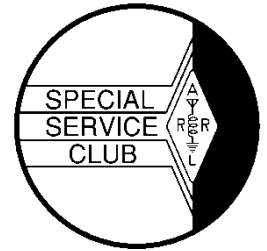




# The *ORC* Newsletter

Official publication of the Ozaukee Radio Club, Inc. Mail all contributions to the editor, Tom Ruhlmann, W9IPR, 465 Beechwood Dr., Cedarburg WI 53012 (phone 262 377-6945). 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](http://www.ozaukeeradioclub.org) Facebook: [facebook.com/orcwi](https://facebook.com/orcwi)

Volume XXX

November, 2018

Number 11

## From the President

*De Kevin Steers (K9VIN)*



Well, this month's article will likely be a short one. With unexpected travel and two different car breakdowns, I have yet to get things straightened around on my tower. I am beginning to gather all my warm weather clothing, and pray for a warm spell the next time I am up north to toil.

Meanwhile, I finally replaced my 2M rig in my car, and I use the Green Bay repeaters on my travels to the north woods. Apparently, my antenna had broken, and my old rig did not let me know that, so I burned it out during a long conversation in traffic on my way to Dayton.

I sure wish more folks tuned in to the .97 club repeater. I monitor on my drive home from work, but rarely does anyone respond. Amusingly, during a recent QSO with Brett in Green Bay, he noted that the 10-minute conversation was likely his longest on 2M, and I laughed and told him that I could smell the heat of my 2M radio for the first time ever.

I continue to chase down noise issues in my Volvo on my HF rig, and my next attempt is to install high quality Coax, rather than the Radio Shack grade RG58 that is in there now. The noise is so loud, that I only hear a small fraction of stations that are on the air. I trust that will be a life-long struggle.

I am going to make a concerted effort this winter to make at least one HF contact every day. I am also going to call CQ on quiet bands in hopes of drumming up some action. Though my equipment is pretty old, I trust that the folks with newer equipment, and especially Pan Adapters, etc, will be able to see my CQ visually and come chase me down. One can only hope.

Lastly, please make an effort in 2019 to volunteer to help with our number of events such as Field day, Light House Weekend, and our two swapfests. So much of our planning and work gets done by the same individuals every year. We need more than one person to understand how each of the events is planned, etc, and with more volunteers, it means less work for everyone.

Cheers and 73s, K9VIN

# DX'ing & Contesting

*De Gary Sutcliffe (W9XT)*



October ended on a tragic note. Well-known contester, Rev. Paul Bittner, W0AIH, died in a tower accident. I met Paul in the 1980's. He was a real gentleman with an incredible enthusiasm for ham radio and an even more incredible amount of energy. Paul was 84 and still doing tower work on what is perhaps the largest ham antenna farm in the world.

I visited his 120 acre QTH near Eau Claire in the late 1990's on my way back from a trip to Minneapolis. Paul was so excited to show me around. I counted 50 towers 100' or taller.

Being a Lutheran minister, Paul could not just write a check for his station. Many of his towers were obtained from commercial radio stations that had towers they wanted to be taken down. The tower was his if he took it down and hauled it away.



W0AIH QSL card showing Paul Bittner's antenna farm

Paul also made his antennas. One of my favorite stories about him is he signed up for the local community college machining courses every semester so he could use their equipment to build antenna hardware.

Paul was one of a kind. He invited me to operate a contest at W0AIH a few times. I never could fit it in, something I will always regret. Val, NV9L, of Ham Nation fame, made a really nice short video tribute to Paul. You can see it here: <https://tinyurl.com/y7qjuauy>

The longer nights and low sunspot counts of November mean the low bands will be hitting their peaks shortly. I have not been able to spend much time on the air on those bands yet, but I have been setting up my rig to monitor 630 meters with the WSPR beacon system.

After we got the band just over a year ago, I would let the rig monitor the WSPR beacons all night every couple of weeks. These get sent to a website where they go into a huge database. In the morning I would go to the web site and query the database for a list of unique callsigns my station decoded the night before. The best months were December and January. I would frequently get a copy on a station from Hawaii and the Cayman Islands. I never heard Europe. So far this year I have decoded stations from France, Germany, and Australia. I don't know if there are more effective stations on now or better propagation. I have heard over 80 unique calls, using WSPR, CW, and JT9. Building antennas for that band is a huge challenge, and I am slowly making progress on mine. One of these days I will be able to report my first QSO on that band.

Flipping the calendar to November, we are now in the contesters "Hell Month" where you have a month (actually seven weeks) of major contests every weekend but one. Serious contesters can burn out with two weekends of CQWW DX contests, two weekends of ARRL Sweepstakes, followed by the ARRL 160 and 10 Meter contests.

The ARRL Sweepstakes and CQWW DX contests were covered in detail last month, so there is little point in rehashing them again this month other than the dates for the remaining modes. The phone installment of the Sweepstakes starts at 2100 UTC, Saturday, November 17<sup>th</sup>. It ends at 0300 UTC on Monday the 19<sup>th</sup>. Those are 3:00 PM Saturday to 9:00 PM Sunday night, local time.

The CW installment of the CQ WW contest starts at 0000 UTC Saturday, November 24<sup>th</sup>. It runs for 24 hours and ends at 2359 Sunday, November 24<sup>th</sup>. That is 6:00 PM Friday night until 6:00 PM Sunday night local. Yes, that is the Thanksgiving weekend.

The ARRL 160 Meter contest normally starts in December. By a quirk in the calendar, it starts this year on Friday, November 30<sup>th</sup> at 2200 UTC (4:00 PM local) and runs until 1600 UTC (10:00 AM local) on the following Sunday. This is a CW-only contest. QSOs with stations in the US and Canada are worth two points and stations from other countries are worth five points. We send a signal report and our ARRL section, which is WI for us. DX stations send only a signal report. ARRL sections and DX countries are the multipliers. Entry classes are QRP, low power (150 watts or less) and high power. Each power level has two classes: Single Operator, in which the use of spotting networks is not permitted, and Single Operator Unlimited which allows spotting networks.

160 meters, or Top Band, is a challenging but interesting band. Getting an antenna up can be tough for small lots. If you have a tower or tall trees, an inverted L can be put up and is effective. I have seen designs for trap inverted L's for 80 and 160M. The trap reduces the overall length somewhat. Some hams with an 80 meter dipole have shorted the coax connector and fed it with a tuner to get on the band.

The November calendar has a few DXpeditions of interest. Probably the most interesting one is Iran with a group of Russian hams putting on three stations using the call EP6RRC. They will be on 160-10 meters using CW, SSB, and FT-8. Tonga will be activated as A35EU November 16-27. They will be on 160-10 meters. Modes will be CW, SSB, RTTY and some FT-8.

A number of contest DXpeditions will be on for the CQWW CW DX contest, including PJ7AA operated by Wisconsin ham Tom, AA9A. The Caribbean is a popular destination for these operations. Operations from P4 (Aruba), KP2 (US Virgin Islands), V2 (Antigua) and probably many others, have been announced from that region. No doubt there will be other operations from other parts of the world. If you are not into contesting, these stations are often on the air a few days before the contest testing out their stations.

That wraps up November on the air. Happy Thanksgiving!

## Interesting stories about CW operators and its history

*De Ray Totzke (W9KHH)*



Ray's Shack – Circa?

Morsum Magnificat (MM), a Danish publication from Autumn 1986 (MM1) to March 2004 (MM89), is available for free download. MM deals with Morse Code history, operation, and stories of operators in wartime, commercial operators on land and at sea, and much of amateur radio.

Whether you are a CW operator or not, by straight key, bug, paddle, keyboard or devoted to phone operation only with no CW device to be found in your shack, you will find much of interest. Good reading when the bands are dead or when a break is needed from the excitement and agony of the pile-ups or the depression of a rig dying in mid-QSO.

Google "Morsum Magnificat" or go to <http://www.n7cfo.com/tgph/Dwnlds/mm/mm.htm> to download one or all of the eighty-nine issues plus MM Special Publications.

Read on - di-di-dit dah-di-dah dit dit

# THE COMPUTER CORNER

## No. 249: Update on HiBit Uninstaller

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

(262) 268-1949 [wb9rqr@att.net](mailto:wb9rqr@att.net)



Last February (CC No. 240, “Uninstallers: Geek and Hiber”), I wrote about two new free pieces of software that were very good at their job. You can get both at <https://www.majorgeeks.com>. One of the two, Geek Uninstaller, remains the simplest, quickest uninstall software on the planet. The other, HiBit Uninstaller, is really the best at how thoroughly it cleans up after the uninstall process is done. But HiBit has added some features that expand its abilities and now make it the rival of CCleaner!

CCleaner is no slouch. Its ability to clean the file system and the registry, and uninstall unwanted programs is legion, and that is why it has been downloaded over 2.5 *billion* times since its inception. It is safe to use, albeit a bit conservative. But, that conservative nature is what protects all of us users from doing any damage when it cleans your machine. So, CCleaner deserves kudos, and no Windows machine should be without it, up to now.

HiBit Uninstaller has several tricks up its sleeve that make it at least a rival of CCleaner, and I think it can replace it. First, HiBit comes as a portable program. That means there is no need to install it. Just download the program (*HiBit Uninstaller Portable.exe*) from Majorgeeks, double-click it, and the program will run. It will show you an alphabetical listing of all your programs, except for any very recent additions, which are always listed first. You can select those you wish to uninstall, and the program will do that for you. It will then scan your file system including the Registry and present you with any entries for you to give permission to delete them. When all finished, you have truly cleaned your machine of that program you were out to delete.

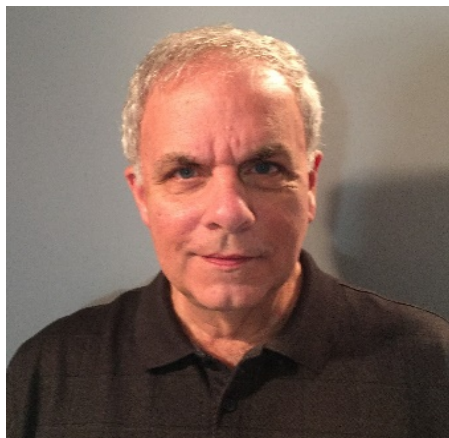
But the next trick will expand your power immeasurably. If you look closely, you will see a rather unobtrusive word, Tools, on the HiBit menu. Click that, and you are presented with several excellent cleaning options. First is a Registry Cleaner that seems to do a better job than CCleaner. Next is Junk Files Cleaner that also seems more thorough than CCleaner. These are followed by an Empty Folder Cleaner, a Shortcuts Fixer and a File Shredder. All handy from time to time in your efforts to spiffy up the file system on your hard drive by identifying and correcting problem areas. None of these are present in CCleaner.

There are more. The list of tools seems never to end. There is a Process Manager, Startup Manager, Services Manager, Scheduler Task Manager, Context Menu Manager and System Restore Manager. And even this is not all. But, I will leave you to find and explore the additional possibilities by yourself. Take it from me, it will be worthwhile.

Happy computing!

# Vintage Amateur Radio

De Bill Shadid, W9MXQ



Some months ago, earlier in this series of Vintage Amateur Radio Articles, I talked about “The Day the Universe Changed,” a phrase coined by historian, James Burke,<sup>1</sup> and how it related to the Collins Radio Company introducing the game changing S-Line 75S-1 Receiver, 32S-1 Transmitter, and the KWM-2 Transceiver. As you have seen in my various articles, this triggered a response from nearly all the established, and some new, amateur radio equipment manufacturers. While there were a lot of products and many versions of the Collins concept of the new age in radio equipment, perhaps no one went after the concept more intensely than The Heath Company – or as we know them, Heathkit. So, for this article we will start the discussion of the extremely popular Heathkit “SB-Line.”

Heathkit, in 1965, introduced the first of their competitive radios with the SB-100 Transceiver<sup>2</sup> in direct competition to the Collins KWM-2. The radios were nearly identical in specifications and even physical size and layout. Heathkit even used the concept of a permeability tuned oscillator – variable inductance tuned oscillator or PTO – for the VFO rather than the more common capacitively tuned oscillator. This was a hallmark of Collins’ design. (Actually, in the ham radio field of the time, both Heathkit and Drake followed Collins’ lead in this circuitry.)

The SB-100 was a 180-watt input SSB and CW Transceiver – just as was the Collins KWM-2. The two radios were nearly identical in size – but the Heathkit enjoyed a very large monetary savings for the amateur radio operator by being offered only as a kit to be assembled by the user. The Heathkit SB-100 was priced at only a fraction of the cost of the Collins KWM-2 back in 1965. And, Heathkit was widely known for the design quality of its kits with their “We won’t let you fail!” business philosophy.

Here is the operating Heathkit SB-101 Transceiver at W9MXQ: (The SB-101 superseded the SB-100 but they are very difficult to distinguish from each other as noted later.)



Heathkit SB-101 (successor to the SB-100) with SB-600 Speaker. Shown with HP-23 AC Power Supply mounted inside of the SB-600 (out of view)  
(W9MXQ Shack Photo)

To get a better idea of the physical similarities in the front panel controls and physical size of the Heathkit SB-101 and the Collins KWM-2, look at these two radios at W9MXQ for your reference:



**Heathkit SB-101 HF Transceiver**



**Collins KWM-2A HF Transceiver**

Both Radios – W9MXQ Radio Collection

One difference visible in the above views is the main tuning dial. You will note the band spread dial at the top of the readout area on the Heathkit along with the main tuning dial calibrated 0-500 (for a 500 kHz band segment). The upper, horizontal, dial indicated a rough approximation of the moving across the 500 kHz tuning range. The lower, round dial showed the exact, down to 1 kHz markings, of the place in that range. The round dial included a spiral “gear” that moved the indicator on the horizontal drive. Well assembled radios showed a very accurate mechanism with good linearity across the 500 kHz range.

Collins used a different, but no less effective, dial mechanism with two disks in an epicyclical drive mechanism. You can see the numbers in the dial and see a separate disk with white colored, opaque covers to only allow certain numbers to show in different revolutions. So that dial would move from 1-200 kHz over multiple revolutions with only the correct 10 kHz numbers showing as the knob was turned. Also see that Collins used 0-200 ranges instead of the 0-500 range for the individual bands. So, for instance, on 40 meters, the Heathkit would scale from 7.000 MHz to 7.500 MHz whereas the Collins, with its 200 kHz ranges would cover 40 meters in two band positions – 7.000 to 7.200 kHz and 7.200 kHz to 7.400 kHz. This is perhaps a bit inconvenient but on a band like 10 meters, it could get very inconvenient.

The reason for the narrow band coverage on the Collins radio addressed an issue with analog tuning of the day – linearity. The Collins design allowed for perhaps a single setting with the crystal calibrator at any place in the 200 kHz range and the readout would be accurate, or darn close, along the entire range. The typical 500 kHz range used by Heathkit (and most other manufacturers of the day) was not so linear along a 500 kHz run in frequency range. Heathkit was better than some of the others but Collins did have the right idea – even if it was a bit inconvenient.

Both radios use a similar final amplifier arrangement with loading set at a range of 50-75 ohms impedance – designed to feed modern coaxial cable. These radios would not work well with linear amplifiers that did not have a tuned input network. So, the modern, at the time, SB-100 and its successors, did not work well with older Heathkit Linear Amplifiers, such as the HA-10 Warrior. The final amplifier tubes used in the SB-100 Series Transceivers were two of the very popular 6146A or 6146Btetrode final amplifier tubes for an input power of 180 watts PEP SSB and CW. Like the Collins KWM-2, these radios were not really designed for AM operation. Output power was a nominal 100 watts. Tuning of the driver and final amplifier stages of the transmitter section of the transceiver was relatively straight forward and easy even for today’s amateur operators to master.

Heathkit provided a complete line of accessories for the SB-Series Radios (including a complete line of separate receivers and transmitters<sup>2</sup>). Most of the most popular accessories appear in the pictures, below . . .



**SB-200 1.2-Kilowatt Linear Amplifier<sup>3</sup>**



**SB-220 2-Kilowatt Linear Amplifier<sup>3</sup>**



**SB-640 External VFO**  
(Heathkit Catalog)



**HP-23(x) AC Power Supply**  
(for SB-100 Series Radios)



**HP-13(x) DC (Mobile) Power Supply**  
(for SB-100 Series Radios)  
(HP-13 Assembly Manual)



**SB-600 Speaker Console**



**SB-610 Monitor Scope**



**SB-620 Spectrum Scope**



**SB-500 Two-Meter Transverter**  
(Heathkit Catalog)



**SB-630 Station Console**



**HD-1410 Electronic Keyer**



**SB-650 Digital Readout**  
(for SB-100 Series Radios)  
(Heathkit Catalog)

(Pictures, unless otherwise noted, are from W9MXQ Photographs)

Virtually all the accessories were compatible with most other brands of radios of the day, except for frequency related items such as the SB-640 External VFO, the SB-620 Spectrum Scope, the SB-500 Two-Meter Transverter, and the SB-650 Digital Readout. But some enterprising hams found ways around even that restriction. The SB-200 and SB-220 Linear Amplifiers were some of Heathkit's most popular products and operate today in large numbers<sup>3</sup>. As implied earlier in this article, the sizes of the Heathkit items, including the transceiver itself, matched the Collins sizing almost perfectly. The only difference for a good match was the green on green colors of the Heathkit vs. the gray on gray colors of the Collins.

There are some simplicities in the Heathkit design. In the left picture below, see the overall main circuit board that contains all vacuum tube and interstage wiring – there are few interconnection wires in this transceiver, as you can see. The Collins, in the right picture below, has a clean and overall classically simple appearance, perhaps enhanced by the metal chassis color compared to the brown circuit boards in the Heathkit. Also note the multistage ganged variable capacitors at the left center of the Heathkit. These are replaced by a multistage ganged group of variable inductors in the Collins radio that are visible under a cover running from the front to the back of

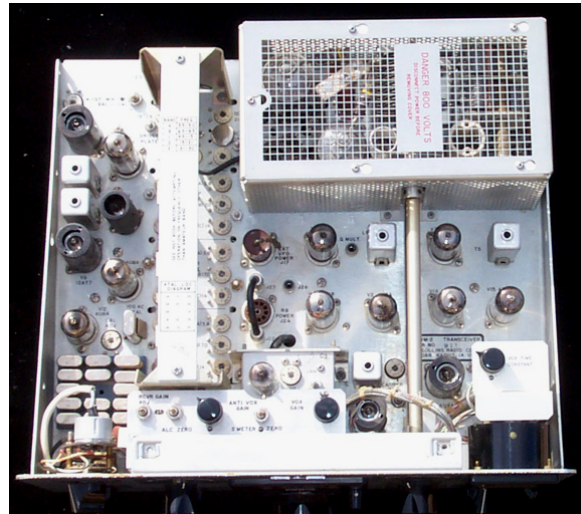


the radio just to the left of center in the view shown below. Collins had a much more elegant (and expensive) design. Collins was good at small details – such as the way the top cover of the power amplifier shield was affixed. Note that the fastening screws would be loosened then the cover would slide left then lift off – without the need to remove (and perhaps misplace) those screws. Collins equipment is full of such fine touches in design.



**Top Interior View  
Heathkit SB-100 Series Transceiver**

(W9MXQ Collection Pictures)



**Top Interior View  
Collins KWM-2 Transceiver**

Both radios have a lock down top cover that swings open from a hinge along the rear of the cabinet. The illustration of the Heathkit, above, has the radio sitting in the cabinet with the top open so you can just spot the hinge at the right, rear. The Collins picture shows the radio completely removed from its cabinet – with no hinge visible. The Heathkit top fasteners were on the upper left and right sides of the top cover. The Collins cover locked down along the front edge of the top cover – you can see the fastener holes toward the front in the above picture of the Collins radio,

There were three versions of the SB-100 Transceiver. They were known by the following differences . . .

- SB-100 Transceiver (1965-1967) – the initial release of the radio. Effectively duplicates most performance specifications of the Collins KWM-2.
- SB-101 Transceiver (1967-1970) –The SB-101 added the ability to switch in and out a 400 Hz CW filter. That switch is ganged with the RF Gain control on the front panel. The SB-101 added some additional phono jacks on the back to more easily accommodate the SB-650 Digital Readout and the SB-500 Transverter.
- SB-102 Transceiver (1970-1975) – this model is the most numerous. The SB-102 improved sensitivity from 1  $\mu\text{V}$  to 0.35  $\mu\text{V}$  by replacing the RF Amplifier 6AU6 with a 6HS6. (6HS6 tubes are hard to find today so many SB-102's have reverted back to the direct plug-in replacement 6AU6.) There was a kit offered at the time to convert the SB-101 to an SB-102<sup>5</sup> with the increased sensitivity of the later model.

There was no SB-103 offered for sale, but Heathkit made a quantum leap with the introduction of the all solid-state SB-104<sup>3</sup> that we will talk about it a future article.

The one item that can impact finding a good SB-100, SB-101, SB-102, or any Heathkit, is to remember that most of them are assembled by the owner. So, finding a used one puts the buyer at the mercy of the talent and care of the original builder. Look carefully for damaged components, burned wires, and quality of soldering. While the SB series were economical, they were not cheap. So, given the size of the initial investment, it is not impossible to find finely made equipment. My SB-101 Transceiver and my SB-200 Linear Amplifier were expertly assembled. (In fact, my SB-200 is a very rare, factory assembled unit<sup>4</sup>.) However, I have three HP-23 AC Power Supplies at W9MXQ. One is very well done (and is used with my SB-101), the second is sloppily wired and stored for parts, and the third one was so poorly made it caught fire in its initial test! That last one is destined to be completely rebuilt with perhaps only the original power transformer, chassis, and hardware being left in the finished unit.

If there is one Heathkit failing it is in the area of color matching. Especially the darker (front panel) green they used over the years. It is not unusual today to encounter an SB-100 Transceiver, an SB-600 Speaker, an SB-640 External VFO, and an SB-200 Linear Amplifier in a vintage station with all showing distinctly different shades of front panel green. In my opinion as a collector of many brands, Hallicrafters and Collins were the best at color matching over the long term. National and Heathkit may have been among the worst. At the same time, we must remember that this is not a reflection on the technical quality of their products.

Heathkit leveraged the SB-100 series designs to make the very economical HW-100 and HW-101 series HF Transceivers<sup>3</sup> that we will cover in the future. That is a most interesting story. Late versions of the Heathkit catalog (the Heath Company in Benton Harbor, Michigan) always said that the HW-101 Transceiver was most popular and numerous ever made. They are still present in abundance and can be found at almost every hamfest that I attend.

Remember that the Heathkit SB-Line Transceivers (along with the separate SB Line Receivers and Transmitters, when carefully built, were the equal of or were superior to any of the fully assembled competitive units on the market at the time.

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

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

#### **Credits and Comments:**

<sup>1</sup>[https://en.wikipedia.org/wiki/James\\_Burke\\_%28science\\_historian%29](https://en.wikipedia.org/wiki/James_Burke_%28science_historian%29)

<sup>2</sup>The first of the SB-Line was the SB-110, 6-Meter Transceiver – that was an SB-100 look alike. Due to some supplier issues it was released about six months ahead of the SB-100.

<sup>3</sup>Subject of a future article.

<sup>4</sup>Factory wired SB-101 Transceivers and accessories such as the SB-200 Linear Amplifier can be spotted by their serial label which instead of, for instance, “SB-200,” it will say “SBW-200.” A factory wired SB-101 would be identified as an “SBW-101.” This was a marketing idea by Heathkit to attract customers who wanted the Heathkit radio but did not want to build it. Also, at that time, there were specialists around the country who would, for a fee, assemble any Heathkit for a paying customer.

<sup>5</sup>The SB-102 update for the SB-101 did not accommodate a change in the front panel model number.

# Ozaukee Radio Club October 10, 2018 Meeting Minutes

Ben Evans (K9UZ), Secretary



First Vice-President Pat Volkmann (W9JI) called the meeting to order at 7:32 PM in place of President Kevin Steers (K9VIN) who was not at the meeting. All the attendees introduced themselves.

## **Announcements, Show-and-Tell, Bragging Rights:**

Robert K4WTH: We had a booth at HRO Superfest. Robert was the winner of the Yeasu FT-991A radio.

Gary K9DJT: Bought a Tarheel multiband antenna, with a controller to easily switch between bands, and installed it on his vehicle.

## **Program:**

Pat W9JI gave a presentation on the relatively new FT-8 digital mode and live-demoed it on HF.

## **50/50 Drawing:**

Bill L. KD9HLN was the winner of the 50/50 drawing.

## **Auction:**

Stan WB9RQR conducted the auction. Many items were sold, including a 2017 ARRL Radio Amateur's Handbook, a Larson antenna for 2m and 440, a backup hard drive, and a Dell Inspiron computer with the latest Linux installed.

## **Officer Reports:**

Kevin S. (K9VIN), President – 1<sup>st</sup> VP Pat (W9JI) gave the President's report in Kevin's (K9VIN) absence. Nothing to report except that there will be an executive board meeting later this month.

Pat V. (W9JI), 1st VP – No 1<sup>st</sup> VP report, but as the new Program Chairman, Pat encouraged members to consider presenting a program at an upcoming meeting about a subject in which they're expert, anything they've done or a subject related to ham radio. The program schedule is wide open for 2019.

Robert E. (K4WTH), Treasurer – The profit and loss report for September and the amended summary for the Fall Swapfest was emailed to everyone. A motion to accept the Treasurer's report was made, seconded and passed by the members. Since Dave Barrow (N9UNR) has moved to Illinois to an assisted living apartment, Robert will be sending email requests to members to verify their addresses and phone numbers, even if there'd been no change of either for most members. The verification process is for the 2019 ORC roster.

Tom T. (KC9ONY), Repeater VP – Nels (WA9JOB) has been upgrading the controllers and radios at the remote sites. Grafton and Port Washington have been done. Belgium will be next. Upgrading at Mequon will not be done until the new tower project there is complete. According to Jim A. (K9QLP), that project has been delayed; antennas probably won't be moved over to the new tower until late winter or early spring. The 440 there has been fixed and is working. Germantown is a little hard to get into, so there's no telling when that will be done.

Wisconsin Parks on the Air last month was a fun event. The results haven't come in yet.

Ben E. (K9UZ), Secretary – This month's newsletter has been posted on the website which includes the September meeting minutes. Motion to accept the minutes was made, seconded and approved by the members.

**Committee Reports:**

There were no committee reports.

**Old Business:**

Ken (W9GA): Regarding the status of the Field Day tent modification, Ken was contacted by the K&D tent company about a month ago. They said they're hesitant to work on shortening the tent because they're afraid of the liability in case of damage that may occur during the work. As an alternative, K&D offered a used canopy tent similar to one that was used at the last Field Day. Ken has yet to go down there to look at the canopy tent and make an offer for it if it looks good, but plans to do so before winter sets in. The board has set a budget for the shortening of the existing tent, so Ken will try to work within that budget for a solution to the tent issue, whether shortening the tent as previously planned or going with the used canopy. Ken said he'll provide an update at the next meeting.

**New Business:**

There was no new business.

**Adjournment:**

A motion to adjourn was made, seconded and approved by the members. The meeting was adjourned at 9:08 PM.

**Attendance:**

There were 36 members and three 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](mailto:ben@evansengsolutions.com) for a copy.

Respectfully submitted,



B. Benjamin Evans, K9UZ  
Secretary

## ORC Meeting Agenda

November 14, 2018

1. 7:00-7:30 PM – Network & Rag-Chew
2. Call to Order & Introductions
3. Announcements, Bragging Rights, Show & Tell, Upcoming Events, etc.
4. Program: Vic WT9Q, The new Flex Radio 6600 (SCR)
5. Fellowship Break
6. 50/50 Drawing
7. Auction – Stan Kaplan (WB9RQR)
8. President's Update – Kevin Steers (K9VIN)
9. 1<sup>st</sup> VP Report – Pat Volkmann (W9JI)
10. Repeater VP Report – Tom Trethewey, (KC9ONY)

11. Secretary's Report – Ben Evans (K9UZ)
12. Treasurer's Report – Robert Escola (K4WTH)
13. Committee Reports:
  - A. FCC License Classes
  - B. Scholarship Project Review
  - C. Other
14. OLD BUSINESS
  - A. Field Day tent
15. NEW BUSINESS
  - A. ORC Scholarship Endowment to ARRL
16. Adjournment to ?

Return undeliverable copies to:

### The ORC Newsletter

465 Beechwood Drive  
Cedarburg WI 53012

### First Class

#### Next ORC Meeting:

Wednesday, November 14, 2018

Grafton Multipurpose Senior Center  
1665 7<sup>th</sup> Avenue, Grafton

7:00 PM – Doors Open

7:30 PM – Meeting Begins