



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 (-127.3PL), 224.18 (-127.3PL), 443.75 MHz (+127.3PL) - Callsign W9CQO

Web site: www.ozaukeeradioclub.org

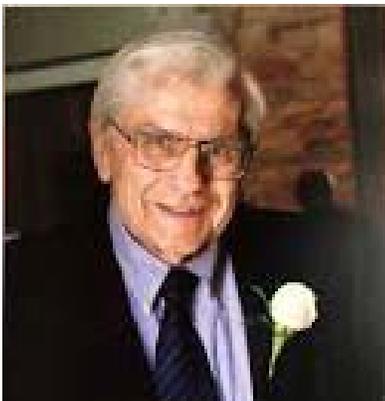
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Volume XXXII

January, 2020

Number 1

Ron Yokes, W9BCK (1926-2020) “Silent Key”



ORC members were saddened to hear the news of the passing on January 8th of Ron Yokes, W9BCK (“Big City Kid”), a co-worker, business associate and friend to a great many in the club. Ron was a founding member of the Ozaukee Radio Club and helped get it organized. He is preceded in death by his wife Ethel and sister Genevieve Bandemere. Ron leaves behind his seven children, 11 grandchildren and 14 great-grandchildren. Services will be held at the Mueller Funeral Home & Crematory, 979 N. Green Bay Road in Grafton on Saturday, January 18, 2020 from 12:30 to 3:00 PM.

The following is from Ron’s obituary on the Mueller Funeral Home website (<https://www.muellerfuneralhome.com/obituaries/Ronald-R-Yokes?obId=10439459#/obituaryInfo>):

Born in Chicago, Ron was a World War II vet and radio operator on a Destroyer Escort US Navy ship. This propelled his lofty career into television and he grew with the broadcast mass media of the times – holding positions from TV repair for RCA, to Assistant Chief Engineer and Production Manager for WITI TV-6 in Milwaukee. Later he participated, with Storer Broadcasting, in bringing cable TV to Southern California. He then finished his career as a Broadcast Equipment Sales Representative for RCA.

Ron was an avid hobbyist all his life as a Ham Radio Operator, and was cofounder of the Ozaukee County Amateur Radio Club. He was also an automobile enthusiast, with a particular interest in Mercedes Benz.

In all endeavors, Ron strived for the best in himself and others. He served on the committee for Ozaukee Health and Human Services to ensure maintenance of quality care for his communities. He was secretary of the Grafton Lions Club and wrote the weekly newsletter. The Lions Foundation presented him with the Melvin Jones Fellow award “for dedicated humanitarian service.” He was a member of Rose-Harms American Legion Post 355 in Grafton, and delivered Meals on Wheels with his wife Ethel.

Ron will truly be missed by his entire family and all who knew him.

[Editor’s note: There will be an expanded article in a future edition of the newsletter about Ron and other ORC members around the time of the club’s founding and afterwards. Got an idea for an article you want to contribute? Let me know at ben@evansengsolutions.com].

DX'ing & Contesting

De Gary Sutcliffe (W9XT)



Welcome to 2020. Another year has passed, and depending on how you count, another decade. Later this year, I will celebrate the 50th anniversary of getting my Novice ticket. A lot has changed from the days of using tube rigs and a crystal controlled CW only transmitter.

We continue into the depths of solar minimum. In 2019 we had 272 (74%) days with no visible sunspots. At the end of December, there were two spots from the new cycle. New cycle spots can be identified because they occur at higher latitudes and their magnetic field is reversed from the previous cycle spots.

This is a good sign.

The consensus of the solar scientists is that the minimum will occur in April, plus or minus about six months. So, we could be past the minimum, or it could be at the end of the year. That assumes they are correct. At any rate, it will be a good three years before conditions show a major improvement.

That does not mean that you can't make contacts. I totaled up my DX totals for 2019. Running less than 200 watts, I managed to work over 100 countries on 80, 40, 20, 17 and 15 meters. The openings are there; they are just less frequent and often brief. The really long distance openings don't happen on the higher bands.

The low bands are the best bet. You can get some strong signals on 40 meters, often an hour or more before sunset and lasting an hour or more after sunrise. We had some great openings on 160 meters. I was out of town at the start of the Stew Perry Top Band DX Challenge the last Saturday night of December, so I got a late start. I was able to work about 20 Europeans running 100 watts into a piece of wire in a tree. Signals were very strong, and I could have worked a lot more if they had heard me.

Besides writing this column, I have been writing the Contest Tips, Tricks, & Techniques column in the *National Contest Journal* for many years. The ARRL publishes the *NCJ*, and a separate subscription is required. The ARRL announced that ARRL members will be able to read a digital version of the magazine as part of their ARRL membership. There are a lot of articles on contest operating, of course. There are also articles on station design which might be of interest to non-contesters. The free digital copies will also apply to *QEX* magazine. *QEX* is another ARRL publication that specializes in the technical aspect of the hobby. I have been disappointed in the lack of good technical articles in *QST*.

Contests this month include the North American QSO Parties. The CW running starts at noon local on January 11th. The phone event is a week later. They each run for 12 hours, but you can only operate 10 hours. It is a good contest for those with modest stations since the power limit is 100 watts. Being a domestic contest, low antennas are effective. More info can be found at <https://ncjweb.com/NAQP-Rules.pdf>

The same weekend as the phone NAQP is the ARRL January VHF contest. It starts at 1900 UTC (1:00 PM) Saturday, January 18 and runs to 0359 UTC Sunday night. You exchange grid squares. Activity in the January event is not as good as the others. The June running is often blessed with big

Sporadic E openings, and the September one sometimes has good tropo openings. January is also cold so there is less incentive for the rovers to go out or for operators to go out to some hilltop to operate. On the other hand, the digital modes can create openings to make it interesting. A good time is around sunrise on Sunday, using FSK441 to work stations on random meteor trails.

The CQ 160M (CW) contest starts at 2200Z (4:00 PM Local) on Friday, January 24 and runs 48 hours. There are a lot of categories including high, low, and QRP power, and assisted and unassisted in each power group. Send a signal report and state. Full rules at <http://www.arrl.org/january-vhf>

Contacts with other US stations are worth 2 points. Contacts with other countries in North America are worth 5 points. Contacts to other continents are worth 10 points. Multipliers are US states, VE provinces, and DXCC countries. Full rules are at <https://cq160.com/rules.htm>

After a break for the holidays, DXpeditions pick up a bit this month. Palestine will be activated January 6-12 by a group of Russian hams. They will be operating as E44RU on 160-10 Meters, CW, SSB, and FT8.

Palau, in the Pacific Ocean, will be on the air with a group of Japanese operators. The dates are January 15-23. Each one will be using a different T88 call. They will operate 160-10 meters, all modes.

Cocos Island will be on January 10-February 9. This one is pretty rare because permission is rarely given. The call sign has not been released, but the standard prefix is TI9. Propagation is good in that direction, so you will just need to get through the pile ups. They will be running two stations at 700 watts. Unfortunately, they will only be operating SSB. No CW or digital.

Tanzania will be well represented in early February. A large group of Italians will be using 5I5TT on CW, SSB, and RTTY. 5I4ZZ will be used for FT8 and FT4. The dates for this group are February 4-18.

A group of primarily Czech and Slovakian hams will be on February 6-18 as 5H4WZ. They will also be active in the CQ WPX and ARRL DX CW contests.

If that is not enough, NK8O will be on from Tanzania on February 16-March 16. Holiday style operating, 40-10M. Mostly CW and digital.

That wraps up January. Cold days and long nights are the perfect time to play some ham radio.

Reserve Sunday Afternoon, March 15th, for the WIQP!

The ORC came close to winning the Wisconsin Club category last year. We can win it in 2020 if we can get a good showing of ORC members. Everyone can contribute. Work other stations on HF with digital, CW, or SSB, and FM simplex on VHF. More info in the next ORC Newsletter or rules at https://www.warac.org/wqp/wiqp_rules.htm

-Gary, W9XT

THE COMPUTER CORNER

No. 262: Linux In The Hamshack

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



[This article, by Sholto Fisher (K7TMG) appeared in THE BEACON, West Mountain Radio Quarterly Newsletter, Quarter 4-2019, pp. 3-5. It is the same issue of THE BEACON that contained ORC's Fred Schwierske's (W9KEY) article on Celebrating the 100th Anniversary of Radio Station WWV, and reading Fred's article led me to spot and read Sholto's article. It is a good thumbnail sketch of using Linux in the hamshack, so I asked permission of West Mountain Radio to reprint it here. They said yes and we are grateful for it. Stan]

We recently had a customer who mentioned we might consider writing about Linux operating systems because "it is used more than you think". I have actually been promoting the use of Linux in a ham radio environment for more years than I care to remember, and certainly the number of users is growing all the time.

There are many good reasons to use a Linux operating system, and ham radio applications are supported by a variety of programs.

Long gone are the days when you had to be a computer whiz kid to get Linux onto your PC. Nowadays you can burn a USB flash drive with an image, boot to it and install Linux in a matter of minutes. You don't even have to install it, as some Linux distributions are happy to run from the flash drive directly.

This is a great way to take a Linux test drive or even take your operating system with you wherever you go.

You might consider one of the small, inexpensive, single board computers which are available these days such as the Raspberry Pi. This is a complete PC with a Linux operating system on it and is perfectly suited for ham radio use.

Let's look at a few other benefits of using Linux vs Windows.

Linux is free, you don't need to pay anyone to install or use it. Linux is not some time-limited program with pop up adverts. It is a real, modern, operating system that is usually 100% compatible with your entire computer hardware.

Because it is not Windows or OS-X, it is in many ways more secure and less likely to be targeted by viruses or malware. It is generally much safer to browse the web or read emails on a Linux computer.

It is available in a number of different distributions (aka “distro”). This might be difficult for long time Windows users to think about but it basically boils down to choosing a particular distro (flavor) which suits you. If you don’t like the look of one distribution, just try another!

Linux is a great choice for an old desktop or laptop PC that was left behind by Windows. You can find a distribution which will work on even ancient PC hardware! So go ahead and put that old machine back in use instead of consigning it to the landfill. You will find that other Linux users are often very helpful and it may be worth asking around your club members to see if someone will take you under their wing and help you get started.

There are literally hundreds of distributions to choose from but the main well known ones are probably the place to start. I personally use Debian, but Linux Mint, Ubuntu and Manjaro are all worthy contenders. A good place to start is <https://distrowatch.com/> which details all of the major distributions. Their “page hit ranking” on the right side is a good way to gauge the popularity of currently used distributions. Anything in the top 5 is probably a safe bet.

[NOTE BY STAN: In the table below, I updated the numbers in the HPD (hits per day) column as of 29Nov2019. Also, the 3rd entry (Linux Mint) is the operating system I install on the rebuilt computers I bring to the ORC auctions. Why? Read the paragraph below that starts with “Linux Mint” for the answer.]

RANK	DISTRIBUTION	HPD
1	MX Linux	4667
2	Manjaro	2542
3	Mint	2089
4	Debian	1642
5	Ubuntu	1406

Once you have selected the distribution you want to try, you should burn the downloaded image to a flash drive using a program such as Unetbootin (see <https://unetbootin.github.io/>) then restart your PC and change the boot up sequence to use the flash drive instead of the internal hard drive.

Booting from a flash drive is usually quite quick and most of the major distributions will start without issue and present you with a desktop in a matter of seconds.

Linux Mint provides a modern, clean-looking desktop for everyday use. Mint is a good choice for someone transitioning from Windows to Linux as a lot has been done behind the scenes to make things “work out of the box”.

Many of the well-known major ham radio programs are written for Linux too. Software such as WSJT-X (JT and FT modes) and Fidigi (multimode and CW) are available. Other great programs to try are QSSTV (Analog & Digital SSTV), FreeDV (Digital HF voice), & Xastir for APRS use.

There are even special distros available with ham radio software baked in. KB1OIQ has a nice Ubuntu based distribution with many of the programs you will likely use already installed.

Check out Andy's Ham Radio Linux page located at <https://sourceforge.net/projects/kb1oiq-andysham/> for details.

At West Mountain Radio, we have worked hard to ensure that all of our RIGblaster interfaces are supported in all operating systems. Drivers for our interfaces are in the Linux kernel which makes them truly plug and play. 73, Sholto, K7TMG

UPCOMING EVENTS

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

Upcoming ORC Monthly Programs

January – Elections

February - Bill W9MXQ, Video Presentation on R.L. Drake Company

March – Vic WT9Q, Selecting & Installing a Vertical Antenna

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.

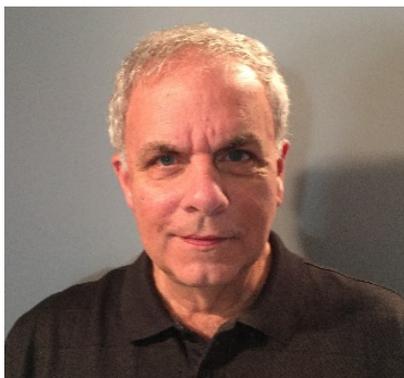
Telegraphy presentation in Fox Point February 7th

de Mike Yuhas, AB9ON

Hello ORC members and friends. If you have an interest in American Morse Code, or telegraphy in general, you might want to attend the February meeting of the Wisconsin Chapter of the National Railway Historical Society, which features "Canst Thou Send Lightnings - The Story of the Telegraph," presented by James Wades. James considers the telegraph to be the invention that spawned commerce and technology, from standardized time zones to the internet. The meeting, which is free and open to the public, will be held at 7:30 PM on Friday, February 7th at the North Shore Congregational Church, 7330 North Santa Monica Boulevard, Fox Point. Additional detail may be found at <http://nrhswis.org/index.php/meetings>.

Vintage Amateur Radio

de Bill Shadid, W9MXQ



The regular article series is going to take a bit of a break this month. December 2019 and early January 2020 have seen a lot of family activity, and time for writing has been a bit limited. In keeping with that, I am going to talk in this edition about what is going on with my article series on Vintage Amateur Radio – where we have been and where we are going.

This is a bit interactive and at the end of this article are requests for input from you that may impact future article content.

My goal in these articles has been to document in two areas:

1. Radios in my personal radio collection.
 - I like to write about radios I have used.
2. The introduction of the Collins S-Line radios.
 - Collins set the pace for the industry right up to today.

This far, with 29 articles completed by December 2019, Goal 1 of the documentation series has been met and will be for some time to come. Goal 2 was completed early in the series. However, Goal 2 continues to be referenced as radios after that are documented and compared with the S-Line ground-breaking concepts.

Back in mid-2017 when Tom Ruhlmann, W9IPR, then Editor of the Ozaukee Radio Club Newsletter, approached me to do some Vintage Radio articles I made a promise to him. I said that such a series from me will be guaranteed to go for about 12 to 18 articles. After 29 articles there is no real end in sight. There is a lot of material out there!

Next month, the regular series continues with Part 2 of the three-part series about Amplifiers based on the 811/811A Triode tube. Following that, I have planned to chronicle radios held by my partner in collecting, Bob Bailey, W9DYQ. While our collections are complimentary in many ways; Bob goes into more detail. For example, Bob has done an analysis of the differences in the Collins 75S-1, 75S-3, and 75S-3B Receivers¹. As a future article will show, Collins made significant changes in these basic chassis' in the S-Line Receiver series. Also, we will delve into the upgrade of the S-Line Transmitters in the 32S-1 and 32S-3 examples². Bob will also help with documenting popular and competitive home brew transmitters from our radio heritage.

Bob and I share a fascination with all radios – holding all Vintage Amateur Radio products as gems from our history. We tend to avoid brand preferences – all are great radios.

A few other areas upcoming in the near term are stories about the rarer members of my collection, past and present. In the near-term, these include the WRL/Globe transmitters and later HyGain Galaxy line of transceivers and amplifiers. The Galaxy transceivers were able and competitive products marketed against the Drake TR-3 and TR-4 line of transceivers. We will cover another giant of the ham radio industry – Gonset. Premier in the Gonset brand were the famous Gonset VHF and UHF Communicators and their player in the world of 100-watt plate modulated

AM transceivers – the G-76 Transceiver. Also, the rather rare Gonset HF separates station with the GSB-100 Transmitter, GSB-101 Linear Amplifier, and G-63 Receiver³.

A love of mine but, thus far, not covered are the Central Electronics line of transmitters, amplifiers, and accessories. Those articles are coming. Central Electronics radios and accessories have been treasured parts of the W9MXQ collection⁴.

Now, for my question to you, the readers of these articles. Is this series taking the right path? Do you want to see any certain radios included in my series? Let me know your thoughts at W9MXQ@TWC.com.

A special note of thanks to my proofreader, Bob Bailey, W9DYQ.

Credits and Comments:

¹ The 75S-1, 75S-3, and 75S-3B Receivers had differences that can be outlined. Briefly, the 75S-1 was pretty much an SSB radio with little accommodation to CW operation. The 75S-3 and 75S-3B greatly improved on this shortcoming. Additionally, the 75S-3B was a slightly altered version of the 75S-3 but many say it was also cost reduced. Many hams today prefer the 75S-3 as the best example of the three radios. The 75S-2, 75S-3A, and 75S-3C were extended coverage versions of the above three radios, respectively. Technically they were identical to their restricted coverage versions.

² The 32S-3 was an improved version of the 32S-1 Transmitter. Again, the updates were heavily based on CW operation conveniences.

³ The Gonset GSB-101 and GSB-201 Linear Amplifiers are included (with others) in Part II of my series on the 811/811A Amplifiers. Part 3 of the series covers much older, post WWII, amplifiers with the 811/811A.

⁴ The line of transmitters, amplifiers, and accessories from Central Electronics include the low power 10A, 10B, and 20A Transmitters. There were the revolutionary 100V and 200V Transmitters that in 1959 required no tuning into a 50-72-ohm load. Visions of today's solid-state radios – but with tubes!

W9MXQ

Ozaukee Radio Club

December 11, 2019 Meeting Minutes

de Ben Evans K9UZ, Secretary



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

Announcements, Show-and-Tell, Bragging Rights:

Bill S. (W9MXQ): The Port Washington library called and said they'd like to keep the ham radio display, put together by Bill S. and Gary Drasch (K9DJT), up for another month due to all the activity. If you haven't seen it, check it out.

Jim A. (K9QLP): Ron Yokes (W9BCK), while cleaning stuff out, came upon a tube from Channel 6's Vitascan system from the early days of color television, which Ron then gave to Jim and is on display tonight for members to look at.

Asa (KD9MUY): This past Friday, a Pico high altitude balloon was launched by the MATC amateur radio club (W9HHX). It is currently at 30,000 feet altitude and crossed the Atlantic over the weekend. At last check, it was over Turkey. It is transmitting APRS and you can track it on www.aprs.fi. The call sign is W9HHX-11.

Stan (WB9RQR): Member Dave Barrow (N9UNR) called from Illinois and sends his regards and best wishes for Happy Holidays.

Program:

John Schrader (W9NRG) gave a presentation on his experience setting up and using emergency communications for firefighting.

50/50 Drawing:

There was no 50/50 drawing.

Auction:

Stan (WB9RQR) conducted the auction. Many items were sold.

Officer Reports:

Kevin S. (K9VIN), President's Update – No update.

Pat V. (W9JI), 1st VP – No report.

Bill C. (KD9DRQ), 2nd VP – No report.

Tom T. (KC9ONY), Repeater VP – Still doing research on a new RF amplifier for the 146.97 repeater. He hasn't found anything to his liking for under \$1,000. Also, those having a 220 MHz radio should use the 224.18 repeater more often; otherwise, we might lose the frequency. The 224.18 repeater links to 146.97 repeater. Jim K9QLP pointed out that the 224.18 repeater also links to the 10-meter FM remote base. Dave C. (KC9REP) pointed out that if people use their 220 radios to make contacts on 146.97, this will create traffic on both bands thus killing two birds with one stone. Tom also said if anyone wants to share duties with him in hosting the Tuesday night net, perhaps once a month, let him know.

Ben E. (K9UZ), Secretary – The minutes from the November meeting were distributed to members by email. Motion to accept the minutes was made by Stan (WB9RQR), seconded by Gary S. (W9XT) and approved by the members. The newsletter is late again but will be posted tomorrow.

Robert E. (K4WTH), Treasurer – Robert was not at the meeting, so Ben (K9UZ) gave the financial report for November which was handed out to members. The only thing of note is that the club finally reimbursed Tom KC9ONY for the new repeater antenna. Motion to accept the treasurer's report was made, seconded, and approved by the members.

Committee Reports:

Ken B. (W9GA), Field Day Committee – On the subject of the shed, Ken is still waiting for news from the buyer of the property. The closing has been pushed back past the first of the year. We're hoping for a solution to keeping the trailers on the property. The white trailer is at Big Nate's. He was authorized to fix the axle but has not yet done so.

Ken B. (W9GA), Nominations Committee – Next month are elections. We have tentative candidates for some of the positions. If anyone would like to step forward for a position, let Ken or any of the officers know. We are going to need new people for some of the offices.

Tom R. (W9IPR), Fall Swapfest – The Fall Swapfest will be August 29th, which has been published in QST, but there are errors in the posting which will be taken care of.

Tom R. (W9IPR), Extra-Class Training – There will be a session next Saturday, December 21st and that will be the last session. The question was asked as to when the new Extra Class exam questions pool will be released because the new tests start in June. Tom responded that the new manual should be coming out very soon. Someone said that the questions will be posted online so you won't need a book.

Kevin K9VIN announced that Robert K4WTH is stepping down as Treasurer. He also handled new memberships, nametags and Field Day networking, so we'll need members to cover those areas.

Old Business:

There was no old business.

New Business:

There was no new business.

Adjournment:

Stan (WB9RQR) made the motion to adjourn the meeting, which was seconded and passed by the members. The meeting was adjourned at 9:13 PM.

Attendance:

There were 25 members and two 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

January 8, 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: Elections, Ken Boston, W9GA
6. Fellowship Break
7. 50/50 Drawing
8. Auction – Stan Kaplan (WB9RQR)
9. President's Update – Kevin Steers (K9VIN)
10. 1st VP Report – Pat Volkmann (W9JI)
11. 2nd VP Report – Bill Church (KD9DRQ)
12. Repeater VP Report – Tom Trethewey (KC9ONY)
13. Secretary's Report – Ben Evans (K9UZ)
14. Treasurer's Report – Robert Eskola (K4WTH)
15. Committee Reports:
 - a. Scholarship – Tom W9IPR
 - b. Field Day Storage – Ken W9GA
 - c. Other
16. OLD BUSINESS
17. NEW BUSINESS
18. Adjournment to ?

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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, January 8th, 2019

7:00 PM – Doors Open

7:30 PM – Meeting Begins