
THE FEEDLINE

Volume 47, Issue 9 The Voice of the Western Illinois Amateur Radio Club September 2023

QRM from da Prez

Hello, it's that time again. We have a meeting coming up. Let's try to RSVP for the dinner on October 14th at this club meeting if possible. As I write this, it's still 86 degrees and it's dark. Hope everyone is trying to stay cool and safe. See everyone at the Red Cross on September 6th at the meeting.

Sincerely, Ed W9US

Minutes of the August 2, 2023 club meeting.

Meeting called to order by President W9US at 7:03 PM. Introductions were made. 14 members were present.

Motion made to accept the minutes as printed in the August newsletter was made by KB9FIN (K9AJC), motion passed.

Treasurer, K9VXD, reported there was \$2.00 interest income and \$74.00 expenses in the past month. K9VXD reported the club's certificates of deposit were cashed in and 2 new CD's were purchased. There was a penalty on cashing in a few CD's but the loss due to penalty will be made up in a few months because the new CD's are at a much higher interest rate. Dave, W9WE, was added to the bank records as a signee for the CD's. Motion made by W9DP (WB9EWM) to accept the treasurer's report. Motion passed.

WB9EWM reported that he had been out to the repeater site and swapped out the broken repeater on 443.900 with one of the older units and that he had sent the repeater back to Yaesu for repair under warranty. John requested that when someone finds a problem with any of the repeaters that the problem be reported to one of the repeater board members immediately.

Several contests are coming up, nothing major until October though.

No report on the club station, membership nor VE schedule.

Old business – It was noted that memorials for the XYL of N9UPG and for W9NTG needed to be made, the executive committee is to take care of this. In the recent past, the club has made contributions of \$75.00 for club members and \$50.00 the immediate family of club members.

There were no applications for club membership.

New Business – WA9GBC is back at Sunset Home after a stay at the hospital. Cards may be mailed to Dave’s home address and he will get them. Dave would also appreciate visitors. WB9EWM reported that Dave has been a club member since at least the early 1960’s.

Net control stations through October 4th.

Sept 6th _ K9AJC

Sept 13th – KD9PPJ

Sept 20th – WB9EWM

Sept 27th – W9DP

Oct 4th – W9WE

Motion made to adjourn by KB9FIN (WB9EWM) motion passed and meeting was adjourned.

Respectfully submitted , Danny Pease W9DP

Net control WIARC with alternative Wednesday evening at 18:45 local

Starting on 147.03

Aug 02	KD9PPJ	146.94
Aug 09	W9DP	443.90
Aug 16.	W9WE	147.195
Aug 23.	KD9VUW	146.94
Aug 30	W9US	443.90
Sep 06	K9AJC	147.195
Sep 13.	KD9PPJ	146.94
Sep 20	WB9EWM	443.90
Sep 27	W9DP	147.195
Oct 04	W9WE	146.94

**Dave Scranton
W9WE**

Mark your calendar. On September 24 at the Radio Expo Belvidere hamfest there will be two ARES meetings (9:30 and 10:30) at the ARRL tables. This is the final of the three (Central, South & North) ARES meetings. All are welcome to attend.

**Vicky Whitaker, KD9BAU,
ARRL Illinois Section
Public Information Coordinator**

DX news shamelessly purloined from *ARRL DX News*

**QST de W1AW DX Bulletin 33 ARLD033 From ARRL Headquarters
Newington CT August 17, 2023 To all radio amateurs**

This week's bulletin was made possible with information provided by The Daily DX, 425 DX News, DXNL, Contest Corral from QST and the ARRL Contest Calendar and WA7BNM web sites. Thanks to all.

DEMOCRATIC REPUBLIC OF CONGO, 9Q. Vlad, OK2WX will be QRV as 9Q2WX from August 20 to September 9. Activity will be on 80 to 6 meters using CW, SSB, and various modes. QSL via IZ8CCW.

NAURU, C2. Phil, 3D2TS is QRV as C21TS. Activity is on the HF bands using FT8 and possibly SSB. QSL via M0OXO.

FEDERAL REPUBLIC OF GERMANY, DA. Radio amateurs from Rostock are QRV with special callsign DQ125LH until the end of October to celebrate the 125th anniversary of the Lighthouse Warnemuende, DOK 125LH. QSL via bureau.

MARIANA ISLANDS, KH0. Uli, DL2AH is QRV as KH0/DL2AH from Rota Island until September 14. Activity is on 80 to 6 meters using SSB and FT8. QSL direct to home call.

ASIATIC RUSSIA, UA0. A group of operators are QRV as RI0Z from Beringa Island, IOTA AS-039, until September 3 to mark the 30th anniversary of the Russian Robinson Club. Activity is on 160 to 10 meters using CW, SSB, and various digital modes. QSL via operators' instructions.

MEXICO, XE. Special event station 6E0G is QRV until December 17 during the Ghost Towns on the Air event. QSL via XE1EE.

Please see August 2023 QST, page 72, and the ARRL Contest Calendar and WA7BNM Contest Web Sites for details.



SWR and its effects

Many hams are obsessed about SWR to the point they make it the most important measurement of an antenna's performance. Back when hams used radios with tubes and you had to tune each band to the antenna you were using, SWR was not as big an issue as it has become with all solid state transceivers. Tubes were a lot more forgiving about a mismatch in the matching between the tube output and the antenna and had a variable matching network much the same as we see in an antenna tuner today.

The biggest reason of matching the transceiver to the antenna was to maximize efficiency for receiving and transmitting. Maximum power flows when impedances between stages match, and a mismatch can result in power being lost in the form of heat.

Today, we want a low SWR as most radios will try to protect themselves by folding transmit power back when the transmitter does not see a reasonably good impedance match. Very few antennas have a low SWR at every frequency we may want to use. Case in point; an 80 meter dipole will almost never have an SWR under 2:1 across the entire 3.5 – 4.0 MHz band. For those using tube type radios, this was not an issue; but today, the higher SWR does cause solid state radios to fold back power to protect the final stages devices.

Enter the "antenna tuner". We all know the antenna tuner does not change anything on the antenna, but it does allow for the whole antenna system to be matched to the radio so the radio is happy and puts out full power. I will not address the "what does reflected power do to my radio" issue but I do want to note that using an antenna tuner does not increase the efficiency of your antenna system; it simply lets your radio see what it wants to see so it can put out full power. The SWR is still present on the antenna system, that is everything after the antenna tuner. Fairly low SWR (say 3:1 or less) does not increase losses in coax enough to get too concerned about; but the higher the SWR on the coax, the more power that is lost in terms of heat in the coax. The antenna tuner itself consumes RF power as well and in severe mismatch cases, loses a large part of the transmitter total output power. These losses are the biggest reason antenna tuner power ratings are important for us to consider. Imagine running a 600 watt amplifier through a tuner that is consuming 300 watts of power. Not only is the power not getting to the antenna, you may be in danger of damaging your tuner.

Another detrimental effect of SWR is it often causes RF current to flow on the outside of the coax shield, which leads to RF in the shack, antenna pattern distortion and a few other things. Many times, adjusting the antenna for a low SWR can improve RF current on the outside of the coax. RF Current on the outside of the coax is also a radiator, allowing RF to go places where it may not be wanted, such as your stereo wiring, TV, fire alarm, other receivers.

Minimizing SWR is best done at the antenna feed point but is seldom the most convenient way to make our transmitter happy.

Danny W9DP



When the electricity is out, the phone lines and cell phone systems are overloaded, how do you call for help? The Hannibal Amateur Radio Club will be holding a 3-session course where you will learn everything you need to know to pass the test for your entry level FCC Amateur Radio License. Classes will be held each Saturday, beginning September 23 and concluding on October 7, with the FCC exam being administered on October 11 by an exam team. There is no age limit for licensing and instruction will be geared to students of all ages from elementary to senior citizens. Classes will be held on Saturday from 8AM to 4PM at the Marion County Ambulance District training facility, 142 Jaycee Drive, Hannibal, Missouri. While instruction is free, the purchase of the license study guide is strongly recommended. It will be available at a discount from the instructor prior to the class. There is an FCC testing fee of \$15.00

If you are interested in attending, please contact:

Donald Vary KDØHHN

573-719-9002

Or email: kd0hnh@hotmail.com

Parks on the Air Update for WIARC

Sunspots have made the higher bands more useful, summer travel has encouraged park activations, and the stats for the members of WIARC have changed considerably:

Here are the updated totals as of August 19:

W9DP	1 activation of 1 park	1549 parks worked
	(At last count, he's in my log 153 times...)	
NU7J	120 activations of 85 parks,	2127 parks worked
	(In my log 269 times)	
W9US	17 activations of 7 parks	479 parks worked
	(Racking up over a 1000 SSB contacts at Siloam Springs!)	
NR9Q	25 activations of 10 parks	605 parks worked
	(Fast becoming "Mr Sid Simpson" with over a thousand SSB Qs)	
AA9GL		102 parks worked
KB9FIN	22 activations of 20 parks	1105 parks worked
KM9DX	72 activations of 40 parks	340 parks worked
	(Almost to his third "kilo" at Siloam Springs)	
WM4D	110 activations of 55 parks	263 parks worked
N9JF	536 activations of 311 parks	990 parks worked
K9AJC	38 activations of 20 parks	2126 parks worked
	("Mr. Wakonda")	
KW9Q	26 activations of 14 parks	521 parks worked
KO0KER		5 parks worked
WG0ATS	5 activations of 2 parks	144 parks worked
W9MDB		182 parks worked
NI9M	21 activations of 7 parks	51 parks worked
KB0V		85 parks worked
KA0SNL		6 parks worked
KD9TTB	10 activations of 7 parks	131 parks worked
KE0MHJ	2 activations of 2 parks	104 parks worked
WB2UFO		61 parks worked
W9WE		65 parks worked

Message from W9RY:

I've waited to write this newsletter until we knew if there would be changes in our ARRL memberships. Now we know.

President Roderick announced effective January 1, 2024 the dues will increase by \$10 to \$59 per year (or \$174 for 3 years) which includes the digital subscriptions for all four magazines.

Print-and-mailed QST and OTA magazines become optional add-ons to membership. Each magazine subscription is \$25 per year.

— Those with regular memberships (a remaining term on a current membership) will need to purchase an add-on subscription to continue receiving printed QST and OTA after January 1, 2024.

— Current Life members as of July 2023 may choose to continue receiving printed QST or OTA at no additional cost by contacting ARRL between September 1, 2023, and June 30, 2024.

- Monthly payment plan options are being created for members aged 70+ to help senior members who are experiencing financial stress.

- We are undertaking work to determine revenue neutral pricing for Life Memberships. New applications for Life Membership are not being accepted as of 7/21/2023 while new rates are being established.

For a link to see all the changes go to: <http://www.arrl.org/2024-dues-rates>

I've received phone calls asking, "Isn't the \$49 membership I signed a contract that says they have to give me the print magazine?" The ARRL's position is that there is no contract and By-Law 44 says QST shall be supplied digitally OR by mail each month.

I suspect this discussion is not over and we can expect more as things evolve.

In 2022 the ARRL had about a million dollar deficit and it is anticipated it may be higher this year. Expenses are up and revenues are down.

The last time dues were increased was 2016 and before that 2001. Have you been to the grocery store or bought gas recently? I know I have. The \$59 is really only \$4.92 a month. This past weekend I met with folks after the Southern Illinois ARRL symposium and the restaurant charged me \$3.92 for a cup of coffee.

My other hobby is woodworking and I have two magazine subscriptions about woodworking. Both cost me over \$25 each per year and they do not contain as many articles as the ARRL magazines.

To me, the whole issue was summed up best by my fellow Section Manager Phil Duggan N1EP, the Maine Section Manager. He wrote:

Membership Challenge

Many of you have already heard of the ARRL board decision to increase membership dues and make changes in the way we receive magazines, such as QST. If not, I invite you to read ARRL President Rick Roderick's (K5UR) letter dated July 23, 2023 in an ARRL bulletin. It is available on the ARRL web site.

For the past year or so, our division directors and other League officials have been warning us about the serious financial situation that the ARRL has been in the past few years caused primarily from inflation, especially the rampart cost increases of print media such as QST. In May, members were asked to take the membership dues survey. About 20% of ARRL membership answered that call and the Board has taken the results of that survey and made the tough choices.

Like many of you, I do not relish the idea of a dues increase, and I especially do not like that the print magazines will no longer be part of the membership benefits (you still get the digital versions of all the magazines free with membership). Now, to receive a printed QST, On The Air, NCJ, or QEX magazine, you will have to subscribe separately. I am one of those that still likes to hold onto a paper book or magazine.

But then, I think how much the ARRL, ham radio clubs (most of them ARRL-affiliated) and my fellow amateur radio operators mean to me. It boils down to people, to friendship, and camaraderie. If not for the ARRL and for all of the clubs and ham radio events, I would miss out on the great friendships forged through the past 27 years. It is my relationship with the League, affiliated clubs and all the individuals I have met through them that has made such a positive impact on my life. I love the coffee meets, hamfest gatherings, convention get-togethers, club suppers, and all the ham radio nets where we get to chat, laugh, innovate, maybe even instigate, and otherwise socialize.

There is no doubt in my mind that this amazing hobby and service would not exist as it is today without the ARRL. The League's advocacy and lobbying is why we have so many amateur radio bands and modes. There are many commercial entities that want some of our spectrum. It is a constant battle that continues today. What chance would we have in keeping our frequency privileges without the ARRL's effort? Very little in my opinion.

The ARRL has not just been a magazine subscription. It is much more than that. For instance, New England Division Director Fred Kemmerer, AB1OC, reminds us that the ARRL provides:

- Spectrum Defense
- Advocacy in local, national, and international regulation and policymaking
- Support from restrictive antenna regulation & zoning
- Volunteer Monitor Program
- Promoting amateur radio to the public
- ARRL Teacher's Institute programs to promote STEM learning through amateur radio

There are also dozens of services and programs available to members. ARRL VEC program, Logbook Of The World, ARRL Learning Center, Training, Webinars, National Traffic System, EmComm and the Amateur Radio Emergency Service (ARES®), and ARRL lab and technical support/RFI. In January the Board passed a motion to create an ARRL Ham Bootcamp, and the League is also working to promote six and ten meter operation for Technician class amateurs. The list goes on!

The last membership rate hike was in 2016, and before that, 2001. For our more senior members (age 70+) who might be stressed financially due to fixed incomes, the ARRL is planning a monthly payment option.

Instead of seeing these dues increases and other changes at the ARRL as a negative, let's instead support the League even further. Last year the ARRL lost about a million dollars. This year that figure is expected to more than double. Dues increases alone will not make up for all of that.

If you can afford it, I challenge you to do one or more of the following:

1. Become Diamond Club member. The additional financial support will help close the gap and get the League into better financial health.
2. Donate to one of the ARRL funds, such as Spectrum Defense, Education & Technology, W1AW Endowment, or the General fund. <https://home.arrl.org/action/Donate>
3. If you are a Life Member, consider making a monthly or annual donation.

Some may think the ARRL has not been a good steward of our membership money. While any business, including the League, can benefit from frequent analysis of expenditures and "tightening of the belt," I do not believe the ARRL is wasting our money. As Maine section manager, I have met and continue to meet many League officials in person and on-line and they are doing their best in a difficult inflationary time.

Today I made a donation to the ARRL general fund. When my membership expiration nears, I will renew AND join the Diamond Club. I will adapt and get used to reading QST on my iPad. I appreciate all that the League continues to do, and I am thankful for all of the friendships I have made because of the ARRL and affiliated clubs and nets. Please, if you can afford to do so, accept my challenge. Turn a negative into a positive!

To sum up my feelings on the issue, it is what it is. Would I rather it didn't need to happen? Of course, but I'm also a realist. I've watched changes over the 60+ years I've been a ham. Some I agreed with and some I didn't but I still enjoy the hobby and definitely want someone there trying to protect my hobby.

We have completed two of the 3 ARES symposiums. This past weekend we held the southern meeting and it was a success. The northern Illinois meeting is still being planned and look for more information in the near future.

We still have four more Illinois hamfests in 2023:
West Central Illinois Hamfest, Carlinville, IL 08/05/2023
Hamfesters 88th Annual Hamfest Peotone, IL 08/06/2023
Midwest Superfest Chillicothe, IL 09/16-09/17 2023
Radio Expo Belvidere, IL 09/24/2023

... As well as the ARRL Central Division Convention Fort Wayne Indiana 11/18/-11/19, 2023 and the Society of Midwest Contesters Naperville, IL 08/12/2023 and the W9DXCC Convention Naperville, IL 09/15-09/16 2023. Don't forget, we will also have the opportunity to operate as W1AW/9 in December. If you are interested in helping out, contact me. Until next time, 73 Thom, W9RY

N9JF/KB9CES Alaska 2023

It's not "finished" yet, but I have 43 pages of story regarding the trip, not including pictures. I can share it at some point with anyone who might be interested. This account is primarily radio-related for the purpose of *The Feedline*.

12800 miles

51 days

102 log uploads

1484 contacts

Quote of the trip: (On Day 47)

Me: "Awesome view! Want a picture?"

Her: "It's a big mountain covered with trees."

Me: "Okay, let's go home."

One really does get "sceneried out" after a few thousand miles.

The purposes of the trip were to see some places we'd never been, activate parks along the way, provide some needed county contacts and enjoy time together. We were successful on all counts.

The basic route was up through Iowa, Wisconsin and Minnesota to Ontario, then west through the Canadian provinces to the AICan Highway, then north from Watson Lake to the Dempster Highway, north to the Arctic Ocean at Tuktoyaktuk, back to Dawson City, west and north to Eagle, south to Tok, west to Fairbanks, north to Galbraith Lake on the Dalton Highway, back to Fairbanks, south to Anchorage, Homer and Seward, north and east to Glenallen, Valdez, back to the Yukon, south to Stewart and Hyder, east and south through BC to Seattle, then back to Vancouver for four days, back to Seattle and then home through Oregon, Idaho, Utah, Wyoming, Nebraska, Iowa and Missouri.

Tired yet?

I think we have now driven just about every "major" road in Alaska, the Yukon and much of Northwest Territories. Some of them are pretty good. Some of them are pretty awful. The worst was the Taylor Highway from Chicken to Eagle Alaska. Eagle is a nice place, but I don't expect to go back. I do have a cap from there. Melba felt I deserved it.

The "station" for the journey was the FT991a powered from a separate battery (with a trickle charger from the car), Hustler resonators for 30 and 40 meters, a 17' vertical for the higher bands, a K4VX vintage key paddle and Ringo the RF Duck as the primary operator. For the most part, the equipment performed without failure, though there were a few quirks along the way. Nothing that couldn't be overcome, repaired or worked around.

I managed to "kill" the original battery. I don't know how, but it gave up in Alberta and had to be replaced. After that, it was a juggling act to keep both the radio battery and the

laptop battery charged enough to complete activations, especially if I tried to do several in one day. This will take some planning for future trips.... Digital modes are a battery hog for a laptop computer and for the radio battery as well. Most of the time, I ran under 50 watts on digital and sometimes as little as 20 watts to save the battery.

We began activating parks (mostly both for POTA and WWFF, some just POTA) in Wisconsin (3), then Minnesota (7), Ontario (3), Manitoba (8), Saskatchewan (2), Alberta (5), British Columbia (15), Yukon (6), Northwest Territories (8), Alaska (27), Washington (3), Oregon (3), Idaho (6), Utah (1), Wyoming (1), Nebraska (1) and Missouri (3). Some of these were “multiples” (a park along a trail, etc.). A few were “incomplete” (fewer than 10 contacts). I refuse to refer to them as “failures”.

Propagation from way up north is a killer. It seemed there were frequent flares and blackouts, and they managed to occur when I was struggling to activate a park north of sixty degrees north latitude. Even FT8 failed to elicit successful responses in a couple of parks, while in others, it saved the day. Several of the locations were surrounded by mountains in every direction. From a couple of parks, the only contacts were on FT8, and most of those were from Japan or Russia. We never managed to see any Northern Lights as it was either cloudy or never got dark.

We as hams pride ourselves in being independent from commercial mains. However, I found that having a “following” via text message made all the difference in the world in trying to activate a park successfully without struggling. When we had cell coverage (which we never did in Canada except with WiFi, thank you, A&W!), I had an ongoing text thread with W9DP, N9MM, W6LEN, NU7J, WM4D and W9WE. If I could notify that bunch when I kicked off an activation, I usually managed to get some of them in the log; and one of them would spot me on the POTA and WWFF clusters. If I could spot myself to W6RK, the county hunters usually came through with several callers.

Despite being very far north (69 degrees, 25 minutes), the Pingo National Landmark Natural Area was a very successful activation with 55 contacts in the logs. It was right on the shore of the Arctic Ocean which obviously didn't hurt anything! A big percentage of those contacts were on FT8 with Japan and Russia. Melba got to wade in the Arctic Ocean!

Later, at a similar latitude but surrounded by mountains in Alaska on the Dalton Highway, I struggled, and failed, to give N4RS his last county of the 3077 on 40 meters in the middle of the night. I did manage to make a couple of contacts from up there (Second District) and also worked a few county hunters from each of the other Alaskan districts, including giving KB6UF his last on 40 meters for all 3077. From Hyder, in the First District, conditions were tough, as Hyder is surrounded by mountains. Here, FT8 came to the rescue.

After returning to the States, we joined NU7J and his YL in their camper for 5 days on Vancouver Island where Tom and I activated several parks; and we enjoyed a lot of scenery and food. At the end of that portion of the trip, we headed home, hitting a few parks along the way.

All in all, I was happy with the radio-related aspects of the trip. There were certainly things that could have gone better, but there were a lot that could have been worse!!

Powering the radio from the car battery would probably have been advantageous. At least this way I didn't worry about running down the car battery. I could never find a convenient way to get power into the vehicle from the battery on the new Honda. Perhaps this was a better alternative, all things considered. I "went cheap" on the battery and probably should consider something stouter like a LiPo battery, which most park activators seem to use. The antenna selections seemed to work well. On the Vancouver Island trip, NU7J had an Outbacker on the front of his truck, and I was impressed with the performance.

Some park activators complain about their significant others truncating their activations: "Aren't you done yet?" Melba is a trooper. Rather than have me cut them short, she was the one who pushed for more parks and more contacts. "Aren't there still people calling? Should you try another band? Did you work so-and-so that needed the county?"

Travel impressions in general:

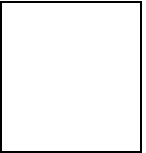
- 1) Keeping roads passable in the northern parts of Canada and Alaska is a challenge, and the crews were working hard to accomplish this. Some of the roads were still pretty bad.
- 2) Tourism up there has recovered fairly well after taking a terrible hit during COVID. The Draconian restrictions in Canada were very damaging. There are numerous businesses that had closed, and I doubt that many of them will reopen. The ones that were open had a lot of traffic. Motels and campgrounds were crowded. Prices were reflective of supply and demand.
- 3) The exchange rate was in our favor. I think it was around seventy-five cents (US) to a dollar (Canadian) for most of our trip.
- 4) You don't argue with the price of gasoline when you travel above 60 degrees north latitude. If you find gas, you smile and buy it. We paid \$7.50/gallon (US) at two places on the Dalton Highway. Up north in Canada, I didn't even try to translate Canadian dollars per liter to US dollars per gallon. I just filled up and moved on. The Honda got 26 mpg for the entire trip so I can't complain.

For the few who might be interested, we saw 201 species of birds on this trip, including four "ice cream birds" (new life birds).

Would I recommend this trip? There is no "bad way" to see Alaska. We like the way we did it. If you are going to spend 51 days in a car with someone, be sure it's someone you like! We celebrated 53 years together on the trip and are planning another one...somewhere....

N9JF and KB9CES (and Ringo)

Western Il. Amateur Radio Club
PO Box 3132
Quincy, IL 62305-3132



September meeting: Wednesday Sept 6
7 pm
Adams County American Red Cross
Building, 24th and Koch's Lane, Quincy (west
½ block from intersection then north on
driveway)

W9AWE – W90AB

The Western Illinois Amateur Radio Club, Inc.

WIARC homepage: <http://www.w9awe.org> e-mail to w9awe@qsl.net

WIARC email reflector: wiarc@mailman.qth.net

Sponsors of

Analog repeater W9AWE/R on 147.630/.030 Tone Rx and Tx 103.5

Analog repeater W9AWE/R on 146.340/.940 Tone Rx and Tx 123.0

Analog and Fusion repeater W9AWE/R on 448.900/443.900 Tone Rx and Tx 103.5

Analog and Fusion repeater W9AWE on 147.795/147.195 Tone Rx and Tx 103.5

All repeaters are located on the north side of Quincy IL

ILLINOIS QSO PARTY

Newsletter input due by the 20th of the preceding month

Editor Jim Funk N9JF

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