

Nacogdoches Amateur Radio Club

2026 CLUB OFFICERS

Pres: Mark Phillips - KI5POH

Vice Pres: Aaron Baker - KI5FIQ

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.

FEBRUARY MINUTES

Mark, KI5POH, started the meeting off at 18:00. Introductions were made and minutes were approved. The treasury report was read.

Old Business - Robert, KD5FEE is the Net Control Operator for 3rd Monday. Also need an EC for the club.

New Business - Talk about Nac HAMFEST. Mike, W5NXK is going to get with Bernice KN6VDH.

Meeting was adjourned.

2026 ARE DUE NOW!

Dues are just \$20 a year and cover all licensed hams in a family. Please get your dues to Darrell, 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

As mentioned last month, we continue looking for a person to become our Emergency Coordinator (EC). The EC is responsible for the ARES group at the local level. Working with our community officials, the Section Emergency Coordinator (SEC) and others. The EC leads our local ARES group through planning, preparedness and response phases. If you are interested in learning more about the EC position, please let me know.

Our next meeting will be on Tuesday, March 3rd door open at 6:30pm and meeting begins at 7:00. I hope to see you there!

Upcoming Hamfests:

February 27 th & 28 th - Orange Hamfest 2026, Orange and Jefferson County ARC

March 7 th - Irving Hamfest, Irving, Texas

I am thankful for each of you for being a Ham and being part of our club!

73, Mark KI5POH
KI5POH21@gmail.com

FROM OUR VP

Even as a short month, February went by way to fast. Oh well, let's jump back to the beginning of this month to the NWS Skywarn training. Had a nice showing from Lufkin clubs and a few from our club as well. As always, the class was a good one and a nice refresher for a weather nerd like me. If you weren't able to go, don't fret too much. NWS has the training online too that you can take. Our Spring severe weather season is about to ramp up after all.

Hope everyone has a fantastic March and hope to see you on the air.

Aaron Baker KI5FIQ
baker.barisax@gmail.com

VE TESTING

Our February VE testing session did not have anyone show up to test.

Many thanks to our VE team: Dave NR5AT, Mike W5NXX, Rusty KD5GEN, Army AE5P, Ralph N6RH, and Mike AA5HH.

Remember that we provide VE testing sessions on 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.

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** January 6th at the Nacogdoches EOC. Doors will open at 18:30 and meeting will start promptly at 19:00. We hope to see you there. Aaron (KI5FIQ) and Steve (WB5IDY) will have us a wonderful program setup.

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

Feb 3rd 19:00

March 3rd 19:00

April 7th 19:00

The New 60-meter Band is Live

Jim Edmondson

In case you missed it, the new 60M band regulations went into effect just after midnight Eastern time on the morning of February 13, 2026. The ARRL has published an extensive guide for using the new privileges at this link.

A few highlights:

- General, Advanced or Extra Class license required
- Channelized frequencies: 100W ERP, 2.8 kHz bandwidth, USB, CW, digital
- Channel 1: 5330.5 kHz
- Channel 2: 5346.5 kHz
- Channel 3: 5371.5 kHz
- Channel 4: 5403.5 kHz
- All frequencies from 5351.5 to 5366.5: 9.15W ERP, 2.8 kHz bandwidth, all modes
- ERP is calculated relative to a half-wave dipole
- So, must account for antenna gain in determining ERP (and you can consider transmission line losses)
- Keep records of manufacturer's antenna gain detail if using commercial antenna
- The ARRL guide details frequency selection within channels and for specific modes as well as tips for avoiding interference
- Old Channel 3 used for FT8 is now in the continuous frequency range, power is limited to 9.15W relative to a half-wave dipole among other restrictions
- Old Channel 5 (now Channel 4) has traditionally been a DX window, avoid domestic QSOs there

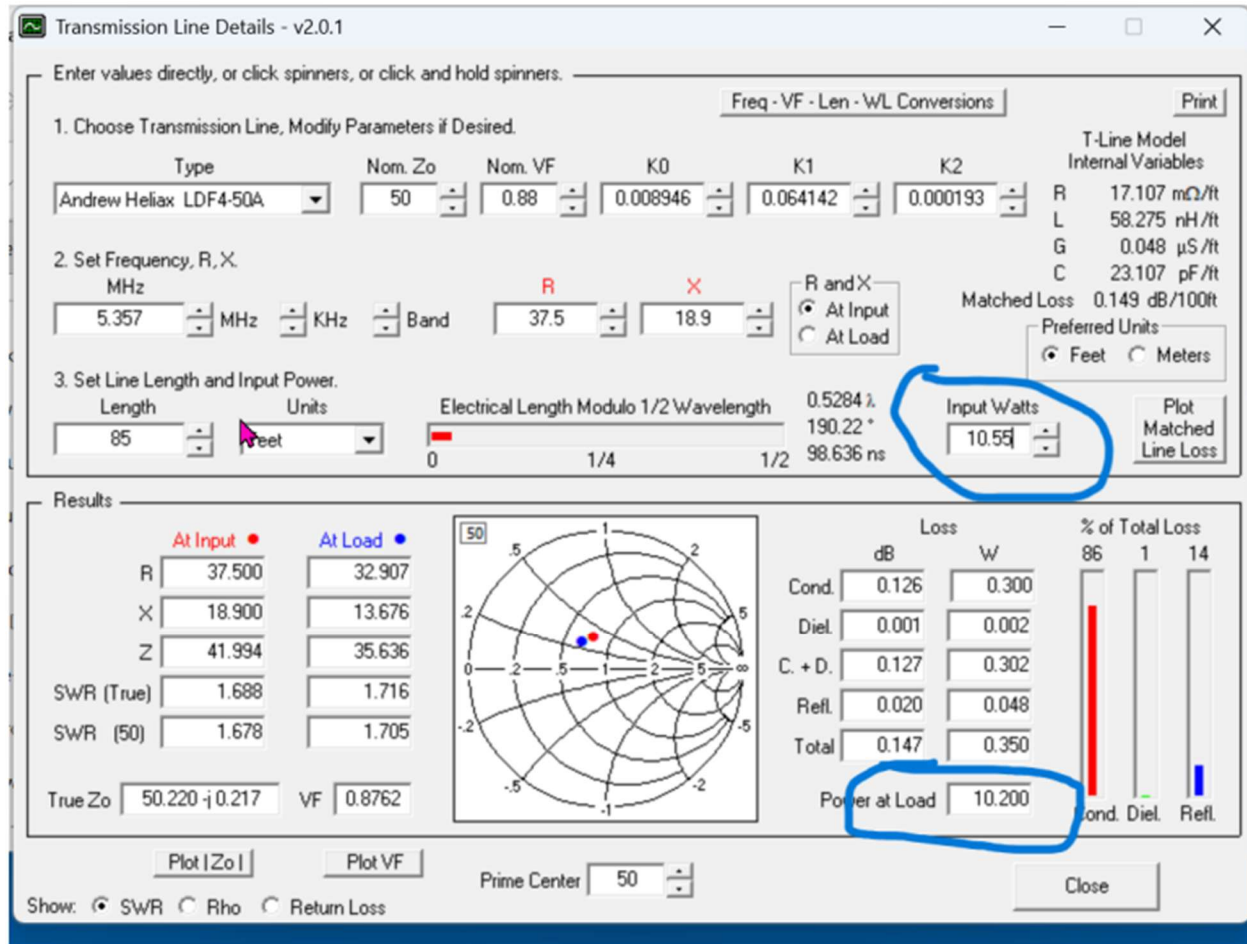
Don't despair of the 9.15W ERP limit, at least, with FT8. I operated just below that power level one evening using my 80M / 60M fan dipole in an inverted-V arrangement with the feed point at about 55'. Conditions were not the greatest at the time with a solar flux of 118 (Fair), sunspot number of 65 (Moderate) and K-value of 4 (Unsettled). In about 45 minutes of casual operation, I was able to make 16 QSOs. The contacts were in Slovenia, Belgium (2), France (2), Chile, Puerto Rico, Cuba, St.

Barthelemy, Canada (Quebec) and the US states of Vermont, Pennsylvania, Michigan, Georgia, Alabama and Kentucky. Having said all of that, I still hope that the FCC rules in favor of the ARRL's pending rule-making petition regarding increased 60M power limits for the non-channelized frequencies. Also, this was early in the evening, so 60M contacts were primarily to the east. Later during nighttime, contacts to the west would be possible.

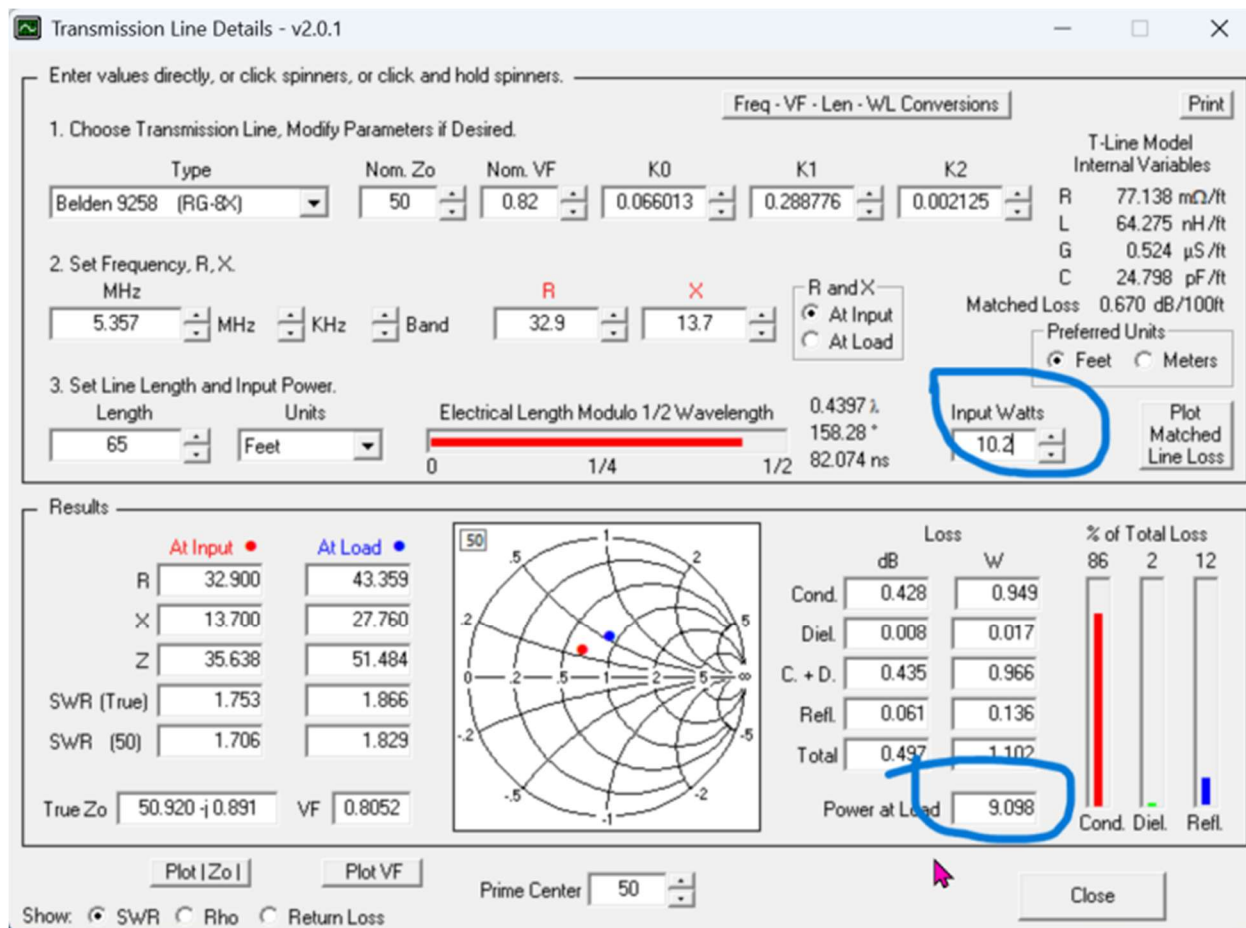
Checking My 60M ERP (Nerdy Rabbit-hole)

For 60M, my only antenna is an inverted-V up about 55'. The lower ends are probably about 20' above the ground. This reduces ground losses and makes it perform more like a horizontal halfwave dipole. Inverted-V antennas tend to be more omnidirectional than horizontal dipoles and actually have reduced gain, so I could maybe take some credit for that if I modeled my antenna. One thing that I know that I can take credit for is loss in the feedline. I decided to see how much of an effect this has. I have Telepost LP-100A (Digital Vector R.F. Wattmeter) in line from my shack to the antennas. This is basically a NanoVNA that can tolerate significant power (up to 3kW). It can measure forward and reflected power, SWR, as well as resistance, reactance, impedance and phase angle at the transmitter end of the feedline. With this information, I can use a program called Transmission Line Details to transform those measurements from the transmitter end of the feed line to the antenna end and determine the ERP and other details there or at any point in the transmission line.

For my inverted-V antenna, the feed line is in two parts ignoring jumpers in the shack. First is about 85' of Andrews LDF4-50A (1/2" heliax) to the antenna switch and then about 65' of RG-8X from the switch to the antenna. To calculate the total line losses and ERP, I modeled the heliax with the Telepost (transmitter end) inputs, then used the heliax output calculated values as inputs to the RG-8X model. These two calculations are shown in the images below. There is a lot going on in the images, but the bottom line (blue "circles") is that the transmitter power of 10.55W barely dropped to 10.2W through the 85' of heliax. Even with an SWR of ~1.7, most of the loss is due to the resistance of the coax center conductor and shield which is converted to heat in the coax (see the "% of Total Loss" bar graph at lower right).



The next image shows the model for the RG-8X using the "At Load" parameters from the heliax model. Even though the RG-8X was ~25% shorter, the power loss was 3-times larger. Of course, we are still talking about very small power losses. At least now I know that when I set my transmitter for 10W, even though it outputs a little more than that, the FCC requirement for 9.15W ERP is met. I also learned a lot about transmission lines and how they affect the performance of my station.



The regulations say that you must compensate for the increased gain of a directional antenna, but they do not specifically address compensating for reduced gain below that of a half-wave dipole. Since this is likely the case for my inverted-V, I plan to do some antenna modeling to see how big this effect is. I suspect it will be more significant that my line losses and maybe I can eke out a few more watts on the new 60M non-channelized band. Hopefully, the FCC will grant the ARRL's pending rule-making petition concerning increasing the power limit for all of the new 60M frequencies.