



From the President

de Pat Volkmann, W9JI



The end of another year is in sight, which means there is some club business that we need to attend to. Elections for officers will be held in January. Ken Boston, W9GA has agreed to be the Chairman of the Nominating Committee. The Nominating Committee will put together a slate of candidates for the officer and board member positions. To be eligible for office you must be a full or family member and have agreed to the nomination. If you are interested in running for office or nominating someone, please contact Ken. Complete information is available in the Bylaws section of the ORC website.

Have you taken a look at the ORC website recently? Our new webmaster, Gregg Lengling W9DHI, has been hard at work updating the content of much of the site. There is a "Members Only" section for Club members. If you don't have an account yet, click the link on the page to get one set up.

You can also renew your dues through the website by using the PayPal link on the home page. Dues are \$15 plus the PayPal fee. If you don't use PayPal, you can send a check to the Club Treasurer, Gary Bargholz N9UUR. I'm sure that we will be hearing from Gary on getting our dues paid up.

Another Club member has become a Silent Key. John Palese, WB9JPH (SK), passed away on October 17, 2021. John was 66 years old. John's wife Angie, N9USB, is also a member of the ORC. Arrangements are being handled by the Bruskiwitz Funeral Home. A donation has been made to the ARRL in John's name. Our condolences go out to Angie and to John's family.

Nels Harvey, WA9JOB (SK), passed away in August of this year. Nels was an active member with many friends in the Club. A number of donations, in honor of Nels, have been made to the ORC. The donations will be divided between the Scholarship / STEM fund and the (reestablished) Repeater Fund, per the wishes of Nels family.

Club meetings will continue on Zoom for now. The technology has been working well, with just a few glitches from time to time. If you haven't tried Zoom yet or maybe aren't

sure how to get started, contact me and I'll talk you through it. It is really easy (most of the time!) and helps us keep in touch with each other.

See you at the meeting.
Pat Volkmann, W9JI

A Message from the Editor

de Bill Shadid, W9MXQ



Just a quick note here about this month's content:

Page 1: Pat Volkmann, W9JI: From the President

Page 3: Stan Kaplan, WA9RQR: Computer Corner
Your PC and Windows 11

Page 4: Don Zank, AA9WP: OZARES Update
October's SET (Section Emergency Test)

Page 5: Pat Volkmann, W9JI:
Vintage Magazine Cover Art

Page 7: Bill Shadid, W9MXQ: Vintage Amateur Radio
Tips on using the Drake TR-4 Transceiver

Page 13: Gary Sutcliffe, W9XT: On the Air!
DX, Contesting, SOTA, and More!

Page 17: Mass Media Advertising with a Ham Radio Theme
This month from Ray Totzke, W9KHH

Page 18: Ken Boston, W9GA: Minutes of the 13 October 2021 Meeting

Page 19: Pat Volkmann, W9JI: Upcoming ORC Monthly Meeting Programs
Also, some notes on Creating a Presentation for Club Meetings

A special thanks to Ray Totzke, W9KHH, for suggesting a look, every once in a while, at how main street media saw and used amateur radio in their advertising. More new columns are in the works. Stay tuned!

On to the Newsletter . . .

THE COMPUTER CORNER

No. 284: This PC Can't Run Windows 11

Stan Kaplan, WB9RQR, 715 N. Dries Street, Saukville, WI 53080-1664

wb9rqr@gmail.com

Well, so what! It is too early to worry about Win 11 at this point, and Microsoft itself is evolving the definition of which computers can and can not run Win 11. Hints floating around even say that some updates they have or will release in the near future will change some machines so they fit the definition. So, at this point, continue on doing what you are doing and don't fret the issue.

On the other hand, the issue does exist, and folks want to be aware of it and what it might mean for them in the future. So, right now, here is the skinny concerning what your machine should have/do:

1. A 1.0 GHz (or faster) processor with 2 or more cores.
2. A total of 4GB (or more) of RAM (random access memory sticks).
3. A 64GB or larger hard drive.
4. A video card (or video section on the motherboard) capable of Direct X 12.
5. At least a 9-inch display capable of HD (high definition).
6. A Microsoft account and Internet connection.
7. A Secure Boot Capable Unified Extensible Firmware Interface (UEFI, referred to by old fashioned, stick-in-the-mud's such as me as your BIOS – the Basic Input/Output System).
8. A Trusted Platform Module (TPM) version 2.0 or greater.

Most of us have or can get items 1 through 6 in the above list. Lack of items 7 or 8 or both, or the fact they are not turned on, are the reason why most people are getting the error message found in the title of this article.

Check the TPM in your machine by pressing the Windows key + r and typing in *tpm.msc*, then press enter. You should get a message telling you of the TPM status. If it is present but turned off, there are ways to turn it on, but use care and caution. Messing with the BIOS has the potential to screw up your machine royally! Best to back it up first, if possible. Better yet, click this hyperlink and read the article at Majorgeeks.com, then print it out and follow all the cautions.

https://www.majorgeeks.com/content/page/this_pc_cant_run_windows_11.html

OZARES: Ozaukee Amateur Radio Emergency Services

by Don Zank AA9WP, OZARES Emergency Coordinator



October is Simulated Emergency Test, otherwise known as the S.E.T., month for the majority of ARES® groups in the United States. It is a time for the groups to put together a response to either a natural or man-made emergency where normal modes of communications have failed.

This year was year of new procedures and involvement. The Southeast District groups of Ozaukee, Milwaukee/Waukesha, Jefferson, Walworth, Racine/Kenosha, and Washington Counties joined forces on Saturday, October 16. In the past each county group would operate their exercise separately with the occasional contact with neighboring teams.

A scenario of a derecho, or high wind event, was used in the simulation. The simulated damage from the winds caused power and communication outages. Involvement from the Red Cross, Wisconsin Emergency Management, local public health agencies and hospitals were included this emergency exercise.

As with all exercise some things went well, and others did not. And that is the point of the exercises, to find what works, what needs to be fixed and what can be improved.

In Ozaukee County, OZARES members Dave KD9JYL, Naomi KC9YES, Todd KD9QLJ, Roland, KB9TMB, Robert K4WTH and myself participated. Dave was assigned as a liaison with an Ozaukee Hospital, virtually from his home station. Naomi was assigned to Ozaukee/Washington Public health, again as a virtual station working from home. Todd and Roland operated from the OZARES radio room at the Justice Center in Port Washington. Robert operated from his home in Michigan's Upper Peninsula and provided back up communications on hf. I was assigned to the Emergency Operations Center in Saukville.

Roland and Todd discovered how very busy it can be in the radio room. Their communication modes, including vhf/hf voice and WINLINK on VHF, provided opportunity and challenge. The 80-meter band was not too friendly, and they had to rely on a relay to check into the state net. Roland and Todd created and passed a number of messages on WINLINK to the OZARES group and the local district. Near the end of the exercise, they setup a portable VHF station next to the Justice Center and did a quick check in and check out on the district net.

Naomi and Dave were also busy using WINLINK and the Red Cross forms available as templates. Requests from Public Health for supplies were passed along and responded to. Weather reports, also available in template form in WINLINK, were created from Port Washington and Cedarburg, since this was a weather-related exercise.

Robert and I provided a number of WINLINK messages to our group, the district, and the State. As a number of OZARES members are relatively new to WINLINK, Robert has been a good mentor and voice of experience. Robert had some 80-meter issues at the beginning of the exercise, but they band opened up for him later in the morning.

So, as you can see, VHF WINLINK was used extensively by our group. It provides a great way to pass traffic, verify reception of traffic, and furnishes a communication report, ICS-309, at the end of the exercise.

The problem was all of this WINLINK traffic in Ozaukee was trying to work through one RMS station, WI9OZ-10 at the Justice Center. At times, several stations would be calling at once which made connections difficult. So, a lesson learned is that traffic into the WINLINK station needs to be controlled or monitored. Either the net control station needs to be checked with first or the frequency must be monitored more closely. Something we need to talk about going forward.

I want to thank the members who participated in the S.E.T. Exercises and practices, with this being the first exercise for most of them, are always a stressful time. Adding the new mode of WINLINK helped increase their stress level. Their enthusiasm and willingness to learn and be involved is greatly appreciated. An After-Action Review was conducted, and they came up with some great learning activities for the future. So, this exercise was a success in helping to determine which communication skills, modes and techniques need to be improved.

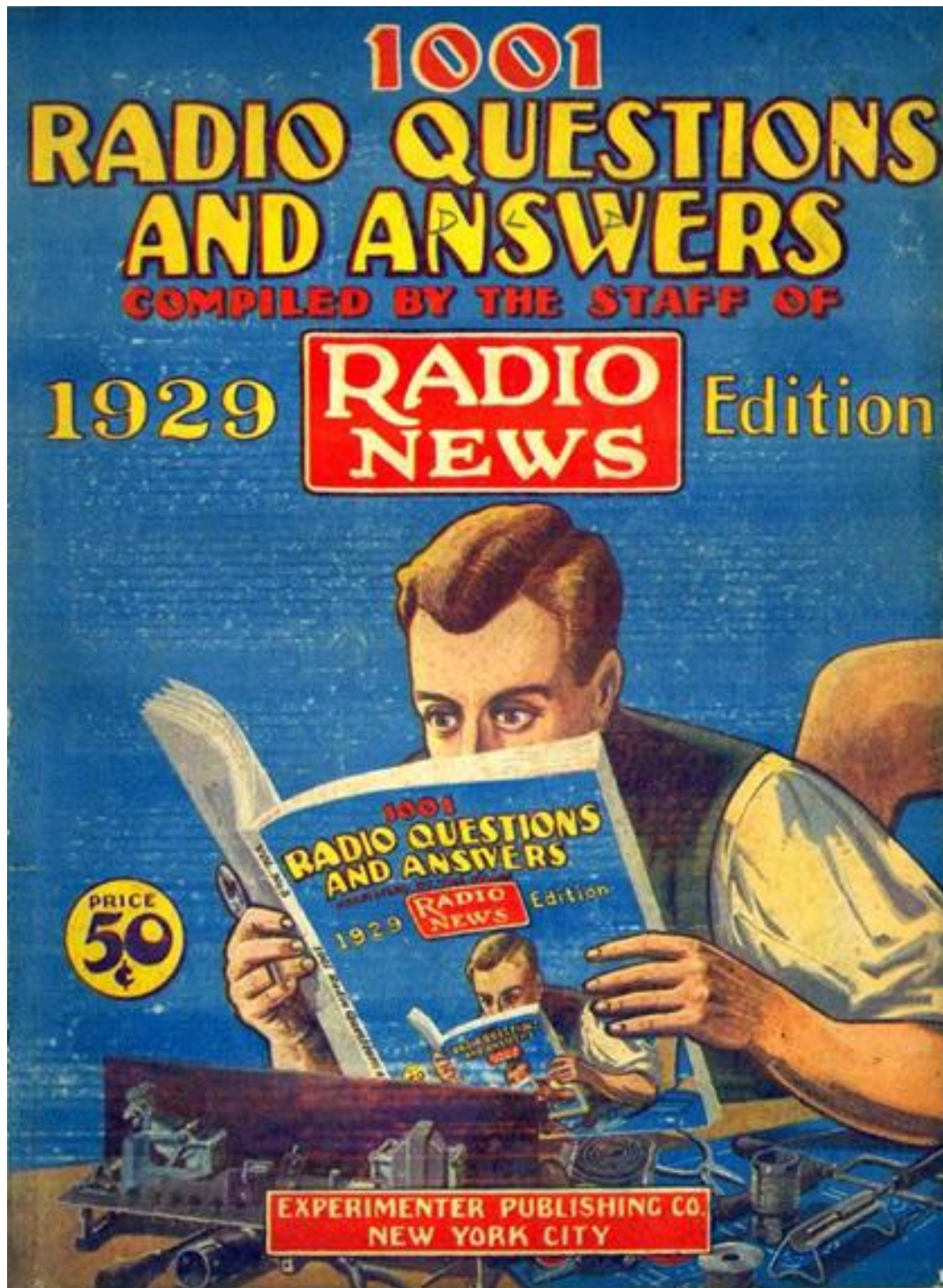
Vintage Magazine Cover Art

de Pat Volkmann, W9JI



Our cover this month is from the 1929 issue of Radio News "1001 Radio Questions and Answers", which was compiled by the staff of Radio News. In addition to the typical monthly magazines, many magazines collected previously published articles into a single volume. This was a low-cost way of having another volume to sell to the public. The practice continues today with, for example, the ARRL Antenna Compendium and the ARRL Wire Antenna Classics.

Take a look at the cover of the magazine the man is reading. The same image appears several times, as if looking into a mirror. This may represent the artists interpretation of publishing the same articles again and again.



RADIO NEWS – 1929 Edition

Vintage Amateur Radio

de Bill Shadid, W9MXQ



I have run into a few issues with my collection of Drake radios in the past few weeks. One of them has netted some information worthy of sharing. Another one is destined to reach these pages in the future.

R. L. Drake Company amateur radio products range from just after World War II with Low Pass Filters and other accessories¹. They continue as a company to this day in non-amateur radio fields. Their last amateur radio related product ended with the last R-8B General Coverage Receiver in 2005².

For most of us enjoying the use of Drake equipment today, the time of actual receivers, transmitters, and transceivers dates from the introduction of the Drake 1-A Receiver in 1957. This tiny receiver (by the standards of the day) was a revolution at the time with its performance equaling or surpassing the heavy radios of the day. Just over 18-pounds in a day with its Collins competition (by performance), a 75A-4 Receiver, weighed twice that². To be sure, Drake only beat its main competitor by a year – the 20-pound Collins 75S-1 was introduced the very next year.

Simple issues certainly predominate in our old favorite classic radios. This is true even with well-designed and built radios as they become older and older. As time has shown, even old Drake Receivers, Transmitters, and Transceivers from the 1950's can easily be in use today. Some still possess competitive operating specifications that allow them to be effective players on today's bands. Even though my main station³ is up to date and a top performer, I still enjoy using my several Drake separate receiver and transmitter and transceiver setups.

In this article we are going to talk about tips and modifications to the Drake TR-4 Transceiver (which includes the TR-4, TR-4C, TR-4CW, and TR-4CW-RIT).

Before we start, let's review the details of the several versions of the TR-4 over the years. These radios had the same basic features throughout their long run but had five noticeable versions over that time – but new features were added as time went along.

1. The early TR-4 was the basic radio that lasted through all versions. It was a significant upgrade from the previous, but every similar concept, TR-3 Transceiver. The TR-4 introduced internal accommodation of an external receiver (with connectors to supply muting and antenna feed to the remote radio).
2. The late TR-4 added a front panel switch and internal socketing for including the new 34-PNB Noise Blanker. (Early TR-4's and the previous TR-3 model could be adapted to accept a hard wired 34-NB Noise Blanker.

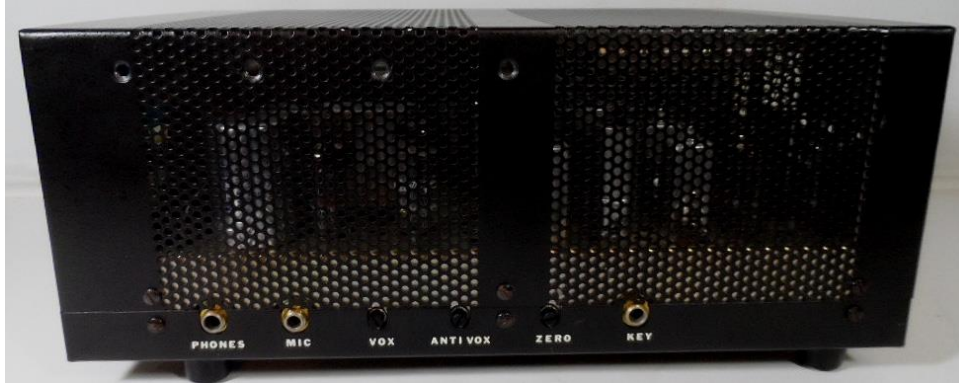
3. The TR-4C model changed the dial mechanism readout to one similar to the updated design used on the new (at the time) R-4C Receiver.
4. The TR-4CW model added a selectable 500Hz CW filter that could be engaged when the radio was in CW mode.
5. The TR-4CW-RIT model added RIT (Receiver Incremental Tuning) to the front panel. This was a major change in the front panel with the RIT control replacing the Noise Blanker On-Off rotary switch. Engaging the Noise Blanker or the RIT feature were accommodated with individual push-push buttons on the front panel.

Over time, as an owner and user of the TR-3, early and late TR-4, TR-4C, and TR-4CW-RIT models, most of the R-4(x) and T-4X(x) models, the TR5, and the TR7(x) versions, I can say that to my ear, no Drake sounds better than the TR-3 and TR-4 series. I know that is a very subjective comment. At the same time, I also will say that the R-4C/T-4XC and the TR7(x) radios are better performers in difficult band conditions. They were better armed with QRM and Noise abatement tools. Other than an optional Noise Blanker and narrow CW filter in the TR-4CW and TR-4CW-RIT models, the TR-3/TR-4 series of radios had no features for controlling interference⁴.

The TR-4(x) series of transceivers were extremely popular over the years and had many user-designed convenience updates published in the various radio magazines and by discussions among users. One feature of the TR-4 radios was their ability to accommodate a separate receiver and thereby offer some way to offset receive and transmit frequency as well as working with a separate receiver (such as a Drake or a different brand⁵). Drake TR-3 and TR-4(x) radios had a different conversion scheme than any other Drake radio so the external receiver, even if a Drake model, could not be used in transceive with the transceiver. They two always had to be separately controlled.

Drake had some unique ideas about items such as microphone and key connections, VOX adjustments, etc. Instead of being on the front or rear panel, they were on the sides of the radio. So, to have the transceiver sitting next to another radio or speaker, one had to use right angle connectors on external microphones and keys. Accessing VOX and S-Meter Zero potentiometers could be a real problem in a station setup. Most such controls were on the right side of the radio, as shown here: (All TR-4 Versions are identical as to side controls and connectors.)

(Special Note: As you proceed here, watch for pictures showing side lettering, in white, on the TR-4 cabinets. I have found some variances in the exact nomenclature used. Is this difference from the Drake factory or changed later by some highly skilled cabinet painters of Drake cabinets? The factory that painted Drake cabinets is well known to me and I actually worked with them in my professional career with another manufacturer. They no longer do this re-finish work. Another source for this work is a very accomplished service provider for repairing Drake products. He provides not only electronic repair and alignment but also does re-painting that rivals or exceeds original Drake standards. Contact me for more details – W9MXQ@TWC.com – as I did not contact him for permission to use his name for this article.}



Drake TR-4 Transceiver
Right Side View - Front Panel is to the Left
(All TR-4 Versions are Identical for Side Controls and Connectors)

W9MXQ

The mounting on the right side for the headphone jack must have been particularly inconvenient for many operators. If other users are like me, they frequently connect then disconnect the headphones in exchange for using the speaker. In many cases, users of early TR-4's would actually drill a hole in the lower right-hand corner of the front panel and install a phone jack for better convenience. The late TR-4's used that position for a Noise Blanker switch but early TR-4's (also TR-3's) are often seen for sale with a phone jack installed. This may be convenient but is rarely done well and can severely detract from the value of the radio to a collector. If it is done well and it does not bother you, it is an effective way to get a decent price on an otherwise nice TR-3 or TR-4.

Now, for the subject of this article, check the other side of the TR-4 (any version) Transceiver:



Drake TR-4 Transceiver
Left Side View - Front Panel is to the Right
(All TR-4 Versions are Identical for Side Controls and Connectors)

W9MXQ TR-4

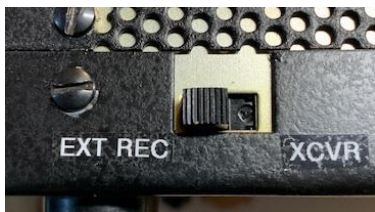
The Left Side View is the subject of this commentary. Note the slide switch (S4). When the switch is in the TCVR position, the radio will receive and transmit with its internal receiver. When the switch is in the RCVR (or EXT REC) position, the radio will receive with the external receiver and transmit with the internal (TR-4) transmitter. The external receiver does not transceive with the transceiver – the frequency of the two units is always controlled internally to the respective device. (Note that some TR-4's use the term RCVR and some use EXT REC – they mean the same thing.)

This arrangement is very inconvenient to say the least. There is no way to zero beat⁶ the internal TR-4 Transceiver and the external receiver.

In addition to the inconvenience, there is another issue with this switch that is more an issue with today's occasional user/collector. The switch itself is problematic:

1. This is a slide switch, and such devices have a limited length of service life. Here are two pointers if the switch seems not to do its assigned function:
 - a. Clean the Switch by carefully spraying a small amount (emphasis on "small") of DeoxIT™ D5 Contact Cleaner or CRC QD™ Electronic Cleaner⁷ followed by moving the switch back and forth, numerous times.
 - b. Check the switch and if you find it defective, replace it. The original is riveted in place. Those rivets must be drilled out to remove the switch. Replace the rivets with #4-40 pan head screws, a lock washer, and #4 hex nuts.
2. Once cleaned or replaced, the switch is at best inconvenient or near impossible to access in a typical radio setup. Think of it sitting in its operating position and needing to access the very lower back of the left side to reach the switch every time you want to switch from internal to external receiver.

This switch issue is best described in the TR-4 Mods and Tech document⁸ as developed by Wayne Montague, VE3EFJ, when he quoted, Tom Taylor, N7TM, commenting on the External [Receiver] Switch, "The switch on the side of the TR4 allows for an external [receiver] to be connected. Whenever you move the transceiver, the switch moves to external by mysterious cosmic forces. You connect the antenna and wonder why the receiver is dead. To prevent this, you can lock the switch by placing a 4-40 nut in the exposed slot where the tab slides back and forth. Cover the nut with some tape to prevent it from coming loose."



The troublesome Switch. Set in EXT REC (or RCVR) Position. This switch can be slipped accidentally to a mid-position with limited connectivity – causing receiver attenuation.

W9MXQ TR-4CW-RIT

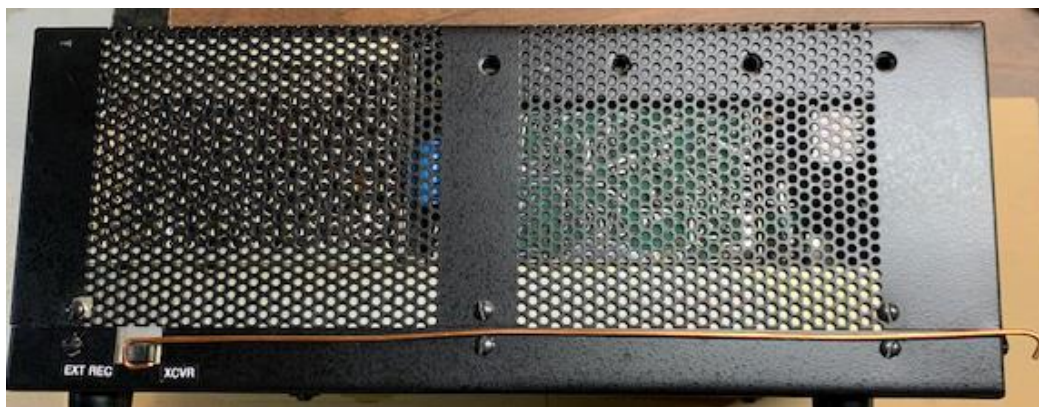


The troublesome Switch can be locked in one desired position by inserting a #4-40 hex nut, as shown. The nut can be held in place with tape (not shown here).

W9MXQ TR-4CW-RIT

It is worse than the comments from N7TM, however. As mentioned at the left, above, often during handling of the radio, the switch is accidentally moved to some odd position in between the two selections causing the radio to receive as if an attenuator has been introduced into the antenna line. This triggers endless troubleshooting until the problem is found! If you are me, then you are mystified for some period before thinking to check that annoying switch!

Many years ago, one of the amateur radio publications presented a suggested alternative for the designed-in inconvenience of that switch. I have searched for a long time for this article⁹ but cannot find it. While I am not a candidate to install it on my TR-4 or TR-4CW-RIT, you may find it an innovative idea with application in your installation.



Remote RCRV/EXT REC / XCVR Switch Actuator

W9MXQ TR-4CW-RIT

The above is simply a length of 12-gauge copper wire affixed to the switch and extending to a hook that can be pulled or pushed to make the selection without reaching to the back of the radio. Some fabricated brackets mounted to the lower row of cabinet screws can be used to keep the wire in alignment. The original author of this idea used piano wire and drilled a hole through the handle of the slide switch to hold the wire at the switch end. He used wire solder lugs, reformed for the purpose, to support and guide the wire at the middle and front, lower cabinet mounting screws. I did that long forgotten ham's modification to my first TR-4 Transceiver, in the past. The above is not mounted and is shown only as an illustration of what can be done.

I collect these short stories on the ongoing collecting and restoring of Vintage Ham Radio Equipment. Occasionally, it is nice to share a bit of the experience. This is an ongoing process!!

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. As I have often said, Bob is a lot more than a proofreader as he often adds commentary that makes it into the

article. Bob and I work to collect and restore many examples of Collins, Drake, Hallicrafters, National, RME, Swan/Cubic, Ten-Tec, and some of the Japanese products of historic and/or personal importance.

Notes and Comments:

¹ Wikipedia: <https://www.wikipedia.com>

² RigPix: <https://www.RigPix.com>

³ My main station includes a Yaesu FTdx-101MP which is currently the top-rated receiver performance radios available to radio amateurs. I reference Rob Sherwood's industry recognized measurements that are available at <https://www.sherweng.com/table.html>. Despite this, I am still inclined in casual operating to use my vintage Drake, Hallicrafters, Collins, Swan, or National equipment. But that is just me!!

⁴ The Drake TR5 was almost identical in features to the TR-4CW-RIT. As such, it offered an optional Noise Blanker and an optional filter slot. The filter slot on the TR5 could accommodate any one of the various filter options available for the TR7(x) series Transceivers. The TR5 had only one optional filter slot.

⁵ The separate receiver idea was accommodated also in the TR-3 by an external circuit that could be fabricated by the user. This is covered in the TR-3 Instruction Manual.

⁶ "Zero Beat" is a term meaning to put the separate receiver on the same operating frequency. This term, not so common in today's transceivers, comes from a time when receivers and transmitters operated separate from each other.

⁷ Available from a local commercial hardware dealer or from Amazon (<https://www.amazon.com>). DeoxIT D5 is available from Radio Shack™ stores or from (<https://www.radioshack.com>).

⁸ This is a part of the document, "Drake Mods – TR3 to the TR7," as edited by VE3EFJ. The comments shown in the text is in Section 9.2 of this document. If you have trouble finding it on the internet in a search, contact me at W9MXQ@TWC.com. All rights to this document belong to VE3EFJ and to contributors that he mentions therein.

⁹ If you can identify this author and where you saw his article on this front accessible switch, please let me know – W9MXQ@TWC.com

W9MXQ

On The Air!

de Gary Sutcliffe, W9XT



One of the things about ham radio is there are so many different things to do within it. It has been said it is a hobby with a thousand hobbies. After 50 years of ham radio, I have been serious about a few aspects and dabbled in many more. I could fill a good portion of this column listing them, and there would be many more I have not tried. No doubt that a year from now, there will be a few new ones to add.

SOTA

A couple of weeks ago, I was tuning around 40M CW and heard a CQ from a DXer radio friend, Paula, K9IR. She was calling CQ SOTA. I knew Paula was big into SOTA and got points for every contact she made, so I gave her a call. We made the contact, and she continued to work other stations. I was only somewhat familiar with SOTA, so I decided to look into it a bit more.

SOTA stands for Summits On The Air. It is a program where hams go out and operate from mountain tops or high hills. QSO point values vary from two to ten points, based on the height of the summit. There are over 100,000 summits in the program, so this is not something you will complete in a weekend. Some of the summits I worked had not been activated in a few years.

SOTA is a worldwide program with the summit lists maintained by regional groups. There is a W9 association that covers the US 9th call district. Wisconsin is not known for being a mountainous state, but we have 42 in the program. I didn't dig deep, but the closest seemed to be Holy Hill, which I can see from my backyard.

There are separate awards for those heading out in the field and those operating from home. The first award starts at 100 points. It didn't take me long to gain 100 points with a good mix of eight and ten-point QSOs. There are separate awards for those going to the summits.

You can work the portable stations with any band and mode except with repeaters. Most are on HF, although some operate on VHF FM simplex if they are near population centers. I concentrated on CW. SSB is pretty common, but I have not heard many. Stations may not operate from mobile stations. Reaching the summit often requires long hikes. Weight is a limiting factor. Simple antennas and small battery packs don't translate to big signals. FT8 operations are uncommon. I suspect the added weight of computers discourages digital operation.

There are no dues for this program. Donations support the SOTA program, and you have to pay for the awards. The rules are pretty complex, especially for determining

which hills can count and requirements for operating from summits. Frankly, I have not read them thoroughly.

They have a very impressive website: <https://summits.sota.org.uk/>. The home page lists call signs, frequencies, and summit designators for SOTA operations currently on the air. If you click on the designator, you go to a page with more information on that summit. It gives you the name, location, latitude and longitude, number of points, last operations, etc. There are also links to Google Maps, topographical maps, and other sources of information. It is kind of fun to work one of the stations and then check out more about them.

I had fun chasing these stations the last couple of weeks. However, I don't know if I will get bored in a few more weeks or really jump in and wear out two pairs of hiking boots hauling radio gear up hills. Well, I might give it a shot in the field next spring, but I doubt I will wear out any boots.

The point is it is fun to try new things from time to time. It does not always take a big expenditure for new equipment to try something new. It might only be a matter of changing the band switch and tuning around a bit.

Transatlantic Tests 100th Anniversary

One hundred years ago, amateur radio operators only dreamed of making contacts across the Atlantic Ocean. Only very low frequencies were thought to be useful for long distance communications back then. Those frequencies were far too valuable to be wasted on ham radio operators, so we were banished to "useless" higher frequencies. Still, there were rumors that amateur radio signals had been copied across the pond. The ARRL sent Paul Godley, 2ZE, to Scotland as a representative to the Second Transatlantic Tests. These were to see if North American amateur signals could be copied on the other side. The first station heard was 1BCG from Connecticut on December 12, 1921.

Note that in those days, we didn't have internationally assigned call sign prefixes. Many countries assigned amateur call signs starting with a number followed by letters. The thought of confusion on the country of origin had not really popped up yet.

Anyway, there are activities planned by the ARRL, the Radio Society of Great Britain, and other organizations to commemorate this milestone. The first events occur in mid-November and others throughout December.

I suggest you check out the ARRL web page for more information. At the time of this writing, the page says to watch the page for updates.

<http://arrl.org/transatlantic>

HamSci Solar Eclipse Experiment

Are you ready for the solar eclipse on December 4? Don't worry. You won't need your special eclipse glasses unless you plan a trip to Antarctica. But it might affect radio propagation, and you can help scientists to find out.

I have mentioned the HamSCI group before. It is an organization of hams and scientists researching the ionosphere and space weather. They want hams around the world to monitor stations like WWV for a change in frequency. At sunrise and sunset, the ionosphere will change in height. Like a police radar bouncing off a speeding car, that will cause a Doppler shift in the signal's frequency. But in this case, the change is a fraction of a Hz. They want to see what happens when the sun gets covered by the moon in an eclipse.

To participate, you will need a receiver, a computer, and some free software. Your ham rig is probably not good enough, though. The rig will drift far more than a fraction of a Hz over time. Instead, you will need a rig with a GPS Disciplined Oscillator (GPSDO). These devices use the incredibly stable frequencies of the GPS satellites to provide a reference signal, usually 10MHz. The rig will lock its oscillators on this reference to provide frequency stability. Some of the newer high-end radios have the feature to use an externally supplied reference signal.

The experiment will start on December 1 and run for ten days. They want to get baseline data on both sides of the actual eclipse. You can read more at the HamSci website. Unfortunately, their website is rather difficult to navigate. However, the link below will get you started.

<https://www.hamsci.org/december-2021-eclipse-festival-frequency-measurement>

DX

Last month I mentioned several DXpeditions. One was 3DA0RU, to the Kingdom of Eswatini, formerly Swaziland. This same Russian group was in Botswana in April of this year as A22RU. At the end of their DXpedition, they announced they were extending their trip to include Mozambique as C92RU. As the 3DA0RU operation was wrapping up, I wondered if they might do the same this trip. I was not disappointed, and they announced they were going to Lesotho, another landlocked homeland inside South Africa. Following their tradition, they used the RU suffix and are currently signing 7P8RU. They will be wrapping up by the time the newsletter comes out. It proves the point that you need to keep current as things can change quickly in the DX world.

After all the exciting DXpeditions last month, November looks a bit dull. A group of Israeli hams will put Rwanda on the air. They will be running three stations. They will also be on for the CQWW DX CW contest at the end of November.

St. Martin is not a particularly rare country, but I include it because a group of W9 hams is putting it on. Note they are concentrating on the low bands and should be pretty easy to work.

Also, check out the bands the week before the CQWW DX CW contest. Contest DXpeditions show up early to get set up and are on the air.

W9XT's DXpedition picks for November and early December 2021					
QTH	Dates	Call	Bands	Mode	Link/notes
Rwanda	Nov 24- Dec 1	9X4X	HF	C/S/D	http://9x4x.qrz.co.il/home
St Martin	Dec 01- 10	TO9W	160-40	C/S/D	www.k9el.com/TO9W/TO9W/htm

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

Contests

Last month I mentioned the CQWW DX (phone) and ARRL Sweepstakes (CW) contests. Well, in November, the opposite mode version of them takes place. Conditions for the CQWW DX were the best in a long time. I made my first SSB contacts to Europe on 10 meters in probably five years. With luck, the sunspots will continue for the CW weekend of CQWW. Note that this is the Thanksgiving weekend.

Going into early December is the ARRL 160M contest. I have started to enjoy 160M contests the last few years. There is a lot of activity, but since it is a single band and you can only work a station once, the serious operators start running out of new stations to work towards the end. If you get on later Saturday night or early Sunday morning before sunrise, you can get some big pileups going once you get spotted on the DX cluster. I did that a few times and had some runs that lasted for 15-20 minutes. If I could have kept it up for an hour, I would have been around 300 QSOs. It is a real thrill to do that.

There will be special event stations during this year's running of the ARRL 160M contest to commemorate the Transatlantic Centenary.

W9XT's contest picks for November and early December 2021					
Name	Start	Length	Bands	Mode	Link
ARRL Sweepstakes	2100Z 20 Nov	30, work 24	160, HF	Phone	http://www.arrl.org/sweepstakes
CQWW	0000Z 30 Nov	48 Hrs	160, HF	CW	https://www.cqww.com/
ARRL160M	2200Z 3 Dec	48 Hrs	160	CW	http://www.arrl.org/160-meter

Times in UTC. Subtract 6 hours from UTC to get local (CST). Watch for day changes
HF = 80, 40, 20, 15, 10 Meters

VHF

November and early December are not known for being particularly exciting months on VHF. The sporadic E (Es) openings in the spring and summer have mostly ended. The tropo season is mostly over, but we did get a 2-meter opening to Alabama the last week of October. But there are some opportunities during meteor showers.

Gary, K9DJT, and I used it to pick up a few new 6M grid squares in October. Gary also worked some new ones on 2M. Gary worked hard to make the 2M contacts. It takes larger meteors to create ionized patches that will support contacts as you move up in frequency. I know that some of his contacts took close to an hour, and many others were unsuccessful. Gary notes that you just have to stick to it. The Leonids Meteor Shower will peak around November 16-18 if you want to try this mode.

That wraps up November. A lot is happening on the radio especially since the sunspots are returning!

Ham Radio in Mass Market Print Media

This month from Ray Totzke, W9KHH

Do you remember this advertisement from the 1950's? Fellow member Ray Totzke, W9KHH, sent this ad to this Editor during the past month.



This advertisement appeared in 1952 in popular mass media magazines of the day. Not in ham radio magazines! The text at the lower left says, "Here's a Message from Milwaukee"

That message goes on to say:

"This thoughtful wife knows that the moment her husband tunes in on Schlitz the reception is good. For Schlitz has a very special taste that beer lovers are changing to with ultra-high frequency."

Note the National NC-183D and the RME DB-22 Preselector with the OM's hand on the dial. Home brew transmitters and amplifiers were quite common in those days. Hmmm, note that "W3H??" callsign. He must have moved to Milwaukee!!

W9MXQ

Ozaukee Radio Club

October 13, 2021, Meeting Minutes

de Ken Boston W9GA

This ORC meeting was conducted via an online (internet) connection using the ZOOM app. Prior to the meeting start, those members who were able to access the 'waiting room' via phone or computer/webcam were then introduced into the meeting space hosted by Pat W9JI. At that time various audio and video connection issues were addressed for the members before the meeting began.

ORC President Pat W9JI officially initiated the meeting at 7:30 PM, as introductions were recognized when members checked into the meeting, a go-around was not conducted. There were no pre-program comments put forth.

Program:

The program was presented by Morgan, W6NBC, on the design and fabrication of antennas based on metal tape as a spiral winding on an insulating tube. Design parameters were presented, some RF theory covering skin effect and metal tape as a radiator was presented, and some designs described for the group.

Committee reports:

Repeater: W9DHI Gregg has reported that there were no major changes from last month.

Treasurer: Gary N9UUR has processed the movement of money from the CU to the ARRL [\$26K] for the scholarship program, and the remainder into Cornerstone bank, for the STEM program. A discussion of the disposition of the Nels Harvey estate-radio equipment occurred, where the proceeds will be split between the repeater and the scholarship program. Gary reminded everyone that the 2022 dues are coming, and that PayPal can be used. The treasurers' report was accepted; motion made by W9MXQ, 2nd by WB9RQR, and carried.

Secretary: Ken W9GA reported the September minutes had been posted; KD9DRQ moved, K9QLP 2nd, motion to accept carried.

Tom W9IPR: turned scholarship discussion to K9QLP, who has been helping Nels family with the disposition of his radio equipment. Equipment includes some Kenwood TS850s's, plus some HTs and various other pieces; sales will be split between club and family 50/50.

K9UZ is preparing our club inventory

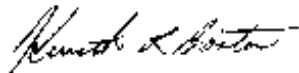
OLD business: None

NEW business: KC9ONY has 2 tickets available for the Fox cities hamfest. KD9RAW reported on the upcoming Scouting Jamboree, JOTA will be at Terry Andrae Park.

Adjournment: WH6ZZ moved to adjourn, KD9JNV 2nd, motion carried; time ending was 8:54 PM.

Following the meeting breakout rooms for the program, and a general topic; were opened.

Respectfully submitted,



Kenneth Boston W9GA, Secretary:

Upcoming ORC Monthly Meeting Programs

de Pat Volkmann, W9JI

November – Paul Mower VA6MPM - Canadian Rockies SOTA

December – Brian Page, N4TRB – Transatlantic Tests in the 1920s

January – Elections

February – Gary Sutcliffe, W9XT – Antenna Basics

March – Chuck Curran, W9KR - Hickok tube testers

Please contact Pat W9JI with your program ideas.

Creating a Presentation

Almost all 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/>

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 orc_pat_w9ji@outlook.com to discuss your idea for a program

ORC Meeting Agenda

October 13, 2021

1. 7:15 – 7:30 PM – Check-In and Introductions
2. 7:30 PM Call to Order – President Pat Volkmann (W9JI)
3. Announcements, Bragging Rights, Show & Tell, Upcoming Events, etc.
4. Presentation: Paul Mower, VA6MPM "Canadian Rockies SOTA"
5. President's Update – Pat Volkmann (W9JI)
6. 1st VP Report – Ben Evans (K9UZ)
7. 2nd VP Report – Bill Church (KD9DRQ)
8. Repeater VP Report – Gregg Lengling (W9DHI)
9. Secretary's Report – Ken Boston (W9GA)
10. Treasurer's Report – Gary Bargholz (N9UUR)
11. Committee Reports
12. OLD BUSINESS
13. NEW BUSINESS
14. Adjournment

Return undeliverable copies to:

The ORC Newsletter

524 Alta Loma Drive
Thiensville, WI 53092

First Class

Meeting Note:

Until the club decides it's safe to hold in-person meetings again, we will be holding the meetings via the Zoom Videoconferencing platform on the same evening and time as we had the in-person meetings. President Pat Volkmann will email sign-in info, W9JI via the ORC remailer usually about an hour before the start of the meeting.

**Next ORC Meeting via Zoom
10 November2021**

7:15-7:30 PM – Check-In

7:30 PM – Meeting Begins