



The *ORC* Newsletter

Official publication of the Ozaukee Radio Club, Inc. Email all contributions to the editor, Ben Evans, K9UZ. Permission to reprint articles published in any issue is granted provided the author and the Ozaukee Radio Club Newsletter are credited.



ORC Repeaters on 146.97, 224.18 and 443.750 MHz - Callsign W9CQO
Web site: www.ozaukeeradioclub.org Facebook: facebook.com/orcwi

Volume XXXI

July, 2019

Number 7

From the President

de Kevin Steers (K9VIN)



Happy July, everyone! Hope you are not complaining about the hot weather. Finally, some swimming weather! From all reports, field day came off without a hitch. I unfortunately could not attend this year, due to family scheduling, but look forward to the reports from Ken, and the scores from Gary, etc.

Well, with the help of Tom Ruhlman W9IPR, the mystery of my Rotator has been solved. I noted to Tom that it would not rotate fully, and he and I looked at it and resorted to following the manual's instructions to reset the ring gear and 'stops'. Low and behold, when we tested it, it appeared that the dial on the rotator controller was giving exceedingly false readings the further it's rotated. With some schematic reading and sleuthing on Tom's part, he noted that two diodes were the culprit. The needle of the controller was pegged, and the antenna only was 180 degrees rotated. I never thought of continuing to hold the button and see if it kept going; it would have. Apparently, Tom corrected the diodes, and I hear that it reads correctly now.

So back up the tower for me! Thank you, Tom!

I am hoping to soon get my cross-band repeater set up so I can do some pontoon contacts to local repeaters, etc. I still have a few snags to work out, like an HT charger that needs some attention, and a replacement antenna also.

Recently, at a rummage sale, I couldn't help but buy a vintage multimeter needing fuses and two batteries replaced. Still not convinced it works, but will bring it to the next meeting to get input.

Lastly, be sure to finish those ham shack projects, and bring them for a brief show-and-tell at our meeting on August 14th.

Let's get ham radio out into the public. If you have an idea on how to do so, just let me know.

Cheers and 73,
K9VIN
Kevin

Obituary

Tom Murtaugh, W9VBQ – Silent Key

de Tom Trethewey (KC9ONY)



Thomas Rawson Murtaugh, W9VBQ, aged 82, became a Silent Key peacefully, with family by his side, on June 3, 2019. He was born in Milwaukee on July 25, 1936.

Tom's daughter Heather said that his favorite book was "Kon-Tiki: Across the Pacific by Raft", written by Thor Heyerdahl in 1948. In the book, a crew crosses the Pacific Ocean, landing on a Polynesian island. Then the crew revives their radio, and makes contact with Hal in Los Angeles, a ham radio operator who had been receiving transmissions from the raft through most of its voyage. This book apparently sparked Tom's interest in Amateur Radio.

He acquired his Novice license, WN9VBQ, in 1952, at the age of 15. That same year, he was pictured in a newspaper article about the MRAC (Milwaukee Radio Amateurs Club) during ARRL Field Day 1952.

Upon graduating high school at St. John's Cathedral in Milwaukee, Tom went on to get an Associate Degree in Telecasting at the Milwaukee Institute of Technology and worked as a TV floorman. He then served in the Army, where he operated an Amateur Radio station under the Military Affiliate Radio System in Germany and was honorably discharged as SPC. While in the 123d Signal Battalion, he received a Good Conduct Medal as an Enlisted Man "for exemplary behavior, efficiency, and fidelity for the period" 19 Sep 58 to 22 Aug 60 at the rank of SP4.

Tom had many interesting jobs throughout his life, had a great work ethic and was a very creative man. He loved, and was proud of, being a television Director and Producer at WISN, a manager at Business Office Furniture, and a photographer. While working at WISN, Tom produced a two-hour stage show and raised money for wounded Marines and Navy personnel at the Great Lakes Hospital in Chicago for three years. An Amateur Radio Operator since 1952, Tom was a member of various radio clubs and was a founding member of LEFROG Radio Club. He was granted Amateur Extra Class Radio Operator Privileges from the ARRL and was always looking for the best place to put up an antenna. Tom, along with other ORC and LEFROG members, visited local schools to show students Amateur Radio and Morse code. Tom was the main CW operator during LEFROG Field Day.

Tom was a passionate semi-professional photographer, a job from which he never retired. At one point, Tom was taking pictures of ORC members, including new members, for the newsletter and club website. Tom loved to grill in any season, tell stories, make people laugh and listen to classical music while enjoying a glass of wine. One story he told me a few times was that he had a contact with an amateur radio operator in Russia. I can't remember if it was CW or SSB. The Russian operator ended the QSO with "Das Vedanya". He asked Tom if he knew what that meant, and was surprised when Tom told him he did know! It is a Russian parting phrase meaning "goodbye".

Das Vedanya, Tom. You will be missed by so many.

DX'ing & Contesting

De Gary Sutcliffe (W9XT)



Last month I discussed the new FT4 digital mode, designed for fast contest QSOs. I have not heard too much since the simulated contest a few days after the new release. If it remains on schedule, the general release version should be available by the end of the month.

As an indication of the interest in the newer digital modes for contesting, the World Wide Radio Operators Foundation (WWROF), and the Slovenia Contest Club (SCC) have announced the World Wide Digi DX Contest. The first running will be starting at 12:00 UTC on August 31 and run 24 hours.

The backing of these organizations should ensure a good turn out right off the bat.

This contest will use the distance scoring method for determining QSO points. This scoring system is used for the Stew Perry Top Band Distance Challenge. The exchange is the grid square, and your computer calculates how many points a QSO is worth. It encourages working the weak, long distant stations. Many contesters feel more contests should use a system like this. I will go into more details in next month's column, but if you can't wait, you can read more at <https://ww-digi.com/>

The first few weeks of July are the prime season for 6 Meter sporadic E (Es) propagation. Small sections of the E layer get ionized, and it provides propagation out to about 1400 miles. Affecting the 20M and above bands, it is not noticed too much below 10M since other propagation modes are often in play.

Es can provide very selective propagation to a small area, or wide areas encompassing many states. Higher frequencies require more ionization, so it is more common on 10M than 6M. On rare occasions, it might extend to 2M.

Although single hop is only 1200-1400 miles, sometimes two or more Es clouds properly placed can provide longer distances and even intercontinental contacts. Longer contacts require several clouds to be in exactly the right positions. Ken, W9GA, compares making these contacts to a complex billiard shot. Tough shot or not, Ken added SV9 (Crete) to his impressive 6M country total at the end of June.

In the bad news department, a paper in Nature magazine came out that predicts we will stay in a solar minimum from 2020 to 2055. The paper discusses a theory that two layers inside the sun rotate at different speeds. The moving materials generate separate magnetic fields. These fields interact and have different cycles, the 11 year cycle being the most noticeable. Other cycles last hundreds of years.

The last time we had a long period of no sunspots was the Maunder Minimum from 1645-1715. Since radio would not be around for another couple of centuries, it was not a big deal. The authors have back tested it against geological records going back over 10,000 years and claim good correlation.

The article can be found at <https://www.nature.com/articles/s41598-019-45584-3>. It is long and pretty dry, but if you are interested, the abstract and summary are approachable

The main stream predictions are for the current minimum to be in late 2019 or 2020. It will take six or more months to know we are past the minimum, so it might not be until 2021 before we

find out if this new theory is correct. I hope they are wrong. Not many of us can wait that long for 10 Meters to start opening up again.

DXpeditions are light in July. Not many big ones are scheduled in July since HF conditions are typically poor in the northern hemisphere. The exception is locations that are difficult to travel to in other months. The most interesting DXpedition this month is one of them.

A group of US hams will be going to St. Paul Island July 31-August 8 using the call CY9C. They will be on 160-2 Meters. The location is a small uninhabited island east of Canada's Prince Edward Island. Ranking #69, on the wanted list, it is not real common because it only activated every few years on average. They will be on CW and SSB, but it seems that they will be putting a lot of focus on the digital modes. There has never been a digital contact from the island on 160M according to ClubLog. They are also bringing gear for 6M and 2M. Two meters will be EME. 6M will be either EME or terrestrial depending on conditions. There is a reasonable chance of working them on 6M Es although the dates are near the end of the Es season. Keep your fingers crossed.

Contests are light in July as well. The biggest one is the IARU HF Championship contest. It starts at 1200 UTC (7:00 AM) July 13 and runs for 24 hours. You can work CW, phone, or mixed mode. There are high, low, and QRP levels for each one. There are separate categories for single op and single op unlimited for those who like to use packet.

You send a signal report and your IARU zone. That is zone 8 for us, not zone 4 as used in the CQWW contests. You can work a station on each band and mode. Depending on the location of the other station, each QSO is worth 1, 3, or 5 points.

Multipliers are the number of zones worked per band (not band/mode) plus IARU HQ stations. Member societies will often have a station on for this. Often they have the suffix HQ. The ARRL is the US member society, and the call sign is NU1AW. Last year I was invited to operate from NU1AW/9 for this contest. It was quite a thrill.

The weekend of July 21 is busy. Both the CQ WW VHF contest and NAQP RTTY contests are this weekend. I have never operated the CQ VHF contest, but apparently it has its following. You can read about it at <https://www.cqww-vhf.com/>

I will be on for the NAQP contest. I have talked about those frequently. It is hosted by the National Contest Journal (NCJ) which I have been writing a column for over 30 years. Info at <http://ncjweb.com/NAQP-Rules.pdf>

A big thank you goes out to Tom Ruhlmann, W9IPR. Tom is retiring as the newsletter editor. He recruited me to write this column about 6 or 7 years ago. Tom really grew it into a first class ham club publication. If you think ORC members are the only readers, you are wrong. Bill, W9MXQ reports having a QSO with a ham on a small island in the Pacific. The DX station said he really enjoyed Bill's columns on old radios! Best of luck and a big thanks to Ben Evans, K9UZ for taking over the job as editor. I know Ben will do a superb job.

That wraps up July. Summer has finally arrived!

THE COMPUTER CORNER

No. 256: Windows vs. Linux Presentation

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



Our Bill Shadid (W9MXQ), recently asked me to present a talk on **Windows versus Linux** at WiARC, the Wisconsin Amateur Radio Club (formerly the Falls Radio Club) in Germantown. Bill, an ORC member, is also the President of the Germantown-based club. So, I prepared and gave the talk to approximately 40 members on Wednesday, 26 June. It was great fun and they were cordial hosts. They have a good series of talks coming up, a few of which are listed below with dates. You will note that Gary Drasch (K9DJT) is giving two, so with Bill Shadid, the presentations are well represented with ORC members. For

more info, look at their website: <https://www.wiarc.org> and try to attend those that interest you.

31 Jul	Bill Shadid, W9MXQ	Tuning a Vacuum Tube Radio Final Amplifier
28 Aug	Gary Drasch, K9DJT	Using a Digital Voltmeter in the Shack
25 Sep	TBA	
30 Oct	Gary Drasch, K9DJT	Features and Use of ClubLog
27 Nov	TBA	Using an Oscilloscope in the Ham Shack
18 Dec	Patrick Moretti, KA1RB	ARRL Update (Patrick is ARRL Wisconsin Section Manager.)

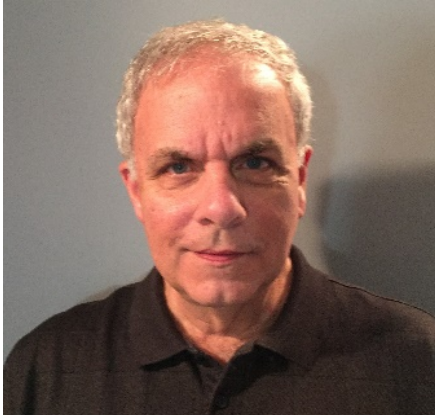
So what did I talk about? First, I explained my computer credentials, including the rebuilding and distribution of over 700 units (Windows and Linux) to Wisconsin ARES/RACES groups between 1995 and 2015. Then I covered the upcoming changes in Windows – to a rental fee basis – and some of the other Microsoft changes in store. I spoke briefly about the origin of Linux, and how widely it is found today (it is now the largest installed base of all general-purpose operating systems). Linux Mint 19.1 Cinnamon, nicknamed “Tessa”, is the most popular version today.

Next, I compared the differences and similarities of Linux and Windows, especially how Linux can now handle most any Microsoft Office chores with nearly perfect compatibility, thanks to the Libre Office that comes with the Linux package. I showed pictures of the Windows and Linux desktops to point out how similar they are, and therefore how easy it is to use Linux or even switch to it. We explored the minimum hardware necessary to run Linux, including memory and hard drive space needs. I pointed out how easily updates are done (reboots rarely needed!) when compared to Windows.

Finally, I finished up with the three ways to get it. 1. A completely free method, by downloading a file from the web which you use to burn a boot “live” Linux disk. 2. By ordering a boot disk for under \$6, plus \$3 shipping (no shipping charges for orders over \$20, so groups can get together to order several and save some bucks). 3. By ordering a bootable thumb drive with the installation files on it for \$14.95 plus shipping (again, no shipping charges for orders over \$20. By edict of Linus Torvalds, the original writer of Linux, the operating system must remain completely free. The charges noted above are just payment for preparation and shipping of the media. Happy Computing!

Vintage Amateur Radio

de Bill Shadid, W9MXQ



This month we talk about the planned replacement for the Drake TR7/TR7A. The TR8 Transceiver was developed to complete in a market dominated by the Japanese manufacturers. This article is about a line of transceivers that were never made even though far enough along in development to be prototyped. Two examples of the TR8 exist today according to a well-known Norwegian¹ collector of Drake radios.

As microprocessors and more advanced frequency generation techniques became common, Drake sought to bring this advanced technology into their product line. Some parts of this “8-Series” product line made it to market. While not part of this article, those of you that followed Drake products recall that the R8 Receiver (followed by the R8A and R8B) came on the market about 1991. It included several accessories, including the MS8 Speaker Console and a VHF Converter for the 35-55 MHz and 108-174 MHz bands.



The Drake TR8 HF Transceiver Prototype

For reference through the article, here also is a repeat picture of the TR7 (a TR7A, in this picture) to use in making comparisons. This TR7A resides at W9MXQ.



W9MXQ

Most important are two areas of obvious design upgrade. The first is Frequency Control:



Check the Frequency Control area of the TR8 Front Panel to see the evidence of dual internal VFO's. To the left is a blown-up view of the area showing that there was a wide selection of Receive (RX) and Transmit (TX) control options. It is seemingly understood that Drake had the circuitry of the PLL RV75 External VFO – or a more advanced version of that product – included in place of the analog PTO and DR7 frequency display apparatus from the TR7. This would have made the TR8 competitive with the more stable Japanese radios of the day. But, not quite as stable as today's TCXO equipped radios made in the USA and elsewhere. Note separate power switch in what appears to be a push-push device.

The second area of improvement is the change in several features that were not seen in the original TR7 and TR7A. Check this insert from the front panel view of the TR8:



Here are a lot of important features of the TR8 that many felt were omitted in error from the TR7 and TR7A. Those include the FM Mode and a dedicated TUNE position on the MODE switch. (I use CW mode for tuning my L7 Amplifier with my TR7 and TR7A.) However, perhaps the most desirable feature added was the humble NOTCH filter – long a main-stay of the previous generation Drake 4-Line separates. Note the repeat bandwidth selections (concentric with the Pass-band Tuning (PBT) control from the TR7 and TR7A. (The TR8 added a fifth bandwidth position.) It appears that Drake continued to use the proven crystal filter bandwidth control as did their competition.

Next we will look at the center of front panel push buttons for further evidence of the inner workings of the TR8.

The buttons used on the TR8, while more numerous, followed the design used on most of the 7-Series products. They seem from my experience to be convenient and durable.



I offer apologies for the poor picture quality – but this TR8 was an engineering “mule” and never was intended as a marketing piece. I think I could duplicate the above panel lettering with the Casio Label Maker in my toolbox.

Let’s now go through the different buttons on the top row:

- REF – switches the meter to Reflected Power – same as TR7/TR7A
- PTT – switches between PTT and VOX transmitter control – same as TR7/TR7A
- NB – switches on the Noise Blanker – same as TR7/TR7A
- SPKR OFF – disables the speaker – the same process used on the Drake R7/R7A Receiver where the insertion of the headphone plug did not automatically disable the internal speaker
- FAST TUNE – allowed the digital VFO to go into fast slew mode.
- DIAL LOCK – disabled the VFO encoder so tuning was locked out

Now for the bottom row:

- BAND INCR – this control seems lost to history – but may have been some feature used with the general coverage receiver band selection or in a way similar to the UP and DOWN buttons on the TR7/TR7A
- PBT – turned on and off the Passband Tuning – as on the TR7/TR7A
- AGC M-OFF-F and S – this was the AGC feature switch, not unlike the bandwidth switching control on the TR7/TR7A – both buttons out was Slow Speed AGC, Left Button pressed was Medium Speed AGC, Right Button pressed was Fast AGC, and Both Buttons pressed was AGC OFF
- NOTCH – turned on the NOTCH feature in the TR8
- RIT – turned on the RIT (Receiver Incremental Tuning) feature in the TR8

Finally, we will look at the lamp panel – which is much expanded from the TR7/TR7A:



The TR7/TR7A had equivalent lamps for PBT and RIT. They also had two different lamps (SETBAND and FIXED) that had no equivalent with the more advanced frequency and band switch control of the TR8. The ALC lamp on the TR7/TR7A was in a different location.

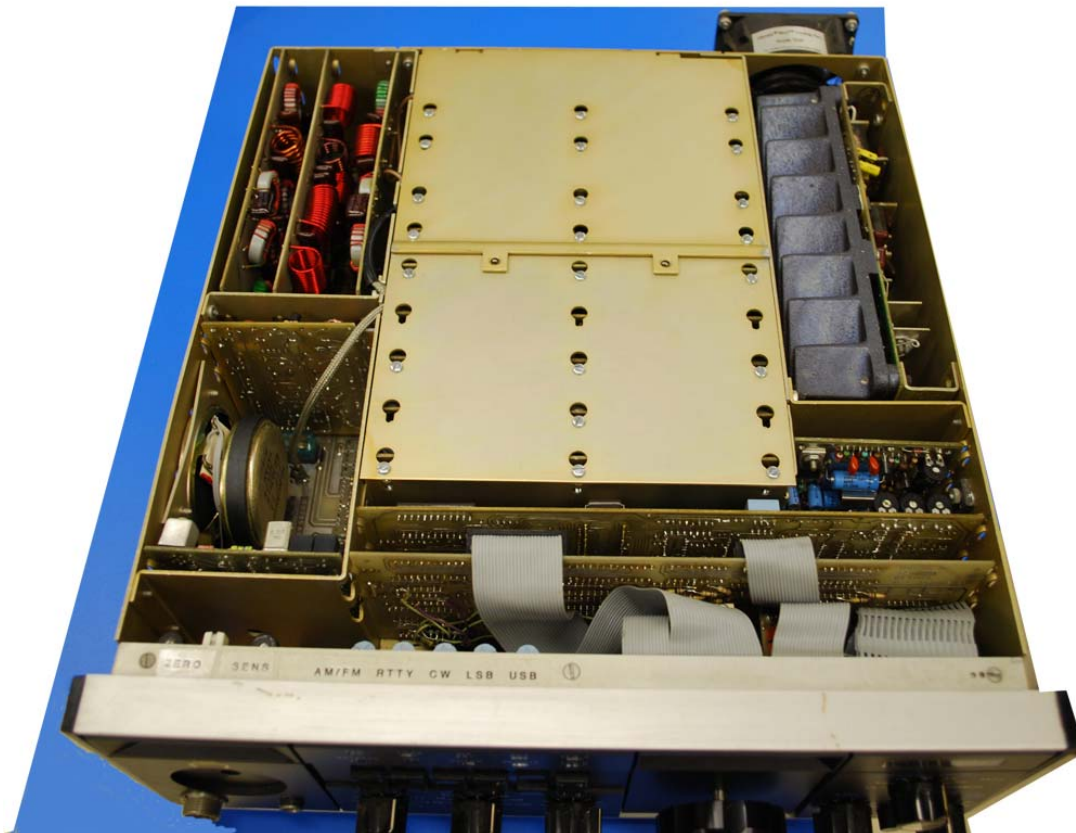
Lamps on the top row:

- ALC – indicates peak modulation but just flickering with modulation
- LOCK – indicates that the tuning dial encoder was locked
- RIT – indicates that the RIT is engaged – same as on the TR7/TR7A
- RCT – feature on the TR8 is not identified in my information
- VFO A – indicates that the frequency readout is showing VFO A frequency and that VFO A is controlling the transceiver (if the radio is in transmit)

Lamps on the bottom row:

- SETBAND – it is assumed this was a term to indicate PLL Unlock Condition – or it could have had some feature set tied to the unexplained BAND INCR button
- PBT - indicates that the PBT is engaged – same as on the TR7/TR7A
- NOTCH – indicates that the NOTCH is engaged – same as on the TR7/TR7A
- REMOTE – indicates remote frequency control – but not clear from where
- VFO B – indicates that the frequency readout is showing VFO B frequency and that VFO B is controlling the transceiver (if the radio is in transmit)

The inside of the TR8 was a rather expanded version of the TR7/TR7A:



The TR8 was some three inches deeper than the TR7/TR7A. Note the continued use of the FA7 Fan and what appears to be the same Power Amplifier Assembly and Bandpass filters. The area where the DR7 Board used to reside in the TR7/TR7A is now taken up by vertically mounted boards that included the PLL Dual VFO Circuitry. It has always been my thinking that the TR8 had an automatic antenna tuner but no controls for one exist on the front panel nor does this view shown any evidence of such a feature. Perhaps it was somehow mounted separately – like an accessory.

The rear panel of this prototype has its own mysteries:



You can see the FA7 Fan in place. And you will note connectors for a remote receiver (which could have had some relationship to the REMOTE lamp if it could be allowed to control the transceiver). The Jones four-pin and Jones ten-pin connectors seem to indicate the reliance on a PS7 (or new version PS7) Power Supply – or could simply mean that this was a TR7A back panel from stock at the time. Note the reference to the “XXX2” number at the right. This is supposed to be the second prototype – so the “XXX” is a reference to the TR8 and the “2” is the number.

Here is an internal top view of the TR7A at W9MXQ. Note the FA7 for size reference with the TR8, above. The TR8 is a deeper and therefore larger. The TR7’s complicated DR7 Digital Readout board in front of the circuit board enclosure is gone from the TR8. Also note the fewer boards in the board enclosure of the TR7/TR7A compared to the TR8:



W9MXQ

There are two more areas of the front panel for review:



The left picture shows the extreme left side of the Front Panel. Here you see the same meter as used in the TR7/TR7A plus the location of the Band Switch. The Band Switch appears this way in any picture I have seen. Careful examination shows the hole to be open with no visible shaft. Perhaps at this prototype level (XXX2) the radio was hard wired to a single band and the switch layout had not been developed. Like on the TR7/TR7A, the silk-screened BAND callout and the printed “bracket” seems to indicate that the Band Switch might have shown a range. See the continued reliance by Drake on the four-pin Foster microphone connector.

The right picture shows the area just to the right of center area of the TR8 and shows the main tuning knob (the same knob as used on the R8/R8A/R8B Receiver) and the readout window. Careful examination would seem to indicate that the readout itself, while still made of seven-segment LED unit(s) it did show nine segments as in 14250.00 format. This means two digits to the right of the decimal point. This is an improvement over the eight segments of the same readout on the TR7/TR7A – as in 14250.0 format.

As hinted above with several buttons and lamps, the complete information package on this radio is limited and incomplete. So, my quest to find answers is ongoing. The TR8 design appears to have taken place before the final plans for the R8 Receiver were finalized and then put into production. The designs (TR8 vs R8) evolved after the idea of an R8 Receiver was finalized.

I will end this article at this point – after having found a good deal of information on a matching Linear Amplifier and even what appears to be a matching transmitter (note I said “transmitter,” not “transceiver”) for the R8 Receiver. So, the final article in this series of Drake radios will come next month.

Please understand that much information about the elusive design specifications of the TR8, its accessories, and other related products are lost to history. Much of what I have written is con-

jecture on my part from very limited information and the interpretation of controls on the panels of subject equipment. My research in this subject is ongoing and may generate information for a more detailed article on the TR8 Transceiver. I am looking for details of QSK operation of the Transceiver, an internal or external automatic antenna tuner, the possibility of any planned "RV8" external oscillator, etc. Some other accessories are better known – and will be the subject of next month's article. Next month we will also talk a bit about a possible TR7B Transceiver that may have been planned – or that was perhaps an even earlier concept of the TR8 Transceiver. Another item for further detail is the final ending for the TR7 and TR7A – it is a story that has a Milwaukee connection..

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.

Reference Notes:

1. Sindre Torp, LA6OP – who further credits Bill Frost, former Drake Service Manager. All pictures, except the two covering the TR7/TR7A, are credited to Mr. Torp.

W9MXQ

UPCOMING EVENTS

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

Upcoming ORC Monthly Programs

July - Tom W9IPR, Sun-N-Fun

August - Homebrew Night

September – Chuck W9KR, Direct Digital Synthesized VFO

Homebrew Night

de Pat Volkmann, W9JI

The August ORC Meeting will give you a chance to show off one of your projects. You can bring anything that is ham radio related. If it's too big to bring in, bring some pictures. Please let me know if you are bringing something so that I will be able to budget the time accordingly. For now, plan on 3 to 5 minutes to talk about your project. Send me no more than 3 PowerPoint slides. If you don't use PowerPoint, send me some photos and information and I'll put it together for you.

I recently attended a similar program at the Wisconsin Amateur Radio Club meeting. The projects were all very interesting and very well done. It was a lot fun looking at and talking about the various projects the members brought in. I'm looking forward to talking about YOUR project at the ORC meeting in August.

Presenters Needed!

de Pat Volkmann, W9JI

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

Ozaukee Radio Club

June 12, 2019 Meeting Minutes

de Ben Evans (K9UZ), Secretary



President Kevin Steers (K9VIN) called the meeting to order at 7:30 PM. All the attendees introduced themselves.

Announcements, Show-and-Tell, Bragging Rights:

Members told of the countries they worked during the recent 6-meter contest.

Program:

Ken (W9GA) gave his presentation about the club's activities for the upcoming Field Day weekend. Ken talked about the ORC's plans for Field Day 2019 and highlighted the club's past Field Day activities with contact statistics and photographs. Ken also talked about the setup Thursday and Friday, and the turkey roast dinner Friday night.

50/50 Drawing:

Jon (WW9JON) was the winner of the 50/50 drawing.

Auction:

Stan (WB9RQR) conducted the auction. Many items were sold, including a book titled "Thunderstruck" by Erik Larson, an RCA speaker and a Dell Studio XPS 8100 desktop computer with the latest version of Linux installed.

Officer Reports:

Kevin S. (K9VIN), President's Update – None.

Pat V. (W9JI), 1st VP – No report.

Tom T. (KC9ONY), Repeater VP – Hopefully got rid of the hum problem at the Mequon site by relocating to another equipment rack. The amplifier at the main site has issues so it's being bypassed resulting in lower power. Working on a replacement amplifier.

Ben E. (K9UZ), Secretary – The minutes from the May meeting are in the newsletter. Motion to accept the minutes was made by Stan (WB9RQR), seconded by Robert (K4WTH) and approved by the members.

Robert E. (K4WTH), Treasurer – The treasurer's report was handed out to members prior to the meeting. The final net income for the Spring Swapfest was \$827.28. The Scholarship made \$187.75. Everyone was reimbursed so there should be no outstanding receipts. The May profit/loss report was in the handout. Motion to accept the treasurer's report was made by Vic (WT9Q), seconded by Ken (W9GA) and approved by the members. Tom R. (W9IPR) commented that the written report is nicely presented.

Committee Reports:

Ken B. (W9GA), Field Day Committee – Ken, with the help of others, will be putting up the canopy at his house Thursday afternoon to make sure there's no trouble with it. Ken called for additional people to help out in that effort.

Tom R. (W9IPR), Scholarship Committee – There were several individuals who showed up to clean up the barn. About five paging systems were gotten rid of, but the power supplies were removed and saved. Each power supply appears to be good for 50 amps. If anyone is interested in these power supplies, let Tom know. Tom thanked those that came to help clear the barn.

Tom is looking for an “assistant editor” to help with the newsletter after being the editor for 18 years. Ben (K9UZ) volunteered for the position.

Jim (K9QLP) had a question about the treasurer's report. The check numbers appeared to be out of sequence. Robert (K4WTH) explained that the check numbers are randomly generated when they are cut by the bank.

Old Business:

There was no old business.

New Business:

There was no new business.

Adjournment

Stan (WB9RQR) made the motion to adjourn the meeting, which was seconded and was passed by the members. The meeting was adjourned at 9:00 PM.

Attendance:

There were 29 members and five guests present at the meeting.

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

Respectfully submitted,



B. Benjamin Evans, K9UZ
Secretary

ORC Meeting Agenda

July 10, 2019

1. 7:00 – 7:30 PM – Network & Rag Chew
2. Call to Order – Kevin Steers (K9VIN)
3. Introductions
4. Announcements, Bragging Rights, Show & Tell, Upcoming Events, etc.
5. Program: Tom Ruhlmann W9IPR – Sun 'n Fun
6. Fellowship Break
7. 50/50 Drawing
8. Auction – Stan Kaplan (WB9RQR)
9. President's Update – Kevin Steers (K9VIN)

10. 1st VP Report – Pat Volkmann (W9JI)
11. Repeater VP Report – Tom Trethewey (KC9ONY)
12. Secretary's Report – Ben Evans (K9UZ)
13. Treasurer's Report – Robert Eskola (K4WTH)
14. Committee Reports:
 - a. Scholarship
 - b. Other
15. OLD BUSINESS
16. NEW BUSINESS
17. Adjournment to ?

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The ORC Newsletter

465 Beechwood Drive
Cedarburg WI* 53012

First Class

Next ORC Meeting:

Grafton Multipurpose Senior Center

1665 7th Avenue, Grafton, WI
Wednesday, July 10th, 2019

7:00 PM – Doors Open

7:30 PM – Meeting Begins