



# Signals from SARA



# WØJH

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An ARRL Affiliate & Special Service Club

March  
2023

[www.radioham.org](http://www.radioham.org)

## March Program - Rob Sherwood NCØB



SARA is pleased to announce that our virtual presenter for the March membership meeting is the renowned Rob Sherwood, NCØB, of Sherwood Engineering, Inc.

Rob Sherwood and Sherwood Engineering are well-known in the amateur radio community for advanced testing of transceivers and receivers, with many of the results posted on Sherwood Engineering website

<http://www.sherweng.com/table.html>.

Rob founded Sherwood Engineering in Colorado in 1974 to build Drake receiver upgrades and in 1976 began to test the performance of amateur radio receivers and transceivers beginning with Drake receivers. The rest, as they say, is history! Rob's list

### Announcements

The regular monthly meeting returns on March 11, 2023 in person & via Zoom. Start time: 9:20 AM, Boutwells Landing.

Meeting: Current Members will receive a meeting invitation via email from Joe, KCØIO.

SARA's virtual monthly meetings are open to all.

#### SARA On the Air

Phone Round-Robin Ragchews/Nets  
Times are Local - Central

- >160m Ragchew  
Nightly, 20:00; ~1.966 MHz  
Alternates: ~3.818 - 3.830 MHz, 21.316 MHz, ~50.166 MHz (USB)
- >Monday Morning 75m Ragchew  
08:15; ~3.856 MHz
- > 2m Tuesday (TMT)  
19:00; SARA 2m Repeater\*
- > Sunday Fusion Digital Voice Hangout  
19:00; SARA Repeater\* 147.060+ MHz  
DCS/DTCS 026 Normal or connect via WIRES-X to WØJH-Room 63969

\*SARA 2m Repeater:  
147.060 MHz; Positive Offset;  
DCS/DTCS 026 Normal or connect via WIRES-X to WØJH-Room 63969.

Can't Find Us On the Air?  
... Monitor SARA Repeater!

#### Upcoming SARA Meetings

Second Saturday of the month

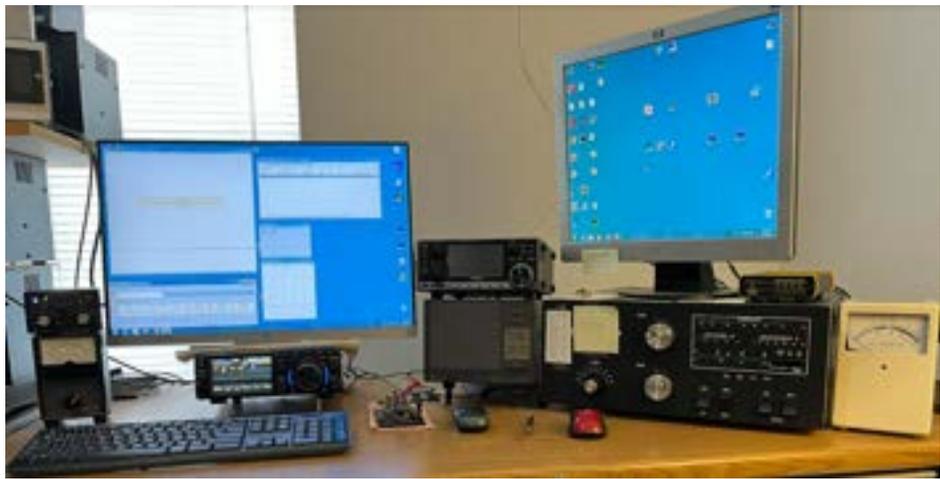
has become the gold standard by which many amateurs, including contest operators, choose their next rig. And many continue to seek out his opinions on the quality of a variety of radios, past and present.



Rob is also an active contester. With the encouragement of his wife, Rob built his dream contest station on 10 acres east of Ft. Collins, Colorado on the Pawnee Grassland. This has made it possible for Rob to evaluate top transceivers in major contests in a real-world environment to augment his laboratory data. This rural setting has also allowed Rob the opportunity to focus on his interest in antennas. Six towers support 9 mono-band HF yagis, plus 6 and 2 meters, and several wire antennas on 160, 40 and 30 meters. A 70cm yagi was added in the fall of 2019.

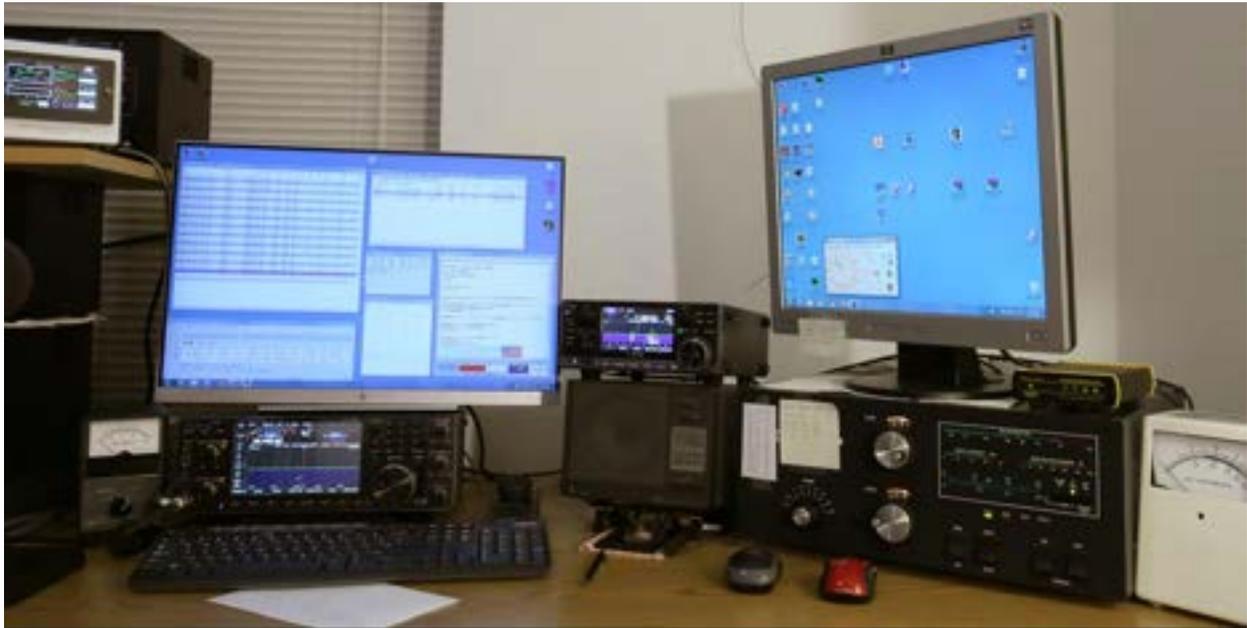
Rob plans to be at his contest station on the date of his presentation to SARA. He will be discussing his testing of the current batch of radios, as well as his contesting endeavors and, if we are lucky, we will get a virtual tour of his contest station.

In anticipation of his presentation, Rob provided the accompanying photos of his three contesting operating positions at his contest station, as well as a wide shot of the contest station antenna farm.



The following are some of Rob's comments on his radio activities in general as well as his contest station and its operation:

*I work 630 meters through 70cm. For HF I have 9 HF monoband Yagis on 6 towers, so it shouldn't be a surprise that I list the following in importance: Location, Antennas, Operator Skill and then the transceiver. I realize that most hams can't move for a better location, HOAs are a terrible problem, and many of us could improve our operating skills, in my case CW copy!*



*I enjoy contesting, but I am often focused on what other brand transceivers have been set up for my long form user evaluation. Attached are photos of the shack setup for Sweepstakes 2022, ARRL 160m CW, ARRL 10m CW/SSB, and finally Top Band W1BB Stew Perry 160m CW contest.*

Don't miss this presentation, it should be a good one. Questions regarding your favorite (or least favorite) transceiver are encouraged!

## SARA POTA Challenge 2022 Recap and Awards



The SARA POTA Challenge 2022 Awards were announced at the Feb 11<sup>th</sup> monthly meeting. The Challenge was formally announced at the March 2022 meeting, with the data retroactive to Jan 1, 2022. The Challenge achieved the primary goal of getting members active on the air and the level of activity far exceeded expectations!



Looking at this plot of SARA POTA activity, one can easily see the key date in August when Leaders and Legends divisions were announced, propelling the Hunter numbers upwards. The Remembering the Edmund Fitzgerald weekend at Split Rock Lighthouse State Park in November

pumped up the activator numbers.

The hunters racked up 10,499 Parks Hunted with an amazing Hunter QSO total of **17,364**! All Hunters in the 2022 Challenge were named 2022 POTA Rangers, receiving a custom sticker commemorating the 2022 Challenge. The POTA Rangers are AAØU, ABØR, ADØSN, KØAIF, KØCFL, KØGW, KØPU, KAØOBI, KB9TBB, KCØOIO, KDØHBU, KDØPKY, KEØIYF, KEØN, KEØOGI, KFØDQU, KFØEKD, KFØEXO, KFØHZG, KIØB, NØBM, NØDRX, NØEBQ, NØUC, N5LB, N9JNQ, N9MA, VE3MXJ, WØELC, WØGAF, WØGIB, W2SAD, W3QLC, WAØTDA.



In the Leader division for Hunters, certificates and customized 15-oz coffee mugs were awarded to the top three Hunters. The Blue Mounds Award went to Zack AAØU with 310 QSOs, the Itasca Award to Brad Harris VE3MXJ with 348 QSOs, and the Split Rock Award to Joe KCØOIO with 439 QSOs. Joe also received a POTA T-shirt as the top Hunter of the Leader division.



10 Hunters attained Legend status by exceeding 500 Hunter QSOS. The Grand Teton Award certificate for 500 to 749 QSOS along with a customized mug were presented to Bob WØGAF with 527 QSOS, Craig WØGIB with 632 QSOS, and Scott W2SAD with 685 QSOS. Six Hunters received Yosemite Award certificates and customized mugs for more than 750 Hunter QSOS.



The Yosemite Award winners are Shane WØNKA with 816 QSOS, Greg KØGW with 1017 QSOS, Brian KB9TBB with 1076 QSOS, Carl KØCFL with 1118 QSOS, Shel NØDRX with 1921 QSOS, and Dave WØOXB with 2119 QSOS. And finally, receiving the Yellowstone Award as top Hunter in the Legend division is Jim KIØB, who amassed a stunning total of 4,242 QSOS. Jim received the certificate, mug, and a POTA t-shirt for achieving such Legendary status.

SARA POTA activators got out into the parks and made 329 qualified activations, activated 199 parks and made a total of 12,044 Activator QSOS. 14 members became POTA Explorers by completing one or more park activations and received a POTA patch. Activators named as POTA Explorers for 2022 are KØAIF, KØPU, KB9TBB, KCØOIO, KDØHBU, KEØOGI, NØDRX, NØUC, N9MA, VE3MXJ, WØGAF, WØNKA, WØOXB and W2SAD.

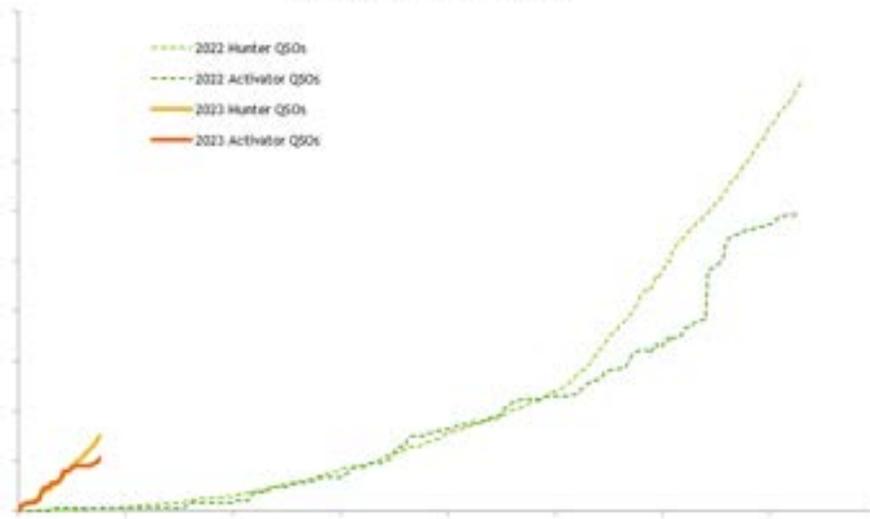
Activators who achieved a top 3 placement in any of the three activator categories of Qualified Activations, Parks Activated, and Activator QSOS were presented with Denali Award certificates, a POTA Flag, and a POTA beanie. Joe KCØOIO finished 4<sup>th</sup> in Activations with 48, 2<sup>nd</sup> in Parks Activated with 35 and 4<sup>th</sup> in Activator QSOS with 1,358. Dave WØOXB reached 3<sup>rd</sup> in Activations with 50, 4<sup>th</sup> in Parks Activated with 25 and 2<sup>nd</sup> in Activator QSOS with 2,881. Brad VE3MXJ placed 2<sup>nd</sup> in Activations with 55, 3<sup>rd</sup> in Parks Activated with 29, and 3<sup>rd</sup> in Activator QSOS with 1,716 Activator QSOS. And climbing all the way to the top in all three categories, Brian KB9TBB tallied 114 Activations, activating 60 Parks, and making 3,614 Activator QSOS.



Dave WØOXB acknowledged the efforts of Bob WØGAF and Brian KB9TBB in managing the SARA POTA Challenge with an expression of thanks and gratitude plus a gift for each of them, an essential piece of POTA Activator kit: an arborist throw weight and throw line – most useful in placing wire antennas in the natural antenna support structures common in many parks and forests!

# 2023 Off to a Good Start

WØJH club QSOs Year over Year



## Nut & Bolts

Shel NØDRX

We weren't able to run the Ice Station Special Event from a frozen lake for the past two years, so it was great to be able to reestablish the tradition. The raw log files were uploaded to LOTW & QRZ, and since then I have been slicing & dicing the logs to be able to verify requests for Confirmation Certificates.

As usual, our certificate confirmation is a 3 prong process. Dave WØOXB, is doing his usual bang up job designing a great certificate. I review all incoming confirmation requests, compare them with our log files, and create a file of confirmed contacts. The final step in the process is done by Bob WØGAF, who takes the certificate file provided by Dave, along with the confirmation file that I produce, and with a bit of magic merges the files and sends out the final Confirmation Certificates. While going through the logs to confirm requested contacts, I have also pulled contacts made by current SARA members to receive Confirmation Certificates, without having to submit a request. We anticipate the majority of certificates will be sent prior to the upcoming monthly SARA meeting.

Contacts were made from all over the US, and 5.6% of our contacts were with DX stations. While the majority of the DX was with our Canadian neighbors, we also had contacts with Brazil, England, France, Italy, Netherlands, & Scotland. Can you imagine what a ham on a southern beach, perhaps in France, might think about some crazy people playing radio from atop a frozen lake?

As usual, 20m was the bread & butter band that produced the most contacts. Conditions on both 80m and especially 40m were poorer than usual, which made it more difficult for many of our closer folks to get in the log. We compensated by moving the station that normally would have been on 40m or 80m, to move and make contacts on 10m, 12m, 15m, & 17m.

Here is a rough percentage distribution by band of contacts for the event:  
80m 3%, 40m 6%, 20m 71%, 17m 8%, 15m 7%, 12m <1%, 10m 4%

**Below is a very slightly abbreviated email that accompanied a confirmation request from a ham who was aeronautical mobile at the time of his contact.**

*I enjoyed speaking with you today while operating aviation mobile. It was about 2308Z on 14.277. I was operating from 35,000 feet about 60 nautical miles east of El Paso, TX, the station is an Airbus A320.*

*In case you are wondering, this was only my second aviation mobile contact. I only operate aviation mobile rarely (and then just briefly) when other piloting duties are complete and there is no cockpit workload, and the copilot is monitoring the VHF radios. Safety first! For this reason, I usually only monitor*

*HF and do not transmit. At the time you called CQ there was no pileup, our VHF radios were quiet, so I made the contact. I don't have time to work through pile ups when flying so I don't attempt it.*

*Note that aviation HF radios are very limited. They are designed for use by airline pilots who are not licensed hams and whose primary job is flying the aircraft, not managing a radio. In other words, the radios are designed for appliance operators. The radio in the A320 has a digital VFO and no other controls except volume and a switch to operate USB or AM. In aviation use, we are always USB. Therefore I have no LSB capability and even though I can tune the radio in the 80 and 40 M bands, I cannot select LSB, so voice communications are not intelligible. Even when we operate on 5 or 8 Mhz, we are still USB. That makes the radio only usable for the 40M – 15M bands. It does not tune high enough for the 10M band. The radio is single mode, voice only. I can only listen to CW and sometimes do listen to the W1AW practice sessions in order to practice my copying skills.*

*Our HF antenna is in the vertical fin and incorporates an antenna tuner. I have no idea how the aviation HF antenna works while embedded in the aluminum structure of fin. When one initially sets a new frequency with the VFO, the first time the pilot presses the PTT, the output power is automatically reduced (no pilot action involved) and the antenna is tuned (impedance matched). During tuning, a tone is sounded in the headset. Once the tone stops, the pilot knows he can now communicate. The next press of the PTT allows for communication. In addition to the HF radio, we have three VHF radios for the aviation band only.*

*Sounds like you have a great activation going. It was a pleasure speaking with you, however briefly. Stay warm!*

Finally, here are a couple photos to show the conditions that Chris KEØQQM and Mark KEØQQN were working with while operating the station on the frozen lake, as opposed to the comforts of the fully stocked SARA trailer. For some unknown reason, it appears Bob KFØHZG and Zack AAØU preferred struggling to make contacts from the trailer.



## How'd it go? (“Ice Station WØJH”)

Dave, WØOXB



Some Ops from one shift (L to R): WØOXB, K9/WØNKA, WØNKA, KØAIF, KCØOIO, NØDRX, KFØKPK, KFØIYA

Usually, SARA members and friends ask me this question after a special event or other club-related activity. It was no different following the recent “Ice Station WØJH Special Event.” My quick answer is often, “It went well.” If I have more time for an explanation, I’d answer specific questions like: How many stations did we make contact with? What bands did we operate?, Did we work any DX?, How were the operating conditions?, What gear were we using?, Who were the SARA members there?, etc., etc.

In the business world, when hard data is used to help us answer some of these questions, we call the analysis “metrics.” Metrics is an objective way to measure and evaluate something. Indeed, I can answer the above using metrics. But, as it turns out, I’m not doing that here. Shel, NØDRX, is sharing that elsewhere in this newsletter. I think he’s detail oriented and likes working with data. So, Shel has been known to “slice and dice” the numbers and use data to show how we did and help us evaluate the event. Again, you’ll find these metrics elsewhere in this issue.

So back to my reply to “How’d it go?”

I subjectively believe it went well based on the participation, especially participation from our newly HF licensed/upgraded members. Out of 28 who attended, most of whom operated or logged, 12 were newly licensed and/or

upgraded to operate on HF in the last 12 months. I've got to really hand it to those who watched, learned and stepped up to log and operate!

Our long-time sage Ops, veterans to Special Events, Field Day and operating in general, did an outstanding job to assist and train the others. A tip of the SARA cap.

**List of participants in this year's event (shown in no order):**

Steve KFØDMG	Brian KB9TBB	Shane WØNKA
Jim KIØB	Teresa KD9UXV	Shel NØDRX
Jim KFØIEX	Mark KEØNFB	Zack AAØU
Chris KEØQQM	Duke KBØPCF	Collin KEØIYN
Mark KEØQQN	Steven KFØKPK	Dave N9JNQ
Chris KFØKXT	Brian KØPU	Claude KFØJFJ (with unlicensed son)
Dave WØOXB	Bob WØGAF	Dave KØAIF
Ray KFØEKD	Bob KFØHZG	Dan KD9OIV
Mike KFØIYA	Joe KCØOIO	Tim KFØJEL

**Other Comments/Observations:**

- This was the first time we've been back on the lake for this event since 2020. (COVID protocols forced us to operate from our own QTHs the last two years.) We learned during this year's set-up on Saturday morning, that we were a bit rusty. I guess we forgot a few of our set-up routines. By Monday's set-up, we were much quicker and coordinated.
- The laminating/layering of the materials on the ice to isolate and insulate us in the Eskimo shelter tent is working well. And the addition of carpeting on the top really added to our comfort.
- The Comms Trailer worked FB (Fine Business), especially once we remembered how to turn the lights on inside.
- We learned a 120VAC, 1,500W heater was barely adequate to keep the trailer warm inside.
- As has been the case the last few years, the Afterglow/Critiquing Sessions were superb. Special TNX to our host, Dave, KØAIF for baking fresh mincemeat pies. The pie, along with apple brandy really hit the spot after we shut the stations down each evening.
- Last but not least; another BIG TNX to Anne, KØVOB and Dave, KØAIF for again hosting the event!!

# "Ice Station WØJH 2023" QSL Certificate – Sample

## "Ice Station WØJH" Special Event

Lake Elmo / Lake Elmo, Minnesota

February 18 - 20, 2023



Members of the Stillwater, Minnesota Amateur Radio Association (SARA) operated a portable station on a frozen lake in east-central Minnesota (~10 miles east of St. Paul). Having strong Scandinavian heritage, Minnesotans are known to do crazy things (not unlike hams!) to break the monotony of the long winters. This was our eighth year for winter Special Event craziness on the frozen lake!

Our Op/Logger teams operated from Lake Elmo, MN (Washington County; Grid Square EN34rx). The primary station was an 8'x8' portable shelter on 15" of ice. The antenna, a center-fed Zepp (253' long, 45' high), ran in trees along the shore. An Icom IC-7300 ran 100W to a MFJ-986 antenna tuner. We also operated on shore from our club's 6'x12' enclosed communications trailer. Trailer station included: IC-7300 (100W), MFJ-986 tuner and a center-fed Zepp antenna (299' long, 55' high) strung in trees.

Primary operation was SSB on 80 thru 6m. Over the 3 days, ~6 hours per day, we (YOU) generated huge pile-ups. We made over 800 contacts worldwide. (BTW: Apple brandy and homemade mincemeat pie were served during the nightly Afterglow/Critiquing Sessions!)



Some Ops from one shift (L to R): WØQXB, K3WØNKA, WØNKA, KBAIF, KCØDIO, NØDKX, KFØPK, KFØYA



SARA is an ARRL Special Service Club: [www.radicham.org](http://www.radicham.org)

Confirming contact with: **AA7CL**

Date: 2/18/2023 UTC: 20:23

Band: 10m Mode: SSB

RST: 59

Trx Jim, for the contact and helping us chase away winter

## Remote Base Station Update - March 2023

Patrick Tice, [wa0tda@arrl.net](mailto:wa0tda@arrl.net)



**Stations WØZSW, WAØTDA, and WØEQO are up and running.**

WØZSW is running in a tandem test mode that keeps the radio powered on. The software interface may indicate PWR OFF although the radio is running.

**A tale of two QTHs:** Perhaps you've noticed the differences in our two station locations. WAØTDA is in Woodbury and WØEQO is in rural Park

Rapids, far to the north. I test the stations every morning to make sure that they are up and running, and as a matter of habit (laziness, probably) I generally pick a frequency that I know will be occupied out of my stored local RCForb memories. I listen, check the radio controls, and make note of the band conditions and signal strength. There are times when the Woodbury station is better than the Park Rapids one, and vice-versa. On the morning of February 28 before sunrise, Park Rapids was clear as a bell with nearly S-0 noise, and Woodbury was a solid S-6 noise with diminished signals. You just never know - but there is a clear pattern: There is often more noise at the Woodbury QTH, and it shows up the most when band conditions are less than ideal.

What to do?

I suspect that much of the noise originates here at my QTH, which is filled with all sorts of potential culprits like dimmer switches, LED lights, "smart" appliances, battery chargers, digital circuitry even in dumb appliances, and so on - we all have those kinds of noise generators these days, so the Scout Camp location in the sticks outside of Park Rapids has a definite advantage since there are fewer gadgets around and virtually no neighbors. While my Woodbury neighbors aren't exactly right next to my house, they are close enough for RFI to be a nuisance. I've fed all of my antennas underground and located the feedpoints away from the house and even farther from the neighbors (I have a big backyard), but that alone cannot solve the problem of an urban location with a higher noise floor. I really have to get busy one of these days and conduct a proper sleuthing for noise sources - but it's hard when I have two people working from home who demand electricity at all times! In the meantime, I guess I can try unplugging one thing or another and seeing if I can spot the worst offenders.

This old (1972) Sony portable AM/FM/Air band/Beacon radio is designed for direction finding - it even has a tripod mount hole in the base - and its long internal ferrite bar antenna has proven helpful in sniffing out noise in the past. It won't be needed at the Park Rapids QTH - but it's definitely needed in Woodbury!



When you are using the stations, remember that all-important “skip zone” that favors one station over the other depending on the frequency band and the distances to the stations you want to contact. There can be quite a difference between the Woodbury location and the Park Rapids location, just defined by the skip zone.

**Contact Pat at [wa0tda@arrl.net](mailto:wa0tda@arrl.net) for transmit access or for help. Information and videos, along with a quick start guide are available here:**

**<http://tice.us/wa0tda/>**

Coming soon: My next YouTube video on RCForb version 0.9 Client basics - I show you around the software interface in a short video for beginning users.



## What does ChatGPT think about logging contacts?

ChatGPT is an A.I., or artificial intelligence. I ask it a question, then follow up with a second directed question when it fails to include necessary information. - WAØTDA

31	2023-03-05	14:17	W5FZ	17m	18.101	FT8	EL29		United States
32	2023-03-05	14:09	WØPAS	20m	14.076	FT8	EN91f1		United States
33	2023-03-04	22:14	DL1STG	10m	28.426	SSB	JO31nh		Germany
34	2023-03-04	21:49	PT5J	10m	28.426	SSB	GG52kh		Brazil
35	2023-03-04	21:41	PJ2T	10m	28.416	SSB	FK52kg		Curacao
36	2023-03-04	16:47	K8TAS	20m	14.076	FT8	EN82		United States
37	2023-03-04	16:38	KE8ESJ	20m	14.076	FT8	EM79		United States
38	2023-03-04	15:29	W8VDG	20m	14.075	FT8	EN91		United States

Let's get started:

**Q: Why should I log my ham radio contacts?**

**A:** *Logging your ham radio contacts serves several important purposes:*  
*Confirmation of contacts: Logging your contacts provides a record of your communication with other ham radio operators. This helps to confirm the validity of your contacts and can be used to resolve any disputes or discrepancies that may arise.*

- 1. QSL cards: Logging your contacts is essential if you want to exchange QSL cards with other operators. QSL cards serve as a physical confirmation of your contact and are often used to collect awards and certificates.*
- 2. Awards and certificates: Many ham radio organizations offer awards and certificates based on the number of contacts made or other achievements. Logging your contacts is necessary to track your progress and qualify for these awards.*
- 3. Personal record keeping: Logging your contacts can also serve as a personal record of your ham radio activity. This can be useful for tracking your progress, identifying areas for improvement, and simply reminiscing about past contacts.*

*Overall, logging your ham radio contacts is an essential practice for any serious operator. It helps to ensure the validity of your communications, enables the exchange of QSL cards, qualifies you for awards and certificates, and serves as a personal record of your ham radio activity.*

**Q: Can logging my ham radio contacts help me resolve problems with interference to a neighbor's electronic devices?**

*Yes, logging your ham radio contacts can potentially help you resolve problems with interference to a neighbor's electronic devices. If your neighbor is experiencing interference from your radio transmissions, logging your contacts can help you identify patterns or frequencies that may be causing the interference.*

*You can use this information to adjust your radio settings or change the frequencies you are using to reduce or eliminate the interference. In some cases, you may need to add additional filtering or shielding to your equipment to prevent interference from radiating out.*

*Additionally, if the interference continues despite your best efforts, you can use your contact logs to demonstrate to your neighbor and regulatory authorities that you have taken steps to address the issue. This can be helpful in resolving disputes and avoiding potential fines or penalties.*

*In general, it is important to be a good neighbor and take steps to minimize interference from your ham radio transmissions. Logging your contacts can be an important tool in achieving this goal.*

**Conclusion:**

Overall, this is a pretty good overview of why logging contacts is good amateur radio practice, but note that it needed the intervention of a real person to provide a more complete answer. It won't be long before A.I. is designing circuits and writing software for our ham radio applications - but be aware that it will require oversight to avoid mistakes and omissions.

I have been looking at different kinds of logging software lately, and that's what got me started on the reasons to keep a contact log in the first place. More about that another time...!

- WAØTDA

## Upcoming events

- **March Monthly Meeting Saturday, March 11 - Boutwells Landing 9:00 AM (Don't arrive early) 13575 58th Street North, Oak Park Heights**  
**Zoom Stream begins at 9:15 AM. *Early birds: 7:30 AM Breakfast/Coffee***  
*Pre-meeting: Perkins Restaurant (2050 Frontage Rd, Stillwater)*
  - **Boutwells Landing policy – WEAR Mask in Lobby!**
- **Thursdays, ~6:00 – 8:00 PM EyeBall QSO Parties** Stillwater Public Library
- **April Signals Newsletter article deadline: April 1-2** (It's early this month, isn't it?)
- **April Monthly Meeting** Saturday, April 8 at 9:00 AM (Don't arrive early)
- **April 27, 5:30 - 8:00pm VE Exam Session** - The Gables at Boutwells Landing (13575 58th Street North, Oak Park Heights, MN)
- **Metro Skywarn Spotter Training May 6th:**  
SARA will host a Metro Skywarn Storm Spotter training session on Saturday May 6th at the Stillwater Public Library. Metro Skywarn is returning to a limited number of in-person training sessions this year, along with continuing to offer online sessions as well this spring. The session will be in the Margaret Rivers Room from 10:30 AM to 1:30 PM.  
Pre-registration is preferred. Registration can be completed by clicking on this link: [In-Person SARA Metro Skywarn Training Session](#). Walk-ins only if the max pre-registered has not been reached. The session is for all interested in Skywarn storm spotting, new and renewing. Spotters need to renew their training every two years to keep current with Metro Skywarn. Metro Skywarn is offering a total of 6 in-person and 5 online training sessions. The full class schedule can be found at [metroskywarn.org/calendar/](https://metroskywarn.org/calendar/).

## SARA Connections:

***We offer multiple ways to stay connected with SARA. They include: groups.io, YouTube, Facebook, Instagram, and Twitter.***

SARA groups.io: <https://groups.io/g/StillwaterMNAmateurRadioAssoc>

SARA YouTube Playlists: Technical Topic Thursday SARA Monthly Meetings

SARA on Facebook: <https://www.facebook.com/groups/527705810939785>

SARA on Instagram: sararadioham

SARA on Twitter: @saraW0JH

SARA on Flickr: Photos taken at the 2023 SARA Sweep have been posted to the Flickr Site. The link is: <https://flic.kr/s/aHBqjArS2C>

Stillwater Amateur Radio Association Discord Server

The “Stillwater Amateur Radio Association” Discord server was established by Brian KB9TBB and is available exclusively for SARA members. The admin team is Brian KB9TBB, Shane WØNKA, and Collin KEØIYN. The “Introduction to SARA’s Discord Server” from Feb 23rd Tech Topic Thursday video is now available on the SARA YouTube Channel. It is part of the Technical Topic Thursday Playlist.

Our Discord Server is open to all current SARA members. To join the “Stillwater Amateur Radio Association” Discord server, click on this link: <https://discord.gg/Z9A8NsCCXh>

## SARA 2023 Officers

The offices of President, Vice President, Secretary, and Treasurer are elected annually. The Director positions are 2-year terms, each elected in alternating years. One Director is elected for the 2023-2024 term.

- President: Joe Heitzinger, KCØOIO
- Vice President: Bob Jensen, WØGAF
- Secretary: Dave Iverson, N9JNQ
- Treasurer: Rich Smith, ADØSN
- Director ‘23-’24: Brian Edgell, KØPU

- Director '22-'23 Brad Harris VE3MXJ will continue for the 2nd year of his term.

Trustee: Shel Mann, NØDRX (Note: The SARA Trustee officer is an appointed position; chosen by the elected officers)

Now is the time to consider helping shape the future of the Association by serving as an official of SARA.

### **A Note from the Editors**

This edition of the 2023 Signals from SARA news is produced on Google Docs using 100% recyclable electrons.

We welcome your article submissions. Don't worry about getting the spelling & grammar perfect - submit it anyway and we'll work it out. Please keep text and pictures separate, as this helps us with layout.

We can take most any format, but plain text is easiest to manage. Word docs are also fine, but we'd prefer to avoid formats like MS Publisher and PDF as submissions. Email [wa0tda@arrl.net](mailto:wa0tda@arrl.net)



March 2023 - Butternut vertical at WAØTDA