

Nacogdoches Amateur Radio Club

2025 CLUB OFFICERS

Pres: Mark Phillips - KI5POH

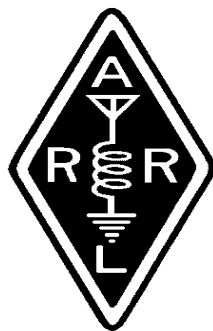
Vice Pres: Dave Emmerling - NR5AT

Sec/Treas: Darrell Thornton - KI5PYQ

Visit our web site at
<https://w5nac.com/>

MISSION STATEMENT

The Mission of the Nacogdoches Amateur Radio Club is to support and promote Amateur Radio by public service, offering training to unlicensed interested parties and licensed Amateurs, mutual support of other Amateurs, engaging events that promote Amateur radio to the general public and other Amateur radio



operators, and continuing fellowship by regularly scheduled organized meetings and events and having fun.

NOVEMBER MINUTES

Mark, KI5POH, started them meeting off at 19:00. Introductions were made and minutes were approved. The treasury report was read.

Old Business - New officers were elected. Mark, KI5POH, will continue to reside as president. Aaron, KI5FIQ, will take on the vice

president roll. Darrell, KI5PYQ, will continue in his role of secretary/treasure. Dave NR5AT and Mike W5NXK will be the VE Coordinators. The EC position is currently open.

New Business - Robert, KD5FEE, mentioned statewide Net, Mike, AA5HH, brought up Winlink P2P HF practice, Christmas party will be 12/2/2025 at Clear Springs at 6:00 in the party room. Thank you Steve, WB5IDY, for booking this spot for us. There will be a gift auction, proceeds go to the club for various projects. There is a need for a Net Control OP for 3rd Monday on the 84 repeater.

Meeting was adjourned.

2026 DUES WILL BE DUE SOON

Dues are just \$20 a year and cover all licensed hams in a family. Please get your dues to KI5PYQ either in person or mailed to his home address. Sooner is better than later. Make checks payable to NARC.

SUPPORT YOUR CLUB

Are you a member of NARC? Do you check into one or more of the weekly nets on 2M? If not, why not? Do you participate in the club Fox Hunts? If not, why not? Do you participate in the club Special Events K5C and K5T? If not, why? Let us know how we can get you involved in our club. Is there an event or program that you would like to see, let your club officers know.

FROM OUR PRESIDENT

Our December meeting is our Christmas party and

White Elephant Auction. Our Christmas party will be held at Clear Springs on Tuesday (12/2) at 6pm in the Party Room. Bring a White Elephant gift and a significant other and get ready for a good time!

I can't believe we at the end of 2025! I would like to thank all of those that helped coordinate or give a presentation at our club meetings. Without your help or willingness to present, our meeting would not be as informative or interesting. Thank You! Our January meeting will be on Tuesday (1/6). If you would like give a presentation or have ideas for a presentation, let us know. I hope to see you all at the December Christmas party!

73, Mark KI5POH
KI5POH21@gmail.com

FROM OUR VP

As I sit here and type what will be my last newsletter, I, as always, am struggling to find the words. My theme for 2025 has been trying to entice the

membership to increase their individual involvement in club activities and monthly meetings, to raise a hand when volunteers are asked for. But I am not going to go down that road today! As it is quickly approaching the official time to give thanks, I would like to do just that.

Ten days ago, I officially hit the 70yo mark, and while I long ago adopted the "do not let the old man in" mindset, I would be a liar if I said despite my best efforts, every once in a while the "old man" wiggles his way in! From time to time, the reality of having more miles behind than in front smacks me in the face. It is very humbling. But I suppose the nicer part of aging (if there is such a thing) is reflecting and being thankful. Thankful for having made it this far. Thankful for my wife, family and friends. Thankful for my health (despite ALL my past efforts to...let's just say...negatively influence it). For all the adventures I have had, the tremendous people I have

met. Thankful for the memories.

Radio has been a big part of my adult life. Every person I have met in my radio progression has been fantastic (THANK YOU Mike AA5HH!!). Radio for me has truly been a blessing and a journey I hope will continue for years to come.

It is my wish every member of this club, their spouses and family enjoys a GREAT Thanksgiving. The way the crazy world is right now Thanksgiving is truly the time to slow down, take a breath, put your arms around those you cherish, both present and gone, and say THANK YOU GOD FOR YOUR BLESSINGS.

Thank you NARC membership for your friendship and mentoring. It has truly been an honor to be your VP for the last year.

Happy Thanksgiving to ALL!

73, NR5AT
Dave Emmerling
Dke1955@duck.com

NOTES FROM OUR EC

Nothing for this month.

de John Chapman KC5MIB
Jlchapman2@gmail.com

VE TESTING

Our November VE testing session did one successful tester. Jerry Davis, KJ5NHI, from Huntington, TX.

Many thanks to our November VE team: Dave NR5AT, Army AE5P, Robert KD5FEE, Mike AA5HH, Mike W5NXK, and Rusty KD5GEN.

Remember that we provide VE testing sessions the third Wednesday of EVERY MONTH with exams for all classes of Amateur Radio licenses. Sessions are held at the EOC with doors open at 6:30 and testing beginning no later than 7:00 p.m.

Rusty, KD5GEN

TWO METER CLUB NETS

Please join us each week for the two-meter nets sponsored by NARC. All stations are welcome to check into the nets.

Each MONDAY is the NARC ARES/RACES net, at 20:00 on the club's 146.84 repeater (PL 141.3).

Second, on THURSDAY evenings at 20:00 is the Deep East Texas Skywarn Emergency Weather Net on the 147.32 repeater (PL 141.3).

Please join us for one or both.

HAMLIST

Are you on Hamlist? Check it out and join at:

<https://w5nac.com/about/email-reflectors/>

NEXT MEETING

The next regular NARC meeting will be TUESDAY

December 2nd at Clearsprings restaurant1 Meeting begins at 18:00; We will have a quick meeting and a great social evening. Hope to see everyone there.

FOX HUNT

The Fox Hunts will be on hold for now. We currently do not have enough attendance to continue currently. If you would like

to have another fox hunt, please let Darrell KI5PYQ or Mark KI5POH know that you would like to participate.

UPCOMING EVENTS OF NOTE

Mark your calendars for the following events coming up in the next few months. Full information on these events and much more can be found at

<https://www.contestcalendar.com/contestcal.html>

You will need to scroll to find the correct month.

Link to ARRL Contest Calendar

<https://www.arrl.org/contest-calendar>

Club Meeting Dates

Dec 2nd 19:00

Jan 6th 19:00

Feb 3rd 19:00

Tips for Reducing Noise on Your Ham Radio Receiver - Part 1

Jim Edmondson, AE5JE

A common complaint among HF operators is too much receiver noise. This can make it hard to understand desired signals. We would like to have as large a signal-to-noise ratio (SNR) as possible especially for SSB. CW and many digital modes (like FT8, RTTY, PSK31, etc.) are able to reliably receive signals even with a low to very low SNR. This is because the operator or software can focus on one or a few tones to decode the signals. Of course, CW is dependent on the operator's hearing ability while the others strictly depend on digital signal processing.

Every receiver will have a "noise floor". That is the lowest level of noise possible with that receiver. This noise floor is due to electronic and thermal conditions in the receiver itself and cannot be changed. Fortunately, the noise floor of modern receivers is so low that it would almost never be the cause of audible noise loud enough to interfere with HF reception.

Generally, there are two classes of external noise: man-made and atmospheric. Man-made noise has become a much bigger problem due to the large number of modern

electronic devices in the typical home. The most common offenders are "wall warts" and other switch-mode power supplies, solar panel controllers, LED lighting, plasma TVs, direct-drive motors in washers and dryers, etc. Man-made noise can also be produced by arcing of electric utility lines. This is mainly due to poor or corroded connections or insulator breakdown. Solving electric utility noise is not discussed in this article other than to say it will require the cooperation of the utility provider and some are more willing to help than others.

Atmospheric noise is caused by primarily caused by lightning. When a thunderstorm is nearby, you distinctly hear the noise "crashes" created by each lightning strike. Due to the sensitivity of modern radios, if you have a decent antenna, lightning will be heard from thousands of miles away. These distant strikes blend together to result in a lower level, but more or less constant background noise or "static". Atmospheric noise is particularly problematic on the "low bands", that is 160M, 80M, 60M and 40M. Astronomical noise emanates from the Sun, Jupiter and the center of the Milky Way galaxy among other heavenly bodies. These types of noise are picked up on the antenna, and you will need to use good operating techniques and noise reduction as discussed below to reduce these noise sources.

The noise from the many possible man-made sources could be received by your antenna like atmospheric noise or picked up on the coax braid. The noise on the braid travels on the outside of the braid to your receiver. You can unscrew the ground ring from your antenna to radio connector (usually a PL-259 for HF radios) leaving the center pin in place. Note the noise level and then touch the ground ring to the radio jack and see if the noise increases. If so, you have noise on the outside of the coax shield. RF chokes (ferrites) can help reduce this noise from whatever sources are causing it. [Palomar Engineers](#) is a great source for ferrites and data / information to use them properly.

If the noise is being received by your antenna, then more drastic measures are needed. One way to quickly determine how much noise is emitted from your home electronics is to operate your radio using a battery and note the noise level audibly and on the S-meter. Then turn off the main breaker in your home and without changing the radio settings, note the audible noise level and S-meter reading again. A drop in the noise and meter reading corresponds to the noise level produced by the electronics in your home at that time. If the noise level has become very low with the main breaker off, then you can turn breakers on one at a time to determine which circuit or circuits have noisy devices. For items like washers and dryers, this method is not appropriate, and you will need to run the appliance through all of its

cycles to verify if it is a noise source. You could also use Tiny SA Ultra with the external antenna to try and pinpoint the culprit if it is not obvious.

If you can live without the offending device(s) or move it (them) further from the shack antenna that may solve the problem. If you (or your family) cannot do without the offending device, then ferrites placed on all cables to / from the device and on all cables to / from your radio may reduce or eliminate the noise.

One other solution to reduce all kinds of noise is to use a low-noise antenna. These antennas are typically on or close to the ground and used for receiving only. [Loop on ground](#) and [Beverage](#) antennas are typical of this type. Loop on ground are quite small and easily fabricated, but Beverage antennas require lots of room (1.5 to 2 wavelengths long is typical, so ~500-ft. for 80M) and a control scheme to take advantage of directionality. While these antennas are low-noise, they also have lower signal levels. I did not have much success trying a loop on ground antenna for 40M and 80M. The third type of low-noise antenna is the magnetic loop. These can be receive-only or also transmit. The transmitting ones are quite expensive. These loops typically have a narrow bandwidth and are directional. They are compact and can be setup in small spaces like an apartment balcony. I have had good success using a receive-only magnetic loop (see my previous articles on SDRs).

To reduce noise in your station, you should have a good grounding system. Many books have been written on this topic, so I can only cover the high-points in this article. A [great book](#) on this topic has been published by the ARRL. A good ground system should have a single-point ground. All equipment in the shack should be attached directly to a copper bar, tubing or plate. The copper bar or tubing is then attached to a buried vertical ground rod (8' - 10' copper-clad steel or galvanized). The ground should be as close to the shack as possible. The antenna feed-lines should also be attached to this rod via good-quality (Alpha Delta, Polyphaser or Morgan Systems) lightning arrestors. A bare, buried copper wire should connect the utility ground rod to this single-point shack rod. All connections should be large gauge (6 AWG or larger) stranded copper wire or tinned copper braid (1/2" - 1"). I like to use solid wire for utility bonding as it is more robust for burial. All connections should be mechanical - no solder.

That's plenty of info to digest for this month. Next month, I will talk about operating your radio and possibly accessories for reduced noise.