projects. I am also trained on a dataset of human conversations. This dataset includes conversations from chat rooms, forums, and social media." Bard also claims to site sources when reusing text, but there was no evidence of that in the Valiant article that it wrote.⁸

Educators have a variety of tools to detect plagiarism in their student's work. Those tools could be applied to AI generated content to detect reused text.

Overall, a fun exercise. Bard was far from correct on many factual points, even those that could be readily discovered with an internet search. However, it seems that given a few more years of development, an AI engine will be able to write good newsletter articles and a whole lot more. But no AI could ever replace our Editor!

Corrections and notes:

1,2. The company started in 1923 not 1932. Edgar F. Johnson is the founder of the company. See article on the E.F. Johnson company museum:

https://www.mankatofreepress.com/news/lifestyles/ef-johnsons-history-displayed-in-waseca-museum/article_79251990-e864-5ad0-bbde-e492571ad96e.html

3. The companies first products were parts used in transmitters, starting in 1925. The Viking product line started in 1949 with the Johnson Viking 1. Johnson's first amateur amplifier was the Viking Thunderbolt linear, in 1958. Source: *Tube Type Transmitters, 2nd Edition* by Eugene Rippen, 2011

4. E.F. Johnson Technologies is a subsidiary of JVC Kenwood, though they no longer make ham gear. For this and other company history:
https://en.wikipedia.org/wiki/EF_Johnson_Technologies

5. 6146 tubes are still manufactured in China. Old tubes are readily available used or as NOS.

6. True but misleading. The 6146 tube is available in several variations – 6146, 6146A, 6146B and 6146W. The 6146 and 6146A are similar. The 6146B has a higher power rating and other specification differences. The 6146W is the “ruggedized” military version. Some radio designs are very sensitive to the type of 6146 that can be used. When the Valiant was designed the 6146 and 6146A were available.
<https://www.tubesandmore.com/tech-articles/6146-family-tubes>

7. The answer to this question varies a lot depending on the wording. Bard pointed out that it can't “read” anything as it is a computer program. The inclusion of a link to the newsletter satisfied Bard that it had read the material.

8. There is quite a lot of discussion of AI plagiarism on the internet. Here is one example, there are many more if you are interested in the subject:
<https://deepai.org/publication/do-language-models-plagiarize>

9. While the statement is true, a major point is omitted. The resistor fails because it is not rated for enough power. Even if it is still functioning it should be replaced with a resistor of unit capable of 5 watts or more,

Special thanks to our Editor Bill Shadid W9MXQ for helping to point out the errors in the AI generated content.



OZARES: Ozaukee Amateur Radio Emergency Services

de: Don Zank AA9WP, OZARES Emergency Coordinator, aa9wp@arrl.net

Chat Modes for ARES



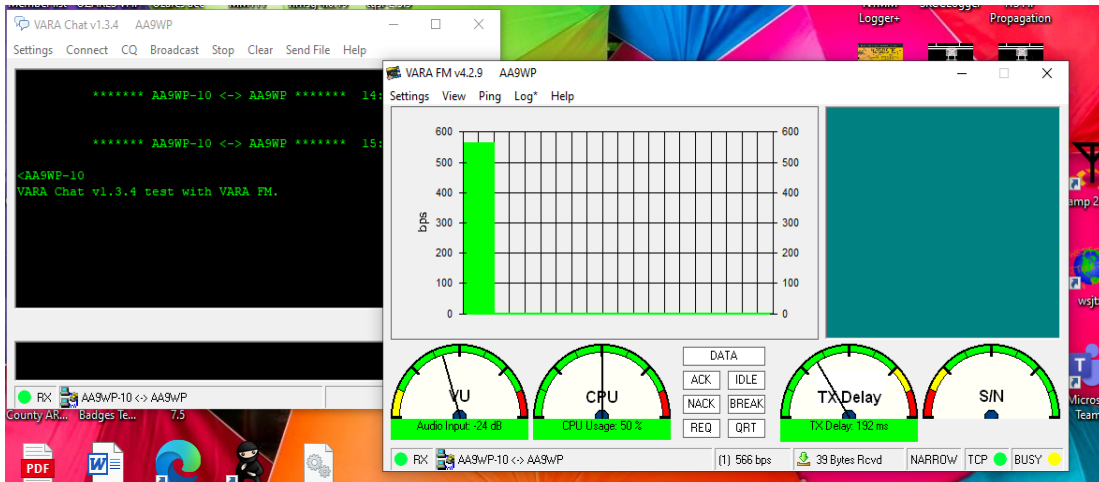
Last month was a review of mobile/portable/remote station OZARES practice net exercise. Dave, KD9JYL, while traveling north to Ozaukee from the Milwaukee Red Cross office, worked members via simplex on the Red Cross frequency of 147.420. Other OZARES operators set up remote stations from Mequon to Port Washington and tested simplex operations on VHF and UHF.

With warmer weather coming soon this type of net will occur more frequently, of course, weather permitting. In this last test it was left to the discretion of participating members to choose a location to set up operations. Future exercises may be a little more structured with portable or mobile stations assigned an operating location. This would help establish a base line among selected locations in Ozaukee County.

Our simplex exercises have used only FM phone as the communication mode, but we can expand the exercise by incorporating the various digital modes. Possible digital modes would include WINLINK peer-to-peer, Narrow Band Emergency Messaging Service or NBEMS, using the MT63-2KL mode, and VARA Chat.

VARA Chat looks like an interesting mode. It is basically a keyboard-to-keyboard communication mode. Very basic, but it can send files and a broadcast message to a group. Unlike packet, VARA uses Orthogonal Frequency-Division Multiplexing, OFDM. You need to google that if you are looking for an explanation. Just let me say that it works very well, especially on the hf bands, where noise, fading and QRM can make sending digital signals difficult. It can be set up to work using VARA HF or VARA FM.

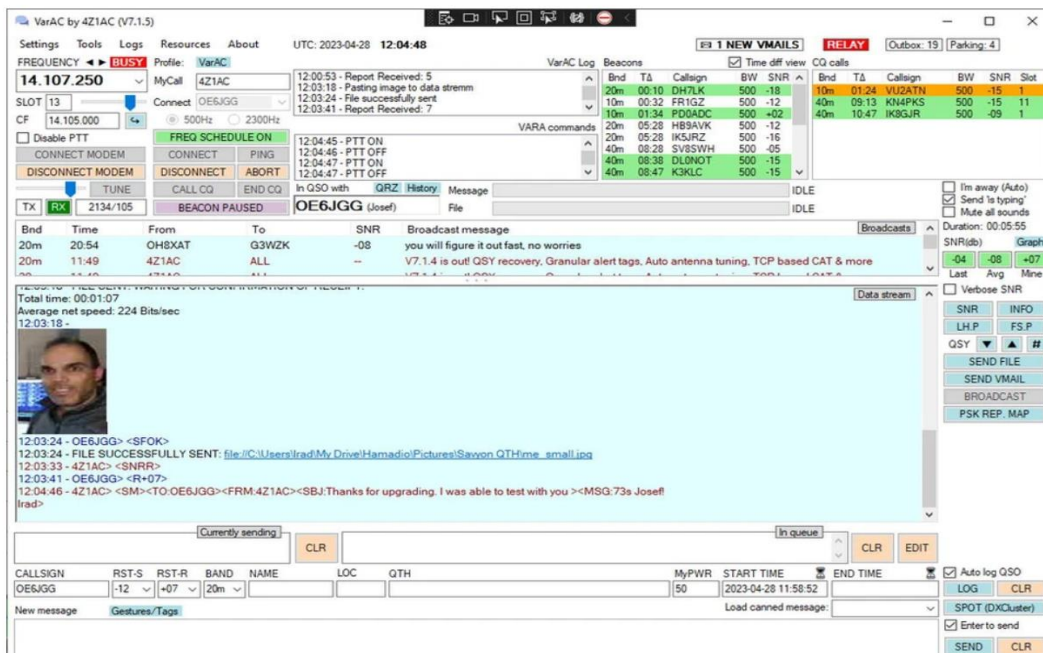
In the image below, on the left is the VARA Chat window with the received text messages in the upper window and the text enter box below. On the right is VARA FM modem software. In the settings of the VARA FM software is a selection to perform a tune test between the two stations. This will confirm connection and alert either station to adjustments that may be needed to their sound settings or sound card, such as a Signalink.



The VARA Chat software is available at the EA5HVK website, <https://rosmodem.wordpress.com/>.

Now there is also a program called VARAC that is a HF keyboard-to-keyboard communication mode. VARAC integrates with the radio for tuning, as it uses “slots,” basically specific frequencies different from the calling frequency. The chats then take place on the slot frequency. There are many bells and whistles in this program, and I have just started to learn the basics. More information and download is available at: <https://www.varac-hamradio.com/>

Below is an image from the VARAC website. As you can see, there is a good deal of setting and operating controls. But it looks like a very interesting concept, and, from the reviews, it has been greatly accepted, especially by those who have become bored with FT8.



We will continue with a review of one of the other modes listed above. Which one will be decided on the interest shown at the Ozaukee Swapfest on May 6. OZARES will have a table near the food area. A very popular corner.

OZARES Repeaters . . .

- 147.330 MHz (+ Shift) (127.3 PL)
 - 443.525 MHz (+ Shift) (114.8 PL)
-

ORC Repeaters are On the Air Awaiting Your Call . . .

- 146.97 MHz (- Shift) (127.3 PL)
 - 224.18 MHz (- Shift) (127.3 PL)
 - 443.75 MHz (+ Shift) (127.3 PL)
-

THE COMPUTER CORNER

No. 302: LINUX: FINE TUNING YOUR NEXT INSTALLATION

de: Stan Kaplan, WB9RQR, 715 N. Dries Street, Saukville, WI 53080-1664
wb9rqr@gmail.com

Here are some things to think about and tweaks you might make next time you install Linux, that will carry your abilities far beyond that available in Microsoft Windows. These suggestions are based on my own experience and also the book I reviewed in No. 301 titled *Linux Mint Essentials*.

Specifically, outlined here are steps that will permit you to isolate your personal files from the operating system, so that each time you install a new version of Linux, your personal files will remain untouched and will remain exactly where they were before you started the new installation! In the Windows world, this would be akin to changing from Windows 7 to Windows 10 without destroying all your letters, notes, and other personal files already on the disc. Of course, that can't really be done in the Windows world without copying all your files off onto some other media such as another hard drive or a DVD, but it most certainly can be done without such copying in Linux.

Before we get into the mechanics of this slick but simple change, let me compare some of the terminology in Linux and Windows.

1. This forward slash in Linux: **/** symbolizes the beginning of the file system and is the equivalent of **c:** in the Windows world. It is also labeled the **root** partition in Linux text.
2. In Linux, the **/home** folder is where your personal files are stored. If my username on a Linux computer is stan, then my personal files are stored in **/home/stan**.
3. There is also a **/tmp** folder for storing temporary files, but it is not for long term storage, because it can and will be deleted. Just leave it to Linux to use as it sees fit.
4. There is an **/etc** folder for storing system-wide configuration files like those involved in networking. Again, leave it to Linux to use as it wishes.
5. Swap Space (not a folder) is an area of your hard drive used as a sort of "scratch pad" when the memory gets full. It is similar to the Paging File in the Windows world. You should allow the swap space to be created when installing Linux; it will not take much space. It may be labeled "swapfile" in the current latest version of Linux Mint Cinnamon (21.1).

OK, now let us suppose you are about to install Linux on a machine that has 8 GB of RAM and a brand new 500 GB hard drive that you physically installed after the old one gave up the ghost. During the installation process, the "Installation Type" screen will ask you if you wish to "Erase the disk and install Linux Mint" or "Something else." Choose the "Something else." If you choose to just erase the disk and install Linux Mint, that is like just having a single **c:** partition on a Windows machine – there will be just a **/** partition on

your initial new installation and you will need to back up your personal files and copy them back, manually, after an upgrade to the next version. Otherwise, they will be lost. Note that this backup and reinstall is not necessarily a bad thing, but it might not be as slick and convenient as what we are aiming for here.

So, what is the aim? Of the 500 GB drive, about 465 GB will be usable and available to you during the setup (see the tabulation after this paragraph). The first item is `/`, which you will remember is the **root** partition or the same as **c:** in the Windows world. Make it 40 GB in size. You don't need nearly that much initially, but 40 GB will leave plenty of space for future expansion. That will leave about 425 GB left. Next, create a swapfile, and the rule of thumb among experts seems to be to make it equal to the amount of RAM you have, plus one more GB for "good luck." So, create the second partition 9 GB in size, leaving 416 GB unallocated. That remaining 416 GB should be all designated for the home partition (`/home`), which is where all your personal stuff resides. So, we have:

500 GB	465 GB usable space
root (<code>/</code>)	<u>40 GB</u>
	425 GB
swapfile	<u>9 GB</u>
	416 GB

So, you will have 416 GB out of 500, or about 82% of all available hard drive space left for `/home`, where all your personal files reside. That's not bad at all. Moreover, when you next update from, let's say 21.1 to 21.2 (coming in late June 2023, by the way), you will tell the Linux install disk NOT to erase `/home` where all your personal stuff resides. So, the total install should go somewhat quicker, and all your personal stuff will already be in place.

On the other hand, don't let this convince you to not to make a backup of your stuff! You know Murphy's Law will tend to leave you alone if you make periodic backups but will certainly bite you in the rear if you fail to do so! Always make periodic backups of your personal files. Especially now that it is easier because your personal stuff is isolated in the `/home` partition. A backup of this entire partition containing your stuff should take far less time than trying to copy the whole 500 GB drive.

I have not given you step-by-step detailed items to follow in this procedure, but rather, a general goal-oriented path. You can refer to the book *Linux Mint Essentials* for the step-by-step details. Have fun! Remember, so long as you have made a good backup of your personal stuff, if you mess up during your try to implement these procedures, it will only take you on the order of an hour to wipe the drive and try it again, or even just let the installation disk do it all by selecting "Erase the disk and install Linux Mint." It all depends upon your making an adequate backup, which is always a key! Happy Computing!

On The Air Activities!

de: Gary Sutcliffe, W9XT



The big event this month is, of course, the ORC Swapfest on Saturday, May 6. I'm sure you all have your tickets and possibly tables. The club can use volunteers to help out with various tasks. In case you live in a cave and didn't hear about it, there is a SwapFest flyer elsewhere in this newsletter.

Hamvention®

The Hamvention is also this month. I'm sure there a few ORC members will be attending. The Hamvention runs May 19-21. In addition, several unofficial events occur on Thursday, May 18. One is Contest University. I attended it once, and it was fantastic. Another is Four Days in May, a QRP event. I know QRP'ers who attend this one too.

I was researching the talk schedule, vendors, etc., and saw the ARRL had an app. It gives you the talk schedule, location of vendor booths, etc. It looked useful.

So, I downloaded it to my Android phone. Then it listed the permissions it wanted. It said it shared information with third parties and wanted access to your personal information, contact list, photos, videos, messages, etc. No way was I going to agree to that! So, I removed it before activation. So, if you decide to download the app, consider the risk to your personal information.

King Charles Coronation

If you follow that sort of thing, you know that the official coronation of King Charles and the Queen Consort of Great Britain will occur over the weekend of May 6-7. Expect a number of special event stations from the UK and Commonwealth countries. The RSGB flagship station will be GB23C. Look for British stations signing /23C, and GB call signs with KC, HCC, KCC, etc. suffixes. VP8KCC will be on from the Falklands. I expect other Commonwealth nations will have some special event stations.

Hams in the UK can operate with their calls but with a GR prefix or their regular call /23. Note that FT8 won't support the /23 identifier. There are awards for working the GR stations. Work ten, and you are a serf. You can work your way up through a knight, cleric, noble, or even a royal by working more. <https://rsgb.org/main/the-coronation-of-the-king-and-the-queen-consort/>

WAC

One of the first DX awards new DXers get is the Worked All Continents (WAC). This award is sponsored by the IARU – International Amateur Radio Union but is handled by the ARRL. You must work and confirm contacts with North and South America, Asia, Africa, Europe, and Oceania. You don't need to work Antarctica. There is also a 5 band WAC for working the continents on 80, 40, 20, 15, and 10 meters.

One morning in late April I was on 10 meters. We had a long path opening into Asia, which is a fun path when it happens. This was on FT8, and I decoded every continent except Oceania. It got me thinking about how quickly it would be possible to get WAC. It should be possible to do it very quickly by using different bands. But what about a single band? I did it once in about a half hour back in 2014. I was operating on Sunday evening on 30-meter CW as W1AW/9. The band was very quiet, and of course, a lot of stations wanted to work me. That made it easier.

How long would it take to do it on a single band with just a plain old W9 call? If you get an opening to all parts of the world, see how quickly you can work them all. Let me know how you do. Let's also include working WAC on any combination of bands in a short period of time.

The next few weeks should be a good time to try it. Conditions should be pretty good, and 30-, 20-, and 17-meter bands should be open to large parts of the northern hemisphere with longer days. Sunset and sunrise times plus or minus a couple of hours should be best for these bands.

DX

Three Brazilian hams are venturing to the San Andres Islands in May. They will be using HK0/home_callsign. They should be there by the time you read this until May 20. I mentioned this one last month.

Last month I also mentioned the DXpedition to the Spratly Islands. The operator came on per schedule. I have heard him, but so far, all I heard him is on 20 meters, and he was only working Japan despite pretty good signal strength to the US. That is very frustrating. From that part of the world, you can work into Japan almost 24 hours per day. Our openings can be much shorter, and signals are often much weaker. It has been impossible to break through the JA wall even by big gun US stations.

Good DXpeditions consider propagation to other parts of the world and stand by for them when the band is open. Sometimes you will see stations in Africa or the Indian Ocean working in Europe and ignoring the rest of the world. Another common occurrence is Eastern Asia or the Western Pacific working Japan when the sun rises in North America. Openings on 80 or 160 meters might only last 10 or 15 minutes while the eastern end of the path is at sunrise. There is plenty of time for them to work Japan after the sun is up in California and the western states.

The DX Rebel Group will continue its sweep of Kiribati. They were operating from West Kiribati in April as T30UN and were very active. They were supposed to still be there until May 12, but their generators failed, and they shut down early. They will head to Central Kiribati, T31TT, June 1-10. Yes, they are getting new generators.

Contests

There is not much contest activity in May. The big one is the CQ WPX Phone contest. I covered the CW version in the March issue. Basically, you work everyone, and multipliers are call sign prefixes. The points for each QSO vary depending on their location and the band you work them on. If you are interested in this contest, I suggest you review the rules first.

The one big downside to this contest is that it is the Memorial Day weekend. If the weather is nice, I am not all that motivated to spend it indoors. For me, that weekend is reserved for working in the garden if the weather cooperates.

The first big contest in June is the ARRL June VHF Contest on June 10-12. You work everyone on 6 meters and up. You can only work a station once per band, regardless of mode. You send your grid as the exchange.

This contest is during the prime season for 6-meter sporadic E (Es) propagation. If we get openings, you can work a ton of stations on the band. Of the three ARRL VHF contests, this is by far the most popular.

If you operate the VHF contest, and 6 meters opens, **PLEASE get off FT8!** FT8 is a great mode when conditions are marginal and don't support CW or SSB. But if we get an opening, you can make 3-4 contacts on CW or phone for everyone on FT8. Actually, it is probably more than 3-4. When everyone stays on FT8, the band gets so crowded that interference requires retries, and the time to make a contact expands. Often you end up not knowing if you are in the other guy's log because you didn't get the 73.

Operators only using digital modes have become a problem in VHF contests, and the ARRL has been looking into solutions. So, there is a rule change this year. You can work Analog-Only class, which is CW/SSB/FM. Or you can work all modes, which includes the analog modes plus the digital modes. So, you will be handicapped if you only operate FT8.

But FT8 is the best mode when conditions are marginal. Ensure you go to the advanced setting and check the special operating activity and NA VHF boxes. If you don't, FT8 won't send the grid as the exchange, which is required for the contest. That will slow things down and may cost you some contacts.

That wraps up May. On the air activities are down, but there are plenty of ham radio events to attend. See you at the swap fest!

W9XT's Contest, Operating, DXpedition, and Special Event Picks for May and Early June 2023

W9XT's DXpedition picks for May and early June 2023					
QTH	Dates	Call	Bands	Mode	Link/notes
San Andres	May 2-20	HK0/PY	80-6	CSD	
Spratly	-May 9	DX0NE	160-6	CSD	
Central Kiri-bati	June 1-10	T31TT	160-10	CSD	

Modes: C = CW, S = SSB, D = Digital (may include RTTY)

W9XT's contest picks for May and early June 2023					
Name	Start	Length	Bands	Mode	Link
CQ WPX	Mar 25, 0000Z	48 work 36 max	160 + HF	SSB	https://cqwpw.com
ARRL VHF	Jun 10, 1800Z	33	6M and up	Any	www.arrl.org/june-vhf

Dates/Times in UTC. Subtract 5 hours from UTC to get local (CDT). HF = 80, 40, 20, 15, 10 Meters

W9XT's operating & event picks for May and early June 2023			
Event	Dates	Details	Link/notes
ORC Swapfest	May 6		Flyer elsewhere in newsletter
Coronation	May 6-7		https://rsgb.org/main/the-coronation-of-the-king-and-the-queen-consort/
Hamvention®	May 19-21		https://hamvention.org

Remember: Although not in early June, Field Day is later in the month (27th and 28th). Field Day is always a big event for the ORC. Stay tuned for details.

Upcoming Events

de: Tom Trethewey, KC9ONY

5/19/2023 – Milwaukee

“Not Makin’ Dayton” tailgate style flea market at HRO Milwaukee

<https://www.w9rh.org/club-events/tailgate-ham-fest/>

6/03/2023 – Green Bay

Green Bay Mike & Key Club Hamfest

<http://www.k9eam.org/>

6/04/2023 – Mendota, IL

Starved Rock Radio Club Hamfest

<http://www.w9mks.org/hamfest/2023-srrc-mendota-hamfest/>

6/10/2023 – Burlington

LAARC WI9ELK / LRA KR9RK FreeFest

<http://www.arrl.org/hamfests/laarc-wi9elk-lra-kr9rk-freefest>

6/11/2023 – Wheaton, IL

Six Meter Club of Chicago Hamfest

<https://hamfest.k9ona.com/>

6/17/2023 – Neenah

Fox Cities Amateur Radio Club Sunshine Swapfest

<https://www.fcarc.club/sunshineswap.php>

7/08/2023 – Milwaukee

South Milwaukee Amateur Radio Club Swapfest

<https://southmilwaukeearc.org/event/south-milwaukee-swapfest-2023/>

8/07/2023 – On the Air

USA National Lighthouse Day

<https://uslhs.org/fun/lighthouse-festivals-events/national-lighthouse-day>

8/19/2023 – Port Washington

International Lighthouse Lightship Weekend

<https://illw.net/>

Vintage Amateur Radio

de Bill Shadid, W9MXQ



Previously, we covered the first of Kenwood's long (and continuing) line of TS-900 series top line transceivers. In the beginning, that model was the TS-900 that came out in 1971, covered in an earlier article. It was part of Trio-Kenwood's entry into the North American market under the auspices of Henry Radio, of Butler, Missouri. Kenwood products were distributed by Henry Radio via the major amateur radio dealers in the United States and Canada at that time.

In the first article on the TS-900, we discussed four distinct models of the transceiver. The Japanese always had at least two versions of a radio – that being a 100-watt output, or more, version accompanied by a lower power version for entry

level license holders in the Japanese market. We saw those low power versions only in rare cases.

Here is the excellent TS-900 HF Transceiver and its accessories as is “lives” its life here at W9MXQ. It is, a TS-900 (no suffix) radio:



Left to Right

PS-900 Power Supply, TS-900 Transceiver, VFO-900 Remote VFO

Shown with – Left to Right

Kenwood MC-50 Microphone, Kenwood HS-6 Headphones, Johnson Speed-X Key

W9MXQ Photo

As clearly noted in the earlier article, below is a listing of the four known variants of the TS-900 that have come from my reviews of old articles and Operating Manuals. Here I have added more specifics not mentioned in the earlier article.

- TS-900 – Finals are a pair of 6LQ6/6JE6 vacuum tubes.
 - North American Market Version.
 - This radio is in the picture, just above – and is the one I own and the subject of an earlier article on the TS-900 Transceivers.
- TS-900S – Final is a single 4X150 vacuum tube.
 - Trio branded so not made for North America
 - This radio is the main subject of this Update Article.
 - Rusty Cline, N9DRC, of Rio, Wisconsin owns the TS-900S in this article. It was refurbished by Jan Servaites, N8CBX, of Kettering, Ohio, specifically for Rusty.
- TS-900X – Final is a single 6146A/B vacuum tube. (See picture, near the end of this article.)
 - Japanese home market radio for entry level licensees (or QRP use).
 - I have never seen an example of this model.
- TS-900D – Finals are a pair of 6146A/B vacuum tubes.
 - Unknown market location focus. But did exist in the USA.
 - I once had one of these in my possession. It was covered in detail in an earlier article.

With my recently acquired data format (PDF) Japanese language Trio Operating Manual covering the TS-900S, TS-900X, and TS-900D plus my original English language TS-900 Operating Manual, I can show the power capability of the transceivers (plus other specifications for all versions. These are Trio-Kenwood published numbers.

Power Input by TS-900 Version:

Version ¹	Final Amplifier Tube(s)	Power Input		
		SSB	CW	FSK
TS-900	(2x) 6LQ6/6JE6	300	200	100
TS-900S	(1x) 4X150	240	240	100
TS-900X	(1x) 6146B	20	20	20
TS-900D	(2x) 6146B	160	160	80

It is interesting to note that even in the early days of Kenwood and its TS-9xx series radios, they went after the best possible signal for SSB – that is spectral quality. Kenwood in later versions of the TS-9xx line (TS-930 was next, followed by the TS-940) they were early believers in using a higher collector voltage on the solid-state finals. In those two radios and their near identical solid-state amplifiers used 24-VDC instead of the usual 12-VDC. That has progressed today to Icom, Kenwood, and Yaesu using 48-volts in that same application for their 200-watt output premium radios.

In the case of the TS-900, comparing it to the lower cost TS-511S model, marketed at the same time, Kenwood showed significantly different expectations of the same 6LQ6 final amplifier tubes:

Version ¹	Final Amplifier Tube(s)	Power Input		
		SSB	CW	FSK
TS-900	(2x) 6LQ6	300	200	100
TS-511S	(2x) 6LQ6	500	300	Not Shown

So, what triggered this update article on the TS-900 Series Transceivers? Well, it is an interesting story, with good friends, and a universally admired Kenwood product.

Rusty Cline, N9DRC, is a somewhat regular participant in the Drake Technical Net on Sunday afternoons (go to <http://www.wb4hfn.com/DRAKE/DrakePageHome.htm> for details of the net schedule). On the net, Rusty mentioned he had a Kenwood TS-900S that needed work to get on the air properly. As I recall, it worked but had developed problems. With Rusty on the Drake Technical Net that day, fellow friend and collector, Jan Servaites, N8CBX, and I talked to Rusty about the problems. The three of us decided that a trip to N8CBX for review was in order. Subsequently, the radio was sent, repaired, aligned, and then returned to N9DRC. The repairs by N8CBX are obvious in contacts with N9DRC and his beautiful sounding TS-900S!!

Jan is adept in refurbishing a wide variety of radios, including a complete set of the Kenwood TS-900 Transceiver, VFO-900 Remote VFO, and PS-900 Power Supply that I sold to him for his refurbishing and use. That set duplicated the complete TS-900 station at W9MXQ right now – a result of my own refurbishing project. When I bought the TS-900 station that is still here, I also bought a complete second set that now is with Jan. Jan and I talked on the air with our respective TS-900 stations via the Kenwood Hybrid Net. (See <http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm> for details of the schedule of the two different Kenwood Hybrid Nets.) Jan, N8CBX, contributed pictures used in this article – and those are credited to him. I inserted my own text for the pictures.

It would appear, from personal experience, that there are at least three TS-900 Series Operating Manuals available:

- Kenwood TS-900 Operating Manual
 - Source: Kenwood USA Website
 - https://manual.kenwood.com/en_contents/search/
 - English Language – Only TS-900 Covered
 - I have a reprint manual and an original manual.
- Kenwood TS-900S/TS-900X/TS-900D Operating Manual
 - Japanese Language – Covers TS-900S/TS-900X/TS-900D.
 - I have a full copy from the personal collection of Jan Servaites, N8CBX
- Kenwood TS-900D/TS-900X Operating Manual
 - Japanese Language – Covers TS-900D/TS-900X.
 - I have seen one in an eBay advertisement for a TS-900D Transceiver.

I also have a reprint Service Manual for the TS-900 (plus the VFO-900, PS-900, DS-900). It is very handy for servicing and refurbishing these radios. Since the circuitry for all models is the same right up to the Driver stage, this Service Manual suffices.

There may be versions in more languages in print. If any reader knows where one can be found, please let me know. (W9MXQ@TWC.com) Beware when looking for reprint manuals for the TS-900 – at least in North America the resellers sell excellent copies of the TS-900 Operating and the TS-900 Service Manuals. While some are described as “TS-900S.” They are not – all I have seen are TS-900 only. This is tied to Kenwood’s lack of consistency at the time in the way the suffix was assigned to model numbers.

While the premier version of the TS-900 to Americans was the TS-900 – with 6LQ6 finals, the premier version in Japan was the TS-900S, with a single 4X150 Radial Beam Tetrode. The other versions, especially the dual 6146B version (TS-950D) that appeared in North America were brought home because of the ease of getting and using the 6146-format tube.

Japanese home market versions exist here in the USA for reasons that include:

1. An American stationed in the Armed Forces in Japan brings a local market radio home when he returns.
2. A Japanese ham is assigned to work in the USA and brings his radio.
3. Gray market purchase – rare in the time of this radio but tied to an American or Canadian buying a Japan home market radio through a third party.

Here is a picture of the TS-900S model in operation at N9DRC, in Rio, Wisconsin:



Trio (Kenwood) TS-900S Transceiver HF Station at N9DRC

Left to Right: Heathkit SB-200, Kenwood VFO-900, PS-900S, and TS-900S. Also note Heathkit HD-1418 Audio Filter and Kenwood DG-5 Digital Readout for TS-900S.

N9DRC Photo

The TS-900S model has a vertical brushed bronze color as compared to the TS-900 on the first page of this article that is vertical brushed silver in color. The radios differ in the final amplifier circuits. The PS-900 and PS-900S differ in voltage requirements for the tubes in the final amplifier of their respective radios. The VFO-900 and VFO-900S would

differ only in front panel color. I suspect that in all versions of the VFO-900, the electronics would be identical with only cabinet markings and color to differentiate them.

The difference in the models is in the final amplifiers. Here are pictures to show those differences . . .



**Trio (Kenwood) TS-900S HF Transceiver PA Compartment
Outer Compartment Shields Removed – Front Panel to the Left**

The 4CX250R final amplifier tube (almost invisible in this view) is clamped into the Eimac Air Systems Socket with the pressurized blower housing shown under the chassis, below the socket. See also the sheet metal cover, below the blower housing that allows the entry of air in from the bottom. That cover seals the bottom area of the pressurized air compartment. See the temperature sensor switch – glass tube – just above the tube. This is Rusty, N9DRC's, radio after Jan, N8CBX, did his work.

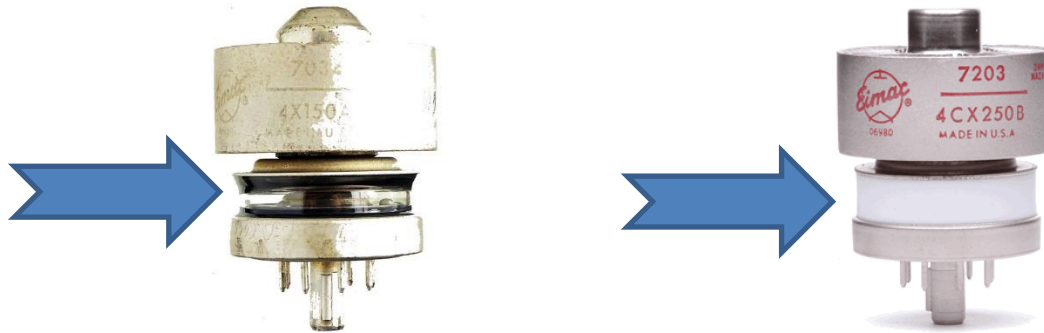
N8CBX Picture

When Jan, N8CBX, did his refurbishing of the radio, he discovered that the 4X150 final was weak – needing replacement. It is common to replace the no longer available glass seal 4X150 with the more modern, and available, ceramic 4CX250B or 4CX250R Tetrode. They are pin for pin and physical size interchangeable devices. They are plug-in equivalents, electronically – with the benefit of the 4CX250B/R having close to double the plate dissipation of the 4X150 (250-watts vs 150 watts, respectively).

Another case in point supporting this replacement was done in the Collins Gold Dust Twins. The KWS-1 Transmitter in those twins used a pair of 4X150 Tetrodes when Collins introduced the radio in 1955. When replacement became necessary, it was always done with a pair of 4CX250B's. To be fair to Collins, the 4CX250B was not available when the

KWS-1 was initially released. Indeed, KWS-1 Transmitters are running to this day with their original 4X150 final amplifier tubes. Of the three KWS-1 Transmitters I have owned, only my current one has 4CX250B finals. So, while both are good tubes, the extra dissipation, the more durable ceramic seal, and availability made the move to the 4CX250B (or the 4CX250R) very desirable.

Eimac 4X150 and 4CX250 Tetrode Tubes Compared



Eimac 4X150 Tetrode (4X150A shown)
Blue Arrow shows Glass Seal

Eimac 4CX250B or 4CX250R Tetrode
Blue Arrow shows Ceramic Seal

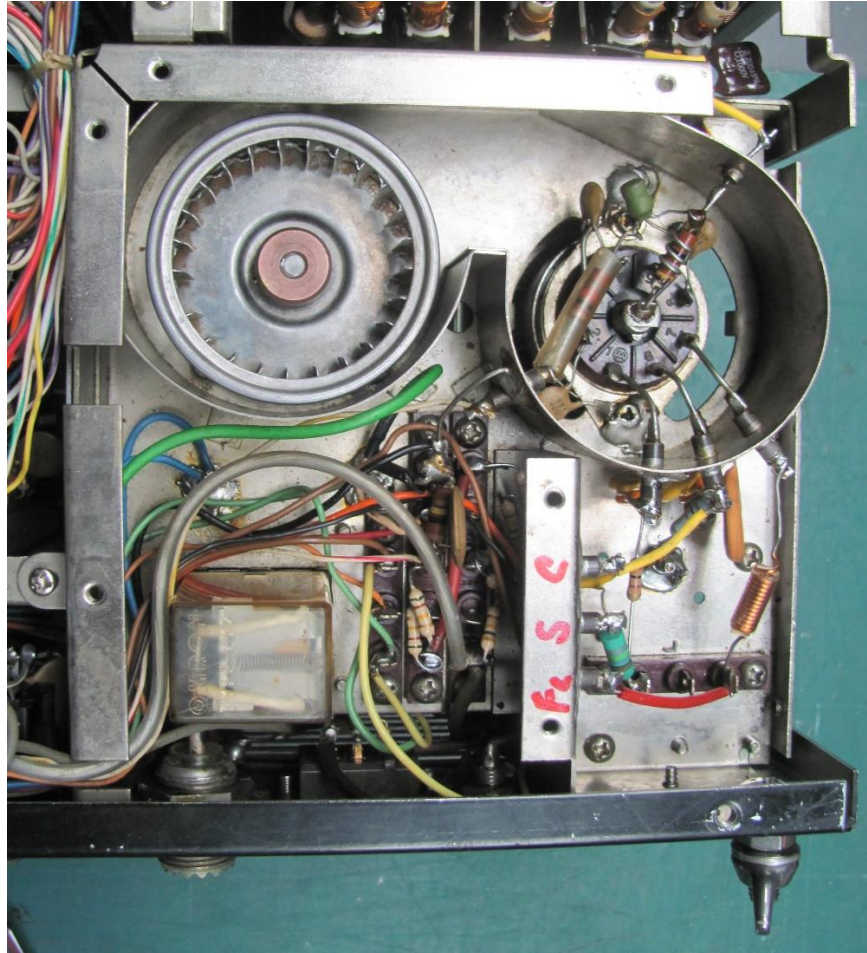
Often, the glass seal 4X150 is replaced with the more modern ceramic 4CX250B or 4CX250R Tetrode. This was a common replacement for radios of the time. The glass (meaning fragile!!) 4X150 was easily damaged. The ceramic 4CX250B and 4CX250R are economical, available, and much more durable.



Trio (Kenwood) TS-900S HF Transceiver PA Compartment. This is a top view with the Front Panel toward the bottom of the picture. Compare this to the side view – above. Note the glass sensor above the tube, also visible in the above picture. This shows another view of the heat sensor, above the tube.

N8CBX Picture

Now, another view of the power amplifier area, this time from the bottom.



**Trio (Kenwood) TS-900S HF Transceiver PA Compartment Bottom View
Bottom Cover Removed – Front Panel to the Top of the Picture**

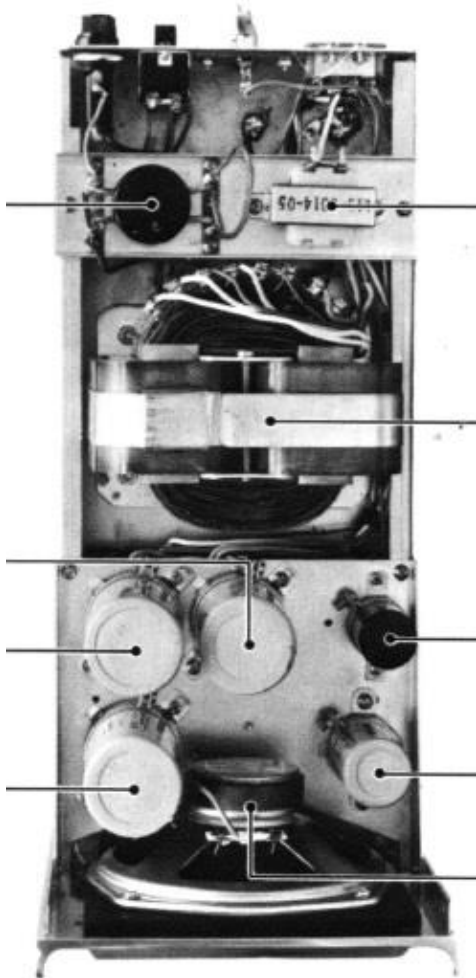
N8CBX Picture

See the shaped, curved, enclosed area toward the top of the picture. On the left is the squirrel cage fan. Air is drawn in from the bottom of the fan blade enclosure via an opening in the bottom cover. The bottom cover seals the air flow compartment. Air flows through the Air System Socket at the upper right and out through the fins in the final amplifier tube. Air must be running whenever the tube filament is powered. If the fan is not running, then power must be removed from the radio to avoid destroying the tube.

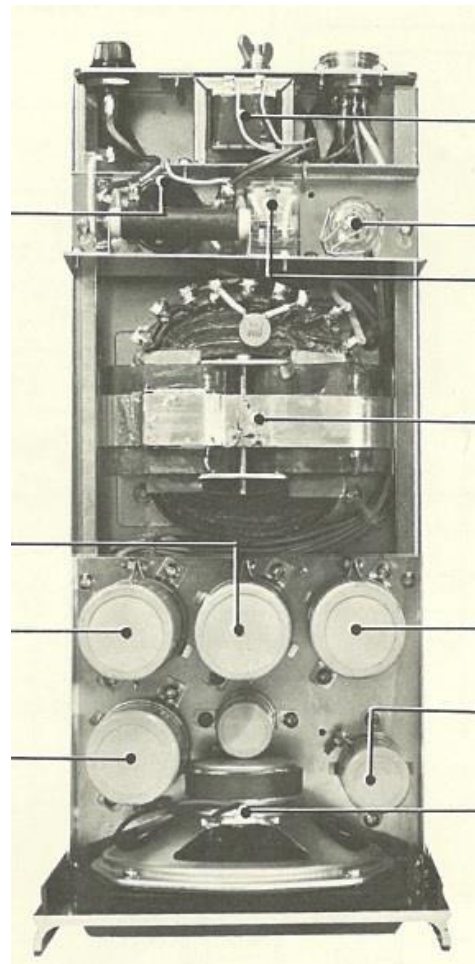
One difference between models of this radio is in the individual power supplies. There is a considerable difference in the plate voltage between the TS-900 (6LQ6 Finals) and the TS-900S (4X150 final). Those voltages are 800 VDC and 1450 VDC, respectively.

Note: The TS-900D and TS-900X plate voltages for their 6146B finals would be the same as each other – but may be different again from the TS-900 and TS-900S. I do not have that information on the PS-900D at this time.

Here are physical details on the PS-900 and PS-900S AC Power Supply and Speaker Consoles:



**PS-900D Top View – Cover Removed
Speaker Toward the Bottom
Kenwood PS-900D Operating Manual**

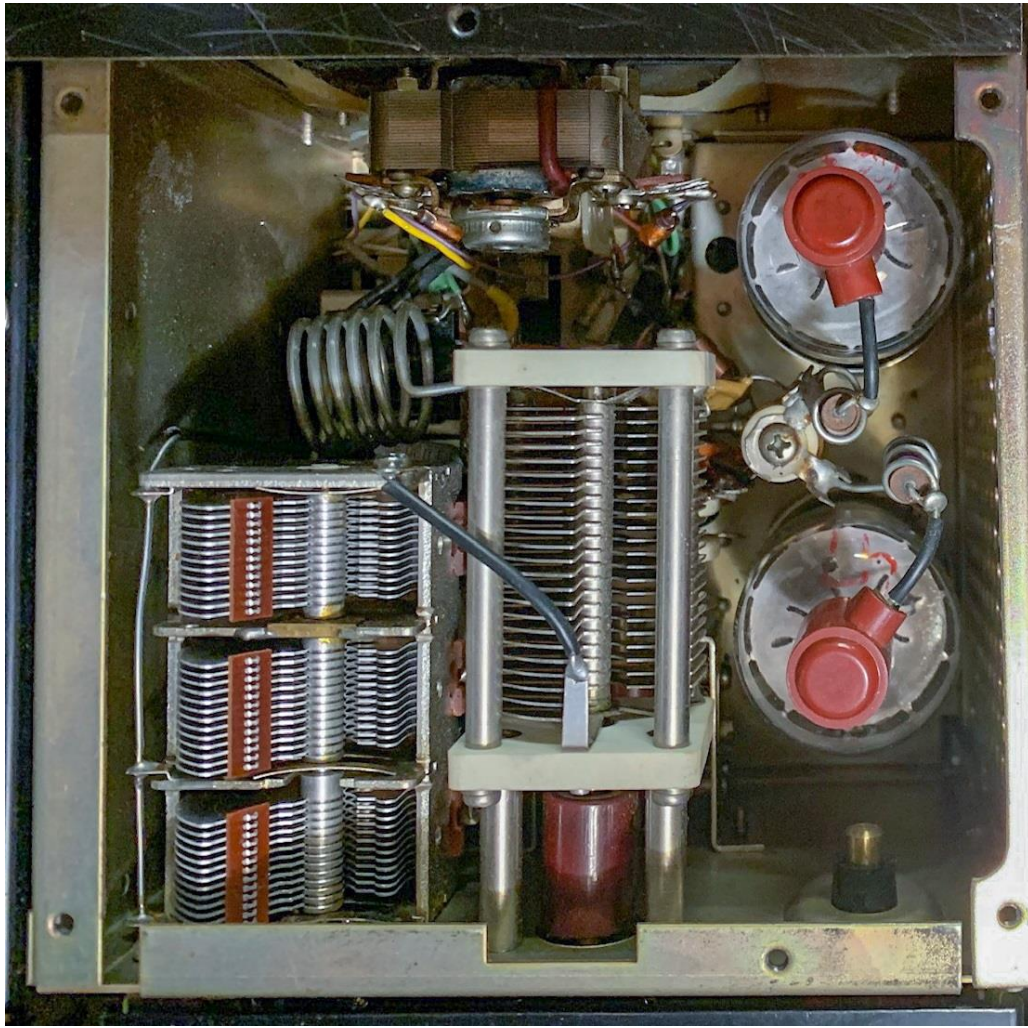


**PS-900S Top View – Cover Removed
Speaker Toward the Bottom
Trio PS-900S Operating Manual**

A consideration between these power supplies is an added electrolytic capacitor on the HV filter to accommodate the higher plate voltage developed in the PS-900S over the PS-900D. Also, the PS-900S adds thermal timer circuitry to prevent DC Plate Voltage being available until the final filament is warmed up properly.

The complexity necessary here for using traditional transmitting tubes, like the 4X150, must have concerned Kenwood for export markets. The sweep tube and 6146 based tube designs removed the need for plate voltage application timing, critical cooling even in stand-by, tube and ventilation costs, led this to a one-off experiment – never to be repeated.

Here is the layout of the final amplifier compartment for the TS-900 (2x 6LQ6 finals) and for the TS-900D (2x 6146B finals) – these installations look identical from the perspective shown in these pictures:



Trio (Kenwood) TS-900 HF Transceiver PA Compartment. This is a top view with the Front Panel toward the bottom of the picture.

W9MXQ Photo

Compare this picture with the top view of the TS-900S PA Compartment, earlier in this article. Now look at the pictures below showing the Cooling Fan typical of the TS-900 and TS-900D models on the left. On the right, see the rear panel view of the TS-900S showing the area where the Cooling Fan is placed on the TS-900 and TS-900D.

Recall that the cooling fan in the TS-900S is in the chassis – not on the rear panel. The TS-900S uses the forced air cooling through the Eimac™ Air Systems Socket as shown in pictures above. It is important to understand that tubes such as the 4X150, 4X150A (which was mostly likely the tube originally in the TS-900S), the 4CX250B, or the 4CX250R must have the air-cooling system working even when just the filament is energized. These miniature tubes cannot have any operating voltage present without cooling. If you turn on power in the TS-900S, you must hear the fan running. If you do not, you must immediately remove all power.



Rear Left View of the TS-900X
Shows air escape grill from blower.
 Schulman Auction Photo



Rear Left View of the TS-900
Shows fan on the rear of the cabinet.
 W9MXQ Photo

The restriction for applying power does not apply to the glass envelope 6LQ6 or 6146B tubes present in the other TS-900 models (TS-900, TS-900D, or TS-900X).

Now for some additional pictures . . .



Kenwood Photo

Trio TS-900X Transceiver shown with PS-900 Power Supply
 (Note "Trio⁴" branding – these were not for the USA Market)

Above is a picture of the home market TS-900X – the Trio branded 20-watt input radio for the low power HF licensees in Japan. Like the TS-900S, this radio appears in the vertically brushed bronze finish. As referenced above, this radio has a single 6146B final amplifier tube. The PS-900 is intended for both the TS-900D and the TS-900X. However, as also mentioned earlier, I cannot confirm that at this time. It is my understanding that this radio could be field upgradable to add the second 6146B and thereby have the same power specifications of the TS-900D. This is not confirmed and only provided by word of mouth.

Finally, here is a picture of the TS-900 station of my friend, Jan Servaites, N8CBX, who is mentioned earlier as repairing this radio. This is, I believe, Jan's original TS-900 – not the one that I sold to him. This is a nice setup, Jan, with that also nice Kenwood TS-940S. Jan and I have become friends over the air, telephone, and email. We have never met in person – but hope to rectify that in the future!



The Kenwood TS-900 and TS-940S Radios at N8CBX

Left to Right:

Kenwood PS-900 Power Supply, VFO-900 Remove VFO, TS-900 HF Transceiver
Shown with Shure 444D Microphone and Kenwood TS-940S HF Transceiver

N8CBX Photo

This does not end the saga of the TS-900S Transceiver or of the maintenance and restoration of other TS-900 versions. Stay tuned for Part 3 of this series on the TS-900, TS-900S, TS-900D, and TS-900X next month when we will talk about:

- My work with a frequent problem shared many of the TS-900 radios, several versions, which must be corrected before alignment can be safely completed.
- A step-by-step checklist review of the things that Jan Servaites, N8CBX, completed in his work to restore the proper operation of the Rusty Cline, N9DRC, Kenwood TS-900S Transceiver.

So, to my friends reading this article, look for Jan, N8CBX, Rusty, N9DRC, and me, W9MXQ, on the bands and see if we happen to be running our Kenwood TS-900 Transceivers of one flavor or another. The communication with Rusty, N9DRC, happened just after the closure of the Drake Technical Net, on 18 December 2022. Net control that day was Mark Gilger, WBØIQK, of Doylestown, Ohio.

This article would seem to move between brand names “Trio” and “Kenwood.” This mirrors the confusion Kenwood’s marketing seemed to wrestle with at the time. For the most part and for the sake of discussion, I use them interchangeably according to how the radio’s panel is labeled. At the time, Trio was the marketing name in Japan and Kenwood

was the marketing name in the rest of the world. Simple? Well, not so much. Variations in that exist through time. For a while, Kenwood USA, when it was first formed, showed reference to “Trio-Kenwood” as the company’s name.

I appreciate that you read my articles. As mentioned above special thanks go to Bob, W9DYQ, for his proof reading. Remember that I am open to questions and comments at my email address, W9MXQ@TWC.com.

Notes:

¹ From Specifications in the Trio-Kenwood Operating Manuals of the noted models.

² The adhesive was sourced from:

https://www.amazon.com/Anticlog-Adhesive-superglue-Cyanoacrylate-Plastics/dp/B0BCL2KT5Y/ref=sr_1_2?keywords=GH1200&qid=1682470278&sr=8-2

W9MXQ ©2023

Kenwood Hybrid (Solid State with Vacuum Tube Power Amplifier) Transceivers in the North America Amateur Radio Market . . .



Kenwood TS-511S
First Marketed: 1971



Kenwood TS-520(x)
First Marketed: 1973



TS-530S
First Marketed: 1981



Kenwood TS-820(x)
First Marketed: 1976



Kenwood TS-830(x)
First Marketed: 1980



TS-900(x)
First Marketed: 1973
All Pictures Here: W9MXQ

The TS-511 (and it’s international – outside USA – sister, the TS-515) were what we today call, “honorary hybrids.” Actually, they had ten vacuum tubes. Still, it was a major step in the solid-state revolution of the 1970’s in amateur radio equipment. Also, there is the TS-511’s close relative in the USA, the private label, Trio-Kenwood manufactured, Allied Radio A-2517. So many models – so little space!!

Ozaukee Radio Club Minutes of Membership Meeting. 04/12/2023

de: Ken W9GA, Secretary

The monthly ORC meeting occurred at the senior center as we have returned to live in-person meetings, along with a streaming version held via Zoom. ORC President Bill K9GN began the meeting at 7:30 PM, with actual members attending, a go-around was conducted. Zoom attendees were also in attendance and were introduced individually. ORC is still in need of a member to help Tom KC9ONY with the technical committee to stream the meetings; and still have a need for a 2nd V.P. W9IPR Tom, has raised the concern that shipping rates for packages have soared; he had to pay \$240 to ship a radio in to a tech for a \$200 repair.

Program:

Our presenter was Mike KC9GCN, who outlined the application of RHR, or remote Ham Radio. This is a service available to hams who might not otherwise have the ability to assemble a home station. You pay a yearly fee and have access via the internet to a selection of ham stations to which you can connect and operate, via a minute-by-minute fee. Mike added some details, such as access for free by STEM students, and the variety and caliber of the stations that are available.

50/50 Raffle: This was won by Dragi [a guest w/no call]; winning an award of \$23.00

Scholarship Auction:

Stan WB9RQR held a short auction; included: ARRL handbooks, shop light, HB tuner, cabinets. Stan then announced that he would be retiring as auctioneer, effective immediately.

Committee reports:

[there were no second VP and no RPT VP reports.]

1st VP: Jeananne N9VSV has located a new vendor for ORC badges, possible to provide embroidered shirts and jackets, more to follow. She is also working on a survey for the members.

Treasurer: Gary N9UUR provided reports on the tables. Recent bills paid include our webhost and more equipment for streaming. The March treasurers' report was accepted; motion by KC9FZK; 2nd by WB9AZH & carried.

Secretary: Ken W9GA reported that the April 2023 minutes are posted, a motion to accept was made by K9QLP; 2nd by N9VSV & carried.

Scholarship/STEM: The committee now has a draft charter for the ORC participation in STEM..

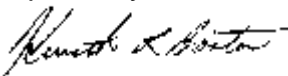
Tech committee: Now has some better audio equipment.

OLD business: The next FD planning meeting is planned for April 25 at 6:30 PM, held by zoom.

NEW business: Tom W9IPR wants help for a load out prior to the spring hamfest; meet at the barn on Friday afternoon May 5, and can assist at ORC table Saturday May 6 if possible

Adjournment: WB9AZH moved to adjourn, WB9RQR 2nd, motion carried; time end was 8:53 PM. There were 19 in-person attendees, 11 Zoom attendees.

Respectfully submitted,



Kenneth Boston W9GA, Secretary



Upcoming ORC Monthly Meeting Programs

de: Pat Volkmann, W9JI

- May – Bill, W9MXQ & Pat, W9JI – Video: “Collins: The Lost Decade” and a brief video tour of a huge Collins private collection
- June – Ken, W9GA Field Day
- July – Jeananne, N9VSV – Collecting Amateur Radio Themed Stamps
- August – Field Day Reports from the Club and members
- September – Bruce AC4G – Reporting on a DXPedition
- October – Janice, KA9VVQ and Bruce, W9FZ – “Getting on the Air and Having Fun with Roving!”

Please consider sharing some of your experiences with the rest of us. If you have an idea and would like some help putting a program together let me know.

Creating a Presentation

Many of our presenters use Microsoft’s PowerPoint to organize and present their information. If you don’t have access to or aren’t familiar with Power Point there is an alternative. The Open Office package contains Impress, which is similar to PowerPoint. Impress is easy to use and available at no charge. You can check out OpenOffice here: <http://www.openoffice.us.com/>

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.

Not sure how to approach talking about a subject? Never used PowerPoint? No problem, I would be happy to help you get your talk ready for the club.

Contact Pat Volkmann, W9JI, at orc_pat_w9ji@outlook.com to discuss your idea for a program.

ORC Meeting Agenda

April 8, 2023

- | | |
|---|--|
| 1. 7:15 – 7:30 PM
Check-In and Introductions | 6. 1 st VP Report:
Jeananne Bargholz (N9VSV) |
| 2. 7:30 PM Call to Order:
President Bill Greaves (K9GN) | 7. Repeater VP Report:
Tom Trethewey (KC9ONY) |
| 3. Announcements, Bragging Rights, Show &
Tell, Upcoming Events, etc. | 8. Secretary’s Report:
Ken Boston (W9GA) |
| 4. Bill Shadid, W9MXQ & Pat Volkmann, W9JI,
Videos and Interaction – Collins, “The Lost
Years,” and a Tour of a Large Collins
Collection | 9. Treasurer’s Report:
Gary Bargholz (N9UUR) |
| 5. President’s Update:
Bill Greaves (K9GN) | 10. Committee Reports |
| | 11. OLD BUSINESS |
| | 12. NEW BUSINESS |
| | 13. Adjournment |



**This Month's ORC Meeting
Hybrid In-Person/Zoom Meeting
10 May 2023**

**Program:
Bill Shadid W9MXQ & Pat Volkmann W9JI
Video: "Collins: The Lost Decade"
and a
Brief Tour of a huge Collins Collection**

**7:00 PM – Doors Open
7:15-7:30 PM – Zoom Check-In
7:30 PM – Meeting Begins**

**NEXT MONTH
Hybrid In-Person/Zoom Meeting
14 June 2023**

**Program:
Ken Boston, W9GA
2023 Field Day**

The Ozaukee Radio Club presents its 43rd Annual Spring Indoor
Amateur Radio, Electronics & Computer



SWAPFEST



featuring **TOWER ELECTRONICS!**

Saturday, May 6, 2023 – 8 AM to 12 PM (setup begins at 6 AM)

Ascension Columbia St. Mary's Center (Milwaukee Curling Club)
W67N890 Washington Ave., Cedarburg, WI 53012

Talk-in: 146.97 MHz – PL 127.3 Hz

Door Prizes! Free WIFI

Food sold by Cub Scout Pack 586, returning from 2022!

Admission: \$7.00 at the gate

Children 12 and under FREE, with a paid adult admission

6 ft. Tables: \$12.00 in advance, \$15.00 at the door, if available

Use the Order Form below, email, or call Tom Trethewey, KC9ONY at 262-421-6351

Email: swapfest@ozaukeeradioclub.org

More information: <http://www.ozaukeeradioclub.org/> or <http://www.facebook.com/orcwi>

For Advance Tickets and Tables, send check with a **SASE** (Business-Size #10 envelope) to:
Tom Trethewey, KC9ONY- W69N905 Evergreen Ct N, #202, Cedarburg, WI 53012-1170

Name: _____

Call sign: _____

Address: _____

Phone number: _____

Email: _____

No. of Tickets: _____ X \$7 = _____

(Advance tickets are double stub)

No. of Tables: _____ X \$12 = _____

Electricity: Yes (Add \$5) _____ No _____

Total Amount: _____

(Please make checks payable to ORC)